



Technical Report

Cummeennabuddoge Wind Farm

Request for Further Information Report

Cummeennabuddoge Wind (DAC)

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Glossary of Terms

Term	Definition
The Applicant	Cummeennabuddoge Wind Designated Activity Company (DAC)
The Agent	Atmos Consulting Limited
Environmental Advisors and Planning Consultants	Atmos Consulting Limited
Environmental Impact Assessment	A means of carrying out, in a systematic way, an assessment of the likely significant environmental effects from a development
Environmental Impact Assessment Regulations	Planning and Development Regulations 2001(as amended)
Environmental Impact Assessment Report	A document reporting the assessment findings and produced in accordance with the EIA Regulations to assist the commission in carrying out the EIA.
The Proposed Development	Cummeennabuddoge Wind Farm, a 110kv underground cabling route, a turbine delivery route and associated infrastructure
The Proposed Development Site	The land enclosed by the red line shown on Figure 1-1a
EIA Directive	Directive 2011/92/EU (as amended by Directive 2014/52/EU, the EIA Directive).

List of Abbreviations

Abbreviation	Description
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CCC	Cork County Council
CRM	Collision Risk Modelling
CTMP	Construction Traffic Management Plan
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
GLVIA	Guidelines for Landscape and Visual Impact Assessment
HGV	Heavy Goods Vehicles
IEMA	Institute of Environmental Management and Assessment
KCC	Kerry County Council
LCA	Landscape Character Area
LCT	Landscape Character Type
LGV	Light Goods Vehicles
NIS	Natura Impact Statement
NRA	National Roads Authority
RFI	Request for Further Information
RTC	road traffic collisions
TII	Transport Infrastructure Ireland
SAC	Special Areas of Conservation
SPA	Special Protection Areas
VP	Vantage Point
ZTV	Zone of Theoretical Visibility

1. Introduction

1.1 Background

In October 2024, Cummeennabuddoge Wind Designated Activity Company (DAC) ('the Applicant') submitted a planning application (Ref. No: ABP-321029-24) to An Coimisiún Pleanála (ACP) ('the Coimisiún') seeking planning permission under Section 37E of the Planning and Development Act 2000 (as amended), ('the Planning Act') for the construction and operation of an electricity generating station, known as Cummeennabuddoge Wind Farm (the 'Proposed Development').

The application included an Environmental Impact Assessment Report (EIAR) (2024 EIA Report), prepared and in accordance with Directive 2011/92/EU (as amended by Directive 2014/52/EU, the EIA Directive) and a Natura Impact Statement (NIS) prepared in accordance with Directive 92/43/EU (the Habitats Directive)

On 22 July 2025, An Coimisiún Pleanála issued a request for further information for application ABP-321029-24 with a submission deadline of 5:30 p.m. on 21 November 2025. This deadline was subsequently extended to 13th December 2025, then 31st March 2026 (before 17:30). This response document addresses each specific information request issued by ACP on 22 July 2025. It has been collated to supplement the information submitted as part of the Environmental Impact Assessment Report (EIAR), the Natura Impact Statement (NIS) and Planning Application (Ref. No: ABP-321029-24) for the Proposed Development.

1.2 The Project Team

This Request for Further Information (RFI) Report has been prepared by Atmos Consulting with assistance from the same team of competent experts from the original 2024 EIA report. All are suitably qualified and competent experts in their field, as is required under the EIA Directive. For this purpose, A Statement of Authority is included within each technical chapter of the EIAR.

1.3 Purpose of this Report

ACP issued a Request for Further Information on 22 July 2025 in relation to the planning application for the Proposed Development. The RFI seeks additional clarification and information on several areas of the EIAR.

The Coimisiún has requested to provide further information on the following matters:

1. To provide details of the likely significant environmental effects before mitigation, as required under Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (as amended).
2. To update and expand the biodiversity and ornithology assessments, showing both pre-mitigation and post-mitigation effects, in line with CIEEM and EPA guidance.
3. To review the assessment of the Kerry Slug (Annex IV species), ensuring potential impacts are fully addressed and considering whether a Regulation 54 Derogation is required.
4. To supply updated mapping showing the proposed turbine locations and infrastructure in relation to nearby European Sites (SACs and SPAs), correcting inconsistencies in distance measurements.
5. To provide a map of the six vantage points used for bird flight activity surveys, including viewshed analysis.

6. To update bird survey data, particularly for key species such as the Hen Harrier, to reflect current site conditions and ensure assessments are based on the most recent information and submit an updated ornithology report and NIS.
7. To clarify the Collision Risk Modelling (CRM), ensuring that the species included align with those recorded during site surveys.
8. To provide a written response to public observations received in December 2024 and January 2025, addressing only the issues raised without introducing new reports.

This RFI Report has been prepared in response to the request issued to provide detailed technical information to address the queries, including clarifications, updated data, and revised assessments, while demonstrating compliance with planning legislation and guidance.

1.4 Structure of the Report

The RFI report is structured to align with the eight items set out in the Further Information Request letter. Each section restates the Coimisiún’s request, summarises the issue, and provides a detailed response, including supporting figures and appendices where applicable.

Table 1.4-1: Summary of Report Structure

RFI Point	Topic/Particulars	RFI Report Section Reference
1	Article 94 Compliance - Assessment of Effects Pre-Mitigation	Section 2.1.1, Section 2.1.2
2	Biodiversity and Ornithology pre-mitigation impacts	Section 2.2
3	Annex IV Species Kerry Slug - Reassessment and Derogation Consideration	Section 2.3
4	Turbine Layout and Distances to European Sites	Section 2.4
5	Vantage Points and Viewshed Analysis	Section 2.5
6	Updated Ornithological Surveys and Data Validity	Section 2.6
7	Collision Risk Modelling Clarifications	Section 2.7
8	Response to Observations Received	Section 2.8

The following updated EIAR chapters are provided alongside this RFI report in response to planning observations:

- Volume 2 - Updated EIAR Chapter 8 – Biodiversity in response to ACP’s RFI request;
- Volume 2 - Updated EIAR Chapter 9 – Ornithology in response to ACP’s RFI request;
- Volume 2 - Updated EIAR Chapter 14 – Archaeology, Architectural and Cultural Heritage in response to Kerry County Council’s planning observation response;

Appended to the end of this RFI Report are the following documents:

- Technical Appendix A - L: Summary of Likely Effects – EIAR Chapters;

Found in Volume 3 are the following technical appendices:

- Technical Appendix M: Response to Cork County Council and Department of Housing, Local Government and Heritage - Specification of Geophysical Survey;
- Technical Appendix N: Response to Cork County Council and Department of Housing, Local Government and Heritage - Specification of Trial Trenching;
- Technical Appendix O: Response to Cork County Council and Department of Housing, Local Government and Heritage - Specification for an Underwater Archaeological/Wade and Metal Detector Survey;

- Technical Appendix P: Response to Cork County Council and the National Environmental Health Service for Noise Levels and Proposed Noise Limits;
- Technical Appendix Q: Kerry Slug Survey Report 2026;
- Technical Appendix R: Application for Derogation Under Regulation 54 & 54A of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended;
- Technical Appendix S: 2024 Habitat Report;
- Technical Appendix T: 2024 Bat Activity Survey Report;
- Technical Appendix U: Cultural Heritage TA 14-1 Sites Identified within the Study Area; and
- Technical Appendix V: Cultural Heritage TA 14-4 Summary of Cultural Heritage Assessment.

Also provided are the following documentation and figures:

- Volume 1 - Natura Impact Statement;
- Volume 4 - The Paps Photomontage Photography;
- Volume 4 - Figure 2-4-1 Ecological Designations within 15km;
- Volume 4 - Figure 2-4-2 Ecological Designations within 2km;
- Volume 4 - Figure 2-5-1 Vantage Point Locations and Viewsheds;
- Volume 4 - Figure 14-1 Overview of Cultural Heritage Sites within Study Area;
- Volume 4 - Figure 14-2 Overview of Cultural Heritage Sites within the Proposed Development Site;
- Volume 4 - Figure 14-3 Cultural Heritage Zone of Theoretical Visibility;
- Volume 4 - Figure 14-4 Cultural Heritage Zone of Theoretical Visibility – Northeast;
- Volume 4 - Figure 14-5 Cultural Heritage Zone of Theoretical Visibility – Northwest;
- Volume 4 - Figure 14-6 Cultural Heritage Zone of Theoretical Visibility – Southeast;
- Volume 4 - Figure 14-7 Cultural Heritage Zone of Theoretical Visibility – Southwest; and
- Volume 5 - Confidential Ornithology Appendix.

Further Information Request Response

1.5 Compliance with the Planning and Development Regulations, Article 94

Details of the Request

“Having regard to Article 94 of the Planning and Development Regulations 2001, as amended and Schedule 6 Information to be contained within an EIAR of the Regulations, the EIAR is required to detail potential significant effects (direct and indirect) in the absence of mitigation to allow for assessment of effects and analysis of likely effectiveness of mitigation. The EIAR submitted only refers to the impacts following the application of mitigation measures and hence, it does not comply with Article 94.

Schedule 6 2(e)(i) states the following - a description of the likely significant effects on the environment of the proposed development resulting from, among other things-

- (I) the construction and existence of the proposed development, including, where relevant, demolition works,*
- (II) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources,*
- (III) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste,*
- (IV) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters),*
- (V) the cumulation of effects with other existing or approved developments, or both, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources,*
- (VI) the impact of the proposed development on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the proposed development to climate change, and*
- (VII) the technologies and the substances used, and*

(ii) the description of the likely significant effects on the factors specified in paragraph (b)(i)(I) to (V) of the definition of ‘environmental impact assessment’ in section 171A of the Act should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium term and long-term, permanent and temporary, positive and negative effects of the proposed development, taking into account the environmental protection objectives established at European Union level or by a Member State of the European Union which are relevant to the proposed development.

Please provide details of potential significant effects (direct and indirect) for each Chapters of the EIAR in accordance with Article 94 and Schedule of the Regulations as outlined above.”

Applicant’s Response

The Applicant acknowledges the Coimisiún’s observation and confirms that a detailed review of the EIAR has been undertaken in accordance with Article 94 and Schedule 6(2)(e) of the Planning and Development Regulations 2001 (as amended), which transpose the requirements of Annex IV of Directive 2011/92/EU, as amended by Directive 2014/52/EU (the EIA Directive).

The EIAR was prepared in line with the EPA (2022) “Guidelines on the Information to be Contained in Environmental Impact Assessment Reports”, the European Commission (2017) EIA Guidance, and other relevant national guidance. Each topic chapter of the EIAR follows a consistent methodology describing baseline conditions, identifying likely significant effects, detailing mitigation measures, and setting out the residual effects.

Embedded Design Mitigation and Presentation of Likely Effects

The Proposed Development was subject to an iterative design process in which a range of embedded or inherent mitigation measures were integrated from the outset to avoid or minimise potential environmental effects. These include, for example, the siting of infrastructure to avoid/minimise impact on sensitive habitats and designated assets, and other receptors. Therefore, many of the potential adverse effects were effectively avoided or reduced through the design itself prior to formal assessment.

To provide additional clarity and transparency for ACP, this RFI Report submission includes the following:

- A Compliance Table (Section 2.1.1), demonstrating how the EIAR satisfies the requirements of the EIA Directive, Article 94, and Schedule 6 of the Regulations; and
- A Summary of Potential Effects Table (Section 2.1.2), explicitly distinguishing between the likely Significant effects prior to mitigation and the corresponding residual effects following mitigation, in line with the regulatory framework.

These additions are provided for ease of reference and do not alter the conclusions of the EIAR.

1.5.1 Compliance with the EIA Directive and Regulations

The following table (Table 2.1-1) demonstrates how the information presented within the EIAR, supported by this RFI Report, meets the requirements of the EIA Directive, Article 94, and Schedule 6 of the Planning and Development Regulations 2001 (as amended).

Table 1.5-1: Compliance with the EIA Directive and Planning and Development Regulations 2001 (as amended)

Legislative Requirement		Information in the EIA Report
2(e) (i)	(I) the construction and existence of the proposed development, including, where relevant, demolition works,	Assessment of construction, operational and decommissioning phases including excavation, earthworks, and site clearance, where applicable and addressed in all technical Chapters 5- 18.
	(II) the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources,	Potential impacts on land, soil, groundwater, surface water are assessed and provided in EIAR Chapter 10 Soils, Geology and Hydrogeology, Chapter 11 Hydrology Water Quality and Flood Risk with the water environment assessed in accordance with the EU Water Framework Directive . Potential impacts on biodiversity, habitat are considered in EIAR Chapter 8 Biodiversity. Sustainable resource use and environmental protection are considered throughout and details are included in the EIAR Chapter 16 Material Assets (Including Telecommunications and Aviation) .
	(III) the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste,	Being a renewable energy development, the Proposed Development will not produce heat or radiation. Potential emissions and nuisances assessed for air, water, noise, vibration, light, and waste are addressed in Chapter 8 Biodiversity, Chapter 11 Hydrology Water Quality and Flood Risk, Chapter 12 Air and Climate, Chapter 13 Noise and Chapter 16 Material Assets (Including Telecommunications and Aviation)
	(IV) the risks to human health, cultural heritage or the environment (for example due to accidents or disasters),	Human health impacts, including occupational and public safety risks, are assessed in detail and provided in EIA Chapter 5: Population and Human Health, Chapter 17 Risk of Major Accidents, Chapter 15 Shadow Flicker, Chapter 13 Noise, Chapter 12 Air and Climate. Impact Cultural heritage and archaeological receptors/assets are assessed and provided in Chapter 14: Cultural Heritage
	(V) the cumulation of effects with other existing or approved developments, or both, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources,	Cumulative effects of the proposed development with existing and permitted developments considered for all relevant environmental factors addressed in all technical Chapters 5- 17. <ul style="list-style-type: none"> • Chapter 5: Population and Human Health – Section 5.7; • Chapter 6: Landscape and Visual – Section 6.5; • Chapter 7: Traffic and Transport – Section 7.6; • Chapter 8: Biodiversity – Section 8.6; • Chapter 9: Ornithology – Section 9.5; • Chapter 10: Soils, Geology and Hydrogeology – Section 10.8;

Legislative Requirement		Information in the EIA Report
		<ul style="list-style-type: none"> • Chapter 11: Hydrology, Water Quality and Flood Risk – Section 11.8; • Chapter 12: Air and Climate – Section 12.9; • Chapter 13: Noise – Section 13.7; • Chapter 14: Archaeology, Architectural and Cultural Heritage - Section 14.4; • Chapter 15: Shadow Flicker – Section 15.3; • Chapter 16: Material Assets (Including Telecommunications and Aviation) <ul style="list-style-type: none"> • Aviation: Section 16.3.4; • Telecommunication – 16.4.4; • Resource and Utility Infrastructure – Section 16.5.1-Section 16.5.5; • Chapter 17: Major Accidents and Natural Disasters – Section 17.7;
	(VI) the impact of the proposed development on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the proposed development to climate change, and	<p>The impact of the proposed development on climate and the vulnerability of the proposed development to climate change are addressed in EIAR Chapter 12: Air and Climate.</p> <p>To demonstrate that the carbon savings will significantly outweigh any potential carbon losses a methodology made available by the Scottish Government (2019) in tabular spreadsheet format -‘Carbon Calculator Tool v1.7.0’ has been used for the assessment of the Proposed Development.</p>
	(VII) the technologies and the substances used	<p>EIAR Chapter 3 Design Evolution and Alternatives and Chapter 4 Description of Development provide details on the proposed technology and substances.</p>
2(e) (ii)	the description of the likely significant effects on the factors specified in paragraph (b)(i)(I) to (V) of the definition of ‘environmental impact assessment’ in section 171A of the Act should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium term and long-term, permanent and temporary, positive and negative effects of the proposed development, taking into account the environmental protection objectives established at European Union level or by a Member State of the European Union which are relevant to the proposed development.	<p>All technical chapters address the full range of direct and indirect effects both temporal and spatial, applying methodologies aligned with their respective guidance and standards. Effects arising during construction, operation, and decommissioning are assessed for the duration of each phase, while permanent effects are identified as those resulting in irreversible changes (where possible), along with the cumulative effects that would arise from the Proposed Development.</p> <p>The assessments describe both positive and negative effects to provide a comprehensive understanding of the likely significant effects.</p> <p>Pre-mitigation and residual effects summarised in section 2.1 for clarity.</p> <p>Based on the assessments undertaken, it is confirmed that the Proposed Development will have no adverse transboundary effects. A positive transboundary effect is anticipated occur during the operational phase due to carbon savings and the associated climate benefits.</p>

1.5.2 Summary of Likely Significant Effects

The table provides a consolidated summary of the likely significant effects identified across the EIA. It includes references to proposed mitigation measures and the residual effects expected following their implementation, along with the section numbers in the EIAR where these measures are described.

It should also be noted that the assessment of significance is undertaken separately within each technical chapter, using criteria specific to that environmental topic. , References to the EIAR sections reporting these criteria are provided for in each chapter, allowing traceability to the detailed assessments in the individual chapters.

The likely significant effects related to Biodiversity and Ornithology Chapters are provided in Section 2.2 of this report. As no ‘Significant’ effects have been identified in the assessments for Population and Health, Traffic and Transport, Shadow Flicker and Material Assets (incl. Aviation and Telecommunications), the relevant chapters (EIAR Chapter 5, Chapter 7, Chapter 15 and Chapter 16) are not included in this section.

For completeness, all other technical chapters where no ‘Significant’ effects have been identified, as well as summaries of effects assessed as below ‘Significant’ (such as Not Significant, Negligible, Slight, Imperceptible, Minor, Low, Moderate or other categories as defined in the relevant chapter), are included in the Appendices Section.

Chapter 6: Landscape and Visual Impact Assessment

The methodology used to determine the significance of effects is outlined in Section 6.2 of the EIAR chapter. This methodology follows the approach set out in the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3), where professional judgement and experience are applied to identify effects that are likely to be significant. As described in Table 6-8: Matrix for Determining the Significance of Effects of the EIAR chapter, provides the basis for evaluating the significance of each identified effect.

The likely significant effects determined during the assessment are summarised in the below Table 2.1-2, while effects assessed as below ‘Significant’ (including Moderate, Slight, Not Significant, Imperceptible, and No Effects) are presented separately in Appendix B of this RFI Report.

As defined in Section 6.5.9 of the EIAR Chapter 6, cumulative sites were grouped depending on their location in order to produce meaningful cumulative ZTVs with good readability, in order to illustrate the relationship between the Proposed Development and operational, consented, appealed and in-planning (proposed) windfarm developments within 30km. Within the assessment, these groups are referred to as the south, central, north, east and south-west cumulative groups. The magnitude of change from interactions between the proposed turbines and each wind farm group is not quantified, as it would be inappropriate to define change without considering the wider cumulative context, including turbines outside these groups. Cumulative effects have therefore been assessed where relevant, with reference to specific receptors.

Table 1.5-2: Likely Significant Effects on Landscape and Visual Amenities

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Effects on Landscape resources within the Proposed Development Site	6.5.1	The landscape within the Proposed Development Site is of high sensitivity, being a Visually Sensitive Area with high landscape value and medium to high susceptibility to the proposed development. The felling of approximately 152ha of commercial forestry to accommodate turbines, foundations, access tracks, hardstands, a substation, and a met mast will result in a notable and direct effect on landscape resources, giving rise to a high magnitude of change across all stages of development	Significant effects are therefore predicted on landscape resources as a result of the Proposed Development	Embedded and Mitigation by Design Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	Construction/Decommissioning: Significant Operational: Significant	6.6
Effects on Landscape Designations						
KCC Visually Sensitive Area	6.5.3	A large portion of the Proposed Development Site and surrounding land to the west lies within a Kerry County Council (KCC) designated Visually Sensitive Area, which comprises outstanding and highly sensitive rural landscapes. While development in these areas is not prohibited, it must demonstrate strong landscape integration and visual respect. Several operational and consented wind farms are already located within or near the south-east of this designated area. Given the rural character and high scenic value of the area, the Visually Sensitive Area is assessed as having high susceptibility and overall high sensitivity to the type of development proposed. Parts of the designated area within the Site boundary will be directly affected, leading to a high magnitude of change due to the replacement of forestry and introduction of new infrastructure. However, these effects will occur within a landscape already containing existing turbines, properties, and farmsteads, and the careful siting of turbines helps ensure appropriate landscape fit. Across the wider area, visibility of the turbines will be limited by distance and topography, reducing the overall magnitude of change to low.	Significant effects are anticipated within the Proposed Development Site extents and immediate vicinity during the construction phase and operational phase. Across the wider extents of the Visually Sensitive Area moderate not significant effects are anticipated as a result of the Proposed Development. The Proposed Development is well sited amongst neighbouring infrastructure to form a cohesive part of the landscape. With reference to the 'do nothing' scenario, the forestry that would be removed as a part of the Proposed Development would instead be felled as part of normal rotational forestry operations.	Embedded and Mitigation by Design Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	Construction/Decommissioning: Significant effects locally to the Site and moderate not significant effects across the wider extents of the Visually Sensitive Area Operational: Significant effects locally to the Site and moderate not significant effects across the wider extents of the Visually Sensitive Area.	6.6

Chapter 10: Soils, Geology and Hydrogeology

The methodology for determining the significance of effects is outlined in Section 10.2 of the EIA chapter. It follows the approach set out in a combination of the ‘Guidelines on the Information to be Contained in Environmental Impact Assessment Reports’ published by the EPA (2022), and the ‘Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes’ published by the National Road Authority in 2008.

The ‘Significant’ effects (Significant and Moderate) determined during the assessment are summarised in the below Table 2.1-4, while effects assessed as below ‘Significant’ are presented in Appendix D of this RFI Report.

Table 1.5-3: Likely Significant Effects on Soils, Geology and Hydrogeology

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance Effect of	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Peat (resource)	10.4	<p>Construction Phase</p> <p>Potential loss of / adverse effects on the peat soils due to temporary excavations for windfarm infrastructure.</p> <p>Peat compaction associated with construction traffic may reduce soil permeability and increase surface runoff.</p> <p>Potential increased erosion of superficial soils due to tree felling and loss of surface vegetation.</p> <p>The receptor sensitivity is considered high, and the magnitude of effect is medium adverse.</p>	Significant Adverse	Mitigation measures are proposed. Details are provided in Section 10.6 of Chapter 10 of the EIAR.	Slight Adverse, not significant	10.9
Peat (resource)	10.4	<p>Operational Phase</p> <p>Potential loss of / adverse effects on the peat soils due to permanent excavations for windfarm infrastructure.</p> <p>Ongoing erosion of superficial soils due to construction phase tree felling and loss of surface vegetation.</p> <p>The receptor sensitivity is considered high, and the magnitude of effect is medium adverse.</p>	Significant Adverse	Mitigation measures are proposed. Details are provided in Section 10.6 of Chapter 10 of the EIAR.	Slight Adverse, not significant	10.9
Peat (stability)	10.4	<p>Construction Phase</p> <p>Potential landslide of peat caused by risk factors such as cutting, loading, unloading, vibration, alterations to surface water drainage, vegetation</p>	Significant Adverse	Mitigation measures are proposed. Details are provided in Section 10.6 of Chapter 10 of the EIAR.	Slight Adverse, not significant	10.9

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		removal, or inappropriate storage of peat, leading to effects on surface water, infrastructure and people. The receptor sensitivity is considered high, and the magnitude of effect is medium adverse.				
Peat (stability)	10.4	Operational Phase Ongoing potential landslide of peat caused by risk factors during the construction phase such as cutting, loading, vibration, alterations to surface water drainage, vegetation removal, leading to effects on surface water, infrastructure and people. The receptor sensitivity is considered high, and the magnitude of effect is medium adverse.	Significant Adverse	Mitigation measures are proposed. Details are provided in Section 10.6 of Chapter 10 of the EIAR.	Slight Adverse, not significant	10.9

Chapter 11: Hydrology, Water Quality and Flood Risk

The methodology for determining the significance of effects is outlined in Section 11.2 of the EIA chapter. It follows the approach set out in the Institute of Environmental Management and Assessment (IEMA) Guidelines (2004), EPA EIAR Guidelines (2022), and NRA Guidelines (2009). In line with EPA guidance, significance is determined through a combination of scientific analysis and professional judgement. Table 11-7: Evaluation of Overall Significance of the EIA chapter, provides the basis for evaluating the significance of each identified effect. Effects of major or moderate significance are considered ‘Significant’ effects.

The likely significant effects determined during the assessment are summarised in the below Table 2.1-5, while effects assessed as below ‘Significant’ are presented in Appendix E of this RFI Report.

Table 1.5-4: Likely Significant Effects on Hydrology, Water Quality and Flood Risk

Particular / Receptors	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Killarney National Park	11.6.2	potential risk to the receptor with regards to changes to water quality (chemical pollution).	Major Adverse effects during construction, operational, and decommissioning phases	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7

Particular / Receptors	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Macgillycuddy's Reeks	11.6.2	potential risk to the receptor with regards to changes to water quality (chemical pollution).	Major Adverse effects during construction, operational, and decommissioning phases	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7
Caragh River Catchment	11.6.2	potential risk to the receptor with regards to changes to water quality (chemical pollution).	Major Adverse effects during construction, operational, and decommissioning phases	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7
River Clydagh	11.6.2	potential risk to the receptor with regards to changes to water quality (chemical pollution).	Major Adverse effects during construction, operational, and decommissioning phases	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7
River Flesk	11.6.2	potential risk to the receptor with regards to changes to water quality (chemical pollution).	Major Adverse effects during construction, operational, and decommissioning phases	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7
Major watercourses draining the Proposed Development	11.6.2	potential risk to the receptors with regards to changes to water quality	Major Adverse effects during construction / decommissioning phases	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7
Watercourses draining the section of the Proposed Development where site access is proposed	11.6.2	potential risk to the receptors with regards to changes to water quality	Major Adverse effects during construction / decommissioning phases	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant	11.7

Chapter 12: Air and Climate

The methodology for determining the significance of effects is outlined in Section 12.2 of the EIA chapter. The significance criteria for this chapter are defined as any impact above low is deemed Significant. Medium and high impacts are therefore ‘Significant’ impacts.

The likely significant effects determined during the assessment are summarised in the below Table 2.1-6, while effects assessed below the ‘Significant’ are presented in Appendix F of this RFI Report.

Table 1.5-5: Likely Significant Effects on Air and Climate

Particular Receptors	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Construction Phase						
Air Quality	12.6.2	The highest overall risk of impacts upon sensitive receptors from construction, earthworks and trackout activities has been assessed as medium risk. This risk is centred on the ecological receptor Killarney National Park, with risk assessed as low on the human sensitive receptor, Dwelling 1.	Significant negative impact over the duration of the construction phase on Killarney National Park.	Mitigation/best practices measures are proposed. Details are provided in Section 12.7 of the EIAR Chapter 12.	Non-Significant short-term negative impact	12.8
Operational Phase						
Climate	12.6.2	The quantities of greenhouse gas emissions produced during the operational phase of the Proposed Development will have a negligible impact on climate. the Proposed Development will have a significant positive impact on climate due to the carbon offsetting which will occur once carbon payback has been occurred.	Significant positive due to the carbon offsetting after carbon payback time.	No mitigation required	Significant long-term positive impact	12.8
Decommissioning Phase						
Air Quality	12.6.2	The highest overall risk of impacts upon sensitive receptors from decommissioning has been assessed as medium risk. This risk is centred on the ecological receptor Killarney National Park, with risk assessed as low on the human sensitive receptor . The highest overall risk of impacts upon sensitive receptors from trackout has been assessed as medium risk. This risk is centred on the ecological receptor Killarney National Park, with risk assessed as low on the human sensitive receptors.	Significant negative impact on Killarney National Park	Mitigation/best practices measures are proposed. Details are provided in Section 12.7 of the EIAR Chapter 12	Not Significant	-

Cummeennabuddoge Wind Farm

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		However, dust emissions will be lower during the decommissioning phase than during the construction phase due to the limited nature of the works involved.				
Cumulative Effects						
Climate	12.9	The quantities of greenhouse gas emissions produced during the construction and decommissioning phases of the Proposed Development and all other developments will have a negligible cumulative impact on climate. The cumulative positive impacts of the Proposed Development and all other cumulative windfarms considered will result in a significant positive cumulative impact on climate.	Significant positive	No mitigation require	Significant positive	12.9

Chapter 13: Noise

The methodology for determining the significance of effects is outlined in Section 13.5 of the EIA chapter. It follows the approach set out in BS 5228 ‘Code of Practice for Noise and Vibration Control on Construction and Open Sites’, Department of the Environment, Heritage and Local Government Planning Guidelines on wind farm development and the best practice described within the UK Institute of Acoustics document, ‘A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise’.

The likely significant effects determined during the assessment are summarised in the below Table 2.1-7, while effects assessed as ‘Not Significant’ are presented in Appendix G of this RFI Report.

Table 1.5-6: Likely Significant Effects on Sensitive Receptor

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Operational Effects	13.7.3	During the daytime, predicted operational noise levels comply with the noise limits at all properties, except R153 where noise limits are exceeded at wind speeds greater than or equal to 6m/s and by up to 4.2dB.	Significant for R65 during the night-time and R153	It is proposed to implement a suitable mitigation scheme tailored to the specific turbine.	Not significant	13.9

Particular Receptors / EIA Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIA Section
	During the night-time, predicted operational exceedances occur for wind speeds greater than or equal to 5m/s at R153 and at 7-9m/s at R65. Exceedances at R153 are up to 7dB.	during the day and night-time.			

Chapter 14: Cultural and Archaeological Heritage

The methodology for determining the significance of effects is outlined in Section 14.2 of the EIA chapter. It follows the approach set out in EPA Advice Notes on Current Practice in the Preparation of Environmental Impact Assessments. Table 14-6: Criteria for assessing significance level of impacts of the EIA chapter, basis for evaluating the significance of each identified effect.

The ‘Significant’ (Profound, Significant and Moderate) effects determined during the assessment are summarised in the below Table 2.1-8, while effects assessed as below these significance are presented in Appendix H of this RFI Report.

Table 1.5-7: Likely Significant Effects on Cultural and Archaeological Heritage

Particular Receptors / EIA Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIA Section
Operational Phase Effects					
Monuments within the Paps Landscape (CH002-CH020, CH022, CH135-CH152, CH154-CH159,	14.4.4 These monuments are present in the Paps Archaeological Landscape. A ZTV analysis of the Proposed Development site shows that 16-17 turbines will be visible from CH142 and CH195. For the majority of recorded monuments, there will be 7 to 9 turbines visible (CH003-CH004, CH012-CH013, CH022, CH143-CH150, CH155-CH157, CH159, CH161, CH163-CH169). Following this, 4 to 6 turbines will be visible from ten sites (CH002, CH014–CH020, CH135, CH158) while 1 to 3 will be visible from five sites (CH136–CH140).	Moderate Negative	A Heritage opportunity can be incorporated into the Proposed Development design, which will enhance the surrounding monuments. This can be done by incorporating information boards on publicly accessible area within the Proposed Development site. This can contain detailed information on archaeological, architectural and cultural heritage background of the Clydagh Valley and the Paps Archaeological Landscape.	Moderate Negative	14.5

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
CH161-CH169, CH195)		<p>The ZTV mapping also suggests that ten or more turbines will be visible from 13 monuments. This breakdown to 10 to 12 will be visible from two monuments (CH151, CH162), 13 to 15 turbines will be visible from eight monuments (CH005–CH011, CH154) and 16 to 17 turbines will be visible from two monuments (CH140, CH152).</p> <p>Views to the south and southeast will include at least 1–6 turbines, but most frequently 16–17. Many views toward recorded monuments beyond the Clydagh Valley are largely obscured by topography, with the peaks of Cnoc an Choimin, Cnoc na Morc, and Mullach an Ois screening views in this direction.</p> <p>Views from other directions toward the twin peaks and cairns remain largely unaffected, except from the east where turbines appear in the foreground at approximately 5 km.</p> <p>While the foreground setting of CH142 and CH195 and the setting of 53 other monuments will be altered, intervisibility between monuments is maintained, and the overall character and integrity of the archaeological landscape is respected.</p> <p>Given that these visual effects are limited to the operational life of the windfarm, the magnitude of indirect effect is considered moderate,.</p>				
Monuments outwith the Paps Landscape CH021, CH037, CH040–CH046, CH075, CH092–	14.4.4	<p>ZTV analysis indicates that turbine visibility varies across these monuments. One turbine to three turbines are visible from CH037, CH171–CH175, CH075, CH095, CH098, CH100, and CH160. Four to six turbines are visible from CH043, while seven to nine turbines are visible from CH042, CH099, and CH093. Ten to twelve turbines are visible from CH040.</p> <p>The turbines are located in a valley below the surrounding hillscape where these prehistoric monuments are sited, and therefore do not affect intervisibility between the monuments themselves or with the Paps Archaeological Landscape.</p>	Moderate Negative	A Heritage opportunity can be incorporated into the Proposed Development design, which will enhance the surrounding monuments. This can be done by incorporating information boards on publicly accessible area within the Proposed Development site. This can contain detailed information on archaeological, architectural and cultural heritage background of the Clydagh Valley and the Paps Archaeological Landscape.	Moderate Negative	14.5

Cummeennabuddoge Wind Farm

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
CH093, CH095, CH098–CH100, CH153, CH160, CH171–CH176		<p>Many views are already obscured by natural topography, and modern agri-forestry within the development site further reduces potential visibility in some cases. While there will be a visual impact on the setting of monuments where turbines are theoretically visible, the relationship between the monuments and the wider landscape remains discernible, and the readability of the prehistoric landscape is largely retained.</p> <p>Given the limited visibility and screening factors, the magnitude of the indirect effect is considered moderate, and the visual impact is long-term but reversible.</p>				
CH083	14.4.4	<p>The Paps Archaeological Landscape borders the Proposed Development Site to the northwest and comprises a significant archaeological, historic, and mythological landscape, including 76 recorded monuments. Views to the south and southeast from the landscape will include at least 1–6 turbines but most frequently 16–17. Many views toward recorded monuments beyond the Clydagh Valley are largely obscured by topography, with the peaks of Cnoc an Choimin, Cnoc na Morc, and Mullach an Ois screening views in these directions. Views toward the twin peaks and cairns remain largely unaffected, except from the east where turbines appear in the foreground at approximately 5 km.</p> <p>No turbines will affect the intervisibility between recorded monuments within the landscape, and the overall character and integrity of the archaeological landscape is respected. Given that the visual effects are long-term but limited to the operational life of the windfarm, the magnitude of effect is considered moderate, resulting in an overall moderate negative effect. The effect is reversible, as the setting will be restored once the turbines are removed.</p>	Moderate Negative	To partially offset the impact of the Proposed Development on the setting of the archaeological landscape, it is proposed to incorporate information boards on publicly accessible area within pertaining to the archaeological, architectural and cultural heritage historical of the Clydagh Valley as part of the development.	Moderate	14.5

Chapter 18: Interactions of the Foregoing

The likely significant effects determined during the assessment are summarised in the below Table 2.1-9, while effects assessed as below this significance are presented in Appendix H of this RFI Report.

Table 1.5-8: Likely Significant Effects

Particular Receptors /	EIAR Section	Likely Significant Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Landscape and Visual Impact Assessment - Archaeology, Architectural and Cultural Heritage	18.3.8	<p>The Cultural Heritage assessment has confirmed the Proposed Development (operational phase) will have a long-term negative moderate, not significant effect on the surrounding archaeological, architectural and cultural heritage landscape, specifically CH083 The Paps Archaeological Landscape.</p> <p>Landscape and Visual Impact Assessment identifies a significant effect on the landscape resources within the Proposed Development Site and on the Kerry County Council (KCC) Visually Sensitive Area in the locale of the Proposed Development Site during the construction and operational phases of the Proposed Development. This area partially overlaps with the Paps Archaeological Landscape.</p>	Significant effect	Mitigation proposed and details are provided in Section 6.6 of Chapter 6 and Section 14.5.1 of Chapter 14 of the EIAR.	Significant effect	18.5

1.6 Biodiversity and Ornithology pre-mitigation impacts

Details of the Request

“It is noted that the application of CIEEM approach in the presentation of impacts where it is stated that In EclA it is only essential to assess and report significant residual effects that remain after mitigation measures have been taken into account (see paragraphs 5.24 to 5.28). The guidance goes on to state the following:

However, it is good practice for the EclA to make clear both the potential significant effects without mitigation and the residual significant effects following mitigation, particularly (emphasis provided):

- a) where the mitigation proposed is experimental, unproven or controversial; or*
- b) to demonstrate the importance of securing the measures proposed through planning conditions or obligations.*

The EPA Guidelines on the information to be contained in EIAR for Ireland is clear that the assessment of effects is presented without mitigation.

Therefore, the Commission requests that the biodiversity and ornithology assessments be resubmitted detailing potential significant effects (direct and indirect) in absence of mitigation to allow for assessment of effects and analysis of likely effectiveness of mitigation.”

Applicant's Response

In response to the Coimisiún's request, the Biodiversity assessment has been revised to clearly present both potential significant effects in the absence of mitigation and residual effects following mitigation. The updated assessments cover direct and indirect impacts and provide a clear evaluation of the likely effectiveness of mitigation measures. These revisions are included in the supporting document “61253 Cummeennabuddoge Wind Farm - Chapter 8 Biodiversity Resubmitted”. The assessment demonstrates that in the absence of mitigation and compensation measures, significant effects are likely on several of the Important Ecological Features (IEFs) but confirms that with the proposed mitigation and compensation measures, no residual adverse effects remain significant. Moreover, 4.76ha of degraded wet heath and 4.69ha of degraded blanket bog will be enhanced to good condition; set against the losses of 2.03ha degraded wet heath and 1.56ha of degraded bog, this will deliver a net gain, which would not be in place in the absence of the Proposed Development, and this is considered a moderate beneficial and significant effect.

In the case of the ornithology assessment, a number of good practice/mitigation measures were identified which can be summarised as:

- Provision of an Ecological Clerk of Works (ECoW);
- Measures for protection of active nests during construction to be overseen by the ECoW; and
- Protection of breeding Hen harrier nests, in the very unlikely event that they breed on or close to the Proposed Development.

While these measures were intended to mitigate for impacts on bird species, they were not required to reduce the magnitude of the impacts of the Proposed Development on the receptors carried forward for further assessment to a level where the impacts would not be significant in EIA terms.

The focus of the mitigation was on protecting bird nests to ensure works were carried out lawfully, but it was not targeted at the species carried forward for assessment – two of those four species occurred only in the non-breeding season. Despite that, specific protection was, however, provided

for Hen harrier; but the very low likelihood of this mitigation having to be adopted meant that it was not required to reduce the impact on this species to an acceptable level. Red grouse will not be affected by the mitigation as the habitat within the Proposed Development is not suitable for their nesting. As a result, the outcome of the assessment was not affected by the mitigation/good practice measures outlined. The magnitude of the unmitigated impacts on the receptors taken forward for further assessment was the same as for the mitigated impacts because of this. As such, the ornithological impact assessment submitted as Chapter 9 of the EIAR would be the same in the absence and presence of mitigation. Nevertheless, the chapter has been re-submitted with impacts assessed first in the absence of mitigation and then with residual effects assessed following mitigation.

1.7 Annex IV Species Kerry Slug - Reassessment and Derogation Consideration

Details of the Request

“Following on from the point above, the assessment of potential impacts on Annex IV species Kerry Slug in particular is inadequate and likely significant effects underestimated.

It is requested that this assessment is revisited and additionally, in view of the recent Guidance on applications for Regulation 54 Derogations for Annex IV species published by the Department of Housing, Local Government and Heritage, you are requested to consider the need for a derogation for disturbance and relocation of Kerry slug to accompany the application - (see page 18- Timing of application of derogation).”

Applicant’s Response

Dedicated surveys for Kerry slug (*Geomalacus maculosus*) were carried out on site by APEM Group Woodrow in January 2026.

The 2026 survey programme was carried out under NPWS licence DER-KERRY SLUG-2026-02 and used a combination of live refuge traps (metric mats), timed hand searches, and incidental observations. Survey design focused on the proposed works footprint and built upon baseline data collected in 2021 by Malachy Walsh and Partners (MWP).

Results confirm the continued presence of Kerry slug within the works footprint and supporting the appropriateness of the earlier surveys. Individuals were recorded across multiple transects and habitat types at four of the ten transects (near the proposed locations of Turbines 1, 5, 6 and 8). The findings indicate that the species actively uses a range of habitats and refugia, and that suitable habitat persists across the site.

Overall, the surveys provide a robust and up-to-date assessment of the Kerry slug distribution and habitat use within the proposed development area. Given the continued presence of the species within the works footprint, in the absence of mitigation there is a potential for direct mortality and injury from construction activities, loss of suitable habitat as well as a reduction in habitat suitability due to the spread of invasive species such as *Rhododendron ponticum*, which could be exacerbated by construction activities. Because the species moves within suitable microhabitats and does not remain fixed to any specific point, it is not possible to reliably predict the maximum number of individuals that may be affected. As such, in the absence of mitigation a permanent moderate adverse effect is predicted on Kerry slug.

Mitigation is therefore described within Chapter 8, and it is confirmed that a Regulation 54 derogation is needed for disturbance and relocation of Kerry slug, an Annex IV species. A Regulation 54 derogation application was therefore submitted on 23 March 2026 to National Parks and Wildlife Service. Following implementation of the mitigation, no significant effects are predicted.

The survey report is provided as **Technical Appendix Q**, and the associated Regulation 54 derogation application is provided as **Technical Appendix R**.

1.8 Turbine Layout and Distances to European Sites

Details of the Request

“Please provide a drawing of the location of the proposed windfarm with turbines locations and associated infrastructure in context with nearby European Sites with distance measurements referred to in the EIA and NIS documentation as the distances reported do not align for Mullaghanish Bog SAC or for Mullaghanish to Musheramore Mountains SPA.”

Applicant’s Response

Figure 2-4-1 shows the European nature conservation designations within 15km of the site, and Figure 2-4-2 shows such designations within a 2km distance. Table 2.4-1 provides the distances between these designations and the nearest parts of the Proposed Development, split into distances to turbines and distances to other infrastructure.

Table 1.8-1: Distances to European Designations within 15km

European Designation	Distance to nearest Turbine (Km)	Turbine Number	Distance to nearest Infrastructure (Km)	Infrastructure Type
Mullaghanish to Musheramore Mountains SPA	1.51	9	0.17	Cable trench
Killarney National Park, Macgillycuddy's Reeks And Caragh River Catchment SAC	0.17	13	0.03	Access track
Mullaghanish Bog SAC	0.67	3	0.61	Access track
St. Gobnet's Wood SAC	4.36	16	4.11	Cable trench
Blackwater River (Cork/Waterford) SAC	4.53	13	4.06	Access track
Old Domestic Building, Curraglass Wood SAC	13.81	16	10.20	Access track
The Gearagh SAC	14.85	3	14.33	Access track
Kilgarvan Ice House SAC	16.27	16	13.0	Access track

Specifically for Mullaghanish Bog SAC and Mullaghanish to Musheramore Mountains SPA, it should be noted that the two designations do not overlap geographically.

The EIAR and Natura Impact Statement erroneously listed Mullaghanish Bog SAC as being located 75m from the Proposed Development; it is actually 0.67km from the nearest turbine and 0.61km from the nearest other infrastructure (the cable trench).

The EIAR and Natura Impact Statement erroneously listed Mullaghanish to Musheramore Mountains SPA as being located 500m from the Proposed Development; it is actually 1.51km from the nearest turbine and 0.17km from the nearest other infrastructure (the cable trench).

These errors are not considered to significantly alter any of the conclusions in the EIAR or NIS.

1.9 Vantage Points and Viewshed Analysis

Details of the Request

“Please provide a map showing 6 number vantage points used for flight activity surveys with viewshed analysis.”

Applicant’s Response

Figure 2-5-1 (Volume 4) shows the viewsheds of the VPs used for the data collected between 2019-2022, the data from which was presented in the 2024 EIA Report. This shows that the VPs used gave good coverage of all turbine locations as well as covering most of the Proposed Development Site, and as such, there was no limitation as a result of the location of VPs on the data gathered.

1.10 Updated Ornithological Surveys and Data Validity

Details of the Request

“Data presented from Vantage Point surveys bird surveys covers the period 2018/2019, 2019/2020, 2020/2021. There is reference in Chapter 9 to surveys in 2022-2023 but no data corresponding to that period is presented. Other surveys for individual species date back to 2019.

Survey data submitted with the planning application in October 2024 was between 3 and 5 years old and in terms of the CIEEM note on the lifespan of ecological reports and surveys the validity of such data should be questioned. This is particularly the case where there has been significant changes to habitats present e.g. changes in forestry cover.

You are requested to provide updated survey data for key bird species including Hen Harrier that is representative of the current use of the site and hinterland area so that AA and EIA can be based on best available data (or provide robust scientific rationale on why this is not required). A revised Ornithology report and NIS should be provided to reflect the updated findings.”

Applicant’s Response

The data presented in the application, EIAR, AASR and NIS is compliant with NatureScot guidance on validity, which describes that data should have been collected within the five years leading up to submission of an application. However, to address the point raised in the RFI, additional ornithology surveys were carried out between December 2023 – August 2024 to provide an additional years’ worth of more recent ornithology data, and ensure compliance with the CIEEM guidance. A revised ornithology report and NIS have been included as part of the submission. A detailed report of the additional survey work is provided as Confidential Appendix 2-6-1 and a summation of the surveys is provided here

1.10.1 Additional Ornithology Surveys

The surveys carried out are summarised in Table 2.6-1 and follow NatureScot guidance, as endorsed by CIEEM.

Table 1.10-1: Summary of ornithology surveys 2023 - 2024

Survey	Period carried out	Methods used	Survey scope
Vantage Point surveys	December 2023 - August 2024	NatureScot 2017	Three vantage point locations (A, B, D) with a total of 72 hours of survey for VPs A & B and 78 hrs for VP D
Breeding Bird Surveys	April – July 2024	NatureScot 2017	Four visits; Proposed Development Site with 500 m buffer. Target species during surveys were non-passerine species of conservation concern breeding within open habitats in line with NatureScot guidance
Breeding Raptor Surveys	April - July 2024	NatureScot 2017, drawn from (Hardey J. C., 2013)	Four visits; Proposed Development Site with 2 km buffer

Results

The results are presented as short species accounts, in line with the species accounts presented in the updated Chapter 9: Ornithology and the NIS. Species accounts are provided for all species in the 2024 EIA Report which were carried forward for further assessment; in addition, the data from

2023-24 was reviewed to identify if the situation had changed with activity for any species not previously carried forward for further assessment.

Two species carried forward for further assessment were observed during the 2023 – 2024 surveys; Hen harrier *Circus cyaneus* and Golden plover *Pluvialis apricaria* as discussed further below. There were no observations of Red grouse *Lagopus lagopus* or Woodcock *Scolopax rustica*.

Hen harrier

Hen harrier were recorded during both VP surveys and breeding season surveys.

Table 2.6-2 shows the results of the VP surveys for this species

Table 1.10-2: Hen harrier VP survey results

Year	Mean no of birds	No. of flights	Total flight time (bird secs)	Total at risk flight time (bird secs)
2023 - 2024	1	3	235	120

Two of the flights occurred during the non-breeding season; a juvenile Hen harrier was present in August 2025. However, all flight activity occurred outwith the Proposed Development Site, with activity happening to the south of the Proposed Development.

An adult male and juvenile Hen harrier were also recorded in August south of the Proposed Development Site during the Breeding Raptor Surveys. However while this is indicative of a successful breeding attempt at some location, the absence of any other records of this species during the breeding season indicates that the territory was not within or even close to the Proposed Development Site.

There appears to be no change in Hen harrier activity during the 2023/4 surveys when compared with data presented in the 2024 EIA Report. There was still no activity associated with the Proposed Development Site in 2023/24; this accords with the very low levels observed during the previous surveys. The presence of a juvenile south of the Proposed Development provides evidence of successful breeding; however the absence of any activity prior to this individual being recorded indicates that the nest was not within the survey area as breeding Hen harrier tend to be highly visible during vantage point surveys if breeding close by.

Because of this, the findings of the updated and enclosed Chapter 9: Ornithology of the 2024 EIA Report with respect to Hen harrier remain valid and unchanged.

Golden Plover

Golden plover were recorded on six occasions during vantage points (Table 2.6-3).

Table 1.10-3: Golden plover VP survey results

Year	Mean no of birds	No. of flights	Total flight time (bird secs)	Total at risk flight time (bird secs)
2023 - 2024	10.5	6	4890	2790

All flights occurred during the non-breeding season, between January – March 2024. The largest flock size was 20 birds.

The activity level observed appears to be lower than in the data presented as part of the 2024 EIA report, although the months of October – November were missed for survey which could explain this; however flock size was also smaller than recorded previously. This might indicate a decline in activity in the vicinity of the Proposed Development Site, but could also be variation for the species.

Because of this, the findings of Chapter 9: Ornithology of the 2024 EIA Report remain valid.

Species not previously carried forward for assessment

The following species were observed during surveys which had previously been described:

- Kestrel *Falco tinnunculus*; Kestrel were the species most commonly recorded during VPs and two territories were identified. However the level of activity was similar to that recorded during the surveys described in the 2024 EIA Report.
- Buzzard *Buteo buteo*; Continued to be present within the survey area; recorded as a secondary species so limited information obtained. No territories identified. No suggestion that the level of activity had changed from the surveys described in the 2024 EIA Report.
- Snipe *Gallinago gallinago*; one flight of Snipe was recorded in the non-breeding season, with one observation during the breeding bird season in March. However there was no evidence of breeding and this level of activity was similar to that recorded during the surveys described in the 2024 EIA Report.
- Sparrowhawk *Accipiter nisus*; recorded as a secondary species during surveys so limited information obtained. No territories identified. No suggestion that the level of activity had changed from the surveys described in the 2024 EIA Report.
- Unidentified *Accipiter* – there were two observations of an *Accipiter* hawk during the non-breeding season, where Goshawk *Accipiter gentilis* could not be ruled out. Both observations were in January. In the author's experience, where Goshawk are territory holding, they are most visible in the early part of the breeding season (March/April) when they are displaying. While this could indicate presence of a Goshawk, the absence of any further activity from this species would tend to suggest that Goshawk are not present routinely or territory holding within the Proposed Development Site. If this was a Goshawk, and not the more frequently observed Sparrowhawk, then it is considered to have been transitory on the Proposed Development Site.
- As a result, there are no species which were not assessed in the 2024 EIA Report, where assessment would be required now.

1.10.2 Conclusions

The EIA and NIS have both been updated with recent bird survey data. Having reviewed the data from the additional year of surveys carried out, it is apparent that there has been no change in the occurrence of species present over and around the Proposed Development Site which would mean that the findings of Chapter 9: Ornithology of the Environmental Impact Assessment Report would still be valid. This also means that changes in habitat – for example from areas of commercial forestry being felled – have not affected species distribution or usage of the Proposed Development.

1.11 Collision Risk Modelling Clarifications

Details of the Request

“You are requested to clarify Section 9.2.6 Collision risk modelling makes reference to CRM carried out for species that were not recorded at the site during the survey period.”

Applicant’s Response

ACP sought clarification as to why it was stated that CRM was carried out on a range of species in Chapter 9: Ornithology of the 2024 EIA Report that were not recorded at the site during the survey period.

The list was included in error. Collision risk modelling was carried out only for those species for which modelling results were included in section 9.5.2 of Chapter 9: Ornithology of the 2024 EIA Report, namely Golden plover and Hen harrier. Flight activity levels were not sufficient for any other species to warrant carrying out collision risk modelling.

When assessing which species CRM should be carried out for, the level of activity and the sensitivity for each species is considered.

In reviewing flight data, consideration is therefore given to species for which the expected collision risk has the potential to be significant either individually or cumulatively. Typically any species which is a qualifying feature of a SPA will also be considered because of the sensitivity of the population. A further consideration is that when carrying out CRM, the results are limited to three decimal places to help with readability; a species with a collision risk of 0.001 is predicted to have a collision approximately once in a thousand years. The collision risk level would have to be very much higher than that to suggest an effect that could be significant; even a risk of 0.01 results in a predicted loss of only once every 100 years.

Therefore not all species with flight activity have collision risk calculated. The data is assessed and collision risk is run for species which have levels of flight activity which indicate a significant impact could occur. Of the four species for which impact assessment was carried out in the 2024 EIA Report, collision risk was calculated for Golden plover (with a mean estimate of approximately 2.2 birds per annum) and Hen harrier (with a mean estimate of approximately 0.001 birds per annum). For the other two species, there was no flight activity recorded during VPs and so no collision risk could be calculated as per standard methodology.

Of the other species for which flight activity was recorded but which were not taken forward for detailed assessment, as detailed in section 9.3.2 of the 2024 EIA Report, flight activity was of a similar order of magnitude to that recorded for Hen harrier, so, even allowing for the greater avoidance rate for Hen harrier, collision risk for other species would not have approached a level where a significant impact would occur, either with respect to the Proposed Development or in combination. As a result no further assessment occurred. It is worth noting that where there is uncertainty as to whether the flight activity is of a level where a significant impact could occur, then collision risk modelling would be carried out to determine exactly what the collision risk is.

1.12 Response to Observations Received

Details of the Request

“The Commission hereby considers it appropriate to invite you to make a submission on the observations received in relation to the application, as previously issued to you on the 13th December 2024 and 14th January 2025. Please be advised that any response to the Commission’s invitation should not contain any additional reports or supplementary reports and should be confined to the issues raised in the observations received by the Commission.”

Applicant’s Response

Table 2.8-1 below provides the Applicant’s response to the observation comments provided by the consultees.

Table 1.12-1: Observation Response

Consultee	Observation	Applicant Response
Planning / Development		
<p>Kerry County Council</p>	<p>In terms of the principle of the development, it should be noted that the subject site is not in an area identified for the provision of wind energy infrastructure in the Kerry County Development Plan 2022-2028. The subject site is not in an area designated 'Areas Open to Consideration' or 'Repowering areas' and such areas are not deemed suitable for commercial wind farm development because of their overall sensitivity arising from landscape, ecological, recreational and or cultural and built heritage resources.</p> <p>Objective KCDP 12-19 of the Kerry County Development Plan 2022-2028 seeks to: Facilitate the sustainable development of wind energy development within open to consideration areas at appropriate locations where it can be demonstrated to the satisfaction of the planning authority that there will be no significant adverse impact on residential amenity, on the built and natural environment, or on the visual character of the landscape.'</p> <p>Objective KCDP 12-20 of the Kerry County Development Plan 2022-2028 seeks to: "Ensure that commercial wind energy projects will not be considered in areas outside of 'Open-to-Consideration' and 'Repower Areas"</p> <p>The proposed wind farm would contravene Objective KCDP 12-19 and KCDP 12-20 of the Kerry County Development Plan 2022-2028 in relation to wind energy development and wind energy projects in areas outside 'Open-to-Consideration' and 'Repower Areas'. The proposed development and undesirable precedent It would set for similar development at inappropriate location in the Country, would therefore be contrary to the proper planning and sustainable development of the area.</p>	<p>It is noted in the Planning Statement accompanying the application that the Proposed Development Site no longer benefits from a supportive designation for wind energy in the KCDP. It is noted that the area was previously designated for wind farms in the two previous County Development Plans for Kerry County Council, which demonstrates that the site was previously considered suitable for wind energy. There has been no change to the baseline, or in any environmental or planning circumstances in the intervening period and therefore no environmental or planning reason or justification for the change in designation.</p> <p>This change in designation was not due to any change in planning or environmental conditions or in response to any incident. It is notable that the implementation of a new Wind Zoning Methodology for the current KCDP that resulted in a significant reduction in the land considered suitable for wind development across the County from c. 77,000ha to just 6,000ha.</p> <p>The applicant maintains the position that KCC's process for redesignating these areas is flawed in that:</p> <p>It did not comply with the (then applicable) Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change (Dept. of Housing, Planning, Community and Local Government (DHPLG 2017) as detailed in Section 3.1 of the Planning Statement;</p> <p>It failed to follow standing Guidance (the Wind Energy Development Guidelines (2006) (WEDG, DHPLG, 2006) or the draft guidance (the Revised Wind Energy Development Guidelines (RDWEDG, DHPLG 2019)) the methodology itself purported to; "...have cognizance of..."</p> <p>It is not evidence based and is subjective in places; and</p> <p>It applies a blanket approach to environmental constraints, applying constraints at a gross level which are only appropriate to consider at a site-specific level as detailed in Section 3.1 of the Planning Statement.</p> <p>The relevant national, European and local policy context is addressed in detail in the Planning Statement submitted with this application. There is without question overarching policy support for renewable energy development within Ireland. The Proposed Development will make a significant contribution to the delivery of</p>

Consultee	Observation	Applicant Response
		<p>climate change and renewable energy targets. The details are included in the EIAR Chapter 12 Air and Climate.</p> <p>Ireland has committed to reduce greenhouse gas emissions by 51% by 2030. A key feature of this policy is the decarbonization of Ireland’s electricity system, with a target to increase the share of electricity generated from renewable sources to 80% by 2030. These targets are reflected in the Climate Action Plan 2025 which sets a target of 9GW of onshore wind generation by 2030. It is now clear across Irish government and industry that neither of these targets will be met. It is incumbent on all of us as a society to do what we can to accelerate the deployment of renewable energy generation. Reinforcing this is the statutory obligation placed on public bodies, including An Coimisiún Pleanála, under section 15 of the Climate Action and Low Carbon Development Act, 2015 (as amended) to carry out their functions in a manner consistent with the Climate Action Plan and the achievement of these targets.</p> <p>The obligation placed on public bodies under section 15 of the Climate Act was recently clarified in the recent Coolglass Supreme Court decision¹ - it requires planning authorities, and the Commission, to do more than simply ‘have regard’ to the Climate Action Plan; they must be able to demonstrate their decision is consistent with it, and to the extent it is not, set out the impracticalities that precluded a decision which was consistent.</p> <p>From a planning perspective, the suitability of the site has been set out in the Planning Statement, as follows:</p> <p>The site location and characteristics are eminently suitable (provided in Section 5 of the Planning Statement. The EIAR provides a detailed assessment of the Proposed Development and concludes that the project is suitable in environmental terms and is consistent with the objectives of the National Planning Framework (NPF4) and broader national and EU sustainable energy and climate targets. ;</p>

¹ The Supreme Court (43/2025) upheld the quashing of a decision by ACP to refuse permission for the Coolglass Wind Farm, Co. Laois.

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		<p>Section 15 of the Climate Act obliges a Planning Authority, and the Commission is to perform its decision-making function (in so far as practicable) in a manner consistent with:</p> <ul style="list-style-type: none"> • the most recent approved climate action plan; • the most recent approved national long term climate action strategy; • the most recent approved national adaptation framework and approved sectoral adaptation plans; • the furtherance of the national climate objective, and, • the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State. <p>In the <i>Coolglass</i> case, Supreme Court held that it requires planning authorities, and the Commission, to do more than simply 'have regard' to the Climate Action Plan, it must engage in a detailed consideration of the question where it is raised in the context of a particular planning application, were obliged to give reasons why it says its ultimate decision is consistent with these climate objectives and, to the extent it is not, it must identify the impracticalities that prevent it from so doing.</p> <p>In this regard, it is noted that the Supreme Court held that a planning authority is entitled to approach its decision on a particular planning application on a presumption that any strategy or development plan adopted is consistent with climate objectives, and that any decision consistent with such a plan and strategy will itself be consistent with those objectives, and therefore in compliance with section 15. However, the Supreme Court also recognised that it is open to an applicant to demonstrate that compliance with a particular development plan would not be consistent with the objectives set down in section 15 and that the Commission, in order to comply with its own obligations under the section, would be obliged to depart from the development plan and exercise its power under section 37G(6) of the Planning Act. It is submitted that for the reasons set out above and in more detail in the Planning Statement that the KCDP was not adopted in a manner consistent with climate objectives.</p> <p>The Supreme Court went on to say that since the sequence of production of plans and strategies is not precisely integrated, it is possible that a development plan, which covers a five year period, may have been drafted by reference to earlier</p>

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		<p>iterations of the national climate action plans. It said that it was therefore possible that a development plan, although compliant with the then contemporaneous climate action plan could be out of date and no longer comply with the current climate action plan. This is demonstrably the case here. The KCDP was adopted in July 2022. At this point in time the applicable Climate Action Plan was CAP 2021 which provided for a target of 8GW. This has now been under the current CAP 2025 increased to 9GW.</p> <p>The Supreme Court went on to say that, at a more individual level, it might also be that the position proposed was not one which particularly engaged with the values of preservation of areas of scenic or natural beauty which had led to the designation of the area as not available. It is again submitted that for the reasons set out above and in more detail in the Planning Statement that this is case for the Site's designation.</p> <p>The Supreme Court concluded that:</p> <p><i>"At the same time demands of the climate emergency reflected in the most up to date climate action plan might tip the balance in such a case so that permission should be granted. <u>In any of these cases, it can be argued that the duty imposed on the Commission by s. 15 should means that the Commission should exercise its power to grant permission notwithstanding that the development would be a material contravention of the development plan</u>"</i> [Emphasis added]</p> <p>It is submitted that the present case falls squarely within all three of the example cases described by the Supreme Court and as such, the duty imposed by section 15 means that the Commission should exercise its discretion under 37G(6) and grant permission.</p>
Kerry County Council	<p>Refusal of permission is recommended in this case for the following reasons:</p> <p>The proposed windfarm would contravene Objective KCDP 12-19 and KCDP 12-20 of the Kerry County Development Plan 2022-2028 in relation to wind energy development and wind energy projects. Development Objective 12-20 of the Kerry County Development Plan 2022-2028 seeks to ensure that commercial wind energy projects</p>	<p>The response to the cited reasons for refusal regarding Objectives 12-19 and 12-20 is addressed in the Planning Statement and is summarised in the previous section.</p> <p>The Water Quality Assessment undertaken as part of the EIAR Chapter 11: Hydrology Water Quality and Flood Risk outlines mitigation measures specifically</p>

Consultee	Observation	Applicant Response
	<p>will not be considered in areas outside of 'Open-to-consideration' and 'Repower Areas'. The proposed development site is located outside of areas designated as being either a 'Repower Area' or an area that is 'Open-to-Consideration'. The proposed development and the undesirable precedent it would set for similar development at inappropriate locations in the County, would not be in accordance with the stated objective of the Development Plan and would therefore be contrary to the proper planning and sustainable development of the area.</p> <p>The proposed windfarm if permitted would prevent the Flesk waterbody from achieving its Water Framework Directive Objective with hydromorphology identified as a pressure. The proposed development is not in accordance with the objective of the Water Framework Directive to maintain good status and to improve less than good status waterbodies and would therefore be contrary to the proper planning and sustainable development of the area. As such, the Planning Authority is not satisfied that the proposed development would not have adverse impacts on water quality downstream and would not result in adverse impacts on the integrity of the Killamey National Park, MacGillycuddy Reeks and Caragh River Catchment SAC, in view of the sites' Conservation Objectives. The proposal would therefore conflict with Development Objectives KCD 11-1 and 11-2 and would be contrary to the protection of the environment, biodiversity, water and natural heritage and the proper planning and sustainable development of the area.</p> <p>The proposed windfarm would have a significant visual impact on The Paps Archaeological Landscape, that cannot be mitigated. As such, it is considered that the proposed development if permitted would contravene the objectives of the County Development Plan, specifically KCDP 8-28, which seeks to ensure the active protection of the 19 identified, significant archaeological landscapes outlined in Volume 3 with particular emphasis on the landscape settings, views to and from the landscapes and monument/feature inter-visibility within these landscapes. As such the proposed development contravenes the objectives of the County Development Plan, would injure or interfere with an archaeological area and would therefore be contrary to the proper planning and sustainable development of the area.</p>	<p>in relation to management of surface water (detailed further in Technical Appendix 11-4 Surface Water Management Plan) to prevent deterioration of water quality and quantity. As this assessment concludes that overall residual effects of the Proposed Development on the water environment are “not significant”, it is concluded that the development will not contradict WFD objectives, and is considered that the residual effect to all receptors will be “not significant”.</p> <p>This is further discussed in 'Hydrology, Geology, Hydrogeology, Soil and Peat' section of this table.</p> <p>The Proposed Development will not have any effect on the nature conservation value or integrity of Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs), details are provided in the NIS and Planning Statement.</p> <p>It is noted that the Proposed Development will have significant visual effect on the The Paps Archaeological Landscape, however, this effect is assessed as Moderate because the turbines will be visible only from limited directions (east and southeast) and are mostly screened by surrounding hills, including Cnoc an Choimín, Cnoc na Morc, and Mullach an Ois. The visual impact is also considered reversible, as the turbines will be removed at the end of their operational life.</p> <p>Overall, the impact on designated cultural heritage sites within 5 km is assessed as Moderate, primarily due to the proximity of The Paps and the changes to its setting when viewed from the east and southeast. The details are provided in the EIAR Chapter 14 Archaeology, Architectural and Cultural Heritage. The policy assessment and compliance for the Proposed Development is provided in planning statement.</p> <p>This is further discussed in the 'Cultural Heritage and Archaeology' section of this table.</p>
Landscape and Visual		
Kerry County Council	<p>The site lies within an area designated by Kerry County Council as a Visually Sensitive Area (VSA) in the Kerry County Development Plan 2022-2028. Visually sensitive landscape areas comprise the outstanding landscapes throughout the County which are sensitive to alteration. Rugged mountain ranges, spectacular coastal vistas and unspoilt wilderness areas are some of the features within this designation. These areas are particularly sensitive to development. The County enjoys both a national and</p>	<p>As noted in the Planning Statement and the LVIA supporting the application, while the Site lies within a VSA, existing wind farms are present within the VSA including Clydaghroe immediately to the south of the Proposed Development and a cluster of wind farms approximately 10km to the south.</p>

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	<p>international reputation for its scenic beauty. It is imperative in order to maintain the natural beauty and character of the County, that these areas be protected. In these areas, development will only be considered subject to satisfactory integration into the landscape and compliance with the proper planning and sustainable development of the area.</p> <p>In light of the above and the fact that the subject site is not in an area identified for the provision of wind energy infrastructure as per the Kerry County Development Plan, it is considered that the proposed development is not in accordance with the proper planning and sustainable development of the area and as such would constitute an inappropriate development in a visually sensitive area.</p>	<p>The area to the immediate south of the Proposed Development is within the areas identified in the KCDP as suitable for repowering. Furthermore, the KCDP does not exclude wind development in VSAs and makes provision for such development in the applicable policies for development in areas ‘Open for Consideration’, providing the proposal an opportunity to be considered and assessed on a case-by-case basis, subject to viable wind speeds, environmental resources and constraints and cumulative impacts. The policy assessment and compliance for the Proposed Development is provided in planning statement.</p> <p>The site does not fall within an area noted in the Landscape Character Assessment for the Upper Clydagh River and Derrynasaggart Mountains (2012) as not being suitable for wind farm development.</p> <p>Significant effects on landscape, including on the VSA, are expected only within the Site boundaries and in close proximity views only.</p> <p>No settlements or roads are anticipated to experience significant visual effects as a result of the wind farm. As noted the landscape in the immediate area contains operational wind farms, which reduces the susceptibility to change and the overall sensitivity of to wind development.</p> <p>Assessment of the policies of the KCDP are included in section 9 of the Planning statement .</p>
Ornithology		
Cork County Council	<p>The Ecology Section has concerns in relation to the information provided regarding a number of species recorded in the EIAR, particularly avian species. It is considered that the data provided, at over three years old, should not be considered as a reliable component of the ecological assessment of the proposed site. This is especially important when considering the proximity of the site to the Mullaghanish to Musheramore Mountains SPA to the site and the potential for hen harrier (special conservation interest of the SPA) to utilise the site, especially considering the recent clear felling of forestry. As such, the following would be required:</p> <ul style="list-style-type: none"> • Bird surveys for the proposed site, in line with recommended guidelines (e.g. NatureScot/SNH), to reflect the current usage of the proposed site and hinterland by species considered to be key ecological receptors. • Revised Natura Impact Statement and Ornithology Chapters to reflect the updated survey information. <p>The following conditions are proposed</p>	<p>As described in Section 2.6, additional ornithology surveys were carried out between December 2023 – August 2024 to provide an additional years’ worth of more recent ornithology data. This included Vantage Point (VP) surveys from three locations, Breeding Bird Surveys (April – July 2024) and Breeding Raptor Surveys (April - July 2024).</p> <p>All surveys were undertaken in accordance with NatureScot (2017) methodology. The results were reviewed to identify if the situation had changed with activity for any species, including those not previously carried forward for further assessment in the EIAR Chapter 9: Ornithology: Two species carried forward for further assessment in the chapter were observed during the 2023 – 2024 surveys; Hen harrier <i>Circus cyaneus</i> and Golden plover <i>Pluvialis apricaria</i>. There were no observations of Red grouse <i>Lagopus lagopus</i> or Woodcock <i>Scolopax rustica</i>.</p> <p>Hen harrier were recorded during both VP surveys and breeding season surveys. However, all flight activity occurred outwith the Proposed Development Site, with activity happening to the south of the Proposed Development. An adult male and juvenile Hen harrier were also recorded in August south of the Proposed</p>

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	<ul style="list-style-type: none"> • The applicants shall conduct two years of bird surveys of the proposed site and hinterland, prior to the commencement of works. • Revised Natura Impact Statement and Ornithology Chapters may be required to reflect the updated survey information. • Prior to any construction works being carried out between mid-March and mid-August, a survey for breeding hen harriers shall be carried out by a competent, experienced ornithologist between mid- March and the end of May. The survey shall cover the area within a boundary of 500m of the works to be carried out during the above period. It shall be the responsibility of the ornithologist to ensure that the survey methodology (location of vantage points, length of timing of observations, etc.) is sufficient to ensure that a hen harrier breeding site will not be overlooked. Taking into account the results of this survey no construction works shall be carried out during the above period within 500 metre of a pre nesting breeding site and/or nest, except with the written approval of the National Parks and Wildlife Service, but also no deliberate disturbance by surveyors of a hen harrier on or near a nest containing eggs or unflown young shall be considered lawful as a consequence of this grant of planning permission. 	<p>Development Site during the Breeding Raptor Surveys. However while this is indicative of a successful breeding attempt at some location, the absence of any other records of this species during the breeding season indicates that the territory was within or even close to the Proposed Development Site. August is when Hen harriers fledge and start to move away from nest sites. There appears to be no change in Hen harrier activity during the 2023/4 surveys when compared with data presented in the 2024 EIA Report. Because of this, the findings of the 2024 EIA Report with respect to Hen harrier would remain valid and unchanged.</p> <p>Golden plover were recorded on six occasions during VP surveys: All flights occurred during the non-breeding season, between January – March 2024. The largest flock size was 20 birds. The activity level observed appears to be lower than in the data presented as part of the 2024 EIA report, although the months of October – November were missed for survey which could explain this; however flock size was also smaller than recorded previously. This might indicate a decline in activity in the vicinity of the Proposed Development Site, but could also be variation for the species. Because of this, the findings of the 2024 EIA Report would remain valid.</p> <p>As described in Section 2.6, the following species were observed during surveys and similar levels of activity as in the earlier surveys: Kestrel Falco tinnunculus, Buzzard Buteo buteo, Snipe Gallinago Ggllinago, and Sparrowhawk Accipiter nisus. An unidentified Accipiter – there were two observations of an Accipiter hawk during the non-breeding season, where Goshawk Accipiter gentilis could not be ruled out but as described in Section 2.6, the absence of any further activity from this species would tend to suggest that Goshawk are not present routinely, or territory holding within the Proposed Development Site. If this was a Goshawk, and not the more frequently observed Sparrowhawk, then it is considered to have been transitory on the Proposed Development Site. As a result, there are no species which were not assessed in the 2024 EIA Report, where assessment would be required now.</p> <p>Having reviewed the data from the additional year of surveys carried out, it is apparent that there has been no change in the occurrence of species present over and around the Proposed Development Site which would mean that the findings of the Ornithology Impact Assessment would still be valid. This also means that changes in habitat – for example from areas of woodland being felled – have not affected species distribution or usage of the Proposed Development. As such no further surveys are considered required.</p>

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Department of Housing, Local Government and Heritage	<p>The proposed 17-turbine Wind Farm is not within a designated or proposed European or National biodiversity site, but it is within 0.5 km of the Mullaghanish to Musheramore Mountains Special Protection Area (SPA) (Site Code: 004162), designated for the Hen Harrier (Croman na gCearc). Hen harriers breeding within the SPA will hunt for prey outside the boundaries of the SPA in suitable habitat within up to 4km of the SPA. Hen Harriers will often nest and hunt for prey within secondary rotation re-afforested land, so despite the mostly closed canopy conifer woodland occurring on the site, all areas of the site may be suitable habitat at some stage in the rotation. However, the VP (Vantage Point) data from the Environmental Impact Assessment (EIA) shows little use of the proposed Wind Farm site during the breeding season, with most records occurring during the overwintering season.</p> <p>It is recommended that surveys for the following bird species are carried out, by one or more experienced ornithologists, annually during the lifetime of the Wind Farm, and during the appropriate seasons: Hen Harrier, Merlin, White-tailed eagle, Red grouse and Golden Plover. Annual corpse surveys using trained dogs are also recommended. The results of these surveys will be made available to the Planning Authority and to the Department.</p>	<p>Given the very low level of bird activity across the site, monitoring is only proposed for woodcock, a species whose response to wind farms is poorly understood. As described in EIAR Chapter 9: Ornithology, the monitoring programme will involve update woodcock surveys prior to works commencing, followed by a targeted programme of monitoring with a view to comparing levels of breeding woodcock activity pre and post construction to see if there is any spatial change in use of the Site pre and post construction, both in relation to the wind farm but also forestry use of the Site.</p> <p>Ideally this will involve use of a control site, if a suitable site can be identified, to enable conclusions about any identified changes in activity to be referenced to activity in other locales not subject to development. Surveys will take the format of repeated Woodcock activities prior to construction on both sites, and then following construction on both sites.</p>
Biodiversity		
Kerry County Council	<p>Biodiversity Assessment</p> <p>The proposed windfarm development is not located within an area identified as 'open to consideration' for windfarm development in the Kerry CDP 2022-2028. As such the project is considered to be a developer led rather than a plan led proposal, was not assessed as part of the Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) or the Strategic Flood Risk Assessment (SFRA) undertaken as part of the Kerry CDP plan preparation, and materially contravenes the CDP. There is no meaningful windfarm specific guidance set out in the CDP for proposals such as this proposed to be located outside of the 'open to consideration' designated areas.</p> <p>AA Screening</p> <p>For completeness and clarity purposes it is considered that the Castlemaine Harbour SAC and SPA, which are located downstream should have been included within the AA Screening Assessment.</p> <p>Appropriate Assessment</p> <p>The NIS submitted has identified the potential for the construction of the proposed development to result in pollution reaching watercourses that drain into the River Clydagh as part of the SAC, which could change the water quality, biology and chemistry of the river and consequently the SAC species it supports. Mitigation</p>	<p>Castlemaine Harbour SAC and SPA is large coastal site located c45km from the Proposed Development. Given that no significant effects are predicted on watercourses, no pathway for effect is likely on the SAC's qualifying features, which comprise a range of coastal and alluvial habitats as well as Sea lamprey <i>Petromyzon marinus</i>, River lamprey <i>Lampetra fluviatilis</i>, Atlantic salmon <i>Salmo salar</i>, Otter <i>Lutra lutra</i>, and Petalwort <i>Petalophyllum ralfsii</i>. The SPA is designated for a range of wintering waterfowl; the large separation distance between the SPA and the Proposed Development prevents a pathway for effects.</p> <p>The biodiversity impact assessment has been revised to assess impacts before and after the implementation of mitigation measures. These revisions are included in the supporting document "61253 Cummeennabuddoge Wind Farm - Chapter 8 Biodiversity Resubmitted".</p>

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	<p>measures aimed at addressing same are outlined in Section 6 of the NIS. As part of this, it is outlined that 'mitigation for all water features aims to preserve existing water quality ratings as far as practicably possible'.</p> <p>While the concise format of the NIS submitted is welcomed, it is noted that for the Killamey National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, the NIS does not distinguish between whether the conservation objectives are to restore or maintain favourable conservation status of the individual qualifying interests.</p> <p>Furthermore, it is considered that the mitigation measures could have been set out in a manner more in keeping with S3.2.4 of the EC Commission Notice 2021/C 437/01 'Assessment of plans and projects in relation to Natura 2000 sites- Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC'. It is noted that the mitigation outlined in S6 of the NIS relies on embedded mitigation and measures set out in various other reports submitted as part of the application. Therefore, it is considered that these should similarly be presented in a manner compatible with the EU guidance document referred to.</p> <p>The concerns of the environment department as outlined in the report prepared on the 23rd of October 2024, regarding water quality and hydro-morphology are noted. Any impacts on water quality could adversely impact Qualifying Interest aquatic species and habitats downstream and should be avoided. Based on the information submitted and the report received from the Environment Section, it is considered that a definitive appropriate assessment cannot be completed in favour of the proposal.</p> <p>Furthermore, proximity to the Mullaghanish to Musheramore Mountains Special Protection Area (Site code: 004162) is noted. Wind farm development at this location was not taken into consideration as part of the strategic level environmental assessments undertaken as part of the Kerry CDP 2022-2028. Having regard to Hen Harrier population trends here and nationally, a wider consideration of potential for impact on the species would be beneficial, which should also take into account repowering proposals supported by the Kerry County Development Plan 2022-2028 and the Hen Harrier Threat Response Plan 2024-2028. It is noted that proposals permitted as part of the planning application 23.646 to the west of the N22 required works to be undertaken between September and March (outside of the bird breeding season) and that no such mitigation is outlined for this proposal.</p>	
<p>Kerry County Council</p>	<p>Wider Biodiversity Considerations</p> <p>It would have been beneficial if the documentation submitted outlined compatibility with the Freshwater Pearl Mussel Guidance Document: 'Guidance on Assessment and</p>	<p>The Freshwater Pearl Mussel survey work was done under licence (No. C47/2021) and carried out following the National Parks & Wildlife Service guidance 'Margaritifera margaritifera Stage 1 and Stage 2 survey guidelines, Irish Wildlife Manuals, No. 12' (Anon, 2004) which remains current. It was undertaken in 2021,</p>

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	<p>Construction Management in Margaritifera Catchments in Ireland'. Atkinson et al 2024. https://e-mussels.eu/europe/conservation-guidelines</p> <p>The Kerry CDP places an increased emphasis on biodiversity enhancement. Within this context and having regard to the historical alterations of the hydrology within the landholding by way of forestry activities etc, and having regard to development objective KCDP 11-69, it is considered that increased operational stage upstream storage of flood waters would have been beneficial.</p>	<p>prior to publication of the guidance document by Atkinson et al. (2024) but is effectively considered to be compliant with that guidance.</p>
<p>Kerry County Council</p>	<p>Overall Conclusion and recommendation of the Environmental Assessment Unit</p> <p>It is considered that biodiversity and climate change commitments have equal standing, and creating opportunities to achieve both, without compromising each other, should be plan led and supported by strategic level environmental assessment.</p> <p>Having regard to the above and in particular to the concerns raised by the Environment Section, it is considered that it is not possible to conclude beyond reasonable scientific doubt, that this proposal would not adversely impact the Killamey National Park, McGillycuddy Reeks and Caragh River Catchment SAC.</p>	<p>We respectfully disagree. A wide range of proven effective mitigation measures that are commonly employed for developments of this nature are proposed in the EIAR, notably in the Construction Environmental Management Plan (Technical Appendix 4-1), the Peat Management Plan (Technical Appendix 10-3) and Surface Water Management Plan (Technical Appendix 11-4). The implementation of mitigation will be overseen by an Ecological Clerk of Works. As outlined in the supporting document “61253 Cummeennabuddoge Wind Farm - Chapter 8 Biodiversity Resubmitted”, examples of the mitigation include no instream works, stream crossings installed during the July to September (inclusive) to avoid the most sensitive time for spawning fish, no-works buffers implemented around watercourses, avoidance of direct discharge into watercourses, and off-site disposal of wastewater generated during construction off site.</p>
<p>Cork County Council</p>	<p>(Continued from Ornithology response above)</p> <p>Furthermore, in keeping with the principles of the mitigation hierarchy, retaining the wet heath habitat that was recorded along the proposed grid connection route should be the preferred approach. As per Chapter 8 of the EIAR, the proposed cable will result in the direct loss of 0.9ha of HH3 Wet Heath. This comprises a permanent moderate significant adverse effect on a National value IEF.As such, the following would be required:</p> <ul style="list-style-type: none"> • A revised plan to provide for the GCR avoid wet heath and to run along the existing access track to Ballyvouskill substation. <p>The following conditions are suggested:</p> <ul style="list-style-type: none"> • The grid connection route (GCR) shall be rerouted to run along existing access tracks. • Should the GCR be allowed to run through wet heath habitat, appropriate mitigation and a method statement should be agreed upon with planning authority prior to the commencement of works. 	<p>The quality of the wet heath habitat is generally unfavourable across the site, being both fragmented and mainly in poor condition, although some areas of wet heath in good condition occur; as evaluated in Section 8.3.2 of the EIAR, the wet heath feature was assessed to have no more than County value, although it is acknowledged that elsewhere in the original Chapter 8, the value was incorrectly and inadvertently stated as National. This has been corrected in document “61253 Cummeennabuddoge Wind Farm - Chapter 8 Biodiversity Resubmitted”. Although the proposed cable will result in the excavation of 0.9ha of HH3 Wet Heath, this loss is temporary only, as the excavated turves will be reinstated. Therefore no change in route is proposed. It should also be noted that a beneficial effect is predicted from the enhancement of 4.76ha wet heath, which would not be in place in the absence of the Proposed Development and which will deliver a net gain of 3.86ha wet heath during the operational phase.</p> <p>A programme for post-construction bat monitoring and bat carcass searches is committed to (see document “61253 Cummeennabuddoge Wind Farm - Chapter 8 Biodiversity Resubmitted”).</p>

Consultee	Observation	Applicant Response
	<ul style="list-style-type: none"> After commencement of operation of the wind farm, a bird and bat corpse survey shall be conducted annually under the operational turbines by a competent ecological surveyor and according to up-to-date best practice using trained search dogs. Full details of the bird and bat corpse survey programme, including timescales for submission of the survey data and results to the Planning Authority, shall be submitted in writing and agreed with the Planning Authority prior to the commencement of development. 	<p>Given the very low level of bird activity across the site, monitoring is only proposed for woodcock, a species whose response to wind farms is poorly understood. As described in EIAR Chapter 9: Ornithology, the monitoring programme will involve update woodcock surveys prior to works commencing, followed by a targeted programme of monitoring with a view to comparing levels of breeding woodcock activity pre and post construction to see if there is any spatial change in use of the Site pre and post construction, both in relation to the wind farm but also forestry use of the Site.</p> <p>Ideally this will involve use of a control site, if a suitable site can be identified, to enable conclusions about any identified changes in activity to be referenced to activity in other locales not subject to development. Surveys will take the format of repeated Woodcock activities prior to construction on both sites, and then following construction on both sites.</p>
<p>Inland Fisheries Ireland</p>	<p>The proposed windfarm works are located on high gradient lands encompasses the Clydagh River and its tributaries, all part of the Flesk and Killarney Lake system. Part of the Killarney National Park, Macgillycuddy's Reeks And Caragh River Catchment SAC.</p> <p>These waters are of high fishery interest, with extensive salmonid spawning and nursery grounds throughout these systems, it is therefore essential the aquatic habitat and water quality is protected, and not negatively impacted by this proposed development.</p> <p>These rivers should be considered good status waters and highly vulnerable to polluting inputs, habitat interference and hydrological changes.</p> <p>The lands in question have shallow overburden of peat with limited vegetation cover. There is a high dynamic hydrological regime present due to the sites elevated location, high gradient and dynamic rainfall.</p> <p>IFI considers the environmental impact assessment report (EIAR) in support of this application and requires strict adherence to environmental protection measures identified.</p> <p>The following comments and recommendations are relevant:</p> <ul style="list-style-type: none"> An experienced Environmental officer is employed to oversee the project and protect the fishery habitat. 	<p>As described above, a wide range of effective mitigation measures that are commonly employed for developments of this nature are proposed in the EIAR, notably in the Construction Environmental Management Plan (Technical Appendix 4-1), the Peat Management Plan (Technical Appendix 10-3) and Surface Water Management Plan (Technical Appendix 11-4). The implementation of mitigation will be overseen by an Ecological Clerk of Works. As outlined in the supporting document "61253 Cummeennabuddoge Wind Farm - Chapter 8 Biodiversity Resubmitted", examples of the mitigation include no instream works, stream crossings installed during the July to September (inclusive) to avoid the most sensitive time for spawning fish, no-works buffers implemented around watercourses, avoidance of direct discharge into watercourses, and off-site disposal of wastewater generated during construction off site.</p>
<p>Cultural Heritage and Archaeology</p>		

Consultee	Observation	Applicant Response
<p>Kerry County Council</p>	<p>It is noted that the application is accompanied by an archaeological assessment of the development contained in Chapter 14 of the EIAR.</p> <p>The report correctly notes that there is only one recorded monument within the proposed development area Ke077 001, a hut site in Cummeennabuddoge townland, which was not found during the course of this assessment. There are other recorded monuments in the wider area but none in close proximity to the proposed development area.</p> <p>The report also correctly identifies that much of the area of the proposed development has previously been disturbed by the extensive mix of mature and new forestry across much of the area. This would have impacted any potential archaeological deposits or features in these areas.</p> <p>The report does note that there are areas of higher potential within the site where development may impact on previously unrecorded archaeological strata or features, specifically stream crossings and townland boundaries.</p> <p>The mitigation measures proposed involve a mix of geophysical survey (where possible), pre- development archaeological testing and licenced archaeological monitoring. In general, these measures are appropriate to the development as described.</p> <p>However, the proposed development is located within a protected archaeological landscape, as defined in the Kerry County Development Plan 2022-2028:</p> <p>13. The Paps -- Annaghbeg, Annaghmore, Doocarrig More, Gortacoreen, Gortderrig, Shrone More, Shrone Beg, Gortnagane, Raheen, Awnaskirtaun, Knocknabro, Knockagowan, Derrynafinnia, Derrymaclavlode, Killeen, Carrigaveema & Coolcirtoga.</p> <p>According to legend The Paps are the earthly manifestation of the breasts (Paps) of the Mother Goddess Anu and would have been venerated as such throughout prehistory. The cairns on the summits of the mountains are likely to contain small passage tombs, while other features on the summit are also likely of similar date. The slopes of the mountains and surrounding area are littered with hut sites, enclosures, megalithic structures, triple banked barrow etc. While the locally important Christian focus at 'The City' in Gortnagane is likely to be of prehistoric origin also given the name Caher Crov Dearg and the likely association with the triadic mother goddess in the form Badb Catha or Raven of Battle. These sacred mountains and their surrounding archaeological, mythological and historic landscape are still venerated, albeit in Christian guise, to this day.</p> <p>This is the largest and one of the most significant of the 19 archaeological landscapes listed for protection within the CDP as it is still a focus of veneration and visitation to</p>	<p>The assessment of potential effects on the setting of Recorded Monuments and the designated Paps Archaeological Landscape was undertaken using the best practices and is informed in part by ZTV analysis. As the ZTV is based on a bare-ground model, it does not reflect existing field boundaries, forestry, or natural vegetation, all of which have the potential to further reduce actual turbine visibility in the landscape.</p> <p>The proposed wind farm will be visible from a number of recorded monuments within and around the Paps Archaeological Landscape; however, it will not interrupt any key sightlines or intervisibility between the monuments or between these monuments and the Paps themselves.</p> <p>Within the Paps landscape, around half of the recorded sites will experience some degree of turbine visibility, but the overall archaeological character, coherence, and integrity of the landscape will remain intact. The resulting visual impact is therefore assessed as long-term, moderate and reversible, as the turbines can be removed at the end of their operational life.</p> <p>For monuments outside the Paps, turbine visibility varies and is often reduced by topography or existing forestry, with many sites experiencing no visibility at all. As the development sits within an area already altered by peat extraction and modern forestry, it will not further diminish the legibility or understanding of the surrounding prehistoric landscape or the relationships between its monuments.</p> <p>Potential effects on the feature or site of archaeological, architectural heritage merit or their setting, located in proximity to the Proposed Development have been assessed and details are provided in Section 14.3 and Section 14.4 of the updated Cultural Heritage chapter and included alongside this RFI Report.</p> <p>The EIAR assesses the overall impact on designated cultural heritage sites within 5 km is assessed as Moderate, largely due to the proximity of The Paps Archaeological Landscape and the impact on the setting of this landscape as it is viewed from the east and southeast, and views from the landscape to the east and southeast. Appropriate mitigation measures are recommended to address the potential for previously unrecorded subsurface archaeology. It is also proposed to incorporate the heritage opportunities into the Proposed Development design, to enhance the surrounding monuments that where it is not feasible to mitigate the effects.</p>

Consultee	Observation	Applicant Response
	<p>the present day is a long established place in the cultural and spiritual consciousness of the county and further afield. The relevant objective of the CDP in relation to these landscapes is KCDP 8-28 which states:</p> <p>Ensure the active protection of the 19 identified, significant archaeological landscapes outlined in Volume 3 with particular emphasis on the landscape settings, views to and from the landscapes and monument/feature inter-visibility within these landscapes.</p> <p>It is considered that 'moderate', is a very subjective assessment of the visual impact which is clearly significant and affects the southern aspect of both the mountain peaks and the surrounding landscape. The proposed mitigation by way of information boards to 'partially offset' this impact is not acceptable as a mitigation measure.</p> <p>The proposed development if permitted would have a significant visual impact on The Paps Archaeological Landscape, which cannot be mitigated and would contravene Objective KCDP 8-28 of the County Development Plan.</p>	
<p>Cork County Council</p>	<p>The County Archaeologist recommends that planning conditions be attached to any grant of planning permission that may issue to ensure that any impacts to sub-surface archaeological features can be dealt with appropriately. (These planning conditions pertain to the section within County Cork only, i.e., the Grid Connection Cable Route). The following conditions are proposed:</p> <ul style="list-style-type: none"> • The developer shall engage a suitably qualified archaeologist to carry out an updated Archaeological Impact Assessment (AIA) in advance of any site preparation works and groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works. The updated AIA shall involve an examination of all development layout/design drawings, completion of documentary/cartographic/photographic research and archaeological testing in off-road locations along the proposed grid connection cable route (consent/licensed as required under the National Monuments Acts), the methods of which shall be agreed with the NMS and the County Archaeologist. The archaeologist shall prepare a comprehensive report, including an updated archaeological impact statement and mitigation strategy, to be submitted for the written agreement of the planning authority in advance of any site preparation works, groundworks and/or construction works. Where significant archaeological remains are shown to be present, preservation in-situ will be required and establishment of further 'buffer zones', preservation by record (archaeological excavation) or archaeological monitoring may be required and mitigatory measures to ensure the preservation and/or recording of archaeological remains shall be included in the AIA. Any further 	<p>Specifications for advance geophysical survey, advance archaeological trenching, and advance Underwater Archaeological/ Wade & Metal Detector Survey have been prepared and provided ,as separate Appendix M, Appendix N and Appendix O for this RFI Report.</p>

Consultee	Observation	Applicant Response
	<p>archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. The planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of any subsequent archaeological investigative works following the completion of all archaeological work on site and the completion of any necessary post-excavation work. All resulting and associated archaeological costs shall be borne by the developer.</p> <ul style="list-style-type: none"> • The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in the updated Archaeological, Architectural and Cultural Heritage Impact Assessment Report (Chapter 14 of the EIAR) following consultation with NMS. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity. The CEMP shall be submitted to the County Archaeologist / Local Authority for written agreement prior to the commencement of any site preparation works and groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works. • The developer shall engage a suitably qualified archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping, groundworks and/or the implementation of any agreed preservation in-situ measures associated with the development. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in consultation with the National Monuments Service, regarding appropriate mitigation [preservation in-situ/excavation]. The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer. • Following the completion of all archaeological work on site and any necessary post-excavation specialist analysis, the planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. All resulting and associated archaeological costs shall be borne by the developer. 	

Consultee	Observation	Applicant Response
<p>Department of Housing, Local Government and Heritage</p>	<p>It is noted that the Environmental Impact Assessment Report (EIAR) submitted as part of the planning application includes a desk-based Archaeological Impact Assessment (AIA) which was carried out in relation to the proposed development by Rubicon Heritage Services Ltd (EIAR Chapter 14; date September 2024).</p> <p>The proposed development is located in proximity to a number of Recorded Monuments which are subject to statutory protection under Section 12 of the National Monuments (Amendment) Act 1930-2014. The EIAR acknowledges that there is a potential that previously unknown sub-surface archaeological features or deposits may be present within the proposed development site (PDS). The Department notes that no advance archaeological investigations have been carried out within the PDS to inform the EIAR, other than a walkover survey. The Department advises that advance archaeological test excavation should be carried out in advance of any development and note that some provision for this has been made in the mitigation measures proposed in the EIAR along with the carrying out of Advance Geophysical Surveys (where appropriate).</p> <p>The Department has reviewed the EIAR and advises that the following should be included as a condition of any grant of permission. Note these recommended conditions align with Sample Conditions C3, C5 and C6 as set out in OPR Practice Note PN03: Planning Conditions (October 2022), with appropriate site-specific additions/adaptations based on the particular characteristics of this development and informed by the findings of the EIAR.</p> <p>Archaeological Requirements:</p> <ul style="list-style-type: none"> • All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 14 of the EIAR (Rubicon Heritage Services Ltd; date September 2024) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order • The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out pre-development archaeological testing in areas of proposed ground disturbance within all greenfield sections of the site and to submit an Archaeological Impact Assessment report for the written agreement of the Planning Authority, following consultation with the Department, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works. Please note that: • The report shall include an Archaeological Impact Statement and Mitigation Strategy. Where archaeological material is shown to be present, avoidance, preservation in- 	<p>Specifications for advance geophysical survey, advance archaeological trenching, and advance Underwater Archaeological/ Wade & Metal Detector Survey have been prepared and provided as separate Appendix M, Appendix N and Appendix O for this RFI Report.</p>

Consultee	Observation	Applicant Response
	<p>situ, preservation by record (archaeological excavation) and/or monitoring may be required.</p> <ul style="list-style-type: none"> Any further archaeological mitigation requirements specified by the Planning Authority, following consultation with the Department, shall be complied with by the developer. No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the Planning Authority. The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 14 of the EIAR and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly The Planning Authority and the Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer. <p>Underwater Archaeology</p> <p>The planning and environmental assessments, submitted to the Department as a prescribed body, under Section 182A of the Planning and Development Act 2000 (as amended), including the Environmental Impact Assessment Report (EIAR) Chapter 14 Cultural Heritage (Rubicon Heritage Services Ltd; date September 2024), have been reviewed. It is noted that the proposed development is located proximal to a number of Recorded Monuments which are subject to statutory protection under Section 12 of the National Monuments (Amendment) Act 1930-2014. It is further noted that the proposed development includes interactions with a number of waterways and water-crossings that, given the concentration of known archaeological monuments in their environs, have the potential to contain Underwater Cultural Heritage. Wrecks and archaeological objects underwater are protected by Section 3 of the National Monuments (Amendment) Act 1987. In light of the potential significant effects of the proposed development on underwater cultural heritage, as outlined above, the Department recommends that a programme of pre-development underwater archaeological assessment should be undertaken as a condition of any planning approval that may issue from An Bord Pleanála.</p> <p>The assessment should be carried out at the earliest possible stage to facilitate the embedding of any recommended further mitigation within the post-consent detailed</p>	

Consultee	Observation	Applicant Response
	<p>design for the project, as necessary, in order to ensure the preservation in-situ of any identified/potential underwater cultural heritage and to develop an informed archaeological strategy to be implemented in agreement with the Department.</p> <p>Underwater Archaeological Impact Assessment (UAIA)</p> <p>The developer shall commission an Underwater Archaeological Impact Assessment (UAIA) report which shall include the following:</p> <ul style="list-style-type: none"> • A desktop assessment that addresses the underwater cultural heritage (including wrecks, archaeological objects, built, and industrial/canal heritage) of the development area, as identified by fieldwork, cartographic analysis, historical research and prior archaeological investigations. The assessment shall include a full inventory, mapping and survey (photographic, descriptive, photogrammetric, as appropriate) of all underwater cultural heritage features and structures that are proposed to be significantly affected by the proposed development. • The UAIA shall include a licensed wade/dive survey, accompanied by a hand-held metal detection survey, centred on (but not confined to) the area(s) where in stream works are proposed, including the proposed locations of enabling works, coffer dams and machinery movements that may affect the underwater environment. The wade/dive assessment and metal detection survey shall be undertaken by a suitably licensed and experienced underwater archaeologist. All identified underwater cultural heritage shall be surveyed (photographic, descriptive, photogrammetric) in detail as part of the assessment. A Dive/Survey licence (Section 3 1987 National Monuments Act) and Detection Device consent (Section 2 1987 National Monuments Act) will be required for the dive/wade survey and metal detection, respectively. Licences should be applied for to the National Monuments Service and should be accompanied by a detailed Method Statement. Note a period of 3-4 weeks should be allowed to facilitate processing and approval of the licence applications and Method Statement. All archaeological wading/diving should comply with the Health and Safety Authority's Safety, Health and Welfare at Work (Diving) Regulations 2018/2019. • Having completed the above-described works, a final report describing the results of the UAIA shall be submitted to the Department. The report shall include a comprehensive Archaeological Impact Statement (AIS) that comments on the degree to which the extents, location and levels of all proposed works (including Site Investigation works) required for the development, will impact upon any underwater cultural heritage and areas of archaeological potential that have been identified. The AIS shall describe the potential impact(s) of all proposed development works and 	

Consultee	Observation	Applicant Response
	<p>shall also assess any proposed additional potential secondary/indirect impacts, such as those caused by scouring resulting from changes in hydrology. The AIS should be illustrated with appropriate plans, sections and photographs that clearly describe any adverse effect(s) of the development on underwater cultural heritage and proposals for their mitigation. Mitigation shall prioritise redesign to allow for full or partial preservation in situ and the institution of archaeological exclusion zones, and may also include further wade/dive surveys, test-excavations, excavations ('preservation by record') and/or monitoring, as deemed appropriate. The Department will advise with regard to these matters. No construction works shall commence until after the UAIA has been approved in writing to the developer by the Department.</p>	
Traffic and Transport		
<p>Cork County Council</p>	<p>The proposed main entrance to the site is located off the National Primary Road N22 in Co. Kerry. The applicant has stated that this entrance will be used for the delivery of material and personnel to the site.</p> <p>The Area Engineer has assessed Chapter 7 of the EIA Report. The applicant has stated that they have identified a number of quarries to supply material to the proposed development. Given the proximity of one of these suppliers to an existing forestry/wind farm entrance located in Caherdowney, Cork County Council would have concerns that the L-5226 would be used as a short cut to access the site through existing tracks through Coillte own land. Therefore, we will require confirmation from the applicant that this route will not be used for the delivery of materials to the site.</p> <p>The following condition is proposed: The L-5226 from the junction of R582 to the existing forestry entrance at Garrane Bridge shall not be used as a haulage route for materials to the site.</p>	<p>The Applicant can confirm that the L-5226 road will not form part of any designated construction traffic route to site. The designated routes are included within the CTMP document and site traffic will need to adhere to these designated routes. Adherence to the CTMP will form part of the Contractor's obligations. This will ensure that unsuitable routes are not used by construction traffic.</p>
<p>Transport Infrastructure Ireland (TII)</p>	<p>1. Official Policy</p> <p>In relation to the subject application, TII considers that clarification in relation to access proposals is required.</p> <p>In one instance the application indicates access to the site is via an existing local road junction prior to access to the N22, national road, and in another instance the Planning Statement indicates that a new site entrance will be formed at the junction of the site access road and the N22.</p> <p>In the interests of road user safety and adherence to the provisions of official policy relating to development access to national roads, TII recommends that all access</p>	<p>The Applicant confirms that all access to the subject site will be facilitated via the existing local road access from the N22 only. There are no proposals for a new site access from the N22.</p>

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	<p>TII requests the following:</p> <ul style="list-style-type: none"> In the interest of clarity, any operator who wants to transport a vehicle or load whose weight falls outside the limits allowed by the Road Traffic (Construction Equipment & Use of Vehicles) Regulations 2003 must obtain a permit for its movement from each Local Authority through whose jurisdiction the vehicle shall travel; All structures should be checked by the applicant/developer to confirm that structures can accommodate proposed loading associated with delivery of components where weight of the delivery vehicle and load exceeds that permissible under the Road Traffic Regulations; It is critical that a full assessment by the applicant/developer of all structures on the national road network along the haul route should be undertaken, where relevant, and all roads authorities along the haul routes should confirm their acceptance of proposals by the applicant; and <p>The Authority requests referral of all proposals agreed between the road authorities and the applicant impacting national roads</p>	
<p>Kerry County Council</p>	<p>The construction programme associated with the proposed development is anticipated to cover a 24 month period. During this time, 11,034 HGVs would access the proposed development site, which equates to 96 daily two-way HGV trips during the peak construction months (Month 1, 2 and 3).</p> <p>A robust assessment has been submitted, which uses a conservative scenario for two-way traffic movements, including the assumption that 20% of stone would be imported to the proposed development site.</p> <p>The impact of total construction traffic could increase traffic flows along the road links within the Study Area by the following percentages:</p> <ul style="list-style-type: none"> N22 north of the Proposed Development Site --1.6%; N22 south of the Proposed Development Site -- 1.8%; N40 Cork South Ring Road -0.3%; and N28 at Ringaskiddy -0.7%. <p>The documentation submitted with this application notes that these increased traffic levels are temporary in nature and represent the expected traffic generation during the busiest month of construction. Generated traffic by the proposed development during other months of the construction programme will be considerably lower.</p> <p>The documentation submitted with this application infers that the traffic levels anticipated during the busiest month of construction can be accommodated by the</p>	<p>The Applicant notes the consultee's comments.</p> <p>As demonstrated in the Traffic and Transport Assessment submitted with the EIAR, the increase in traffic associated with the construction phase is temporary and the predicted traffic levels can be accommodated by the existing road network.</p> <p>Any potential impacts will be further managed through the implementation of the Construction Traffic Management Plan (CTMP).</p>

Consultee	Observation	Applicant Response
	existing road network within the Study Area, and further managed / minimised by the implementation of a Construction Traffic Management Plan.	
Hydrology, Geology, Hydrogeology, Soil and Peat		
Geological Survey Ireland	<p>Geoheritage</p> <p>Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS, Department of Housing, Local Government and Heritage), to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme of Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme are rigorously selected by a panel of theme experts.</p> <p>County Geological Sites (CGSs), as adopted under the National Heritage Plan, include additional sites that may also be of national importance, but which were not selected as the very best examples for NHA designation. All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS. CGSs are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online Map Viewer.</p> <p>The CGSs for Kerry remain unaudited and as such there is limited detailed information on each site available publicly. The sites are listed in a master list of unaudited sites and are presented on Geological Survey Ireland's Map Viewer as sites with buffer zones but no specific site boundary. Our records show that there are no unaudited CGSs within the site boundary of the proposed windfarm.</p> <p>Groundwater</p> <p>Groundwater is important as a source of drinking water, and it supports river flows, lake levels and ecosystems. It contains natural substances dissolved from the soils and rocks that it flows through, and can also be contaminated by human actions on the land surface. As a clean, but vulnerable, resource, groundwater needs to be understood, managed and protected.</p> <p>Geological Survey Ireland's Groundwater and Geothermal Unit, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.</p>	<p>The Applicant notes the comments of the Geological Survey Ireland and acknowledges the information provided in relation to geoheritage, groundwater resources, geological mapping, geotechnical databases, geohazards and natural resources.</p> <p>The EIAR prepared for the Proposed Development includes assessments of geology, soils, hydrogeology and hydrology, which considered the geological and groundwater environment of the site and the potential effects of the development. The Applicant confirms that there are no recorded County Geological Sites within the Proposed Development site boundary, and the assessment concludes that the Proposed Development will not give rise to significant effects on geological heritage or groundwater resources.</p> <p>The Applicant also notes the recommendation to utilise Geological Survey Ireland datasets and mapping resources and confirms that publicly available geological and hydrogeological information has informed the baseline assessment undertaken for the EIAR.</p> <p>Should the Proposed Development proceed, the Applicant will have regard to the recommendations of Geological Survey Ireland, including the provision of relevant site investigation information where appropriate and the consideration of geological exposures during construction, subject to safety and engineering requirements.</p>

Consultee	Observation	Applicant Response
	<p>Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer. which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers {karst features, tracer test database; turlough water levels (gwlevel.ie)}. Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.</p> <p>The Groundwater Protection Response overview and link to the main report is here: https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx</p> <p>Geological Mapping Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found here, in your future assessments.</p> <p>Geotechnical database Recourses Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our Geotechnical Map Viewer. We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project</p> <p>Geohazards Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into</p>	

Cummeennabuddoge Wind Farm

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	<p>consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.</p> <p>Natural resources (minerals/aggregates) Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our Minerals section of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our Map Viewer.</p> <p>In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed wind farm are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.</p> <p>Other Comments Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings be created, we would ask that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate. Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.</p> <p>The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector.</p>	
Department of Housing, Local Government and Heritage	<p>Increased efficiency of drainage of upland areas, due to the combination of many drainage works for farms, forests and roads, can, at least initially, result in accelerated runoff, with greater storm hydrographic peaks where more water flows through the river system in a shorter time period (e.g. Holden et al., 2006). This can exacerbate flood levels in rivers due to the increasing magnitude of rain events, likely to be due to climate change, where exceptional falls of rain occur in more intense and more frequent periods (e.g. Fowler et al., 20073).</p>	<p>Felling It is noted in Section 1.4.1 of the WQA that a highly precautionary/conservative approach has been adopted to the assessment of the impact of felling works on nutrient release (“due to on-going commercial forestry operations, approximately 40% of the proposed felling area considered in this assessment has already been felled”). It is therefore considered that the assessments completed illustrate that</p>

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	<p>It is understood that virtually all of the Wind Farm site drains into the catchment of the River Flesk, which is part of the Kerry Biosphere area, and includes Killarney National Park Special Area of Conservation (SAC), as it is also the catchment of the River Leane. The Department would be concerned with the level of nutrient release to the Flesk tributaries if all the conifer stock was felled in one season. The Department recommends the spreading of felling over a number of years.</p> <p>It is recommended that daily sediment sampling in streams within the Flesk catchment is carried out by a qualified ecologist or hydrologist clerk-of-works during the active road and turbine foundation construction period, and that construction contracts require immediate work stoppages when sampling indicates excessive sediment release.</p> <p>It is also particularly important that the geotechnical stability assessments are reviewed by an independent competent geologist, geomorphologist or hydrogeologist.</p>	<p>the potential for nutrient release as a result of felling is considered to be sufficiently mitigated under the existing mitigation measures.</p> <p>Monitoring Regime</p> <p>The current monitoring regime outlined in Appendix 11-3 (Water Quality Monitoring and Response Plan) of the EIAR consists of the following:</p> <p>“The water quality sampling and analysis regime will consist of physico-chemical sampling techniques. Water quality monitoring will be carried out at the following stages of the project:</p> <ul style="list-style-type: none"> • Baseline sampling (12 months prior to commencement of the construction phase (including felling): • continuous monitoring via automated sonde with telemetry and cloud-upload capabilities (or similar capability to allow automated data capture in real time); and • nominally monthly via in-situ measurements and grab samples for lab analysis for approximately one year prior to pre-construction felling; • Construction phase (including forestry felling) monitoring: • continuous monitoring via automated sonde with telemetry and cloud-upload capabilities; and • fortnightly in-situ measurements and grab samples for lab analysis; • Operational phase monitoring (12 months post-completion of commissioning of the proposed development): • nominally monthly via in-situ measurements and grab samples for lab analysis for the monitoring period; • Decommissioning phase: • the decommissioning phase poses similar risks to water quality in receiving watercourses (within and downstream of the Proposed Development) as during the construction phase. Notwithstanding changes in requirements by the planning authority, environmental regulators or stakeholders, decommissioning phase monitoring would comprise 6 months pre-decommissioning baseline monitoring, continuous and grab sample monitoring for the duration of decommissioning, and in-situ / grab sample monitoring for a 6-month period on completion of decommissioning. <p>Results from water quality sampling will be independently recorded and reported by the appointed Environmental Consultant. Reports will be made available to the</p>

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		<p>local authority or related stakeholders if requested. Further testing and visual assessment may be carried out by the Developer to further augment the independent test regime proposed”.</p> <p>It is considered that the currently proposed monitoring plan outlined within the Water Quality Monitoring and Response Plan is sufficiently robust to ensure no significant effects on water quality within the receiving hydrological environment from felling activities, however, the developer will commit to daily sediment sampling in Flesk catchment streams during road and turbine foundation construction, to provide additional oversight and to enable rapid response if levels exceed established trigger thresholds.</p> <p>Response to Excessive Sediment Levels</p> <p>It is noted this action is currently included in Appendix 11-3 (Water Quality Monitoring and Response Plan) of the EIAR, which provides the following requirements in Section 4.2 (Response Plan/Adaptive Mitigation):</p> <p>“All monitoring data uploaded to the cloud will be screened by the appointed Environmental Consultant / ECoW, and sensibility checked for anomalies. Trends in concentrations of specified parameters shall be determined to pre-empt any potential exceedance of established trigger thresholds.</p> <p>An exceedance event requiring a response will be determined by the ECoW or Environmental Consultant where:</p> <ul style="list-style-type: none"> • in their judgement based on trends indicated on monitored data, a breach of the trigger threshold is likely; or • where the automated sonde and telemetry triggers an alarm that a trigger threshold has been exceeded for the specified water quality parameters and where the Environmental Consultant determines that the exceedance is not spurious. <p>In that case, the Environmental Consultant / ECoW shall initiate a response which will require work to cease within the catchment draining to the location where the trigger threshold has been met. This may require a site-wide stoppage.</p> <p>The Environmental Consultant / ECoW shall investigate the potential cause of the trend or exceedance and implement effective adaptive mitigation measures where a potential source of reduced quality runoff is identified (such as implementing additional temporary SuDS).</p>

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		<p>Works shall only recommence when monitoring has determined that specific water quality parameters have returned to acceptable levels determined by the Environmental Consultant / ECoW.”</p> <p>It is noted in Section 1.4.1 of the WQA that a highly precautionary/conservative approach has been adopted to the assessment of the impact of felling works on nutrient release (“due to on-going commercial forestry operations, approximately 40% of the proposed felling area considered in this assessment has already been felled”). It is therefore considered that the assessments above illustrate that the potential for nutrient release as a result of felling is considered to be sufficiently mitigated under the existing mitigation measures.</p> <p>Monitoring Regime</p> <p>The current monitoring regime outlined in Appendix 11-3 (Water Quality Monitoring and Response Plan) of the EIAR consists of the following:</p> <p>“The water quality sampling and analysis regime will consist of physico-chemical sampling techniques. Water quality monitoring will be carried out at the following stages of the project:</p> <ul style="list-style-type: none"> • Baseline sampling (12 months prior to commencement of the construction phase (including felling): <ul style="list-style-type: none"> - continuous monitoring via automated sonde with telemetry and cloud-upload capabilities (or similar capability to allow automated data capture in real time); and - nominally monthly via in-situ measurements and grab samples for lab analysis for approximately one year prior to pre-construction felling; • Construction phase (including forestry felling) monitoring: <ul style="list-style-type: none"> - continuous monitoring via automated sonde with telemetry and cloud-upload capabilities; and - fortnightly in-situ measurements and grab samples for lab analysis; • Operational phase monitoring (12 months post-completion of commissioning of the proposed development): <ul style="list-style-type: none"> - nominally monthly via in-situ measurements and grab samples for lab analysis for the monitoring period; • Decommissioning phase: <ul style="list-style-type: none"> - the decommissioning phase poses similar risks to water quality in receiving watercourses (within and downstream of the Proposed Development) as during the construction phase. Notwithstanding changes

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		<p>in requirements by the planning authority, environmental regulators or stakeholders, decommissioning phase monitoring would comprise 6 months pre-decommissioning baseline monitoring, continuous and grab sample monitoring for the duration of decommissioning, and in-situ / grab sample monitoring for a 6-month period on completion of decommissioning.</p> <p>Results from water quality sampling will be independently recorded and reported by the appointed Environmental Consultant. Reports will be made available to the local authority or related stakeholders if requested. Further testing and visual assessment may be carried out by the Developer to further augment the independent test regime proposed”</p> <p>It is considered that the currently proposed monitoring plan outlined within the Water Quality Monitoring and Response Plan is sufficiently robust to ensure no significant effects on water quality within the receiving hydrological environment from felling activities, however, the developer will commit to daily sediment sampling in Flesk catchment streams during road and turbine foundation construction, to provide additional oversight and to enable rapid response if levels exceed established trigger thresholds.</p>
<p>Kerry County Council</p>	<p>The application was reviewed in terms of the risk of flooding associated with the proposed windfarm development. The proposal as detailed in the application will not increase the risk of flooding downstream of the development if all mitigation and monitoring measures relating to the pre-commencement, construction, operational and decommissioning phases of the proposed development as set out in the application are adopted and implemented. Should the board consider granting permission the following should be taken into consideration:</p> <ul style="list-style-type: none"> • The proposed development is located within Flood Zone C, as defined in the Planning guidelines except for where access tracks cross watercourses within the site. At these locations (8no), the culverts/bridge structures will be required to comply with OPW Section 50 licence requirements to ensure that there is no increase in flood risk elsewhere because of the crossings • The main potential negative impacts from the development in terms of flooding and surface water pollution are an increase in the rate and composition of surface water run-off arising from physical disturbance of ground, mismanagement of excavations, excavated material and peat storage areas, and operation of machinery, all of which 	<p>The Applicant notes the consultee’s comments regarding flood risk and surface water management associated with the Proposed Development.</p> <p>At the 8 watercourse crossings, culverts and bridge structures will be designed in accordance with OPW Section 50 licence requirements to ensure there is no increase in flood risk downstream.</p> <p>Potential construction impacts, including runoff, peat storage, excavations, and machinery, will be mitigated through the Surface Water Management Plan, SuDS design, and Construction Environmental Management Plan.</p>

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	<p>could lead to increased silt run-off, risk of localised flooding, changes to surface water flows, concrete and fuel contamination</p> <ul style="list-style-type: none"> The Surface Water Management Plan and associated drainage drawings outline measures for the management of surface water and run-off from the site, for the protection of watercourses and in particular, sediment and erosion control. These measures will need to be implemented in full and a robust monitoring and audit system put in place to ensure compliance with the developed Construction Environmental Management Plan and to ensure regular inspection, maintenance and repair of the drainage channels, settlement ponds, swales, dams, silt fences and outfalls. The detailed design of the surface water drainage and management system and the developed CEMP should be updated prior to the commencement of construction to include all mitigations and monitoring measures, planning conditions and alterations to the EIAR and should be submitted to the Planning Authority for written approval prior to the commencement of development. 	<p>Water quality monitoring will be undertaken during pre-construction, construction, operational, and decommissioning phases. Work will be paused if thresholds are exceeded and will only resume once water quality returns to acceptable levels.</p> <p>All mitigation and monitoring measures will be fully implemented. Detailed designs for drainage and SuDS measures will be submitted to the Planning Authority for approval prior to commencement of construction.</p>
<p>Kerry County Council</p>	<p>Environmental / Water Services</p> <p>Given the scale and nature of the overall proposed development, there are significant concerns regarding the risk to water quality potentially arising from this proposed development, in particular the potential hydromorphological impact of the proposed development and the likely impact on the natural drainage of the area, particularly given the sensitivity and profile of the Lough Leane Catchment.</p> <p>The proposed development is predominantly within the Clydagh Valley, which is within the overall Lough Leane Catchment. There was a significant algal bloom in Lough Leane in the late 1990s. The Lough Leane Catchment Monitoring and Management Project was established thereafter, which was an early example of an integrated catchment management approach. The project identified that sediment-derived phosphorus was a potentially significant input to the lake system, this was illustrated by the significance of a landslide event in the Clydagh Valley in 2003.</p> <p>In addition, Water quality management is of significant concern. In relation to the WFD (Water Framework Directive), the project straddles several waterbodies. Much of the project is within the Flesk (Kerry)_01 O and the Flesk (Kerry)_020 waterbodies. The Flesk (Kerry)_020 waterbody is considered at risk of achieving its WFD objective with hydromorphology identified as a pressure. There is an onus under the WFD to maintain good status and to improve less than good status waterbodies. Large applications such as this one have the potential to undermine the waterbody's ability to achieve its WFD objectives.</p>	<p>Assessment of the impact of the Proposed Development on water quality has been considered in detail in Chapter 11 (Hydrology) of the EIAR, and in the following technical appendices:</p> <ul style="list-style-type: none"> Appendix 4-1: Construction Environmental Management Plan (CEMP); Appendix 11-2: Water Quality Assessment (WQA); Appendix 11-3: Water Quality Monitoring and Response Plan (WQMRP); and Appendix 11-4: Surface Water Management Plan (SWMP). <p>Appendix 11-2 (Water Quality Assessment) of the EIAR outlines the assessment conducted by McCloy Consulting, quantitatively assessing the effect of runoff from the Proposed Development to the key receptors.</p> <p>A summary of the assessments is outlined in Section 1.4 of the WQA below:</p> <p>“1.4 Approach to the Assessment</p> <p>An initial assessment was carried out which informed the scope of the water quality assessment. This involved:</p> <ul style="list-style-type: none"> Data collation to characterise the study area including identification of key receptors, hydrological characteristics and WFD water body status; and

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	<p>It is considered that the management of development works for the proposed development particularly from the water-quality management perspective, can be extremely challenging, especially given the terrain, ground conditions and high rainfall levels.</p> <p>Consequently, the proposed development would, if permitted, mitigate against the Flesk waterbody from achieving its Water Framework Directive Objective. In addition, the Council are not satisfied that the proposed development would not have adverse impacts on water quality downstream and would not result in adverse impacts on the integrity of the Killamey National Park, MacGillycuddy Reeks and Caragh River Catchment SAC, in view of the sites' Conservation Objectives.</p>	<ul style="list-style-type: none"> • Undertaking a screening assessment to determine the relevant water quality parameters and legislation enacted within the study area. <p>The detailed water quality assessment was then undertaken in two distinct assessments, as follows:</p> <p>1.4.1 Assessment of Nutrients at Lough Leane</p> <p>The quality of surface water discharging from the Proposed Development site in terms of potential nutrient release associated with felling operations (required as part of construction phase enabling works) and the potential effects on specific environmental receptors at Lough Leane was assessed.</p> <p>The assessment determined compliance of the discharges from the Proposed Development site during the felling work with Environmental Quality Standards (EQS) as defined in the relevant European Union (EU) water quality regulations, and determined the effect relative to the long term pre-construction baseline. A detailed and conservative assessment of the impact on the receiving waters based on a proposed clear-fell of trees across the Proposed Development site has been undertaken and the suitability of the proposals in relation to water quality has been assessed</p> <p>It should be noted at the outset that due to on-going commercial forestry operations, approximately 40% of the proposed felling area considered in this assessment has already been felled; therefore, assumptions made in this report, and results presented, are considered to be highly precautionary / conservative.</p> <p>The assessment of nutrients at Lough Leane involved the following:</p> <ul style="list-style-type: none"> • A 1D modelling study was conducted to assess the concentration of relevant nutrients at Lough Leane into which the River Clydagh / River Flesk ultimately discharges; and • Compliance of the modelled water quality parameters in line with the Environmental Quality Standards (EQS) at points of interest relevant to the Proposed Development site was then determined; and the effect of the Proposed Development relative to the pre-construction baseline determined. <p>1.4.2 Assessment of Total Suspended Solids in the River Clydagh</p> <p>The assessment of total suspended solids (TSS) in the River Clydagh involved the following:</p>

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		<ul style="list-style-type: none"> • A 2D dispersion modelling study was carried out to evaluate discharge of sediments into the River Clydagh (part of the River Flesk catchment), including the adjacent 'Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment Special Area of Protection (SAC)' under storm events; • Compliance of the modelled water quality parameters in line with the Environmental Quality Standards (EQS) at points of interest relevant to the Proposed Development site was then determined; and • The assessment considered various scenarios and a sensitivity analysis. <p>For the purpose of this study, the following have been considered:</p> <ul style="list-style-type: none"> • European Union / domestic water quality regulations relevant at the Proposed Development site; • Available water quality information at, and downstream of, the Proposed Development site; • Site level information based on a combination of 1m and 2m DTM height data, 10m LiDAR and 25m DTM height data; • Site observations based on inspections undertaken in January 2021, April 2021, and July 2022; and • Detailed assessment (by dispersion modelling) of compliance of surface water discharge with Environmental Quality Standards." <p>The findings of the assessment are outlined in Section 6 of the WQA:</p> <p>6.1.1 Assessment of Nutrients at Lough Leane</p> <p>The environmentally sensitive Lough Leane has previously been subject to historic eutrophication and excessive nutrient-loading. An assessment of the water quality parameters primarily responsible for eutrophication (i.e., phosphorous and nitrogen) downstream of the Proposed Development site and into Lough Leane has, therefore, been undertaken. Far field dispersion modelling was carried out to assess the effects of nutrient release associated with felling operations conducted as part of the construction phase of the Proposed Development. A screening assessment identified the pollutants relevant to the assessment as ammonium nitrogen, total oxidised nitrogen, molybdate reactive phosphorous and total phosphorous.</p> <p>A detailed 1D ICM water quality model of the River Clydagh / River Flesk has been developed to model the watercourse from immediately downstream of the Site Boundary to its confluence with Lough Leane.</p>

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		<p>The model scenario is under mean annual flow conditions, in which fluvial inflows are long-term and continuous.</p> <p>The scenario modelled is unrealistically precautionary as the proposed discharge concentrations adopted as inputs to the hydraulic model are demonstrably overly conservative compared to nutrient levels captured in the catchment-specific monitoring undertaken during ongoing felling operations at the site. As a result, the modelling study is highly conservative.</p> <p>Model results show, that for each of the nutrients modelled, downstream dispersion is such that concentrations return to baseline conditions at a point upstream of Lough Leane. Results demonstrate that there is no measurable effect to concentrations discharging into Lough Leane and, therefore, no predicted environmental effect with regards to nutrient enrichment.</p> <p>6.1.2 Assessment of Total Suspended Solids in the Clydagh River</p> <p>A high resolution 2D ICM water quality model of the upper reaches of the River Clydagh has been developed to determine the concentrations of total suspended solids within the watercourse due discharge of surface water runoff from the Proposed Development.</p> <p>The critical model scenario is under low flow conditions coupled with a critical 6 hour-2 year storm event.</p> <p>The results of the model show that for the proposed scenario, TSS concentrations do not exceed EQS threshold levels along the River Clydagh or its tributaries. An exception to this is along a short stretch of a tributary, downstream of outfall catchment 40, in which EQS targets are exceeded due to the underlying topography, with shallow depths leading to reduced mixing in the area. However, after a short distance downstream, these high concentrations are dispersed to below EQS targets. Recommended limits are not exceeded at any point within the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC.</p> <p>To facilitate assessment of the impact of climate change on future summer flows, an extreme low flow scenario was modelled based on an EPA recommended 60% reduction in 95%ile low flows. The model was found to not be sensitive to the reduction in flow, with pollutant concentrations unchanged from the baseline proposed scenario. This is due to influence of the critical storm hydrology applied on dispersal of sediments within the watercourse.</p> <p>Where EQS targets are not exceeded, there are no predicted adverse effects to the qualifying interests in the SAC or the reach of the River Clydagh adjacent to</p>

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		<p>the site. As a result, there will be no adverse effects further downstream due to TSS discharge from the proposed development.”</p> <p>The results of this assessment are discussed further in Chapter 11 of the EIAR, where the predicted impacts of the Proposed Development are assessed following the application of design and embedded mitigation measures, and following the application of additional mitigation measures.</p> <p>EMBEDDED/DESIGN MITIGATION MEASURES</p> <p>The embedded/design mitigation measures are outlined in detail in Section 11.5 of the EIAR, and include:</p> <ul style="list-style-type: none"> • Buffer/exclusion zones in relation to construction activities in proximity to watercourses. • Construction /decommissioning phase surface water management plan / site drainage design using the principles of Sustainable Drainage, promoting the principles of onsite retention of flows and use of vegetated buffers and other silt removal techniques. • Permanent site drainage design using the principles of Sustainable Drainage. • Design evolution has resulted in avoidance of watercourses with the exception of unavoidable watercourse crossings to facilitate access. • Temporary watercourse crossings within the Proposed Development site will be bridging platforms / Bailey Bridges that themselves require no in-channel work. Permanent watercourse crossings within the Proposed Development will be bottomless/ clear-span crossings. <p>The effect of the Proposed Development following application of these measures is assessed in Section 11.6.2 of the EIAR:</p> <p>“Potential environmental effects have been determined based on criteria outlined within Section 11.2.4 taking into account the effect of avoidance by design measures (embedded mitigation) and normal prescribed measures proposed (designed mitigation) and described in preceding sections.”</p> <p>The key conclusions of the assessment are summarised below with the complete assessment schedules and rationale informing the potential effects provided in Section 11.10. The assessment determined that:</p> <ul style="list-style-type: none"> • Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC –including River Clydagh and River Flesk:

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		<ul style="list-style-type: none"> • Embedded mitigation and design measures do not fully remove potential risk to the receptor with regards to changes to water quality (chemical pollution) resulting in potential Major Adverse effects during construction, operational, and decommissioning phases; • Lough Leane: • Embedded mitigation and design measures do not fully remove potential risk to the receptor with regards to changes to water quality (chemical pollution) resulting in potential Minor Adverse effects during construction, operational, and decommissioning phases; • Major watercourses draining the Proposed Development: • Embedded mitigation and design measures do not fully remove potential risk to the receptors with regards to changes to water quality resulting in potential Major Adverse effects during construction/decommissioning phases and Minor Adverse effects during operational phase; • Minor watercourses draining the Proposed Development: • Embedded mitigation and design measures do not fully remove potential risk to the receptors with regards to changes to water quality resulting in potential Minor Adverse effects during construction, operational, and decommissioning phases; • Watercourses draining the section of the Proposed Development where site access is proposed: • Embedded mitigation and design measures do not fully remove potential risk to the receptors with regards to changes to water quality resulting in potential Major Adverse effects during construction /decommissioning phases and Minor Adverse effects during operational phase; • Watercourses draining the section of the Proposed Development where the 110kV grid connection is proposed: • Embedded mitigation and design measures do not fully remove potential risk to the receptor with regards to changes to water quality resulting in potential effects ranging from Minor to Moderate Adverse during construction / decommissioning phases and Minor Adverse effects during operational phase; • Off-site major watercourses (downstream Clydagh / Flesk catchment including reach designated for drinking water) • Embedded mitigation and design measures do not fully remove potential risk to the receptor with regards to changes to water quality resulting in potential

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		<p>Moderate Adverse effects during construction / decommissioning phases and Minor Adverse effects during operational phase.</p> <p>ADDITIONAL MITIGATION MEASURES</p> <p>Additional mitigation measures are proposed and described in detail in Section 11.6.3 to 11.6.5 of the EIAR and the Technical Appendices, and include mitigation measures in the following categories for each phase:</p> <p>Construction Phase</p> <ul style="list-style-type: none"> • Adaptive response – work stoppages; • Responding to weather; • Pollution prevention measures; • Storage; • Refuelling; • Maintenance; • Cement and concrete batching; • Mess and welfare facilities; • Construction in the vicinity of watercourses; • Construction of watercourse crossings; • Temporary SuDs; • Electrical cable laying; • Excavations and spoil management; • Dewatering of excavations and borrow pits; • Dust management; • Maintenance of pollution prevention measures. <p>Operational Phase</p> <ul style="list-style-type: none"> • Adherence to best practice; • Permanent welfare facilities; • Continuation of monitoring (12 months); • Cyclical maintenance of permanent SuDS features. <p>Decommissioning Phase</p> <ul style="list-style-type: none"> • All measures as per construction phase;

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		<ul style="list-style-type: none"> • Monitoring for 6 month baseline phase pre-decommissioning; • Monitoring during decommissioning; • Monitoring for 6 months following decommissioning. <p>RESIDUAL EFFECTS</p> <p>The Residual Effects following implementation of the additional mitigation measures are considered in Section 11.7 of the EIAR:</p> <p>“Potential environmental effects have been determined based on criteria outlined within section 11.2.4 (taking into account the effect of additional mitigation measures proposed and described in preceding sections) of all receptors identified as previously having an unmitigated effect significance greater than ‘not significant’.</p> <p>The key conclusions of the assessment are summarised here with the complete assessment schedules and rationale informing the potential effects, evaluated per the criteria stated in Section 11.2.4 provided in Section 11.10.</p> <p>The assessment concludes for construction and decommissioning phases that the significance of residual effects, after implementation of additional mitigation, would be Not Significant at all receptors.</p> <p>The assessment concludes that for the operational phase, the significance of residual effects, after implementation of additional mitigation, would be Not Significant at all receptors including the adjacent SAC.”</p> <p>Based on the assessment and mitigation measures outlined in Chapter 11, it is considered that all potential major/moderate/minor adverse effects on water quality have been sufficiently assessed and mitigated.</p> <p>CONCLUSIONS</p> <p>Based on the assessments detailed in Chapter 11 of the EIAR and the relevant technical appendices, it is concluded that the implementation of the mitigation proposed eliminates or reduces the potential significance of effect to all receptors to “not significant”. Section 11.9 (Summary and Conclusion) of the EIAR provides the following summary:</p> <p>“The assessment of the magnitude of the predicted effect has taken into account the full range of infrastructure proposed by the application. The range of turbines proposed causes no change to work at ground level that would affect the magnitude of any effect to hydrology. The foundation footprint will remain the same</p>

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		<p>for all turbines within the range and, therefore, there will be no change to the significance of any of the predicted effects on hydrology for all turbines within the proposed range.</p> <p>As noted in EIAR Chapter 11, section 11.1.4, a fundamental requirement of the WFD is to attain good ecological water status of water bodies and that deterioration in the status of water bodies is prevented. Any effect that would compromise the achievement of a WFD objective, or result in the deterioration in the status of a water body, is considered as a significant effect. This assessment outlines mitigation measures specifically in relation to management of surface water (detailed further in Technical Appendix 11-4 Surface Water Management Plan) to prevent deterioration of water quality and quantity. As this assessment concludes that overall residual effects of the Proposed Development on the water environment are “not significant”, WFD objectives are deemed to have been satisfied.</p> <p>There is no likelihood of significant cumulative effects over and above any pre-existing effect caused by existing, proposed or consented projects.”</p> <p>Therefore, based on this assessment, it is concluded that the development will not contradict WFD objectives, and is considered that the residual effect to all receptors will be “not significant”.</p>
<p>Kerry County Council</p>	<p>The proposed windfarm works are located on high gradient lands encompasses the Clydagh River and its tributaries, all part of the Flesk and Killarney Lake system. Part of the Killarney National Park, Macgillycuddy's Reeks And Caragh River Catchment SAC.</p> <p>These waters are of high fishery interest, with extensive salmonid spawning and nursery grounds throughout these systems, it is therefore essential the aquatic habitat and water quality is protected, and not negatively impacted by this proposed development.</p> <p>These rivers should be considered good status waters and highly vulnerable to polluting inputs, habitat interference and hydrological changes.</p> <p>The lands in question have shallow overburden of peat with limited vegetation cover. There is a high dynamic hydrological regime present due to the sites elevated location, high gradient and dynamic rainfall.</p> <p>IFI considers the environmental impact assessment report (EIAR) in support of this application and requires strict adherence to environmental protection measures identified.</p> <p>The following comments and recommendations are relevant:</p>	<p>The Applicant acknowledges the comments from Inland Fisheries Ireland regarding the sensitivity of the Clydagh River catchment and the need to protect aquatic habitats, water quality, and fisheries resources.</p>

Consultee	Observation	Applicant Response
	<ul style="list-style-type: none"> An experienced Environmental officer is employed to oversee the project and protect the fishery habitat. Roads and stream crossings: IFI seeks to ensure all watercourse crossings are spanned as specified in proposed plans, not to impede fish, including eel migration. Bridging should be of a nature, which will not interfere with the natural streambed or its gradient. IFI requires this be assured and/or any crossings originally in place be modified as part of planning if granted. Consultation with IFI will be required and crossing agreed as part of the planning licence if granted. Culvert pipes are not recommended as they increase flow velocities with the potential to cause erosion. During construction, works should be undertaken in the dry by using cofferdams to divert flow if required or by pumping water passed the work areas. Instream works to be carried out from July to September inclusive. Site Construction - Sediment Control. Mitigation measures must be in place and functioning before any earthworks commence. Addition measures may be included/necessary if works breach original measures. Silt control measures need to be regularly inspected, easily managed and maintained (Fencing is easily collapsed and can become ineffective without proper management on an ongoing basis such is not generally a feature of these sites.) Machinery movement within buffer zones should be prohibited. Cement and Fuels. Specific instruction should be given to contractors on the potential hazard to water quality when undertaking works close to watercourses and when using cement. Drainage of wet peat areas. Drainage of these areas should be avoided or minimised. Any forestry drainage system within the site should be back filled to prevent surface water flow through. Such work should be undertaken during dry weather condition Alterations to watercourses. Watercourses should not be diverted or altered as a result of this development. Timing: Instream work or works likely to impact on water quality or habitats may only be carried out during the months July to September inclusive, with IFI consultation. 	<p>An experienced Environmental Clerk of Works (ECoW) will be appointed to oversee construction activities and protect fishery habitats.</p> <p>Watercourse crossings will be designed and installed as per the submitted plans to maintain natural streambeds and fish passage. Consultation with IFI will be undertaken where required, and the crossings will comply with relevant guidelines..</p> <p>Silt and sediment control measures will be implemented before earthworks commence and maintained throughout construction, in line with the Surface Water Management Plan. Machinery movement will be restricted within buffer zones.</p> <p>Contractors will follow all necessary procedures to prevent contamination from cement, fuels, or other chemicals near watercourses.</p> <p>The drainage of wet peat areas will be minimised, and existing forestry drainage systems will be managed to avoid impacts on surface water flows.</p> <p>Watercourses will not be diverted or altered as part of the development.</p> <p>In-stream works will be restricted to July–September, in line with IFI recommendations and permits.</p>

Consultee	Observation	Applicant Response
	<ul style="list-style-type: none"> Monitoring of surface water <p>Monitoring of surface water quality to be stringent through construction works. Use of auto sampler's u/s, discharge from the site and d/s. Testing D.O. silt, conductivity.</p> <ul style="list-style-type: none"> Surveys: <p>IFI would require a combination of semi and fully qualitative and quantitative fisheries information on all aquatic habitats which may be affected. IFI requires a minimum of 1 site on each stream order.</p> <p>Such assessments are to be carried out pre and post works and include control sites where applicable.</p> <p>It is a requirement to apply for a section 14 permit from IFI prior to any electrofishing surveys.</p> <p>Electrofishing is permitted from 1° of July to 30" September inclusive.</p> <p>Water quality must also be assessed, using fauna/flora and chemical analysis pre, during and post works, for a minimum of 1 year after construction phase is completed. Information to be made available to IFI upon request.</p> <ul style="list-style-type: none"> Pre-development information should be of such nature and extent that it can be used for reference purposes and more importantly to identify if an impact (event) has occurred during the project's developmental phase. 	<p>Surface water quality will be monitored during construction using the approved Water Quality Monitoring and Response Plan.</p> <p>Pre- and post-construction monitoring of aquatic habitats, including water quality and fisheries surveys, will be undertaken in accordance with IFI guidance and permits.</p>
<p>National Environmental health Service</p>	<p>The NEHS has considered Chapter 11 Vol 2 of the EIAR- Hydrology. In particular section 11.3.14 Drinking Water. It is noted that the only drinking water source identified is 5km down-stream from the site. It's not clear if Private Wells have been included in the consideration for drinking water sources. The section states:</p> <p>Drinking water datasets available from the EPA identified a section of the River Flesk (Flesk (Kerry)_040) approximately 5 km downstream from the Proposed Development as a drinking water source (Article 7 Abstraction for Drinking Water). No other waterbodies designated as drinking water sources (including Group Scheme Source Protection Areas or Public Supply Source Protection Areas) were found to be hydrologically connected to the Proposed Development.</p>	<p>Assessment of private wells has been considered in Section 11.3.18 (Surface Water Abstractions) Chapter 11 of the EIAR:</p> <p>"In order to assess the potential for construction work associated with the Proposed Development to affect surface water abstractions in downstream catchments, an information request was issued to the EPA and Kerry County Council (KCC) pertaining to abstractions and known private water supplies.</p> <p>The Proposed Development located within County Cork is limited to the 110kV grid connection route i.e., cable buried in a shallow (approximately 1.3 m deep) trench in an access track, where the construction work associated is sufficiently small-scale that potential effects to watercourses in that area is screened as not significant, and that there can be no significant effect to abstractions in that area. There was, therefore, deemed no requirement to consult Cork County Council specifically in relation to abstraction data.</p> <p>The EPA provided a copy of their abstraction register in August 2022. KCC advised no information was available.</p>

Consultee	Observation	Applicant Response
	<p>Construction and Environmental Management Plan (CEMP) The NEHS has considered the draft CEMP in appendix 4 and the schedule of mitigation for the construction phase.</p>	<p>A screening review of the EPA data found 2 no. river abstractions within 5 km of the Site; however, each is located in catchments discrete from, and therefore, not hydrologically connected to the Proposed Development.</p> <p>In addition to identification of potential abstractions from records, and in order to ensure a robust assessment and overcome potential uncertainty around the completeness of the record of abstractions, a screening assessment has been undertaken to identify properties potentially served by local, unrecorded water abstractions within catchments hydrologically connected to the Proposed Development based on property and occupancy information as detailed in EIAR Chapter 5.</p> <p>In the absence of equivalent guidance in Ireland, guidance relevant in similar adjacent jurisdictions has been adopted. DAERA (2019) recommends a 250 m buffer between proposed wind farm development and any potential drinking water (public or private) supply. A conservative 250 m buffer was applied to the Site boundary rather than proposed infrastructure to provide a larger screening extent.</p> <p>The screening exercise identified 1 no. property within the buffer, located on the opposite bank of the River Clydagh approximately 530 m north-east of turbine T13. No infrastructure is proposed within 250 m of the property and the property is hydrologically separated from the development by the River Clydagh and, therefore, cannot be affected by the Proposed Development.”</p> <p>Additionally, consideration of private wells was also included in Section 10.3.5 of Chapter 10 (Soils, Geology and Hydrogeology):</p> <p>“There are unlikely to be unlisted wells within the study area, however if present, any yields would likely be low given the low permeability of the aquifer. There are few properties in the vicinity of the site, with the nearest being one adjacent to the track at the western end of the site, and another on the other side of the Clydagh River, so in the unlikely event that these have unrecorded groundwater abstractions, potential impacts are unlikely due to hydrogeological connection to works that might impact them, and so groundwater abstractions as a specific receptor will not be considered further.”</p> <p>It is therefore concluded that private have been adequately addressed in the EIAR</p> <p>The Applicant acknowledges the NEHS comments regarding the CEMP and note the recommendations for the protection of public and environmental health during construction.</p>

Consultee	Observation	Applicant Response
	<p>The NEHS is satisfied there. will be adequate protection of Public and Environmental Health during the construction phase if all the mitigation measures are implemented in full. The following recommendations are in the interest of the protection of Public Health:</p> <ul style="list-style-type: none"> • All drinking water and water used for the preparation of food in the temporary construction compounds should meet the requirements of. S.I. No. 99/2023 - European Union (Drinking Water) Regulations 2023 • All waste water should be contained and taken off site to a licensed treatment facility, There should be no direct emission to ground or surface water of any foul waste water, • The NEHS notes the commitment to restrict the storage height of excavated peat to below 1.5m. This is an important measures to protect from any accidental slippages and contamination of ground and surface water during the construction phase. • The NEHS has considered section 4.7 of the CEMP. This section covers proposed mitigation measures and the design of the site drainage. The main objective is the protection of surface and ground water during the construction phase. The NEHS is satisfied that if all the mitigation identified in this section is implemented in full there will be adequate protection of ground and surface water during the construction phase. The NEHS notes the proposed water quality monitoring to validate construction controls are effective. <p>The NEHS has considered section 4 of the CEMP on dust control and noise control during the construction phase and are satisfied that if all the mitigation identified in this section is implemented in full there will be adequate protection of Public and Environmental Health during the construction phase, with regard to the control of dust and noise.</p>	<p>All drinking water and water used for food preparation in temporary construction compounds will comply with S.I. No. 99/2023 – European Union (Drinking Water) Regulations 2023.</p> <p>All wastewater generated on site will be contained and removed to a licensed treatment facility, with no direct discharge to ground or surface waters.</p> <p>Excavated peat storage will be limited to a maximum height of 1.5 m to minimise the risk of slippage or contamination of surface and groundwater.</p> <p>The mitigation measures in Section 4.7 of the CEMP, including site drainage design, will be implemented in full to protect surface and groundwater, with water quality monitoring carried out to validate effectiveness.</p> <p>Dust and noise mitigation measures outlined in Section 4 of the CEMP will be implemented in full to protect public and environmental health during construction.</p>
<p>Noise</p> <p>Kerry County Council</p>	<p>The documentation submitted with this application infers that noise from construction works related to the proposed development are assessed as being not significant due to the large separation distances between properties and the construction site.</p> <p>Although noise from access track construction may temporarily breach limits prescribed in BS 5228 at one property, the duration over which it may do so and would not result in a significant impact.</p> <p>With an appropriate mitigation scheme, operational noise from the proposed development is not considered significant at any of the properties assessed as the relevant derived noise limits will be met.</p>	<p>The Applicant acknowledges the consultee’s comments regarding noise.</p> <p>Noise from construction works is not significant due to the distance from properties, temporary access track noise may briefly exceed limits but will not result in a significant impact, and operational noise will meet all relevant limits with mitigation. Overall, it is concluded that noise effects from the Proposed Development are not significant</p>

Consultee	Observation	Applicant Response
<p>Cork County Council</p>	<ul style="list-style-type: none"> For the purpose of clarity, the respective number and distances of all noise sensitive receptors within 500m, 1000m,1500m and 2000m of the turbines should be presented and quantified in tabular form. For the purpose of clarity and ease of reference, the referenced noise sensitive receptors that each background noise monitoring location is considered to be representative of should be quantified in sequential order. These should also be shown on a suitably scaled map along with the locations where the noise monitoring has been conducted to determine the existing noise environment. <p>The following condition is suggested:</p> <ul style="list-style-type: none"> Wind turbine noise arising from the proposed development, by itself or in combination with any other permitted wind energy development in the vicinity, shall not exceed the greater of: <ul style="list-style-type: none"> (i) 5dB (A) above background noise levels or (ii) 43 dB(A) L9o 10 ms <p>when measured externally at noise sensitive locations</p> <ul style="list-style-type: none"> A noise compliance monitoring programme shall be submitted for agreement with the planning authority within 3 months of the commissioning of the development. All results should be submitted to the Planning Authority within 1 month of the completion of any survey. The developer shall carry out any additional noise mitigation measures as may be deemed necessary following a review of such survey. A designated member of the company's staff shall interface with the Planning Authority or member of the public in the event of complaints or queries in relation to environmental emissions. Details of the name and contact details and the relationship to the operator of this person shall be available at all times to the Planning Authority on request whether requested in writing or by a member of staff of the Planning Authority at the site. The construction of the development shall be managed in accordance with a Construction Environmental Management Plan which shall be submitted to and agreed in writing with the Planning Authority prior to the commencement of development. In relation to air and noise, this plan shall provide details of the construction practice for the development including; <ul style="list-style-type: none"> (a) Proposals for the suppression of on- site noise 	<p>The Applicant has provided a response to Cork County Council in Technical Appendix P on this document. Figures 13-1 and 13-2 of the 2024 EIA Report show the noise sensitive receptors and the noise monitoring locations.</p> <p>It is the Applicant's view that the noise limits for the proposed development should not include any contribution from other developments over which the operator does not have control. Therefore, it is recommended that updated site specific noise limits accounting for a 43 dB fixed portion of the daytime limit should be applied to the proposed development.</p> <p>The planning condition should clearly identify the locations of the receptors with specified limits.</p> <p>This is further discussed in detail in Appendix P.</p> <p>A programme will be submitted for agreement with the Planning Authority after commissioning, with results reported as requested. A designated member will be available to liaise with the Planning Authority and the public regarding environmental emissions.</p> <p>Construction will follow the approved CEMP, which includes measures for noise, dust, vibration, odour, and monitoring, reported as agreed with the Planning Authority</p>

Consultee	Observation	Applicant Response
	<ul style="list-style-type: none"> • (b) Proposals for the suppression of dust on site • (c) Proposals for the suppression of vibration • (d) Proposals to minimise any odours <p>This plan shall include a comprehensive monitoring plan to include inter alia noise, vibration and dust with regular reporting to the planning authority.</p>	
<p>National Environmental health Service</p>	<p>The NEHS has considered chapter 13 Vol 2 of the EIAR and makes the following observations:</p> <p>Predicted Operational Noise</p> <ul style="list-style-type: none"> • The 2006 Guidelines include guidance on how to derive noise limits for daytime and night-time periods, which can be summarised as: daytime limits take account of existing background noise levels and include a fixed limit of 45 dB, or background + 5 dB, whichever is the greater, except in low background noise environments where a fixed minimum limit in the range 35-40 dB should be considered • This criteria is therefore that turbine noise at noise sensitive locations should not exceed for daytime periods: 40 dB(A) where background noise levels are below 30 dB; and, 45 dB(A) or background noise plus 5 dB, whichever is the greater, where background noise levels are greater than 30. <p>The EIAR states on page 19 of Chap 13 vol 2: Where the limits are set relative to background noise levels, the background noise must not contain any contribution from existing wind turbines, and although not expressly stated, it is assumed that the relevant noise limits apply to cumulative noise from all wind turbines in the vicinity. The NEHS concurs with this statement in that noise exposure should be the cumulative noise from all noise sources</p> <ul style="list-style-type: none"> • This criteria can potentially see a predicted increase of up to 15 dB(A) change in the noise environment as compliant with the criteria. Any change in the noise environment of this magnitude is highly likely to cause complaints and/or nuisance. BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound identifies an increase of 10 dB above existing rated noise levels will have a significant adverse impact and is highly likely to cause complaints. It is noted that the predicted noise exposure does not meet these levels of increase above background levels except at NSL 153 and NSL 65. • The EIAR states in Chapter 13 Vol 2 page 21: For the purposes of this noise chapter significance is assessed in terms of whether the noise limits are met. For properties 	<p>Chapter 13 of the EIAR sets out detailed assessments of predicted noise levels at sensitive receptors, including cumulative noise from all nearby wind turbines.</p> <p>Noise limits have been derived following the 2006 Guidelines, and the assessment identifies any locations where limits could be approached, including NSL 153 and NSL 65.</p> <p>The EIAR assesses significance based on compliance with these limits, taking into account updated guidance and protection of public health..</p> <p>The relevant operational noise limits are set relative to baseline noise levels, and an assessment of predicted operational noise levels against these limits is presented at Table 13-16 and 13-17 of the EIAR and also provided in considered in more detail in Appendix P of the RFI Report.</p> <p>The mitigation required to enable the limits to be met is set out at Table 13-18 and 13-19 of the EIAR.</p>

Consultee	Observation	Applicant Response
	<p>where noise from the Proposed Development is below the remaining noise budget noise limits, noise is considered to be not significant. Where noise exceeds these noise limits, the noise impact is considered to be significant. The noise limits which apply to the Proposed Development are derived at 13.7.3 according to the approach described at 13.5</p> <ul style="list-style-type: none"> • The EIA process specifically requires the assessment to be 'the likely significant effects' and if the knowledge on an evaluation criteria of significance has developed since the publication of a guidance, then it is reasonable and correct to use the developed knowledge base in assessing the significance of any effect. This is particularly relevant to the protection of Public Health. Statutory Guidance issued under the Planning Development Act 2000 (as amended) has to be considered by the Planning Authority when making a decision, but it is not a consideration that precludes all other evidence and knowledge. • Tabulation of the predicted change in the noise environment from the proposed development and the cumulative change in the original baseline noise environment before any wind farm development in the area would be the most informative way of assessing the likely effect of operational noise. • Whilst the NEHS would consider the most appropriate criteria for assessing significance of the predicted noise would be consideration of the ENVIRONMENTAL NOISE GUIDELINES for the European Region, 2018, which is a health protection standard, the predicted noise exposure levels are of a level that this would not be considered requiring this assessment, except at one sensitive receptor R153. <p>The NEHS notes the curtailment strategy in 13.8.2 to ensure the noise exposure at NSL 65 and NSL 153 is below the exposure limit criteria set in the 2006 Guidance.</p> <p>Construction Noise</p> <p>The NEHS considers the most effective mitigation for the protection of Public and Environmental Health from noise during construction is limiting hours of operation for noisy activity such as blasting. The NEHS notes the distance between turbine construction activity and NSL. With only one NSL closer than 1km from turbine construction. From the draft CEMP in Appendix 4:</p> <p>The proposed normal hours of operations for construction activity are between 07.00 - 19:00 Monday to Saturday, with deliveries on a Saturday and during public holidays restricted to the hours of 07.00 to 14:00. During the installation phase, there may be a requirement for extended working hours as some critical elements of installation cannot be stopped once started such as concrete pouring, this will be agreed in advance with the Planning Authority.</p>	<p>The proposed construction hours are set out at section 3.3 of the outline CEMP included in Technical Appendix 4-1 of the EIAR, and are 07:00 to 19:00 Monday to Saturday, with deliveries on a Saturday and during public holidays restricted to the hours of 07:00 to 14:00.</p> <p>The outline CEMP at section 4.3 and includes blasting, which will be restricted to pre-agreed times.</p> <p>It is noted that the NEHS response states:</p> <p><i>'The NEHS has considered section 4 of the CEMP on dust and noise control during the construction phase and are satisfied that if all the mitigation identified in this section is implemented in full there will be adequate protection of Public and Environmental Health during the construction phase, with regard to the control of dust and noise'</i>.</p>

Consultee	Observation	Applicant Response
	The NEHS would consider this adequate protection of Public and Environmental Health during the construction phase. Blasting activities should not be carried out early morning or evening times.	
Aviation		
Department of Defence	<p>Following consultations with our Air Corps colleagues at Casemount Aerodrome, The Department of Defence would like to make the following observations:</p> <p>All turbines should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions of azimuth and to be operational H24/7 days a week.</p> <p>Obstacle lighting should be incandescent or, if LED or other types are used, of a type visible to Night Vision equipment. Obstacle lighting must emit light at the near Infra-Red (IR) range of electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light.</p> <p>Any Irish Air Corps (IAC) requirements for are separate to Irish Aviation Authority (IAA) requirements.</p>	<p>The Applicant acknowledge the observations and will ensure that all turbines are fitted with Type C medium-intensity red lighting, operational 24/7, visible in all directions, and compatible with night vision equipment, including near-infrared emission around 850 nm.</p> <p>The Irish Air Corps requirements will be adhered to as appropriate..</p>
Irish Aviation Authority	<p>In the event of planning consent being granted, the applicant should be conditioned to contact the Irish Aviation Authority to:</p> <ul style="list-style-type: none"> • agree an aeronautical obstacle warning light scheme for the wind farm development, • provide as-constructed coordinates in WGS84 format together with ground and tip height elevations at each wind turbine location and • notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection. 	<p>The Applicant acknowledge the points raised and confirm that, if planning consent is granted, the Irish Aviation Authority will be contacted to agree lighting, provide turbine coordinates and elevations, and give 30-day notice for crane operations</p>
Shadow Flicker		
Kerry County Council	<p>The documentation submitted with this application has assessed the full Proposed Turbine Range for likelihood of shadow flicker effects at all dwellings located within 10-times the rotor diameter (1,630m & 1490m) of the proposed wind turbines using a shadow flicker model.</p> <p>Shadow flicker is a rare phenomenon and can only occur during the infrequent coincidence of a number of specific, variable meteorological and geographic factors. The shadow flicker model is also based on a number of precautionary assumptions which significantly overestimate the likely shadow flicker impact at any receptor.</p>	<p>The Applicant acknowledge the assessment provided. Based on the submitted shadow flicker modelling and the application of precautionary assumptions, the proposed turbines are not expected to cause significant shadow flicker at any dwellings. Technological mitigation measures will be implemented to ensure near-zero shadow flicker, in line with current guidelines.</p> <p>Consequently, no likely significant effects from shadow flicker are anticipated during operation, construction, or decommissioning phase.</p>

Consultee	Observation	Applicant Response
	<p>There is no likelihood of any significant effects during the construction or decommissioning phases as the proposed wind turbines will not be operational.</p> <p>Technological mitigation measures are available, and widely implemented, to exclude the likelihood for shadow flicker to occur. These measures will ensure that no dwelling experiences shadow flicker arising from the proposed development, in line with the 2006 Guidelines, and the Draft Revised 2019 Guidelines should they come into force in the future, and the Applicant's commitment to near zero shadow flicker.</p> <p>Therefore, it is concluded that the proposed development will not result in any likely significant shadow flicker effects, either individually or in combination with other existing, permitted or proposed developments.</p>	
<p>National Environmental health Service</p>	<p>The NEHS has considered Chapter 13 of the EIAR Vol 2 on the likely significant effects from shadow flicker.</p> <p>The draft 2019 Guidelines proposed a planning condition of:</p> <p>The adopted DoEHLG 2006 Guidelines are currently under review. The Draft DoEHLG 2019 Guidelines recommend local planning authorities and/or An Bord Pleanála impose conditions to ensure that:</p> <p>no existing dwelling or other affected property will experience shadow flicker as a result of the wind energy development subject of the planning application and the wind energy development shall be installed and operated in accordance with the shadow flicker study submitted to accompany planning application, including any mitigation measures required. "</p> <p>The Draft DoEHLG 2019 Guidelines are based on the recommendations set out in the 'Proposed Revisions to Wind Energy Development Guidelines 2006 - Targeted Review' (December 2013) and the 'Review of the Wind Energy Development Guidelines 2006 -- Preferred Draft Approach' (June 2017).</p> <p>Chapter 13 identifies the available technology to mitigate against shadow flicker.</p> <p>In the interest of the protection of Public Health the proposed condition in the 2019 Draft guidance should be implemented if consent is given for the development. The technology has advance since the publication of the 2006 Guidance and it is a reasonable health protection measure to be included in any conditioning of a wind farm development. The mitigation measures that will eliminate exposure to shadow flicker are identified in the EIAR. This mitigation should be implemented irrespective of whether the current guidance is updated.</p>	<p>The Applicant acknowledge the NEHS observations regarding shadow flicker. The mitigation measures identified in the EIAR will be implemented to ensure that no dwelling experiences shadow flicker from the proposed development. These measures align with both the 2006 Guidelines and the recommended approach in the Draft 2019 Guidelines, providing a reasonable and precautionary protection of public health.</p>

Consultee	Observation	Applicant Response
Individuals		
<p>Brendan Lehane</p>	<p>I am writing to formally object to the planning application for the installation of windmills in my area. I am the nearest residence to the site from the Millstreet side of the proposed development.</p> <p>While I acknowledge the importance of renewable energy sources and the need to transition to a more sustainable future, I believe that the proposed windmill project raises significant concerns that require careful consideration. Engagement from the developer "ticked the boxes" but did very little to address our clearly stated concerns.</p> <p>This area has already been subject to introduction of nearby windmills and therefore we fully understand the risks and concerns. It is extremely unfair that we are now being asked to agree to a further 17 turbines nearby - now much larger, for a period of 35 years. It is an area of huge significance to my family but has an important place in Cork's rich historical, archaeological, agricultural and scenic life.</p> <p>We can hear the current existing windmills from our property. These proposed new windmills are much larger and higher than the existing windmills nearby and also will be built in a valley which will exacerbate the noise severely. This is not acceptable for local residents who seem to be entirely forgotten in the developer's submissions. The windmills have the potential to disrupt the tranquillity and quality of life for residents in the vicinity. The constant hum and mechanical sounds emitted by wind turbines can be intrusive and detrimental to the well-being of individuals living in close proximity. This noise pollution will have adverse effects on sleep patterns, concentration, and overall mental and physical health.</p> <p>Studies have indicated that the presence of wind turbines can negatively impact property prices. I have invested significant resources in my property - putting in a new kitchen this year alone, and the introduction of windmills will devalue this investment, leading to financial losses for my family. In 2023, prospective buyers of a house on our road (further from the site than my property) approached me to enquire about the windmills and when informed that further windmills were being proposed, they pulled out of the sale. We are the nearest house on the Millstreet side of the site but yet we still do not fall within any of the proposed annual compensation outlined by the developers. Therefore, the statements in their proposals about engagement and recognition of local's concerns seems very shallow.</p> <p>As noted in their own submissions, houses WILL be impacted by shadow flicker from the site with the proposed mitigation being some software on the windmills, this is simply unacceptable.</p>	<p>There is a critical need for the rapid growth of renewable energy as a key part of combatting climate change and the preservation of natural environments. Renewable developments have a dual purpose of offsetting emissions by removing the need for fossil fuel generation, while offering opportunities (enforced through the planning system) for enhancing the biodiversity of the sites they are constructed on. The details of carbon offset and payback time are provided in Chapter 12 of the EIAR.</p> <p>A full and extensive noise assessment was carried out as part of the Environmental Impact Assessment which can be found in Chapter 13 of the Environmental Impact Assessment Report, or a plain English version is within the Non-Technical Summary. The noise Impact Assessment also considers the potential for significant cumulative effects with permitted and operational windfarms. No significant residual effects have been identified.</p> <p>The noise assessment considers the 'worst case scenario' for turbine noise emissions based on plant available at the time of writing. Advances in turbine technology have led to the new models and larger turbines resulting in less noise due to the slower rotational velocities required to generate electricity from a larger swept area of the turbine, when compared to smaller, older turbines.</p> <p>Any noise breaches can and will be addressed in the operational phase of the wind farm through curtailment strategies which result in turbines being non-operation at particular times of day.</p> <p>A similar approach of curtailment is undertaken to reduce effects of shadow flicker whereby specific turbines would beshut off at times when conditions are likely to result in flicker. With mitigation there will be no significant residual effects. This has been discussed in detail in EIAR Chapter 15.</p> <p>The potential effect on property values is assessed within Chapter 5: Population and Human Health of the EIAR. The assessment draws on available evidence</p>

Consultee	Observation	Applicant Response
	<p>The area proposed is a site of much historical and archaeological interest and of local historical significance. This is on top of the dramatic change of use from agricultural -- bog and forestry. I am not sure if the planners have visited the site but this is an area of incredible natural scenic beauty - with nearby lakes, waterfalls, bogs. This development will have a lasting impact for generations that would be a terribly legacy. Lastly, the proposed windmill project should be assessed in the context of alternative renewable energy sources. While wind energy is undoubtedly valuable, it is essential to explore other options that may have fewer visual, noise, and environmental impacts. Investing in a diverse portfolio of renewable energy technologies, such as solar, tidal, or geothermal, could provide a more balanced and sustainable approach to meet Cork's energy needs.</p> <p>Thank you for considering my objections. I trust that the authority will carefully evaluate all relevant factors before making a final decision on this matter.</p>	<p>which indicates that wind farm developments do not have a consistent or significant negative effect on nearby property values.</p> <p>The effects on the heritage assets and landscape values are thoroughly assessed and provided in detail in Chapter 6 and Chapter 14 of the EIAR. These assessments concluded that the significant effect will be limited and localised.</p> <p>A review of other renewable energy technologies concluded that onshore wind is the most suitable option for the site (Chapter 3: Design Evolution and Alternatives). Alternatives such as solar PV would require substantially more land, cause greater environmental impacts, and generate electricity less efficiently. Other technologies, including tidal or geothermal, are not feasible at this location. Therefore, wind energy was selected as the most efficient and environmentally appropriate solution.</p>
<p>John Lyons</p>	<p>I wish to make an Observation/Submission relating to the above in a personal capacity due to my interests and involvements in the community and energy areas throughout a long career, and knowledge/experience in this area.</p> <p>Personal Background; Qualified in Agric Eng, UCO, initially worked on Landfill sites in Dublin Corporation, followed by 40 yrs in Forestry Engineering with Forest Service and Coillte, introducing mechanisation of operations, especially timber harvesting. I've been involved in R+D and in projects Nationally and Internationally such as 'Environmentally Sensitive Harvesting on Soft Ground', a project led by Ireland. Have worked on projects related to the Pearl Mussel, as well as chairing the Timber Transport Group liaising with different Departments, Local Authorities, Hauliers, consultants that devised National Guidelines for Timber Transport to improve safety and prevent roads damages. Since retirement I've focused more on the climate crisis facing us, conscious of the facts and the trends, and work part-time in the energy area and on biodiversity projects and education related to this.</p> <p>I've been a community activist in the town and the region, having spent 38 yrs as Secretary of Macroom Tidy Towns, and still actively involved and leading its biodiversity projects and recently have been nominated as a Climate Ambassador under An Taisce's programme. I've. been invited by Cork Co Co to join the newly formed Macroom Towns Team.</p> <p>Currently a Board Member with Rural Development Company, IRD Duhallow, and member of their Environmental Sub Committee. I'm still involved in Sport (Handball, Racquetball) and an active parish member as Lector and chair of Macroom Parish</p>	<p>The Applicant acknowledge and appreciates the observations provided and the extensive professional and community experience outlined in support of the proposed development.</p>

Cummeennabuddoge Wind Farm

Consultee	Observation	Applicant Response
	<p>Safeguarding Committee, actively involved with local Comhaltas Group, and member of Ciorcal Cainte groups and hillwalking group and chair of my local Community Association. In my 'spare' time. I like to spend it with family including my 10 grandchildren.</p> <p>I strongly support the proposed development and wish to make the following observations;</p> <p>Benefit Fund. I believe that it will have very significant positive impacts on the socio-economic profile of the area due to community funding and investment. Windfarms are not new to the region, and the funding that flows to groups and organisations currently is making a big difference to beneficiaries, and this funding to date is but a fraction of what will result from the proposed development. This development will serve to sustain and strengthen communities in Gaeltacht Mscrai in the Ballyvourney/Coolea region and further afield, and be of enormous cultural and heritage benefit.</p> <p>Rates Accruing to Local Authority. The money that will the Local Authority gets from this is very significant also and will serve to improve their finances and provide more or better services to the community.</p> <p>Visuals. One of the common complaints about windfarms is the visuals and in this case in Cummeenabuddoge the visual effect will be little or nothing in the surrounding populated areas or main roads. Practically nothing to be seen from Ballyvourney, the closest village, and busiest route only the tips of a few turbines. Nothing will be seen from Millstreet side as this proposal is way behind the existing windfarms. Nothing will be seen from the Kerry side only if one drives up the Clydagh Valley, which is not a through road and subject to very little traffic.</p> <p>Soils/Water. I believe that concerns in this area can be mitigated by good planning/design, mitigation measures and pollution prevention measures and proper oversight in adherence to planning conditions, possibly by the appointment of an Environmental Manager.</p> <p>A construction Environmental Management Plan, surface water management plan, use of buffer zones, erosion control and pollution prevention measures should be subject sign off by the relevant Local Authority in the interest of proper management and to safeguard everybody's concerns.</p> <p>Site Location. I would finally like to say that in terms of site location that this is one of the least intrusive site that is possible to find in Ireland. It would not surprise me to see further application for more turbines in the general area in future.</p> <p>Overall, I feel the benefits of this proposal far outweigh the potential negatives.</p>	<p>As outlined in the EIAR Chapter 5, the development will contribute through Development Contributions and annual rate payments to Kerry County Council. In addition, a Community Benefit Fund will be established to enable the local community to share in the benefits of the Proposed Development by supporting a range of local projects.</p> <p>A detailed assessment of landscape and visual effects is provided in Chapter 6 of the EIAR, including consideration of visibility from nearby settlements and main transport routes.</p> <p>Chapters 10 and 11 of the EIAR assess the potential effects on soils and water. Detailed mitigation and pollution prevention measures are provided to manage and minimize any impacts.</p> <p>A working CEMP has been prepared and submitted as part of the planning submission (Technical Appendix- 4-1) to ensure construction activities are managed appropriately and environmental protection measures are adhered to.</p>

Consultee	Observation	Applicant Response
<p>John, Mary, Gerard and Michelle Buckley</p>	<p>We wish to make an observation in respect of the proposed windfarm development at Cummeennabuddoge, Clydagh Valley, Killarney, Co. Kerry -An Bord Pleana application number PA08.321029.</p> <p>The Clydagh Valley is located 10 miles from the town of Killarney one of Ireland's primary tourist destinations. The valley itself is approximately 7 miles long and lies between the Derrynasagart mountains and Ballyvourney to the south and the Paps mountains and Rathmore / Millstreet to the north. The townlands of Cummeennabuddoge, Clydaghroe, Glashacormick and Cummeenavrick listed on the proposed application collectively form the southern side of the Clydagh Valley which was formed by the fast-flowing Clydagh river which is the source of the river Flesk and the primary water source to the lakes of Killarney. The valley has some of the most unspoiled natural landscapes in Co. Kerry and as residents we have serious concerns about the negative impacts that this proposed development would have on the Clydagh Valley.</p> <p>The proposal to build 17 turbines that are 200 meters in height within the Clydagh Valley would cause a detrimental negative visual impact. The Clydagh Valley attracts many national and international visitors and holidaymakers from the tourist town of Killarney and greater Cork City area who come here to see the unspoiled natural beauty, from the majestic Paps mountains to the clear waters of river Clydagh or just to walk along the Clydagh valley road and to enjoy nature. Constructing wind turbines that are nearly 700 feet high in this sensitive location would be unthinkable, can you imagine coming here for recreation to see the rugged landscape, the wildlife and to hear the sounds of nature only to be faced with a development that consists of 17 of these 700-foot towering monstrosities that completely dominate the surroundings for miles around</p> <p>The location of the proposed development is home to many species of flora and fauna who are found in the Clydagh Valley living peacefully in their natural habitat. Examples of these are the white-tailed eagles who were reintroduced to Killarney in recent years, the Hen Harrier a protected bird of prey that is native to the area. There are also numerous species of bat who live in the area, the department of agriculture have recently introduced measures to encourage local farmers to provide areas of sanctuary for bats and owls on their lands. Does it make any sense to provide a sanctuary on farmland when a few hundred meters away allowing the construction of 200m meter high turbines with rotating blades that would decimate any effort to safeguard these protected creatures. The proposed location is also home to the native Kerry slug a protected species under the convention on the conservation of European wildlife and natural habitats.</p>	<p>There is a critical need for the rapid growth of renewable energy as a key part of combatting climate change and the preservation of natural environments. Renewable developments have a dual purpose of offsetting emissions by removing the need for fossil fuel generation, while offering opportunities (enforced through the planning system) for enhancing the biodiversity of the sites they are constructed on. These are discussed in details in Chapter 12, Chapter 7 and NIS. The Proposed Development will result in a large range of positive effects for the communities through the provision of a community benefit fund. While this does not consist of payments to residents it will be used to pay for community facilities and provide funding for projects to improve the communities affected</p> <p>A full assessment of the Proposed Development has been carried out in terms of Landscape and Visual, Cultural Heritage, Ecology and Ornithology, Noise, Hydrology, population and human health and potential effects on local residents, such as shadow flicker and residential amenity along with the effect on the property values and tourism are also key considerations within those chapters.</p> <p>In the professional opinion of the Chartered Landscape Architect appointed to the project team the Proposed Development will have a significant visual effect only within the Site boundaries and immediate surrounding area.</p> <p>The findings of the Landscape and Visual Impact Assessment can be found in Chapter 6, or in the Non-Technical Summary for a plain English description of the findings.</p> <p>Extensive ecological and ornithological surveys have been undertaken in preparing the Environmental Impact Assessment and further pre-construction surveys will be undertaken to ensure that the findings of the EIA remain accurate. The Proposed Development Site's current habitat consisting of commercial forestry plantation is not considered suitable for Hen harrier. This is reflected in the low numbers observed in the surveys.</p> <p>It is acknowledged that Kerry slug is present on site and that in the absence of mitigation, significant adverse effects are likely from construction activities. A Regulation 54 Derogation is therefore needed for disturbance and relocation of this</p>

Consultee	Observation	Applicant Response
	<p>The proposed development would have a negative impact on the water quality of the Clydagh river which is the source of the river Flesk the primary source of water for the lakes of Killarney. The townlands named in the proposed development consist of blanket virgin bog which in places are several meters deep, the removal of peat to facilitate roadways, substations, and foundations for these enormous turbines would impact on water levels and drainage in the area and lead to large quantities of dirt and silt entering the river which is a natural spawning ground for salmon and trout. Constructing this scale of development would also lead to increased risk of landslides or bog slippages given the mountainous location and susceptibility of flash flooding and cloudbursts as occurred in the famous drowning of Clydagh when a cloud burst in the eastern end of the valley caused the river to burst its banks and swept away and drowned several people who were working in their fields at the time.</p> <p>Kerry county council have deemed this location unsuitable for windfarm development in the current county development plan given the location is of unique scenic value, the requirement to maintain the existing habitat of so many protected species that live in this part of the county and the requirement to protect the water quality and salmon and trout spawning grounds of the river Clydagh which is part of the lakes of Killarney catchment area. The applicants repeatedly used the word "flawed" with regard to the county development plan that recognises the need to protect this area from future windfarm developments which in our opinion shows contempt on their part for the local authority and the Clydagh Valley, The proposed development completely contradicts what local people and Kerry county council are trying to achieve in preserving this beautiful location with its unspoiled natural landscape so that it can be enjoyed for generations to come.</p> <p>We would ask that you consider our request to protect the Clydagh Valley and its inhabitants and to refuse permission to build the proposed development.</p>	<p>Annex IV species. Following implementation of the mitigation, no significant effects are predicted. See Appendices Q,R and S for the Kerry slug documentation.</p> <p>Effects to water quality are addressed in the Hydrology chapter of the EIA, and also summarised in the Non-Technical Summary.</p> <p>Mitigation measures are also proposed and provided in details in the chapter and the CEMP prepared to support the application.</p> <p>The EIAR Chapters 10 and 11 specifically assess the potential risks of landslides, bog slippages, and flooding due to the mountainous location and dynamic hydrology of the site. Detailed mitigation measures and best practice construction methods are proposed to minimize these risks and ensure the safety of the site and surrounding areas.</p> <p>The Natura Impact Statement (NIS) and Biodiversity Chapter of the EIAR assess the potential impacts of the proposed development on habitats, protected species, and water quality, including salmonid spawning grounds in the Clydagh River and the wider Killarney Lakes catchment and included include detailed mitigation measures designed to avoid or minimize impacts, in line with relevant conservation and environmental protection requirements.</p> <p>The planning merits for the siting of the Proposed Development can be found in the Planning Statement which highlights the fact that this area has previously been deemed acceptable for wind development, the existence of wind farms in the area and the flaws in the methodology undertaken in the re-designation of the areas in the KCDP.</p>

Appendices

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Appendix A. Summary of Likely Effect- Population and Health

Table A: Summary of Likely Effects on Population and Health

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Turbine Safety	5.5.2	<p>Wind turbines are designed and operated to strict safety standards, and national and international guidance confirms that the risk of injury from turbine operation is very low. Members of the public, livestock and wildlife can safely approach the turbine base as fencing or exclusion zones are not required.</p> <p>Modern turbines have safety features such as automatic braking systems, lightning protection and vibration sensors to prevent mechanical failure. The risk of ice throw or blade damage is extremely low, as turbines automatically shut down when ice is detected</p>	Not significant effect	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Not significant effect	5.8
Electromagnetic Fields	5.5.3	<p>All electrical infrastructure, including underground cables and substation equipment, will comply fully with international safety limits for electromagnetic fields. EMF levels at ground level will be far below the thresholds set by the World Health Organization and the International Commission on Non-Ionizing Radiation Protection.</p> <p>There are no dwellings or sensitive receptors within close proximity to the substation or cable routes. As such, no impacts on human health or wellbeing are predicted</p>	Not significant effect	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Not significant effect	5.8
Human Health	5.5.4	<p>Construction: Temporary dust, noise, or surface water run-off may arise during construction, but all will be managed through best practice mitigation, including dust suppression, noise control, and water management. Once measures are implemented, no residual health effects are predicted.</p> <p>Operation: During operation, turbines will not produce emissions, waste, or pollutants harmful to human health. All turbines are equipped with automatic braking systems and sensors that shut them down in adverse weather or abnormal conditions.</p>	Imperceptible and Not Significant during all stages	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Imperceptible and Not Significant during all stages	5.8

Cummeennabuddoge Wind Farm

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		Shadow Flicker: Computer modelling confirms that shadow flicker at nearby dwellings will remain within permitted limits, with control systems used to eliminate any exceedances.				
Natural Disasters and Major Accidents	5.5.5	Assessment indicates a low risk of natural disasters or major accidents affecting the site. The area is not prone to flooding, peat instability, landslides, or seismic activity. No SEVESO or hazardous industrial sites are within proximity. The proposed design, construction, and operation comply with all relevant health and safety regulations, ensuring risks remain extremely low.	Not Significant	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Not Significant	5.8
Population Effects	5.5.6	The proposed development will not cause long-term changes to population levels or settlement patterns. During construction, a small number of workers will temporarily reside in or near the area, providing short-term local economic activity. Once operational, the wind farm will have minimal ongoing staff presence and no effect on housing or migration trends.	Slight positive and not significant	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Slight positive and not significant	5.8
Property Value	5.5.7	Extensive research in Ireland and internationally shows no consistent evidence that wind farms negatively affect property values. Studies often indicate neutral or even positive impacts due to road improvements, local investment, or amenity funds associated with wind farm development. Given the separation from residential properties and the rural nature of the area, no effect on property value is anticipated.	Imperceptible and not significant	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Imperceptible and not significant	5.8
Economic Activity and Employment	5.5.8	The proposed development will generate notable economic benefits locally, regionally, and nationally. Construction Phase: The total construction spend is estimated at €153–184 million, supporting approximately 261 full-time equivalent jobs. Local suppliers and service providers will benefit through materials, plant hire, accommodation, and hospitality. Operation Phase: The project will support long-term investment through rates contributions and a community benefit fund, sustaining local economic activity and enhancing community facilities.	Moderate positive and not significant during construction; moderate positive long-term and not significant during operation.	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Moderate positive and not significant during construction; moderate positive long-term, not significant during operation.	5.8

Cummeennabuddoge Wind Farm

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Tourism Economy	5.5.9	<p>Research shows that wind farms generally have little or no adverse impact on tourism or visitor numbers. Some tourists view turbines as a positive feature reflecting environmental sustainability.</p> <p>During construction, short-term benefits may arise from increased accommodation and local spending by workers. Operationally, the visual presence of turbines will not detract from local tourism assets.</p>	Negligible and not significant overall; minor beneficial effect locally	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Negligible and not significant overall; minor beneficial effect locally	5.8
Tourism and Recreation Assets	5.5.10	<p>Tourism and recreational resources within the study area are of low to medium sensitivity. Construction activities may cause temporary minor disturbance but will not restrict access or alter the recreational experience.</p> <p>During operation, turbines will be visible from limited locations but will not alter the attractiveness or accessibility of local amenities.</p>	Negligible and not significant	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Negligible and not significant	5.8
Cumulative Effects	5.7	<p>No significant cumulative effects on population, health, or tourism are predicted. Other nearby wind farms are either operational or proposed at sufficient distance to avoid overlapping construction or operational disturbance.</p> <p>The combined presence of wind energy developments will contribute positively to national renewable energy targets and the reduction of fossil fuel dependence, providing indirect health and environmental benefits.</p> <p>Cumulative effects on employment, tourism, and recreation are expected to remain negligible, with moderate positive cumulative benefits for the regional economy.</p>	Negligible and not significant overall; moderate positive cumulative economic benefit	No mitigation measures have been considered for the Proposed Development as there are no significant negative effects anticipated	Negligible and not significant overall; moderate positive cumulative economic benefit	5.8

Appendix B. Summary of Likely Effect- Landscape and Visual Impact Assessment

Table B: Summary of Likely Effects on Landscape and Visual Amenities

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Effects on Landscape resources within the Proposed Development Site	6.5.1	<p>Cumulative Landscape Effects</p> <p>Potential ancillary works for Knocknamork and Gortyrachilly developments fall within the Proposed Development Site boundary. However, as these projects will utilise the same footprint, cumulative impacts on the landscape fabric will be minimised. Given the limited footprint and lack of turbines associated with these developments, the magnitude of cumulative change is considered to be negligible.</p>	Cumulative effects upon landscape resource within the Proposed Development Site are considered to be imperceptible, not significant	Embedded and Mitigation by Design Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	Cumulative: Imperceptible, not significant	6.6
Effects on Landscape Character						
LCA 27: Clydagh River, The Paps and Derrynasaggart Mountains	6.5.2	<p>The Proposed Development will have a direct effect on the character of the local landscape. The landscape contains existing man-made features such as turbines, a 110kV transmission line, and the N22 Cork–Killarney road, with landform and vegetation providing screening, resulting in low susceptibility to change. Owing to its designation as a Visually Sensitive Area, the landscape value is high, giving an overall medium sensitivity.</p> <p>During construction, parts of the LCA will be directly affected through the replacement of coniferous plantation woodland with new development elements. The change will occur within a context already containing houses, farmsteads, an operational mast, and turbines. Overall, the magnitude of change is considered medium in localised areas but low across the wider LCA and all stages of development.</p>	<p>Moderate, not significant effects are predicted locally across the LCA, within the Proposed Development Site extents, across all stages of development.</p> <p>Slight effects are predicted across the wider extents across all stages of development.</p>	Embedded and Mitigation by Design Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	Construction/Decommissioning: Moderate, not significant effects locally to the Site and slight effects across the wider extents of the LCA.	6.6
		<p>Cumulative Landscape Effects</p> <p>A small number of operational turbines are located along the southern boundary of the LCA, with more operational and consented turbines to the south and east, beyond its boundaries. The Proposed Development will link existing wind farms at</p>	<p>Slight cumulative, not significant effects on the LCA are predicted as a result of the Proposed Development</p>		Cumulative: Slight cumulative, not significant effects	6.6

Cummeennabuddoge Wind Farm

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Clydaghroe, Coomacheo, Gneeves, Curragh, and Caherdowney, increasing the prominence of wind energy development in the south-east of the LCA. However, due to topographical containment, visibility across the wider LCA is not expected to increase substantially.</p> <p>As turbines are a key characteristic of the LCA, the cumulative magnitude of change is considered low. While the prevalence of wind energy in the southern part of the LCA may increase, this is regarded as consistent with the existing baseline.</p>				
LCT 11 Broad Marginal Middleground Valleys (County Cork)	6.5.2	<p>Potential effects on the LCT will be indirect, as it lies outside the Site boundary. The LCT is of high value and local importance but has low susceptibility since views are not a key characteristic. Overall, the sensitivity of the LCT is assessed as medium.</p> <p>The magnitude of change is predicted to be negligible, with restricted and intermittent visibility of the proposed turbines due to intervening topography and the existing development context. Temporary, minor visual effects may occur during construction, but no substantial effects are anticipated at any stage.</p>	Imperceptible, indirect, not significant effects are predicted across the LCT across all stages of development.		<p>Construction/Decommissioning: Imperceptible, indirect, not significant effects.</p> <p>Operational: Imperceptible, indirect, not significant effects.</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>Cumulative impacts will be negligible, as the Proposed Development may only slightly increase the prominence of wind energy in combination with nearby wind farms (Clydaghroe, Coomacheo, Gneeves, Curragh, Caherdowney). However, this is limited by distance, topographical containment, and the fact that views are not a defining feature of the LCT.</p>				<p>Imperceptible cumulative, not significant effects are predicted on the LCT as a result of the Proposed Development.</p>
LCTs 15b: Ridged and Peaked Upland (County Cork)	6.5.2	<p>The Proposed Development site falls within LCT 15b, an area of medium landscape sensitivity and county-level importance according to Cork County’s Local Development Plan (2022). Existing wind farms and quarrying activities are present within and around the LCT, indicating medium susceptibility to change. Most of the Proposed Development consists of low-level or below-ground</p>	Slight, not significant effects are anticipated across the LCT across all stages of development		<p>Construction/Decommissioning: Slight, not significant effects.</p> <p>Operational: Slight, not significant effects.</p>	6.6

Cummeennabuddoge Wind Farm

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		works, primarily adjacent to the LCT, so direct effects are expected to be minor. During construction, temporary visual disturbances may occur due to the movement of vehicles and machinery, but these are expected to be short-lived. The proposed turbines, situated adjacent to the LCT, will slightly increase the presence of man-made infrastructure in views; however, they are considered to sit appropriately within the existing landscape context, which includes operational turbines and other infrastructure. Overall, the magnitude of change across the LCT is assessed as low for all stages of development				
		Cumulative Landscape Effects Cumulative effects from the Proposed Development combined with nearby wind farms (Clydaghroe, Knocknamork, Coomacheo, Gneeves, Curragh, and Caherdowney) may increase the prominence of wind energy in views, particularly to the north. Visual containment largely limits visibility, the cumulative impact is expected to be low.	Slight cumulative, not significant effects on the LCT are predicted as a result of the Proposed Development.		Cumulative: Slight not significant effects.	6.6
LCT 12a Rolling Marginal Middleground (County Cork)	6.5.2	The LCT is assessed as having high landscape sensitivity and local value, according to County Cork’s Local Development Plan (2022). It is highly susceptible to change due to the potential for indirect effects on views and the influence the Proposed Development could have on the setting of nearby settlements. The LCT is also considered of high importance to the local community, and overall its sensitivity is classified as high. Theoretical visibility of the Proposed Development varies across the LCT, with up to 17 turbines visible in the west and fewer in the east due to topographic screening. Full turbine views are further limited by the landscape. Nearby villages such as Ballyvourney, Ballemakery, and Coolea are unlikely to experience substantial effects on their settings. During construction, cranes may be temporarily visible, and the turbines will be seen in the context of existing operational turbines. Overall, the magnitude of change on the LCT is predicted to be low at all stages of development.	Moderate, indirect, not significant effects are predicted across the LCT across all stages of development.		Construction/Decommissioning: Moderate, indirect, not significant effects. Operational: Moderate, indirect, not significant effects.	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cumulative Landscape Effects</p> <p>Potential cumulative landscape effects on the LCT relate to the increased prominence of wind energy in northern views, where the Proposed Development will be seen alongside nearby wind farms, including Clydaghroe, Knocknamork, Coomacheo, Gneeves, Curragh, and Caherdowney. The most significant cumulative interaction is predicted with the consented turbines at Knocknamork. However, due to distance and limited visual prominence, these combined developments are not expected to substantially alter the key characteristics of the LCT. Overall, the magnitude of cumulative change is predicted to be low</p>	<p>Moderate cumulative, not significant effects are therefore predicted as a result of the Proposed Development.</p>		<p>Cumulative: Moderate cumulative, not significant effects.</p>	6.6
LCT 13a Valleyed Marginal Middleground (County Cork)	6.5.2	<p>The LCT is identified as having high landscape value and County-level importance under Cork County's Local Development Plan (2022). However, as views are not a key characteristic of this LCT and only indirect visual effects are expected, its susceptibility to the proposed development is low. Taking both value and susceptibility into account, the overall sensitivity of the LCT is assessed as medium.</p> <p>The visibility of the Proposed Development is expected to be fragmented, mainly in central and southern areas of the LCT, with up to 17 turbines visible in the southwest and fewer elsewhere due to screening by topography. Visibility will mostly be limited to turbine blade tips in scattered locations. As views are not a defining feature of the LCT, the Proposed Development is not anticipated to have substantial effects, and construction visibility (e.g., cranes) will be temporary. The changes will occur within a landscape that already includes existing turbines and infrastructure.</p>	<p>Imperceptible, indirect, not significant effects are predicted across the LCT across all stages of development</p>		<p>Construction/Decommissioning: Imperceptible, indirect, not significant effects.</p> <p>Operational: Imperceptible, indirect, not significant effects.</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>Cumulatively, the development will appear in combination with nearby wind farms (Clydaghroe, Knocknamork, Coomacheo, Gneeves, Curragh, and Caherdowney). However, given the distance, visual containment, and the limited importance of views in this LCT, the magnitude of cumulative change is considered negligible.</p>	<p>Imperceptible cumulative, not significant effects on the LCT are therefore predicted as a result of the Proposed Development.</p>		<p>Cumulative: Imperceptible cumulative, not significant effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
LCT 16c Glaciated Cradle Valleys (County Cork)	6.5.2	Potential effects on this LCT will be indirect, as it lies outside the Proposed Development Site boundary. The LCT is described in Cork County's Local Development Plan (2022) as having medium sensitivity and value, and being of local importance. Since views are not a key characteristic and only indirect effects are expected, the LCT is considered to have low susceptibility to the proposed development. Taking both factors into account, the overall sensitivity is assessed as medium to low. The theoretical visibility of the turbines extends across much of the LCT, though visibility is fragmented and limited by surrounding terrain. Given the distance from the proposed turbines and the low visual sensitivity of the area, no substantial effects are anticipated during any stage of development. Temporary visibility of cranes may occur during construction, but overall, the magnitude of change is negligible.	Imperceptible, indirect, not significant effects are predicted across the LCT across all stages of development.		Construction/Decommissioning: Imperceptible, indirect, not significant effects Operational: Imperceptible, indirect, not significant effects.	6.6
		Cumulative Landscape Effects Cumulatively, the LCT may experience limited additional visibility of wind energy development in combination with nearby wind farms such as Clydaghroe, Knocknamork, Coomacheo, Gneevs, Curragh, and Caherdowney. However, due to distance and the limited importance of views, the cumulative magnitude of change is also considered negligible.	Imperceptible cumulative, not significant effects on the LCT are therefore predicted as a result of the Proposed Development.		Cumulative: Imperceptible cumulative, not significant effects	6.6
Effects on Landscape Designations						
KCC Visually Sensitive Area	6.5.3	Cumulative Landscape Effects Cumulatively, the Proposed Development will link visually with nearby wind farms at Clydaghroe, Coomacheo, Gneevs, Curragh, and Caherdowney, increasing the local prominence of wind energy development. Nevertheless, due to topographical containment, visibility across the wider Visually Sensitive Area will remain restricted. Therefore, a medium magnitude of cumulative change is expected locally, reducing to low across the wider area.	Moderate cumulative, not significant effects are predicted locally, and slight cumulative, not significant effects are predicted across the wider Visually Sensitive Area as a result of the Proposed Development	Embedded and Mitigation by Design Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	Cumulative: Moderate cumulative, not significant effects locally to the Site and slight cumulative, not significant effects across the wider extents of the Visually Sensitive Area.	6.6
CCC High Value	6.5.3	This LCT -High Value Landscape Area, is located south of Macroom and west of Cork, approximately 14 km south-east of the Proposed	Imperceptible, indirect, not significant effects on the LCT		Construction/Decommissioning:	6.6

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Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Landscape Area: LCT 8. Hilly River and Reservoir Valleys		Development Site. There are no operational or planned wind turbines within this area. The LCT is identified in Cork County's Local Development Plan (2022) as having high landscape sensitivity and national-level importance. Its semi-natural character, including the River Lee and Taiscumar Reservoir, indicates a generally high susceptibility to large-scale change; however, due to the distance from the Proposed Development and the fact that long-range views are not a key characteristic, its susceptibility is assessed as low. Overall, the LCT sensitivity is rated medium, reflecting its high value but low vulnerability to the proposed changes. The Proposed Development lies outside the LCT boundaries, meaning effects will be limited to distant visual influence rather than direct landscape alteration. As the development does not affect key defining characteristics, the magnitude of change is considered negligible	are anticipated across all stages of development		Imperceptible, indirect, not significant effects Operational: Imperceptible, indirect, not significant effects	
		Cumulative Landscape Effects Cumulatively, the Proposed Development may be visible in distant combination with other wind farms (Clydaghroe, Knocknamork, Coomacheo, Gneevies, Curragh, and Caherdowney). However, due to distance and limited visual prominence, the cumulative magnitude of change is also negligible	Imperceptible cumulative, not significant effects on the LCT are therefore predicted as a result of the Proposed Development		Cumulative: Imperceptible cumulative, not significant effects.	
Effects on Settlements						
Ballyvourney / Ballymakeery	6.5.5	Residents of the settlement are considered to have high susceptibility to landscape change due to their regular exposure to local views and the contribution these make to the settlement's setting. However, as the surrounding views are rural but undesignated, their overall value is medium, resulting in an overall high to medium sensitivity to the proposed development. Visibility analysis (Zone of Theoretical Visibility (ZTV)) indicates potential visibility of up to six turbines, although this is likely to be limited and fragmented due to buildings and vegetation. During construction, cranes and vehicles may be occasionally visible, leading to a medium magnitude of change, which is expected to reduce to low during operation as screening limits visibility.	Moderate, not significant effects are predicted as a result of the Proposed Development during the construction phase, reducing to slight during the operational phase	Embedded and Mitigation by Design Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	Construction/Decommissioning: Moderate, not significant effects. Operational: Slight effects	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cumulative Landscape Effects</p> <p>Cumulatively, the proposed turbines will be seen in conjunction with nearby developments, notably Knocknamork, Clydaghroe, and the Mullaghanish Mast. The main interaction will occur between the Proposed Development and Knocknamork turbines, forming a cohesive visual group with minimal overlap or “clashing.” As the new turbines will align with the existing and consented baseline, cumulative effects are assessed as low</p>	<p>Slight cumulative, not significant effects are predicted upon the settlement of Ballyvourney / Ballymakeery</p>		<p>Cumulative: Slight cumulative, not significant effects.</p>	6.6
Macroom	6.5.5	<p>Residents are considered to have high susceptibility to change due to their awareness of local surroundings and the contribution of views to the town’s setting. However, since views are largely contained by built form, their overall value is medium, giving a high to medium sensitivity rating to potential visual effects.</p> <p>ZTV indicates potential, though fragmented, visibility of up to three turbines from the eastern and western edges of the town, and up to six turbines from limited southern areas. However, due to distance, intervening topography, and screening from vegetation and built form, visibility will be minimal and intermittent. Consequently, the magnitude of change is considered negligible during all stages of development.</p>	<p>Imperceptible, not significant effects are anticipated across the settlement of Macroom as a result of the Proposed Development across all stages of development.</p>		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects.</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>Cumulatively, fragmented distant visibility may occur in combination with other operational and consented wind farms to the south and west. However, given the distance from the Proposed Development and other cumulative sites, overall cumulative effects are predicted to be negligible</p>	<p>Imperceptible, not significant cumulative effects are predicted upon the settlement of Macroom across all stages of development</p>		<p>Cumulative: Imperceptible, not significant cumulative effects.</p>	6.6
Millstreet	6.5.5	<p>Residents are assessed as having high susceptibility to landscape change due to their ongoing visual engagement with the area, though the value of views is medium because they are mostly enclosed by buildings and the outward views are undesignated. Therefore, the overall sensitivity of receptors is considered high to medium.</p> <p>According to the ZTV analysis, limited visibility of up to three turbines may occur from the eastern edge of the town, though this would be fragmented by vegetation and buildings. Claragh</p>	<p>Imperceptible, not significant effects are predicted across Millstreet as a result of the Proposed Development across all stages of development</p>		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects.</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		Mountain largely blocks direct views, meaning most of the settlement will have no visibility of the Proposed Development. A few peripheral properties, such as those along Macroom Road and near Altamount; may have partial, distant views. Consequently, the magnitude of change is predicted to be negligible across the settlement.				
		Cumulative Landscape Effects Cumulatively, theoretical visibility in combination with cumulative sites in the central, north and east is predicted to be limited to the eastern extents of the settlement. These distant, limited interactions mean the cumulative magnitude of change is also negligible, as the Proposed Development will appear contained within existing operational wind energy clusters.	Imperceptible cumulative, not significant effects are predicted across Millstreet across all stages of development.		Cumulative: Imperceptible cumulative, not significant effects.	6.6
Boherbue / Boherboy	6.5.5	Residents are considered to have high susceptibility to landscape change due to their continuous visual engagement, while the value of views is medium given the contained nature of views and rural, undesignated surroundings. Overall, the sensitivity of receptors is assessed as high to medium. ZTV analysis indicates potential visibility of up to nine turbines from the south-eastern edge of the settlement, though these views will be fragmented and partly screened by local vegetation and buildings. Given the distance and screening, the magnitude of change is negligible.	Imperceptible, not significant effects on the settlement of Boherbue / Boherboy are predicted as a result of the Proposed Development across all stages of development.		Construction/Decommissioning: Imperceptible, not significant effects Operational: Imperceptible effects.	6.6
		Cumulative Landscape Effects Visibility of the Proposed Development in combination with cumulative sites in the central, north and east is predicted to be limited to the eastern extents of the settlement. These distant, limited interactions mean the cumulative magnitude of change is also negligible due to the attenuation of views due to distance from the developments.	Imperceptible cumulative, not significant effects are predicted across Boherbue / Boherboy across all stages of development		Cumulative: Imperceptible cumulative, not significant effects.	6.6
Effects on Vehicular Routes						
N22	6.5.6	The N22 is a major high-speed road, meaning users focus primarily on driving, with low susceptibility to visual change. Parts of the route are designated as Scenic Routes and Views/Prospects, giving them	Slight, not significant effects on road users of the N22 are predicted as a result of the		Construction/Decommissioning: Slight, not significant effects.	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>high to medium value. Overall, the sensitivity of road users is considered medium.</p> <p>ZTV analysis predicts fragmented visibility of up to 12 turbines, mostly within 10 km of the Proposed Development. Visibility will be limited and intermittent, often to blade tips only, and largely screened by topography and vegetation. Road users travelling from Macroom or Killarney will have fleeting, oblique views before turbines move out of view.</p> <p>During construction, cranes and vehicles may be briefly visible, but effects will be temporary. Overall, the magnitude of change for road users is assessed as low across all stages.</p>	Proposed Development across all stages of development	<p>Embedded and Mitigation by Design</p> <p>Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.</p>	Operational: Slight, not significant effects.	
		<p>Cumulative Landscape Effects</p> <p>The Proposed Development will cause a minor increase in turbine visibility along the N22, mainly in sequence with existing southern and central wind farms. Given screening and high travel speeds, cumulative effects are considered negligible.</p>	Imperceptible cumulative, not significant effects are predicted upon road users of the N22 across all stages of development		Cumulative: Imperceptible cumulative, not significant effects.	6.6
N72	6.5.6	<p>The N72 is a major high-speed road, meaning users focus primarily on driving, with low susceptibility to visual change. Theoretical visibility is predicted along a 13km stretch east of Rathmore to east of Roskeen, but views will be distant and oblique, generally over 10km away. Intervening vegetation and topography will further restrict visibility.</p> <p>During construction, cranes and vehicles may be briefly visible, but effects will be temporary. Overall, the magnitude of change for road users is assessed as low across all stages.</p>	No significant effects on road users of the N72 are predicted as a result of the Proposed Development across all stages of development		<p>Construction/Decommissioning: Not significant effects</p> <p>Operational: Not significant effects</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>The Proposed Development will be theoretically visible in sequence or combination with turbines from several cumulative groups, including the east, north, and central groups. However, due to distance, topographical screening, and fleeting views at driving speed, the cumulative magnitude of change along the N72 is assessed as negligible.</p>	Imperceptible cumulative, not significant effects are predicted upon road users of the N72 across all stages of development.		Cumulative: Imperceptible cumulative, not significant effects	6.6
R584	6.5.6	The R584 is a Regional single-carriageway road running west from Coolcower Court near Macroom toward Ballylickey, passing within	Imperceptible, not significant effects on road users of the		Construction/Decommissioning:	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>approximately 14.6 km of the nearest proposed turbine. The road has a medium-speed limit, so users’ focus is mostly on driving, allowing some appreciation of the surrounding rural landscape. About 7 km of the route passes through a High Value Landscape, giving high/medium value to views.</p> <p>Theoretical visibility is predicted for 7–9 turbines along a 2.7 km section near Kilbarry, though views will be heavily screened by roadside vegetation. Construction machinery may be briefly visible, but overall, the magnitude of change is considered negligible across all stages of development</p>	R584 are predicted as a result of the Proposed Development across all stages of development		<p>Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects</p>	
		<p>Cumulative Landscape Effects</p> <p>The Proposed Development will be theoretically visible in fragmented, combined, successional and occasional sequential visibility of the proposed turbines and south, south-west, east and central cumulative groups. However, due to distance, topographical screening, and fleeting views at driving speed, the cumulative magnitude of change along the R584 is assessed as negligible.</p>	Imperceptible cumulative, not significant effects are predicted upon road users of the R584 across all stages of development		<p>Cumulative: Imperceptible cumulative, not significant effects</p>	6.6
R587	6.5.6	<p>The R587 is a Regional Road running north–south between Toonsbridge and Longbridge, with its closest point approximately 15.3 km from the nearest proposed turbine. The road has a medium-speed limit, so users’ focus is primarily on driving, though some appreciation of the rural surroundings is possible. A 0.4 km section passes through a High Value Landscape, though no visibility of the Proposed Development is predicted there.</p> <p>Theoretical visibility of up to nine turbines is expected between east of Dromcarra and south of Kilmichael, seen obliquely from over 5 km away and partially screened by vegetation. Construction machinery may be temporarily visible, but overall, the magnitude of change is considered negligible across all stages of development.</p>	Imperceptible, not significant effects on road users of the R587 are predicted as a result of the Proposed Development across all stages of development		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>Limited theoretical visibility indicates combined, sequential, and successional views of the Proposed Development with south, south-west, east, and central cumulative wind farms. Given the distance and screening, turbines are not expected to significantly</p>	Imperceptible, not significant cumulative effects are predicted upon road users of the R587 across all stages of development		<p>Cumulative: Imperceptible, not significant cumulative effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		alter the cumulative landscape baseline, and the magnitude of cumulative change is predicted to be negligible.				
R582	6.5.6	<p>The R582 is a Regional Road running from Macroom in the south-east of the study area, northward to meet the R577 just south of Ballydesmond, passing within approximately 5.1 km of the nearest proposed turbine. The road has a medium-speed limit, so users' focus is primarily on the road ahead, though there is some capacity to appreciate surrounding rural views. A short section of the route is designated as a CCC Scenic Route (S21), giving the road high/medium value for views.</p> <p>Theoretical visibility is predicted for up to six turbines, mostly limited to blade tips and fragmented by topography and vegetation. Views will be at oblique or perpendicular angles depending on travel direction, and visibility is expected to be limited. Construction machinery such as cranes may be visible temporarily, but overall, the magnitude of change is considered negligible across all stages of development</p>	Imperceptible, not significant effects on road users of the R582 are predicted as a result of the Proposed Development across all stages of development		<p>Construction/Decommissioning: Imperceptible, not significant effects.</p> <p>Operational: Imperceptible, not significant effects.</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines may appear in sequential or combined views with other cumulative wind farms in the region. However, intervening vegetation and topography will greatly restrict visibility. As a result, the cumulative magnitude of change is predicted to be negligible</p>	Imperceptible cumulative, not significant effects are predicted upon road users of the R582 across all stages of development	<p>Cumulative: Imperceptible, not significant cumulative effects</p>	6.6	
R583	6.5.6	<p>The R583 is a Regional Road running northeast from Millstreet to join the N72 near Dromagh, passing within approximately 8.3 km of the nearest proposed turbine. The road has a medium-speed limit, meaning users' attention is mainly on driving, though some appreciation of the rural surroundings is possible. The landscape is undesignated but valued locally, giving the route an overall medium sensitivity.</p> <p>Theoretical visibility of up to six turbines is predicted, mainly for users travelling south from Dromagh towards Millstreet, though vegetation and topography will largely restrict views. Construction activity may briefly increase visibility through machinery such as</p>	Imperceptible, not significant effects on road users of the R583 are predicted as a result of the Proposed Development across all stages of development		<p>Construction/Decommissioning: Imperceptible, not significant effects.</p> <p>Operational: Imperceptible, not significant effects.</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		cranes, but the magnitude of change is considered negligible across all stages.				
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines may be seen in combination or succession with cumulative developments in the central, north, and east groups, but actual visibility will be limited by topography, vegetation, and distance. As a result, the cumulative magnitude of change is predicted to be negligible</p>	<p>Imperceptible cumulative, not significant effects are predicted upon road users of the R583 across all stages of development.</p>		<p>Cumulative: Imperceptible cumulative, not significant effects.</p>	6.6
R577	6.5.6	<p>The R577 is a Regional Road that leaves Castleisland in the north-west of the study area and heads south-east to join the N72 at Cloonbannin Cross, passing within approximately 16.6 km of the nearest proposed turbine. The route has a medium-speed limit, meaning drivers are mostly focused on the road but can still appreciate the surroundings. A section is covered by a CCC Scenic Route, increasing its value; overall, the road has medium sensitivity. Theoretical visibility of up to nine turbines is predicted between Ballydesmond and Cloonbannin Cross, mostly at perpendicular angles and limited to blade tips due to screening from topography and vegetation. Construction activity may briefly increase visibility through machinery such as cranes. The magnitude of change for road users is considered negligible across all stages.</p>	<p>Imperceptible, not significant effects on road users of the R577 are predicted as a result of the Proposed Development across all stages of development</p>		<p>Construction/Decommissioning: Imperceptible, not significant effects.</p> <p>Operational: Imperceptible, not significant effects.</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines may be seen in sequence, succession, or combination with developments in the south-west, central, north, and east cumulative groups, but distance and screening will greatly reduce visibility. The development will not notably increase the presence of wind energy features, and the cumulative magnitude of change is assessed as negligible.</p>	<p>Imperceptible cumulative, not significant effects are predicted upon road users of the R577 across all stages of development.</p>		<p>Cumulative: Imperceptible cumulative, not significant effects.</p>	6.6
Effects on Recreational Routes						
CCC Scenic Routes S33 and S32	6.5.7	<p>CCC Scenic Routes S33 and S32, located south of Lough Allua, offer valued views of the surrounding mountains, lakes, and rural landscapes. These routes, within 15.4 km of the nearest proposed turbine, are classed as medium-value rural landscapes with a remote character. Recreational users travelling at walking pace are</p>	<p>Moderate, not significant effects on recreational users of S33 and S32 are predicted as a result of the Proposed</p>	<p>Embedded and Mitigation by Design</p>	<p>Construction/Decommissioning: Moderate effects</p> <p>Operational: Moderate,</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>highly susceptible to visual change, and views are of high value due to the scenic designation. Therefore, the overall sensitivity of these routes is high.</p> <p>Theoretical visibility of up to 15 turbines is predicted along two short sections: one north of Kealvaugh (approx. 1 km) and another east of Shehymore (approx. 3.4 km). Views will be distant (over 15 km) and often at oblique angles, forming only a small part of the wide mountain's overall views. Construction machinery, to be visible to road users during the construction phase but will be short-lived and replaced by the turbines once operational. The magnitude of change is assessed as medium to low across all stages.</p>	Development across all stages of development	Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	not significant effects	
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines may be seen in sequence, succession, or combination with those in the south-west, central, south, and east cumulative groups. However, distance and topographic screening will reduce actual visibility, and the development will not notably increase wind farm prominence in the landscape. The cumulative magnitude of change is therefore considered negligible.</p>	Imperceptible cumulative, not significant effects are predicted upon recreational users of S33 and S32		Cumulative: Imperceptible cumulative, not significant effects	6.6
CCC Scenic Route S35	6.5.7	<p>The S35 is a local road between Dromcarra and Rossmore, where recreational users travel at walking pace and focus on the surrounding landscape. Sections of the route are designated as a Scenic Route, with views of rolling hills, open countryside, the valley of the River Lee, and distant mountains. The sensitivity of recreational users is considered high.</p> <p>Theoretical visibility of up to approximately seven to nine of the proposed turbines is predicted for an approximately 1.8 km section of the route, with views afforded over 15 km and perpendicular to the direction of travel. Construction machinery, including tall cranes, may be temporarily visible, introducing short-lived human-made features. Following construction, turbines will sit alongside the existing wind farm context. Given the distance at which views are afforded, the magnitude of change for recreational users of S35 is considered medium/low.</p>	Moderate, not significant effects on recreational users of S35 are predicted as a result of the Proposed Development across all stages of development		<p>Construction/Decommissioning: Moderate, not significant effects</p> <p>Operational: Moderate effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines are predicted to be visible in sequence, succession, and/or combination along the route with turbines within the south-west, central, south, and east cumulative groups. In combination with consented development at Knocknamork, the Proposed Development will marginally increase the prevalence of wind energy development in perpendicular views from the route. Actual visibility is predicted to be attenuated by distance, and the magnitude of cumulative change for recreational users is predicted to be low</p>	<p>Moderate cumulative, not significant effects are predicted upon recreational users of S35 across all stages of development</p>		<p>Cumulative: Moderate cumulative, not significant effects</p>	6.6
CCC Scenic Route S26	6.5.7	<p>The S26 is a local road between Lissacresig and the Mouth of the Glen, with views of rugged landscape and valleys. At its closest point, the route is approximately 9.5 km from the nearest proposed turbine. The landscape is classed as “high (x2) – medium” value, with subsistence farming, settlement, and timber processing as key land uses, and hills and valleys as main land cover features. The route is predominantly high-speed dual carriageway, so road users have limited opportunities to observe the surrounding landscape, giving them low susceptibility to the Proposed Development. Views are high in value due to the scenic designation, and the sensitivity of users is therefore considered medium.</p> <p>Fragmented theoretical visibility of up to approximately 12 turbines is predicted, mostly at perpendicular angles to travel. Intervening vegetation will partly restrict views, and construction machinery may be temporarily visible. Following construction, turbines will sit alongside the existing wind farm context. The magnitude of change across the route is therefore medium/low during construction, reducing to low once operational</p>	<p>Slight, not significant effects are anticipated upon road users of S26 across all phases of development</p>		<p>Construction/Decommissioning: Slight, not significant effects</p> <p>Operational: Slight, not significant effects</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines will be visible in sequence or combination with turbines from south-west, central, south, and east cumulative groups. In combination with consented development at Knocknamork and operational development at Clydaghroe, the Proposed Development will increase the prevalence of wind energy development in perpendicular views. Cumulative sites to the south</p>	<p>Moderate cumulative, not significant effects are predicted upon recreational users of S26 across all stages of development</p>		<p>Cumulative: Moderate cumulative, not significant effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		are generally more prominent, but the Proposed Development will make turbines more noticeable in northward views, increasing the angle of visible turbines. The magnitude of cumulative change is therefore predicted to be medium				
CCC Scenic Route S23 and KCC Views and Prospects on N22 adjacent to local hill Doire Réidh	6.5.7	<p>The S23 and a KCC View and Prospect follow the R618/N22 from Macroom north-west towards Tulligmore, with views of the Derrynasaggart Mountains, surrounding hills, the Sullane River Valley, and rugged landscape. At its closest point, the route is approximately 2.3 km from the nearest proposed turbine. The landscape is classed as “medium–high (x2)” value, with agriculture as the main land use and hills, valleys, and settlements as main land cover features.</p> <p>These are high-speed roads, so recreational users are unlikely to access them; road users have limited opportunities to observe the surrounding landscape, giving them low susceptibility. Views are high in value due to the scenic designation, and the sensitivity of users is therefore considered medium. Fragmented theoretical visibility is predicted for approximately 14.6 km of the route, most notably a 10.2 km section where up to 12 turbines may be visible, but more commonly four to six. Views are at perpendicular and oblique angles to travel. Roadside vegetation will partly restrict visibility. Construction machinery may be temporarily visible, but turbines will ultimately sit alongside the existing wind farm context. The magnitude of change across the route is therefore low for all phases of development</p>	Slight effects, not significant are anticipated upon road users of S23 and the KCC View and Prospect along this route across all stages of development		<p>Construction/Decommissioning: Slight, not significant effects</p> <p>Operational: Slight, not significant effects</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>The Proposed Development will slightly increase visibility of turbines along a short section near Tulligmore. Turbines are predicted to be visible in sequence with all cumulative groups, most notably the south-west, south, and central groups. Visibility is limited by topography and roadside screening, and views are likely fleeting due to road speed. The magnitude of cumulative change is therefore predicted to be negligible</p>	Imperceptible cumulative, not significant effects are predicted upon road users of the of S23 and the KCC View and Prospect across all stages of development		<p>Cumulative: Imperceptible cumulative, not significant effects</p>	6.6
	6.5.7	The S22 is a local road south of the Proposed Development, running west off the R582 and serving local farmsteads and the	Moderate, not significant effects are anticipated upon		<p>Construction/Decommissioning: Moderate,</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
CCC Scenic Route S22		<p>Curragh Wind Farm. The route is described as a “local road to south east of Derrynasaggart Mountains from Caumcarrig to Bohill River” with views of Derrynasaggart Mountain, rockscape, river valleys, and remote rural landscape. At its closest point, the route is approximately 2.4 km from the nearest proposed turbine. The landscape is classed as “medium–high” value, with steeply sloping terrain used for sheep farming and commercial forestry, and land cover including commercial forestry, bog, moorland, mountains, and distant improved farmland.</p> <p>Recreational users are highly susceptible to the Proposed Development due to the scenic nature of the route and travel at walking pace. Views are high in value, and sensitivity is therefore considered high. Visibility is predicted at either end of the route: a 1.3 km western section may see up to six turbines perpendicular to travel, and a 2.4 km eastern section may see up to three turbines ahead of travel westwards. Intervening topography will largely restrict views, with turbines generally limited to blade tips. Construction machinery may be temporarily visible, but the turbines will ultimately sit within the existing wind farm context. The magnitude of change is medium during construction, reducing to low during operation.</p>	recreational users of S22 across all stages of development		<p>not significant effects</p> <p>Operational: Moderate, not significant effects</p>	
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines are predicted to be visible in sequence and combination with turbines from the south, south-west, east, and central cumulative groups. Actual visibility is limited by topography and screening. Where visible, the Proposed Development is not anticipated to substantially add to the cumulative landscape effect. The magnitude of cumulative change is therefore predicted to be low.</p>	<p>Moderate cumulative, not significant effects are predicted upon road users of the of S22</p>		<p>Cumulative: Moderate cumulative, not significant effects</p>	6.6
CCC Scenic Route S25	6.5.7	<p>The S25 is a local road in the south-west of the study area, running east from just east of Coolnoohill through Laharan East to join the L3402. It is described as a “section of winding local road joining The Coom and Reanerree Road” with views of Foilanumera, Mweelin, and Carrigalougha Mountains. At its closest point, the route is approximately 9.3 km from the nearest proposed turbine. The</p>	<p>Moderate, not significant effects are anticipated upon recreational users of S25 across all stages of development.</p>		<p>Construction/Decommissioning: Moderate, not significant effects</p> <p>Operational: Moderate,</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>landscape is classed as “high–medium” value, with forestry as the main land use and hills and valleys as main land cover features. Recreational users are highly susceptible to the Proposed Development as they travel at walking pace and focus on the surrounding landscape. Views are high in value, and sensitivity is therefore considered high.</p> <p>Theoretical visibility of up to 17 turbines is predicted along much of the western part of the route at oblique angles to travel. Existing operational turbines are already visible in the baseline, and intervening forestry may screen some views, although this may be reduced during forestry rotations. Construction machinery may be briefly visible, but turbines will ultimately sit within the existing wind farm context. Overall, the magnitude of change is considered medium/low across all stages of development</p>			not significant effects	
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines will be visible in sequence and combination with turbines from south, south-west, east, and central cumulative groups. Combined with consented turbines at Knocknamork and operational turbines at Clydaghroe and Coomacheo, the Proposed Development will slightly increase the prominence of wind energy in distant perpendicular views. In-planning turbines at Gortyrähilly are predicted to be more prominent. The magnitude of cumulative change is therefore predicted to be medium/low</p>	<p>Moderate cumulative, not significant effects are predicted upon road users of the of S25 across all stages of development</p>		<p>Cumulative: Moderate cumulative, not significant effects</p>	6.6
CCC Scenic Route S24	6.5.7	<p>The S24 is a local road in the south-west of the study area, running south-west from Coolda to the CCC boundary. It is described as a “local road between Cúil Aodha and Coom” with views of the foothills of the Derrynasaggart Mountains, surrounding hills, and the Sullane River. At its closest point, the route is approximately 7.3 km from the nearest proposed turbine. The landscape is classed as “high–medium–high” value, with subsistence farming as the main land use and hills and valleys as the main land cover features. Recreational users are highly susceptible to the Proposed Development as they travel at walking pace and focus on the surrounding landscape. Views are high in value, and sensitivity is therefore considered high.</p>	<p>Moderate, not significant effects are anticipated upon recreational users of S24 across all phases of development</p>		<p>Construction/Decommissioning: Moderate, not significant effects</p> <p>Operational: Moderate, not significant effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		Theoretical visibility is predicted along two sections: a 3.5 km section between Coolea and north-west of Fuhirees and a 0.4 km section near the CCC boundary, with up to 17 turbines visible at oblique angles for users traveling north-east. Users traveling in the opposite direction are not anticipated to experience visibility. Intervening roadside vegetation will restrict views in some areas. Construction machinery may be briefly visible, but turbines will ultimately sit within the existing wind farm context. The magnitude of change is therefore considered low across all phases of development				
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines will be visible in sequence and combination with turbines from the south-west, east, and central cumulative groups. The Proposed Development will slightly increase visibility to the north-east of the route, enhancing the prominence of wind energy in views. Given the undulating nature of the route, visibility is likely to be fragmented and limited. The magnitude of cumulative change is therefore predicted to be medium/low</p>	Moderate cumulative, not significant effects are predicted upon road users of the of S24 across all stages of development		Cumulative: Moderate cumulative, not significant effects	6.6
CCC Scenic Route S37	6.5.7	<p>The S37 follows the R618 from Macroom towards the City of Cork, with views of the Lee Valley, reservoir, rural landscape, and the Sullane River. At its closest point, the route is approximately 17.3 km from the nearest proposed turbine. The landscape is classed as “very high–high (x2)” value, with agriculture, forestry, and residential land uses, and settlement, hills, wooded areas, valleys, and the reservoir as main land cover features.</p> <p>The route is a high-speed dual carriageway, so recreational users are unlikely to access it. Road users have limited opportunity to observe the landscape, giving low susceptibility. Views are high in value, giving overall sensitivity as medium. Limited visibility is predicted: a short 0.7 km section may theoretically afford views of up to six turbines, but these are blocked by vegetation and topography. No substantial visibility is predicted from this route, and the magnitude of change is therefore None</p>	No significant effects are anticipated on recreational users of route S37 across all stages of development		<p>Construction/Decommissioning: No effects</p> <p>Operational: No effects</p>	6.6
		No cumulative effects are predicted for road users of the S37 across all stages of development.	No significant cumulative effects are predicted upon		Cumulative: No cumulative effects	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
			road users of the of S37 across all stages of development			
CCC Scenic Route S21	6.5.7	<p>The S21 is a section of the R582 north and south of Carriganimmy, with views of the Musherabeg Mountains and the surrounding rural landscape. At its closest point, the route is approximately 5.4 km from the nearest proposed turbine. The landscape is classed as “high–medium” value, with subsistence farming as the main land use and hills, valleys, and settlements of Carriganimmy as the main land cover features.</p> <p>The route is high-speed and not typically accessed by recreational users, so susceptibility is low. Views are high in value due to the scenic designation, giving overall sensitivity as high. Fragmented theoretical visibility of up to three turbines is predicted along a 2.4 km central section at oblique angles northwards; users traveling southwards are not expected to see the turbines. Views are largely limited to blade tips. Construction machinery may be briefly visible, but turbines will ultimately sit within the existing wind farm context. The magnitude of change is low during construction, reducing to negligible during operation</p>	Imperceptible, not significant effects are anticipated upon road users of S21 during the construction phase, reducing to negligible during the operational phase		<p>Construction/Decommissioning: Imperceptible, not significant effects .</p> <p>Operational: Imperceptible, not significant effects</p>	6.6
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines are predicted to be visible in sequence and combination with turbines from the south, central, and east cumulative groups. Given the limited visibility, mainly to blade tips, cumulative interactions are not expected to be substantial. The magnitude of cumulative change is therefore predicted to be negligible.</p>	Imperceptible cumulative, not significant effects are predicted upon road users of the of S21 across all stages of development		<p>Cumulative: Imperceptible cumulative, not significant effects</p>	6.6
CCC Scenic Route S20	6.5.7	<p>The S20 is a series of local roads east of Keim, including L1123, connecting Musherabeg, Ballynagree, Lackdotia, and Rylane Cross, with views of the Boggeragh Mountains, Knocknagoun Mountains, and remote rural landscape. At its closest point, the route is approximately 6.5 km from the nearest proposed turbine. The landscape is classed as “medium (x3)–high” value, with subsistence farming, commercial forestry, Millstreet Country Park, and one-off housing as key land uses, and mountains, extensive valleys, lowlands, vegetation, and settlements as main land cover features.</p>	Imperceptible, not significant effects are anticipated upon road and recreational users of S20 across all stages of development		<p>Construction/Decommissioning: Imperceptible, not significant effects. .</p> <p>Operational: Imperceptible, not significant effects.</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Road users along high-speed sections are of low susceptibility due to limited opportunity to observe the landscape, while recreational users on quieter sections are highly susceptible as they travel at walking pace. Views are high in value, giving overall sensitivity as medium for road users and high for recreational users.</p> <p>Theoretical visibility of up to 17 turbines is predicted across four sections, with views at perpendicular, oblique, and forward angles depending on direction of travel. Views are relatively open and include existing wind energy development. Construction machinery may be briefly visible, but the Proposed Development will fit within the existing baseline. The magnitude of change is therefore considered negligible across all stages of development.</p>				
		<p>Cumulative Landscape Effects</p> <p>The proposed turbines are predicted to be visible in sequence and combination with all cumulative groups. Some stacking alongside operational turbines may occur in closer views; however, the Proposed Development is considered to fit within the existing cumulative baseline. The magnitude of cumulative change is therefore predicted to be low</p>	<p>Moderate and slight cumulative, not significant effects are predicted upon recreational and road users of the of S20 respectively assessed across all phases of development</p>		<p>Cumulative: Moderate and slight cumulative, not significant effects upon recreational and road users respectively</p>	6.6
CCC Scenic Route S18	6.5.7	<p>The S18 is a series of local mountain roads between Stonefield, Nad, Seefin, and Kilcorney, including part of Coolroe More, with views of the Boggeragh Mountains and distant views of the Caherbranagh and Derrynasaggart Mountains. At its closest point, the route is approximately 16.3 km from the nearest proposed turbine. The landscape is classed as “medium” value, with subsistence farming and upland commercial forestry as key land uses, and grass valleys, rough upland grazing, commercial forestry, the Boggeragh Mountains, and Owenbaun River Valley as main land cover features.</p> <p>Recreational users are highly susceptible to the Proposed Development due to travel at walking pace and focus on the surrounding landscape. Views are high in value, giving overall sensitivity as high. Theoretical visibility of up to 17 turbines is predicted from three sections: 1.9 km around Crinaloo, 3.4 km between Curraraique and Lacklaun, and 0.4 km to the south-west,</p>	<p>Imperceptible, not significant effects are anticipated upon recreational users of S18 across all stages of development.</p>		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>although forestry is expected to restrict views in the latter section. Views are relatively open but distant (over 15 km) and include existing wind farms. Construction machinery may be briefly visible, but turbines will ultimately fit within the existing wind farm context. The magnitude of change is therefore considered negligible across all stages of development.</p> <p>Cumulative Landscape Effects The proposed turbines are predicted to be visible in sequence and combination with turbines from the central, north, and east cumulative groups. Some distant stacking with operational turbines may occur, but given the distance and prominence of existing developments, the Proposed Development is not expected to substantially alter the cumulative landscape. The magnitude of cumulative change is therefore predicted to be low.</p>				
			Moderate cumulative, not significant effects are predicted upon recreational users of the of S18 respectively across all stages of development		Cumulative: Moderate cumulative, not significant effects	6.6
Representative Viewpoints						
Viewpoint 1- View from local road (scenic route) in the townland of Coomnaclohy Figures 6-1-1-a – c	6.5.8	<p>This viewpoint is taken from a local road in Coomnaclohy looking north towards the Proposed Development Site. The existing view is dominated by a foreground ridgeline that screens long-distance views. The landscape comprises rough grazing and intermittent gorse planting, with few human-made features aside from an existing telegraph pole. A number of operational turbines are theoretically visible, and the future baseline includes turbines from the consented Knocknamork Wind Farm and Clydaghroe Extension. The viewpoint is located within LCT 15b Ridged and Peaked Upland.</p> <p>Road users at this viewpoint are considered medium/low sensitivity due to high speeds, although the narrow road may slightly reduce travel speed. Recreational users are highly sensitive due to travel at walking pace and focus on the landscape. Views are high in value as a scenic route. Overall sensitivity is medium for road users and high for recreational users.</p> <p>The Proposed Development will introduce movement and visibility from a single turbine hub and blade tips, with a small partial view of a second turbine. The magnitude of change is therefore considered</p>	Slight, not significant effects predicted upon road and recreational users of the route across all stages of development	Embedded and Mitigation by Design Details are provided in section 6.6 of the EIAR Chapter 5: Landscape and Visual Impact Assessment.	Construction/Decommissioning: Slight, not significant effects Operational: Slight, not significant effects	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		low, as the baseline remains largely unchanged, and changes will be barely perceptible to visual receptors.				
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen alongside turbines from the consented Knocknamork Wind Farm and Clydaghroe Extension. Minor visual clashing may occur with a single turbine, but overall it will appear as part of a cohesive future baseline. The cumulative magnitude of change from this viewpoint is therefore anticipated to be low.</p>	<p>Slight cumulative, not significant effects are therefore predicted due to the Proposed Development</p>		<p>Cumulative: Slight cumulative, not significant effects</p>	6.6
Viewpoint 2- View from the N22 (scenic route) in the townland of Derrynasaggart	6.5.8	<p>This viewpoint is taken from the N22, a main route between Cork and Killarney through Macroom, looking north-east towards the Proposed Development Site. The view is typical of the route, with longer distance views across hilly landscapes where gaps in mature roadside vegetation permit, while other sections are enclosed with near-road views only. The existing Mullaghanish Mast is visible, and the future baseline includes turbines from the consented Knocknamork Wind Farm and Clydaghroe Extension. The viewpoint is within LCT 15b: Ridged and Peaked Upland.</p> <p>Recreational users are not considered due to lack of pedestrian access and high traffic speed. Road users are of low susceptibility, with limited opportunity to view the surrounding landscape. Views are high in value due to the scenic designation, giving overall sensitivity as medium.</p> <p>The Proposed Development will result in a barely perceptible change due to screening from roadside vegetation and nearby coniferous plantations. Existing movement along the N22 further reduces perceptibility. The magnitude of change is therefore considered negligible</p>	<p>Imperceptible, not significant effects are predicted across all stages of development.</p>		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects</p>	6.6
Figures 6-1-2-a to c		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen alongside turbines from the consented Knocknamork Wind Farm and the operational Mullaghanish Mast. Visibility is restricted, and the Proposed Development will integrate into the future baseline. The cumulative magnitude of change from this viewpoint is therefore anticipated to be negligible</p>	<p>imperceptible cumulative, not significant effects are predicted due to the Proposed Development</p>		<p>Cumulative: Imperceptible cumulative, not significant effects</p>	6.6

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Viewpoint 3- View from the N22 (scenic route) in the townland of Derrynasaggart Figures 6-1-3-a to c	6.5.8	This viewpoint is taken from the N22 near individual residential properties set against a ridgeline topped with coniferous woodland, looking north and north-east towards the southern edge of the Proposed Development Site. The site is located beyond the existing mature plantation, and the future baseline includes turbines from the consented Knocknamork Wind Farm. The viewpoint is within County Cork and LCT 15b Ridged and Peaked Upland. Recreational users are not considered due to lack of pedestrian access, high traffic speeds, and road volume. Road users are of low susceptibility, with limited opportunity to view the surrounding landscape. Views are high in value due to the scenic designation, giving overall sensitivity as medium. The Proposed Development allows for the blade tip of one turbine to be visible, mostly screened by intervening coniferous vegetation and viewed at a perpendicular angle to travel. The magnitude of change is therefore considered negligible	From this location and the significance of effects upon receptors of this viewpoint, it is considered to be imperceptible, not significant across all stages of development		Construction/Decommissioning: Imperceptible, not significant effects Operational: Imperceptible, not significant effects	6.6
		Cumulative Visual Effects The Proposed Development will be seen alongside turbines from the consented Knocknamork Wind Farm. Visibility is heavily screened by coniferous woodland, and any visible elements will integrate into the future baseline. The cumulative magnitude of change is therefore anticipated to be negligible	imperceptible cumulative, not significant effects are predicted due to the Proposed Development		Cumulative: Imperceptible cumulative, not significant effects	6.6
Viewpoint 4- View from local road (scenic route) off the R582 in the townland of Caherdowney Figures 6-1-4-a to c	6.5.8	This viewpoint is taken from a local scenic route in County Cork at the start of the Proposed Development Site access, east of the main site containing seventeen turbines. The baseline view includes rural farmland in the foreground, rising land with coniferous forestry and rough moorland grazing in the middle ground, and existing turbines (Curragh and Caherdowney) and masts along the backdrop ridgeline. The viewpoint is within LCT 15b Ridged and Peaked Upland. Road users are considered medium/low sensitivity due to high speed limits, although the narrow road may slightly reduce speeds. Recreational users are highly sensitive, travelling at walking pace and focusing on the landscape. Views are high in value due to the	It is considered therefore that the significance of effects of the addition of the Proposed Development is imperceptible, not significant across all stages of development		Construction/Decommissioning: Imperceptible, not significant effects Operational: Imperceptible, not significant effects	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>scenic designation. Overall sensitivity is medium for road users and high for recreational users.</p> <p>The magnitude of change is negligible, as only a partial view of a single turbine blade tip is visible among existing operational turbines, providing very limited perception of scale difference</p>				
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen alongside operational Caherdowney and Curragh Wind Farms. Views of the Proposed Development are mostly screened, and no cumulative effects on visual amenity are anticipated. The cumulative magnitude of change is therefore negligible</p>	<p>No cumulative effects are predicted due to the Proposed Development</p>		<p>Cumulative: No cumulative effects</p>	6.6
<p>Viewpoint 5- Views from the local road in the townland of Derrynafinnia</p> <p>Figures 6-1-5-a to c</p>	6.5.8	<p>This viewpoint is located within the County Kerry Visually Sensitive Area, taken from a local road looking south-east towards the Proposed Development Site. The view is open to a distant hill with foreground and middle-ground ridges. Rough grazing, gorse, and coniferous plantations are visible, alongside telegraph poles. The hubs and blades of operational Clydaghroe turbines are visible in the far distance against the backdrop of hills, without breaching the skyline. The future baseline includes turbines from the consented Knocknamork Wind Farm and one turbine from the consented Clydaghroe Extension. The viewpoint is within LCA 27: Clydagh River, The Paps and Derrynasaggart Mountains.</p> <p>Road users are medium/low sensitivity due to high speeds, while recreational users visiting the Visually Sensitive Area are highly sensitive, focusing on the landscape at walking pace. Views are high in value, giving overall sensitivity of medium for road users and high for recreational users.</p> <p>The Proposed Development introduces a noticeable change, with five turbine hubs and blade tips and one blade tip closer to the viewpoint, breaching the skyline more than the existing baseline. Turbines do not read as a single development alongside Clydaghroe, and rotational movement adds further visual change, though existing vertical elements (telephone wires, fencing) reduce prominence. The magnitude of change is therefore medium</p>	<p>The significance of effects from this location is considered moderate, not significant for road users and moderate, not significant for recreational users across all stages of development</p>		<p>Construction/Decommissioning: Moderate, not significant effects upon road and recreational users</p> <p>Operational: Moderate, not significant effects upon road and recreational users</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen alongside the consented Knocknamork Wind Farm, consented Clydaghroe Extension, operational Clydaghroe Wind Farm, and Mullaghanish Mast. The Proposed Development turbines are closer and more prominent than existing turbines, with minor clashing between two turbines. The cumulative magnitude of change is therefore medium</p>	<p>Moderate cumulative, not significant effects are predicted upon road and recreational users.</p>		<p>Cumulative: Moderate cumulative, not significant effects upon road and recreational users</p>	6.6
<p>Viewpoint 6- View from the N22 (scenic route) in the townland of Flats</p> <p>Figures 6-1-6-a to c</p>	6.5.8	<p>This viewpoint is taken from the N22 on the edge of Flats, looking north towards the Proposed Development Site. The baseline view comprises linear residential development along the N22, individual dwellings and farmsteads on the valley floor and lower slopes, with views through the built form to upper slopes and a hill ridgeline in the background. Existing operational turbines include one hub and blade tips and the blade tips of three turbines from Clydaghroe. The future baseline includes turbines from the consented Knocknamork Wind Farm and one from the consented Clydaghroe Extension. The viewpoint is within County Cork and LCT 12a: Rolling Marginal Middleground.</p> <p>Road users are of medium sensitivity due to the lower speed limit along the N22 at this location, while recreational users passing on foot are highly sensitive. Views are high in value, giving an overall sensitivity of high/medium for road users and high for recreational users.</p> <p>The Proposed Development will introduce distant views of two turbines with hubs and blade tips and three turbines with blade tips only. Existing vertical elements such as telephone poles and lampposts, combined with intervening natural features and existing wind energy development, mean that the magnitude of change is considered low across all stages of development</p>	<p>Moderate and slight, not significant effects are predicted upon recreational and road users respectively of Viewpoint 6</p>		<p>Construction/Decommissioning: Slight, not significant effects upon road users and moderate effects upon recreational users</p> <p>Operational: Slight, not significant effects upon road users and moderate, not significant effects upon recreational users</p>	6.6
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen alongside the consented Knocknamork Wind Farm, the consented Clydaghroe Extension, operational Clydaghroe Wind Farm, and Mullaghanish Mast. Minor clashing may occur with two turbines, but due to distance this is not</p>	<p>moderate, not significant cumulative effects are predicted due to the Proposed Development.</p>		<p>Cumulative: Moderate cumulative, not significant effects</p>	6.6

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		significant. The cumulative magnitude of change is therefore medium/low.				
Viewpoint 7- View from R582 (scenic route) in the townland of Carriganimmy Figures 6-1-7-a to c	6.5.8	<p>This viewpoint is taken from the R582 Scenic Route in the townland of Carriganimmy, looking across a rural pastoral landscape towards rough grazing and plantation-forested hillsides in the background. Mature vegetation, including shelterbelts, tree copses and scattered farmsteads, defines the middle and foreground. Operational turbines of the Curragh and Caherdowney Wind Farms are visible on the skyline, alongside the Mullaghanish Mast. These operational developments are read as one within the wider landscape context. The viewpoint is located within County Cork and lies within LCT 15b: Ridged and Peaked Upland.</p> <p>Road users are of medium sensitivity due to the lower speed limit through this section of the route and nearby residential properties. Views are of high value, reflecting the route's scenic designation. Overall sensitivity is considered high/medium for road users. The Proposed Development will not perceptibly alter the existing view, with only the blade tips of a single turbine visible above the ridgeline already occupied by operational turbines. Given the minimal visibility and existing wind energy context, the magnitude of change is considered negligible</p>	The significance of effect is deemed as imperceptible, not significant across all stages of development		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects</p>	6.6
		<p>Cumulative Visual Effects The Proposed Development will be seen in conjunction with the operational Caherdowney and Curragh Wind Farms, though visibility will be largely screened by intervening topography. As a result, no notable cumulative effects are anticipated, and the cumulative magnitude of change is considered negligible.</p>	imperceptible cumulative, not significant effects are predicted due to the Proposed Development		<p>Cumulative: Imperceptible cumulative, not significant effects</p>	6.6
Viewpoint 8- View from the L1123, Altamont, Tullig, Millstreet Co Cork	6.5.8	<p>This viewpoint is taken from the L1123 local road on the edge of Millstreet, overlooking a pastoral, hedge-bound farmed landscape leading to the rising, forested and rough-grazed slopes of the hills in the background. The existing view includes several operational wind energy developments, with Caherdowney and Curragh read as a single development in combination with the Mullaghanish Mast. The turbines of Gneevs, Clydaghroe and Coomacheo are also visible, appearing staggered across the ridgeline and read as</p>	The Proposed Development is anticipated to result in slight, not significant effects on receptors of Viewpoint 8 across all stages of development		<p>Construction/Decommissioning: Slight, not significant effects</p> <p>Operational: Slight, not significant effects</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Figures 6-1-8-a to c		<p>separate entities due to differences in scale and siting. The viewpoint is located within County Cork and within LCT 11: Broad Marginal Middleground Valleys. Road users are considered to be of medium sensitivity due to the lower speed limits through Millstreet and the route’s local function. Views are of medium value, reflecting the absence of landscape designation but local community value. Overall sensitivity is therefore medium.</p> <p>The Proposed Development will introduce additional turbines into the existing distant view of operational wind farms. One turbine hub and blade tips and the blade tips of a further four turbines will be visible, with most partially screened behind the ridgeline. Two turbines will appear to clash with existing developments, though this will not greatly alter the overall view at this distance. The magnitude of change is therefore low.</p>				
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen in conjunction with the operational Caherdowney, Gneeves, Clydaghroe, Coomacheo and Curragh Wind Farms. While one proposed turbine will appear more prominent, intervening topography will limit visibility of the remainder. Some clashing of turbines within the array will occur, resulting in a slightly mismatched composition; however, distance and screening reduce prominence. The cumulative magnitude of change is therefore medium/low.</p>	<p>slight cumulative, not significant effects are predicted due to the Proposed Development across all stages of development</p>		<p>Cumulative: Slight cumulative, not significant effects</p>	6.6
<p>Viewpoint 9- View from the L3402 (scenic route), in the townland of Derryfineen</p> <p>Figures 6-1-9-a to c</p>	6.5.8	<p>This viewpoint is taken from the L3402 scenic route, looking across a gently undulating pastoral landscape towards the prevailing topography, where a nearby ridgeline encloses the view, with longer-distance vistas extending to the rising hills beyond. The foreground comprises grassland with scattered scrub and gorse, while large skies and rounded hill forms define the background. The operational Mullaghanish Mast is visible on a hill summit, and turbines of the Clydaghroe Wind Farm are discernible within a wide contextual setting, appearing against or just above the ridge, though they barely register in the view. The future baseline includes turbines from the consented Knocknamork Wind Farm and one from the consented Clydaghroe Extension. The viewpoint lies within</p>	<p>Slight, not significant effects are predicted as a result of the Proposed Development across all stages of development</p>		<p>Construction/Decommissioning: Slight, not significant effects</p> <p>Operational: Slight, not significant effects</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>County Cork and LCT 12a: Rolling Marginal Middleground. Road users are considered to be of medium susceptibility to the type of change proposed, with reduced speeds due to nearby residential properties. Views from this scenic route are of high value, giving an overall sensitivity of high/medium for road users. Recreational users are not considered further due to the lack of pedestrian access.</p> <p>The Proposed Development will introduce additional distant turbine elements into the view, with four turbine hubs and blade tips and a further four blade tips visible above the skyline. Given the distance, perpendicular viewing angles, and existing infrastructure including the Clydaghroe turbines and Mullaghanish Mast, the change will not significantly alter the visual composition. The magnitude of change is therefore low across all stages of development</p>				
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen alongside the consented Knocknamork Wind Farm, the consented Clydaghroe Extension, the operational Clydaghroe Wind Farm, and Mullaghanish Mast. Some minor clashing may occur between turbines; however, due to distance and the similar turbine scale, the Proposed and Knocknamork turbines will read as part of one cohesive wind farm grouping. The cumulative magnitude of change is therefore low</p>	<p>Slight cumulative, not significant effects are predicted due to the Proposed Development</p>		<p>Cumulative: Slight cumulative, not significant effects</p>	6.6
<p>Viewpoint 10- View from the L1123 (scenic route), Upper Aubane, Tullig, Co. Cork</p> <p>Figures 6-1-10-a1-c</p>	6.5.8	<p>This longer-distance view is taken from the L1123 scenic route, just beyond 10 km from the Proposed Development Site, looking south-west across a rolling pastoral landscape towards the moorland hills. The landscape comprises a patchwork of hedgerows, gorse, shelterbelts, and coniferous woodland blocks enclosing individual farmsteads. In the distance, existing operational turbines are visible on the rising hills, breaching the skyline. The viewpoint lies within County Cork and LCT 15b: Ridged and Peaked Upland. Road users are of low susceptibility to the type of change proposed due to the higher speed limit and limited viewing opportunities. However, as a designated scenic route, views are of high value, giving an overall sensitivity of medium for road users. Recreational users are not considered further due to the lack of pedestrian access.</p>	<p>Slight, not significant effects are predicted across all stages of development.</p>		<p>Construction/Decommissioning: Slight, not significant effects</p> <p>Operational: Slight, not significant effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>The Proposed Development will introduce additional distant turbine elements into a view already containing several operational wind farms and the Mullaghanish Mast. Three turbine hubs and blade tips, and the blade tips of a further ten turbines, will be visible at oblique angles from the road. These will appear amongst existing turbines, most of which are already visible above the ridgelines. The Proposed Development will therefore read as an extension to the existing array rather than a new focal feature. The magnitude of change is assessed as low.</p>				
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen alongside the operational Caherdowney, Gneeves, Clydaghroe, Coomacheo, and Curragh Wind Farms. While multiple developments are visible within a wide panoramic context, differences in turbine scale and spacing will allow each to remain legible as a separate group. Some visual clashing will occur, but the distance and intervening topography reduce overall prominence. The cumulative magnitude of change is therefore considered to be medium/low.</p>	<p>Slight cumulative, not significant effects are predicted due to the Proposed Development. This is primarily due to the difference in scale of the proposed turbines when seen in combination with the existing operational turbines, especially of those relating to the Curragh development. When viewed it is difficult for them to read as one development or an extension to any of the existing operational development within the landscape setting</p>		<p>Cumulative: Slight cumulative, not significant effects</p>	6.6
<p>Viewpoint 11- View from local road (scenic route), in the townland of Fuhiry</p> <p>Figures 6-1-11-a to c</p>	6.5.8	<p>This viewpoint is taken from a high point near the 10 km radius to the south-west of the Proposed Development Site, looking north-east across the tops of mature coniferous plantation towards distant hill landforms set against a large sky. The landscape is characterised by extensive forestry, open moorland, and distant peaks, with clearings visible in the middle ground to accommodate the consented Knocknamork turbines. Most of the land cover visible is modified and actively managed. Operational turbines at Coomacheo and Clydaghroe are visible in the distance, with the future baseline including the consented Knocknamork and Clydaghroe Extension turbines. The viewpoint lies within County</p>	<p>The significance of effects is considered to be moderate, not significant across all stages of development</p>		<p>Construction/Decommissioning: Moderate, not significant effects upon road and recreational users</p> <p>Operational: Moderate, not significant effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cork and LCT 13a: Valleyed Marginal Middleground. Road users are considered to have medium/low susceptibility to change due to the relatively high speed of travel, although the narrow road allows for some appreciation of the surrounding landscape. Recreational users are highly susceptible given their slower pace and focus on the scenic quality of the landscape. Views from the route are of high value due to the scenic route designation. Overall sensitivity is therefore medium for road users and high for recreational users.</p> <p>The Proposed Development will introduce distant views of the blade tips and hubs of eleven turbines, with blade tips only of a further five visible, viewed largely at perpendicular angles to the direction of travel. Although the landscape already contains visible turbine development, the Proposed Development will add new vertical movement and visual focus in the middle ground. Given the distance and the existing managed forestry context, the magnitude of change is assessed as medium across all stages of development.</p>			upon road and recreational users	
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen in conjunction with the consented Knocknamork and C lydaghroe Extension Wind Farms, as well as the operational Coomacheo, Carriganima Community, and Bogeragh Wind Farms. Permitted developments at Ballinagree and Gortyr ahilly may also be visible, with the latter likely to become the most prominent feature of the view. While some stacking and clashing of turbines will occur, this will not be strongly perceptible at the viewing distance. The Proposed Development will appear as part of a wider wind energy context, forming a cohesive addition to the existing and consented arrays. The cumulative magnitude of change is therefore considered to be medium</p>	<p>Moderate cumulative, not significant effects are predicted due to the Proposed Development.</p>		<p>Cumulative: Moderate cumulative, not significant effects upon road and recreational users</p>	6.6
Viewpoint 12- View from the R583, in the townland of Coole	6.5.8	<p>This viewpoint is taken from the R583 to the north-east of the Proposed Development Site, located approximately 10 km to the south-west. Views from the R583 are generally enclosed, with openings only where topography and roadside vegetation permit. This viewpoint is situated at a higher point on the road, offering views towards the Derrynasaggart Mountains. A number of operational turbines are visible on distant hilltops forming the</p>	<p>The significance of effect is considered to be imperceptible, not significant across all stages of development</p>		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible effects</p>	6.6

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Figures 6-1-12-a to c		backdrop to the view. The viewpoint lies within County Cork and LCT 11: Broad Marginal Middleground Valleys. Road users are considered to have low susceptibility to the type of change proposed due to the high speed limit along this section of road. Views from the route are of medium value, given the absence of landscape designation but its value to the local community. The overall sensitivity of road users to the Proposed Development is therefore medium/low. The Proposed Development will be barely perceptible from this viewpoint, with only the blade tips of two turbines visible above intervening forestry. These limited views align with the existing baseline character and do not noticeably alter the composition of the view. The magnitude of change is therefore assessed as negligible.			Cumulative: Imperceptible cumulative, not significant effects	
		Cumulative Visual Effects The Proposed Development will be seen in conjunction with the operational Caherdowney, Gneevies, and Curragh Wind Farms. However, views are expected to be largely screened by intervening topography and vegetation, and the addition of the Proposed Development is not anticipated to affect the overall visual amenity. The cumulative magnitude of change is therefore considered to be negligible	Imperceptible cumulative, not significant effects are predicted due to the Proposed Development.	Cumulative: Imperceptible cumulative, not significant effects	6.6	
Viewpoint 13- View from N72 on the border of townlands Meenskeha west and Ardnageeha Figures 6-1-13-a to c	6.5.8	This view is taken from the N72 approximately 14km to the north/north-east of the Proposed Development Site. The view looks towards distant peaks and summits, with a middle foreground of mature scrub, trees, and gorse, backclothed by coniferous plantation. In the immediate foreground, electricity poles and timber post-and-rail fencing are visible, along with an isolated property to the right of the view. Beyond these, the wider landscape appears tranquil, with limited built form and movement other than passing vehicles. In the far distance, the hill ranges where the site is located can be discerned, and a small number of operational turbines are barely perceptible to the naked eye. The viewpoint lies within County Cork and the LCT 11: Broad Marginal Middleground Valleys. Road users from this viewpoint are considered to be of low susceptibility to the type of change proposed, given the high speed	No significant effects are predicted as a result of the Proposed Development across all stages of development. This is due to a combination of the distance, coupled with the limited view of the development, in addition to the limited sensitivity of receptors at this viewpoint		Construction/Decommissioning: Not significant effects Operational: Not significant effects	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>limit of the N72. Views are of medium value due to the route's local visual importance, though it lacks formal scenic designation. Overall sensitivity of road users to the type of development proposed is therefore considered to be medium/low. The baseline includes distant wind energy developments set within the wider landscape context, with the Mullaghanish Mast being the most prominent vertical element visible against the sky. The Proposed Development will occupy only a small portion of the distant view and will sit within the prevailing topographic backdrop. One turbine may appear marginally more dominant than others, but this will not noticeably alter the existing visual composition. The magnitude of change is therefore considered to be low, as the new view remains broadly consistent with the existing baseline</p>				
		<p>Cumulative Visual Effects From this viewpoint, views of the operational Coomacheo, Gneeves, and Curragh Wind Farms will be seen in conjunction with the Proposed Development. Views of the Proposed Development will be largely screened by intervening topography and vegetation, and where visible, will occur at such distance that the interaction between developments is limited. The cumulative effects on visual receptors are therefore considered to be negligible.</p>	<p>Imperceptible cumulative, not significant effects are predicted due to the Proposed Development. The cumulative development at Ballinagree is likely to be mostly screened by local vegetation and the attenuation of effects by distance. It is therefore considered that the Proposed Development is unlikely to result in significant cumulative effects in combination with in-planning development at Ballinagree.</p>		<p>Cumulative: Imperceptible cumulative, not significant effects</p>	6.6
Viewpoint 14- View from local track, in the townland of Crohane	6.5.8	<p>This viewpoint is located within a designated Visually Sensitive Area on a local road/track situated at a high point in an enclosed scenic landscape. The view is characterised by a mixture of rolling landform, field boundaries, and mature vegetation typical of the upland landscape. The viewpoint lies within County Kerry and the LCA 27: Clydagh River, The Paps and Derrynasaggart Mountains. There are limited users of this local route, primarily residents accessing nearby properties. Road users are therefore considered</p>	<p>No effects are predicted as a result of the Proposed Development across all stages of development</p>		<p>Construction/Decommissioning: No effect</p> <p>Operational: No effect</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Figures 6-1-14-a to c		to be of medium susceptibility due to the low vehicle speeds allowing for a greater degree of landscape appreciation. Recreational users visiting the designated area are considered to be of high susceptibility to the type of change proposed, as the surrounding landscape is a key focus of their experience. Given the area's designation as a Visually Sensitive Area, views from the route are of high value. Overall sensitivity of receptors from this viewpoint is assessed as high/medium for road users and high for recreational users. The Proposed Development is entirely screened from this location by dense intervening vegetation. While the degree of screening will vary seasonally, with limited visibility possible during leafless months, any potential views would remain substantially filtered. Where visible, the Proposed Development would be perceived only distantly and would not form a notable feature in the landscape. The magnitude of change is therefore considered to be negligible, with no discernible alteration to the existing view anticipated				
		<p>Cumulative Visual Effects</p> <p>From this viewpoint, there is potential to view the operational Clydaghroe Wind Farm together with the consented Knocknamork and Clydaghroe Extension developments. However, dense screening vegetation largely restricts visibility towards these and the Proposed Development. Even in winter conditions, significant filtering by branches would remain. It is therefore considered unlikely that any cumulative visual effects would occur for receptors at this viewpoint.</p>	No cumulative effects are predicted on visual receptors from this viewpoint.		Cumulative: No cumulative effect	6.6
Viewpoint 15- View from local road, in the townland of Shronaboy Figures 6-1-15-a to c	6.5.8	This viewpoint is taken from an elevated location on the local road within Shronaboy, which lies within a KCC Visually Sensitive Area. The view shows a rolling pastoral farmed landscape with broadleaf shelterbelts and coniferous woodland forming the middle ground, leading to rising hill landforms in the distance. A mature hedge and tree-lined rural road accessing individual properties creates an enclosed, intimate setting in the lower elevated areas. The viewpoint is in County Kerry and LCA 22: Quagmire and Owneyskeagh Rivers. Road users from this viewpoint are considered to be of medium/low	Imperceptible, not significant effects are predicted across all stages of development		Construction/Decommissioning: Imperceptible, not significant effects Operational: Imperceptible effects	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>susceptibility to the type of change proposed. The road has a high speed limit, but its narrow nature may lower speeds slightly, allowing users to take in the surrounding landscape. Views from the route are of medium value due to the lack of designation along the route and its local community value. Overall sensitivity for road users is medium.</p> <p>The addition of the Proposed Development into this view is barely perceptible. Only the blade tip of one turbine will be visible at a distance, introducing a minor new human-made feature into ridgeline views. The view is not visibly altered, and the magnitude of change is negligible.</p>				
		<p>Cumulative Visual Effects No cumulative sites are visible from this viewpoint.</p>	<p>No cumulative effects as a result of the Proposed Development from this viewpoint.</p>		<p>Cumulative: No cumulative effects</p>	6.6
<p>Viewpoint 16- View from local road, in the townland of Raleigh South</p> <p>Figures 6-1-16-a to c</p>	6.5.8	<p>This viewpoint is located within a CCC High Value landscape, approximately 14 km south-east of the Proposed Development Site, near Raleigh South and Macroom. The operational Mullaghanish Mast is visible in the view. Some operational turbines to the east, including Curragh, Caherdowney, and Gneeves, are also present but are not easily seen because they sit on the ridgeline and are partially screened by existing vegetation.</p> <p>The future baseline includes turbines from the consented Knocknamork Wind Farm and one turbine from the consented Clydaghroe Extension. The viewpoint is within LCT 13a: Valleyed Marginal Middleground.</p> <p>Road users are considered of medium/low sensitivity due to the high speed of the road, although the narrow road may allow slight appreciation of the landscape. Views are of medium value, reflecting the route’s local importance. Overall sensitivity for road users is medium.</p> <p>The Proposed Development will introduce the blade tips and hubs of three turbines and the blade tips of two more. These turbines will</p>	<p>Slight, not significant effects are predicted across all stages of development.</p>		<p>Construction/Decommissioning: Slight, not significant effects</p> <p>Operational: Slight effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		be seen at a distance, at oblique angles, and partly alongside the Mullaghanish Mast. The magnitude of change is considered low.				
		<p>Cumulative Visual Effects The view includes operational turbines of Curragh, Caherdowney, and Gneevies, which are partially screened and distant. The future baseline also includes the consented Knocknamork Wind Farm and one turbine from the Clydaghroe Extension. The Proposed Development will be seen alongside these and the operational Clydaghroe Wind Farm. Some in-planning development at Inchamore may also be visible to the south-west. Due to distance and alignment within the turbine array, the Proposed Development will form a cohesive view with minimal stacking. The cumulative magnitude of change is considered negligible</p>	<p>Slight cumulative, not significant effects are predicted due to the Proposed Development</p>		<p>Cumulative: Slight cumulative, not significant effects</p>	6.6
Viewpoint 17- View from R618 in the townland of Gurteenroe Figures 6-1-17-a to c	6.5.8	<p>This viewpoint is taken from the R618 close to the edge of the settlement of Macroom, approximately 15 km to the south-east of the Proposed Development Site. The viewpoint is within County Cork and LCT 13a: Valleyed Marginal Middleground. Road users from this viewpoint are considered to be of medium susceptibility to the type of change proposed. The road observes a low speed limit; however, given the context within the busy settlement, users' focus will predominantly be upon the road ahead or confined to close proximity views. Views from the route are considered to be of medium value, given the lack of designation along the route and its value to the local community. Overall sensitivity of road users from this viewpoint to the type of development proposed is considered to be medium. The Proposed Development is entirely screened by intervening vegetation, built form and topography. The magnitude of change is therefore considered to be none</p>	<p>No effects are anticipated on users from this viewpoint.</p>		<p>Construction/Decommissioning: No effect</p> <p>Operational: No effect</p>	6.6
		<p>Cumulative Visual Effects The Proposed Development is entirely screened, and no cumulative sites are visible from this viewpoint</p>	<p>No cumulative effects as a result of the Proposed Development from this viewpoint.</p>		<p>Cumulative: No cumulative effect</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Viewpoint 18- View from road (scenic route) in the townland of Lacknahaghn y Figures 6-1-18-a to c	6.5.8	<p>This viewpoint is taken from an elevated location on a scenic route approximately 15.5km south-east of the Proposed Development Site. The panoramic view includes lowland farmland, forestry, scrub, and moorlands rising to distant peaks and summits. Several operational turbines are already visible in the view. The viewpoint is in County Cork, on the edge of LCT 13a: Valleyed Marginal Middleground and LCT 15b: Ridged and Peaked Upland.</p> <p>Road users are considered to have medium/low susceptibility due to the high speed limit, though the narrow road may allow some opportunity to take in the landscape. Recreational users are of high susceptibility, as the scenic quality is a key focus for them. Views are of high value given the scenic route designation. Overall sensitivity is considered medium for road users and high for recreational users.</p> <p>The Proposed Development will introduce distant views of the blade tips and hubs of two turbines and the blade tips of two more. These will appear as part of a wider landscape already containing turbines. Given the distance, the proposed turbines will not noticeably alter the view. The magnitude of change is therefore considered negligible.</p>	Imperceptible, not significant effects across all stages of development.		<p>Construction/Decommissioning: Imperceptible, not significant effects</p> <p>Operational: Imperceptible, not significant effects</p>	6.6
		<p>Cumulative Visual Effects</p> <p>The Proposed Development will be seen in conjunction with the operational Curragh, Caherdowney, and Carrignaima Community Wind Farms. It will be mostly screened, and where visible, it will appear at a slightly larger scale. Given the distance, cumulative effects are not significant, and the cumulative magnitude of change is considered negligible.</p>			<p>Imperceptible cumulative, not significant effects are predicted due to the Proposed Development.</p>	<p>Cumulative: Imperceptible cumulative, not significant effects</p>
Viewpoint 19- View from local road in the townland of Gneevgullia	6.5.8	<p>This viewpoint is approximately 15.5km north-west of the Proposed Development Site, just north of the village of Gneevgullia. The view includes roadside vegetation and nearby properties in the foreground, a bank of coniferous trees in the midground, and distant mountains, including the Derrynasaggart range, forming the background. The future baseline includes the blade tip of one turbine from the consented Knocknamork Wind</p>	Imperceptible not significant effects are predicted upon receptors from this viewpoint across all stages of development.		<p>Construction/Decommissioning: Imperceptible not significant effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
near Upper Gneeveguilla Figures 6-1-19-a to c		<p>Farm. The viewpoint is within County Kerry and the LCA 23: River Blackwater and Rathmore.</p> <p>Road users are considered to have medium susceptibility to the type of change proposed, as the low speed limit allows greater opportunity to appreciate surrounding views. Views are of medium value due to the absence of designation but local visual importance. Overall sensitivity is therefore considered medium.</p> <p>Due to the screening provided by topography and distance, change from the Proposed Development will be barely perceptible. Only the blade tips of two proposed turbines will be faintly visible, largely screened by vegetation and built form. The magnitude of change is therefore considered negligible.</p>			Operational: Imperceptible not significant effects	
		<p>Cumulative Visual Effects</p> <p>No cumulative sites are visible from this viewpoint.</p>			There are no cumulative effects as a result of the Proposed Development from this viewpoint	
Viewpoint 20- View from local road (scenic route) in the townland of Crinnaloo North Figures 6-1-20-a to c	6.5.8	<p>This long-distance viewpoint, approximately 16km north-east of the Proposed Development Site, is taken from a scenic route near Crinnaloo. The view is wide and panoramic, encompassing rolling pastoral fields, strong hedgerow boundaries, broadleaf copses, and forested slopes leading towards distant hills and the Derrynasaggart Mountains. A number of operational turbines are already visible, appearing as one overall cluster within the distant landscape. The viewpoint is within County Cork and the LCT 15b: Ridged and Peaked Upland.</p> <p>Road users are considered to be of medium/low susceptibility to the proposed change due to the higher speed limit, while recreational users are of high susceptibility as they experience the landscape at walking pace. The view is of high value given its scenic designation. The Proposed Development will be seen at a distance within the existing turbine cluster, resulting in some minor clashing and stacking but forming part of the established baseline context. The magnitude of change is therefore considered to be low, as the view remains largely similar to existing conditions.</p>	Slight not significant effects are predicted upon receptors from this viewpoint across all stages of development.		<p>Construction/Decommissioning: Slight not significant effects</p> <p>Operational: Slight not significant effects</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cumulative Visual Effects</p> <p>From this viewpoint, the operational Clydaghroe, Gneevies, Caherdowney, Curragh, and Coomacheo Wind Farms are visible. The Proposed Development will appear as part of this existing turbine array, with limited additional visual impact due to distance and screening. Although some clashing will occur between turbines, the overall cumulative effect is reduced by the viewing distance and existing context. The cumulative magnitude of change is therefore considered to be low.</p>	<p>Slight cumulative not significant effects are predicted due to the Proposed Development.</p>		<p>Cumulative: Slight cumulative not significant effects</p>	6.6
Viewpoint 21- View from local road (scenic route), in the townland of Kilbarry	6.5.8	<p>This long-distance view is taken from a scenic route approximately 16km south-east of the Proposed Development Site. The panoramic landscape extends across rolling farmland towards distant hills. A number of operational turbines are visible, and the future baseline includes turbines from the consented Knocknamork Wind Farm and one from the Clydaghroe Extension. The viewpoint is located within County Cork and LCT 12a: Rolling Marginal Middleground.</p> <p>Road users from this viewpoint are considered to have medium/low susceptibility to change due to the high speed limit, though lower speeds may allow limited appreciation of the view. Recreational users are of high susceptibility as the landscape is a key focus of their experience along the scenic route.</p> <p>Views are of high value due to the route's scenic designation. The Proposed Development will introduce distant views of the blade tips and hubs of several turbines, viewed at perpendicular angles to the direction of travel. Given the viewing distance and the varied natural and human-made elements within the landscape, the Proposed Development will not significantly alter the view. The magnitude of change is therefore considered to be low.</p>	<p>The significance of effects is predicted to be moderate and slight and not significant upon recreational and road users respectively across all stages of development.</p>		<p>Construction/Decommissioning: Slight and not significant effects</p> <p>Operational: Slight and not significant effects</p>	6.6
Figures 6-1-21-a to c		<p>Cumulative Visual Effects</p> <p>From this viewpoint, the Proposed Development will be seen in conjunction with the operational Clydaghroe Wind Farm and the consented Knocknamork and Clydaghroe Extension developments. In-planning turbines at Inchamore to the south-west will also be visible, increasing the overall field of view containing turbines.</p>	<p>Moderate and slight cumulative and not significant effects are predicted upon recreational and road users respectively due to the Proposed Development</p>		<p>Cumulative: Slight cumulative and not significant effects upon road users and moderate cumulative and not significant</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		However, due to the distance of these developments and their location within an existing turbine array, the Proposed Development will align with the consented baseline and not substantially alter the view. Some minor clashing may occur between the Proposed Development and consented Windfarm turbines, but this is not expected to detract from the visual amenity. The cumulative magnitude of change is therefore considered to be low.			effects upon recreational users	
Viewpoint 22 - View from the R618 (scenic route) in the townland of Ummera Figures 6-1-22-a to c	6.5.8	<p>This viewpoint is taken from a scenic transitory route approximately 17km south-east of the Proposed Development Site, where the ZTV indicates potential views of four to six turbines. However, the ZTV does not account for screening by existing vegetation. The view looks over a tributary of the River Lee, framed by mature predominantly deciduous vegetation along its banks. The viewpoint is located within County Cork and LCT 13a: Valleyed Marginal Middleground.</p> <p>Road users from this viewpoint are considered to have medium susceptibility to the type of change proposed, given the moderate speed limit which allows greater appreciation of the surroundings. Recreational users are of high susceptibility, as the landscape is a key focus of their experience along this scenic route. Views are of high value due to the scenic designation. Overall sensitivity is considered to be medium for road users and high for recreational users. No visibility of the Proposed Development is predicted from this viewpoint due to screening from vegetation and topography. The magnitude of change is therefore considered to be none.</p>	No effects are anticipated on users from this viewpoint		<p>Construction/Decommissioning: No effect</p> <p>Operational: No effect</p>	6.6
		<p>Cumulative Visual Effects</p> <p>The Proposed Development is entirely screened from this location, and no cumulative sites are visible</p>	There are no cumulative effects as a result of the Proposed Development from this viewpoint		Cumulative: No cumulative effect	6.6
Viewpoint 23- View from the local road (scenic route) in the townland of	6.5.8	This viewpoint is taken from elevated ground approximately 18km to the north-east of the Proposed Development Site within the Ridged and Peaked Upland area. The foreground comprises pastureland with forestry in the middle ground and distant mountains, including the Derrynasaggart Mountains. Existing turbines are visible in both the foreground and far distance. Road	The significance of effects is imperceptible and not significant across all stages of development		<p>Construction/Decommissioning: Imperceptible and not significant effects</p> <p>Operational:</p>	6.6

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Inchamay North Figures 6-1-23-a to c		users from this viewpoint are of medium / low sensitivity due to the high speed limit, although the narrow road may allow some viewing of the surrounding landscape. Recreational users passing on foot are highly sensitive. Views from the route are of high value. The Proposed Development will be seen as an integral part of the existing baseline, which includes operational turbines in the distance. The proposed turbines are distant and will not appear dominant. Some stacking occurs, but distance mitigates visual impact. Existing Boggeragh turbines will form the more eye-catching element. The overall magnitude of change is negligible.			Imperceptible and not significant effects	
		Cumulative Visual Effects From this viewpoint, the Proposed Development will be seen in combination with operational Clydaghroe, Coomacheo, Caherdowney, Gneeves, and Curragh Wind Farms, and the consented Knocknamork Wind Farm. Operational turbines at Boggeragh and Esk Wind Farms form more prominent elements in the view than the proposed turbines. Some clashing will occur with existing turbines, but the distance reduces cumulative effects. The cumulative magnitude of change is negligible	Imperceptible cumulative and not significant effects are therefore predicted due to the Proposed Development.		Cumulative: Imperceptible cumulative and not significant effects	6.6
Viewpoint 24 - View from local road in the townland of Dromickbane Figures 6-1-24-a to c	6.5.8	This viewpoint location is approximately 18km to the north-west of the Proposed Development Site and is within a Visually Sensitive Area. The ZTV indicates that a maximum of three of the proposed turbines may be seen from this view. The view is of a pastoral agricultural landscape with a mature vegetative layer in the middle foreground, back clothed by steeply-rising hill landforms in the middle foreground and background. No elements breach the skyline visible to the eye, although the wireline presents the tip of the operational Mullaghanish Mast. The landscape appears tranquil and strongly rural in character. Road users from this viewpoint are considered to be of medium / low susceptibility to the type of change proposed. The road observes a high speed limit; however, the narrow nature of the road may lower speeds to allow users to take in the surrounding landscape to a slight extent.	The significance of effects is imperceptible and not significant across all stages of development. There will be a small degree of movement with the tip of the rotor blade of one turbine visible that is introduced into the tranquil static view, but it is considered likely to be barely perceptible and not significant .		Construction/Decommissioning: Imperceptible and not significant effects Operational: Imperceptible and not significant effects	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		Recreational users visiting the designated area are considered to be of high susceptibility due to the landscape being of key focus to recreational users passing at walking pace. Views from the route are of high value given the area's designation as a Visually Sensitive Area. The smallest part of a blade tip of a single turbine may be visible, but it is considered barely perceptible in the view. Overall, the magnitude of change is negligible.				
		<p>Cumulative Visual Effects</p> <p>The Proposed Development is almost entirely screened from the view and does not clash with views of the Mullaghanish Mast. The cumulative magnitude of change from this viewpoint is therefore considered to be negligible</p>	Imperceptible cumulative and not significant effects are predicted as a result of the Proposed Development from this viewpoint.		Cumulative: Imperceptible cumulative and not significant effects	6.6
Viewpoint 25- View from the forestry track in the townland of Maulyarkane Figures 6-1-25-a to c	6.5.8	<p>The view is approximately 18km north-west of the Proposed Development Site. The landscape consists of a wide valley-floored area comprising rough grazing and pastoral fields alongside large coniferous blocks. One of the blocks contains a cluster of properties which are seen in the middle distance and atop a ridgeline. Smooth rounded hill landforms are visible in the distance against a large open sky.</p> <p>Other than residential properties, the landscape does not accommodate built forms that dominate the view. Forestry track users from this viewpoint are considered to be of low susceptibility to the type of change proposed, as they are likely using the route for work purposes and their attention is not focused on the wider surroundings.</p> <p>Views from the route are of medium value given the lack of designations along the route and its value to the local community. Overall sensitivity of users from this viewpoint to the type of change proposed is considered to be medium / low.</p> <p>The Proposed Development is not anticipated to be visible from this viewpoint. Although ZTV data predicts visibility of up to three turbines, actual visibility is not predicted following photomontage analysis due to screening by intervening topography. No change is therefore predicted.</p>	No effects are anticipated on users from this viewpoint.		<p>Construction/Decommissioning: No effect</p> <p>Operational: No effect</p>	6.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cumulative Visual Effects The Proposed Development is entirely screened from this viewpoint.</p>	There are no cumulative effects as a result of the Proposed Development from this viewpoint.		Cumulative: No cumulative effect	6.6
Viewpoint 26- View from local road in the townland of Gortagullane Figures 6-1-26-a to c	6.5.8	<p>This viewpoint is taken from the furthest distance of all the viewpoints, at approximately 20km from the Proposed Development. The viewpoint is to the west of the site within the designated Visually Sensitive Area.</p> <p>The landscape is open moorland and rough grazing with large clumps of gorse forming a localised ridgeline in the foreground. Beyond this are the tops of coniferous trees and broadleaf shelterbelts within the wide valley floor and slopes leading down to it, though much of this is not particularly visible due to the localised landform. Upper slopes and summits of hills in the middle and far distance are evident, with nothing breaching the skyline.</p> <p>Road users are of medium / low susceptibility to the type of change proposed, with the narrow road slightly lowering speeds to allow viewing. Recreational users are highly susceptible due to the scenic focus at walking pace. Views are of high value due to the Visually Sensitive Area designation. Overall sensitivity of road and recreational users is medium and high respectively.</p> <p>Primarily due to distance and intervening topography, the Proposed Development is barely perceptible. The blade tips of a single turbine may be seen between landforms, largely back-clothed by a distant slope. The magnitude of change is negligible.</p>	The significance of effects is therefore described as imperceptible and not significant across all stages of development.		<p>Construction/Decommissioning: Imperceptible and not significant effects</p> <p>Operational: Imperceptible and not significant effects</p>	6.6
		<p>Cumulative Visual Effects The Proposed Development is almost entirely screened and does not clash with views of the Mullaghanish Mast. The cumulative magnitude of change is therefore negligible</p>	Imperceptible cumulative and not significant effects are predicted as a result of the Proposed Development from this viewpoint.		Cumulative: Imperceptible cumulative and not significant effects	6.6

Appendix C. Summary of Likely Effect- Traffic and Transport

Table C: Summary of Likely Effects on Traffic and Transport

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Assessment of Effects	7.5	<p>The construction traffic associated with the Proposed Development will comprise construction workers, Heavy Goods Vehicles (HGVs)/Light Goods Vehicles (LGVs) carrying construction materials and plant, and abnormal loads transporting the main wind turbine components. Construction is estimated to take 24 months, with general working hours between 07:00-19:00 (weekdays) and 07:00-12:00 (Saturdays), meaning staff will predominantly arrive and depart outside peak hours. Turbine delivery, erection and commissioning may also take place outwith these hours depending on weather and delivery timing.</p> <p>The predicted peak of HGV movements (2,107 two-way HGV movements per month) will occur during the first three months of construction. There would be an average daily movement of 60 cars/LGVs (30 trips in and 30 trips out) in addition to the daily average HGV movements. Abnormal loads will only be transported over five months of the 24-month construction period (months 18–22), equating to approximately 7.5 inbound abnormal load vehicle trips per week, plus an equivalent number of outbound HGV trips.</p> <p>Given the low number and short duration of abnormal load movements, it is not anticipated that they will give rise to any significant environmental effects within the Study Area. For Count Locations 1 to 4, the temporary increase in total traffic levels is predicted to be less than 5%, with HGV traffic increasing by 5% to 18%.</p> <p>As both are below the IEMA Guideline thresholds (Rules 1 and 2), a full assessment of effects is not required. Two sensitive receptors were identified on the N28 corridor, but impacts were within Rule 2 thresholds, meaning no further detailed assessment is required.</p>	Not Significant	A Construction Traffic Management Plan(CTMP) is proposed as a “good practice” measure to support the Proposed Development.	Negligible and Not Significant	7.8
Assessment of Effects	7.5	Cumulative Assessment	Not Significant	A CTMP is proposed as a “good practice” measure to	Negligible and Not Significant	7.8

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Cumulative effects were assessed for projects that may utilise the same access routes as the Proposed Development.</p> <p><u>Knocknamork Wind Farm (Approved)</u> – Knocknamork received approval in January 2020 for a wind farm comprising seven turbines and a 70,000m² solar array located directly south of the Proposed Development. Further applications were submitted in 2022 and 2023 for a 110kV substation, borrow pits, underground cabling, access roads, and an increase in turbine height to 175m. The Traffic and Transport EIA chapter identifies a 12–18 month construction programme. The preferred site entrance will be via the old N22, with Knocknamork using the north layby junction and the Proposed Development the south.</p> <p>Both projects will share the same site access and grid connection to Ballyvouskill Substation. The Applicant controls both the access and the forest track, allowing coordination through Construction Traffic Management Plans (CTMPs) to ensure peak traffic-generating months do not coincide. This will maintain free vehicle access and prevent queuing on the N22.</p> <p><u>Gortyrhilly Wind Farm (In Planning)</u> – An application for Gortyrhilly Wind Farm (up to 14 turbines) was submitted in September 2022. The site lies approximately 11km south-west of the Proposed Development and south of the N22. Turbine components will be delivered via Ringaskiddy, following the same N22 route, before turning southbound at the layby. Construction is expected to begin in the coming years, with peak HGV movements (approximately 790–970 per month or 44 daily trips) between months six and eleven.</p> <p>It is not anticipated that construction periods for Gortyrhilly and the Proposed Development will overlap, as Gortyrhilly is expected to start in 2025 and the Proposed Development in 2028.</p> <p><u>Inchamore Wind Farm (In Planning)</u> – Inchamore, located approximately 7km southwest of the Proposed Development near Coolea, submitted an application in May 2023 for a five-turbine development. Turbine components</p>		<p>support the Proposed Development.</p>		

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Particular Receptors /	EIAR Section	Likely Effects	Significance Effect of	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>will be delivered via Ringaskiddy, using the same N22 route described in this chapter. Construction is expected to commence in the coming years with peak HGV traffic between months five and ten (approximately 359 vehicle movements per month or 16 daily trips).</p> <p>Inchamore and the Proposed Development are expected to use the same grid connection to Ballyvouskill Substation. The Applicants for Gortyrähilly, Inchamore, and the Proposed Development are joint ventures between FuturEnergy Ireland and SSE Renewables, allowing programming to be aligned to avoid overlap of peak construction periods.</p>				

Appendix D. Summary of Likely Effect- Soils, Geology and Hydrogeology

Table D: Summary of Likely Effects on Soils, Geology and Hydrogeology

Particular Receptors /	EIAR Section	Likely Effects	Significance Effect of	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Do Nothing Scenario	10.4	<ul style="list-style-type: none"> No changes made to existing land-use, commercial forestry would continue undisturbed, felling of sub compartments once mature with re-planting with more coniferous trees thereafter <p>Soils will be cyclically exposed to Plantations may be reploughed and fertilised with phosphates where necessary to facilitate afforestation</p>	No Effects	No specific measures required	None	-
Soils (excluding peat)	10.4	<p>Construction Phase</p> <p>Potential loss of / adverse effects on the superficial geological resource (soils) due to temporary excavations for windfarm infrastructure.</p> <p>The receptor sensitivity is considered negligible, and the magnitude of effect is low adverse.</p>	Not Significant	No specific measures required	Not Significant	10.9

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Soils (excluding peat)	10.4	Operational Phase Potential loss of / adverse effects on the superficial geological resource (soils) due to permanent excavations for windfarm infrastructure. The receptor sensitivity is considered negligible, and the magnitude of effect is low adverse.	Not Significant	No specific measures required	Not Significant	10.9
Soils (excluding peat)	10.4	Decommissioning Phase No effects on soils (excluding peat) are anticipated during the decommissioning phase.	No Effects	No specific measures required	None	-
Peat (resource)	10.4	Decommissioning Phase No effects on the Peat resource are anticipated during the decommissioning phase.	No Effects	No specific measures required	None	10.9
Peat (stability)	10.4	Decommissioning Phase No effects on Peat stability are anticipated during the decommissioning phase.	No Effects	No specific measures required.	None	10.9
Geology	10.4	Construction Phase Potential loss of / adverse effects on the solid geological resource beneath temporary excavations for windfarm infrastructure and in association with the borrow pits (permanent bedrock loss). The receptor sensitivity is considered low, and the magnitude of effect is negligible adverse.	Not Significant	No specific measures required	Not Significant	10.9
Geology	10.4	Operational Phase Potential loss of / adverse effects on the solid geological resource beneath permanent excavations for windfarm infrastructure. The receptor sensitivity is considered low, and the magnitude of effect is negligible adverse.	Not Significant	No specific measures required	Not Significant	10.9
Geology	10.4	Decommissioning Phase No effects on geology are anticipated during the decommissioning phase.	No Effects	No specific measures required	None	10.9
Hydrogeology	10.4	Construction Phase Potential localised increase in alkalinity from spillages of concrete or unset cement causing pollution of groundwater.	Moderate Adverse, not significant	Mitigation measures are proposed. Details are	Not significant	10.9

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Potential accidental release, leakage or spillage of hydrocarbons, fuel or oils from storage tanks/construction plant during construction causing pollution of groundwater.</p> <p>Potential localised alteration of the groundwater regime during construction of the turbine base structures and windfarm infrastructure.</p> <p>Potential localised alteration of the groundwater regime due open borrow pit excavations.</p> <p>Exposure of bedrock resulting in an increase in groundwater vulnerability</p> <p>The receptor sensitivity is considered medium, and the magnitude of effect is medium adverse.</p>		provided in Section 10.6 of Chapter 10 of the EIAR.		
Hydrogeology	10.4	<p>Operational Phase</p> <p>Potential accidental release, leakage or spillage of hydrocarbons, fuel or oils from storage tanks/plant during operation causing pollution of groundwater.</p> <p>Potential localised alteration of the groundwater regime due to turbine base structures and windfarm infrastructure.</p> <p>Potential localised alteration of the groundwater regime due backfilled borrow pit excavations.</p> <p>Potential pollution of groundwater by leachable contamination from imported fill materials.</p> <p>Reduction in infiltration caused by increased hardstanding cover or compaction of soils, resulting in impacts on groundwater.</p> <p>The receptor sensitivity is considered medium, and the magnitude of effect is medium adverse</p>	Moderate Adverse, not significant	Mitigation measures are proposed. Details are provided in Section 10.6 of Chapter 10 of the EIAR.	Slight Adverse, not significant	10.9
Hydrogeology	10.4	<p>Decommissioning Phase</p> <p><u>Groundwater bodies</u></p> <p>Potential accidental release, leakage or spillage of hydrocarbons, fuel or oils from storage tanks/construction plant during decommissioning causing pollution of groundwater.</p> <p>The receptor sensitivity is considered medium, and the magnitude of effect is medium adverse.</p>	Moderate Adverse, not significant	Mitigation measures are proposed. Details are provided in Section 10.6 of Chapter 10 of the EIAR.	Slight Adverse, not significant	10.9

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Contamination	10.4	Construction Phase Mobilisation of contamination in soils as a result of additional sediment loading or leaching. The receptor sensitivity is considered low, and the magnitude of effect is negligible adverse.	Not Significant	No specific measures required	Not Significant	10.9
Contamination	10.4	Operational Phase Mobilisation of contamination in soils as a result of additional sediment loading or leaching. The receptor sensitivity is considered low, and the magnitude of effect is negligible adverse.	Not Significant	No specific measures required	Not Significant	10.9
Contamination	10.4	Decommissioning Phase No effects on contamination are anticipated during the decommissioning phase.	No Effects	No specific measures required	None	-
Cumulative Effects	10.8	Any negative impacts arising from cumulative developments in relation to soil, geology and hydrogeology will be localised and not significant, as stated in the respective EIARs. Furthermore, the combination effect is likely to be limited, and in the majority of cases will reduce the total overall potential effect, for example through shared excavations and an overall reduction in the consequent impacts.	Not Significant	No specific measures required	None	-

Appendix E. Summary of Likely Effect- Hydrology, Water Quality and Flood Risk

Table E: Summary of Likely Effects on Hydrology, Water Quality and Flood Risk

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Lough Leane	11.6.2	potential risk to the receptor with regards to changes to water quality (chemical pollution) during	Minor Adverse and not significant effects	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		construction, operational, and decommissioning phases.				
Major watercourses draining the Proposed Development	11.6.2	potential risk to the receptors with regards to changes to water quality	Minor Adverse and not significant effects during operational phase	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Operational: Not Significant	11.7
Minor watercourses draining the Proposed Development	11.6.2	potential risk to the receptors with regards to changes to water quality	Minor Adverse and not significant effects during construction, operational, and decommissioning phase	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Construction/Decommissioning: Not Significant Operational: Not Significant	11.7
Watercourses draining the section of the Proposed Development where site access is proposed	11.6.2	potential risk to the receptors with regards to changes to water quality	Minor Adverse and not significant effects during operational phase	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Operational: Not Significant	11.7
Watercourses draining the section of the Proposed Development where the 110kV grid connection is proposed	11.6.2	potential risk to the receptor with regards to changes to water quality	Minor to Moderate Adverse and not significant during construction / decommissioning phases and Minor Adverse and not significant effects during operational phase	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Operational: Not Significant	11.7
Off-site major watercourses (downstream Clydagh / Flesk catchment including reach designated for drinking water)	11.6.2	potential risk to the receptor with regards to changes to water quality	Moderate Adverse not significant effects during construction/decommissioning phases and Minor Adverse and not significant effects during operational phase	Mitigations proposed, details are provided in Section 11.6.3 of the EIAR Chapter 11.	Operational: Not Significant	11.7

Appendix F. Summary of Likely Effect- Air and Climate

Table F: Summary of Likely Effects on Air and Climate

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Construction Phase						
Climate	12.6.2	The quantities of greenhouse gas emissions produced during the construction phase of the Proposed Development will have a negligible impact on climate	Negligible and not significant	No mitigation require. However, Mitigation/best practices measures are proposed. Details are provided in Section 12.7 of the EIAR Chapter 12	Not Significant	12.10
Operational Phase						
Air Quality	12.6.2	<p>Only occasional single light vehicle visits will be made to the Proposed Development during the operational phase.</p> <p>Trackout is the only dust emitting activity which could occur during the operational phase of the Proposed Development. The infrequency and small scale of these single vehicle visits would not significantly contribute to dust emissions.</p> <p>In the unlikely event that a major component of a turbine needs to be replaced HGV(s) may be required to access the Proposed Development during the operational phase, however due to the short term, infrequency and low likelihood of such an event taking place, the operational phase will have a negligible impact.</p>	Negligible and not significant	No mitigation require. However, Mitigation/best practices measures are proposed. Details are provided in Section 12.7 of the EIAR Chapter 12.	Not Significant	12.10
Decommissioning Phase						
Climate	12.6.2	The quantities of greenhouse gas emissions produced during the decommissioning phase of the Proposed Development will have a negligible impact on climate.	Negligible and not significant	No mitigation require. However, Mitigation/best practices measures are proposed. Details are provided in Section 12.7 of the EIAR Chapter 12.	Not Significant	
Cumulative Effects						

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Air Quality	12.9	There are no other developments which are located close enough to the sensitive receptors identified within this dust assessment to contribute cumulatively to the overall risk of dust soiling and PM10.	Negligible and not significant	No mitigation require. However, Mitigation/best practices measures are proposed. Details are provided in Section 12.7 of the EIAR Chapter 12	Not Significant	12.9

Appendix G. Summary of Likely Effect- Noise

Table G: Summary of Likely Effects on Sensitive Receptors

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Do-Nothing Scenario	13.7.1	If the development did not go ahead, residential properties assessed in this chapter would be subject to the same noise levels as at present	No Effect	No mitigation required	none	-
Construction Effects	13.7.2	Traffic Noise The transport assessment shows that the overall traffic increase during construction will be less than 5%, including a 5% rise in HGV traffic, resulting in negligible increase in the noise.	Not Significant	No mitigation is required, however best practices measures are proposed. Details are provided in Section 13.8 of the EIAR Chapter 13.	Not significant	13.9
Construction Effects	13.7.2	Access Track Construction Property R52, located 90 m from the proposed access track, was assessed using the BS 5228 method. Predicted cumulative noise levels may temporarily exceed the daytime limit of 65 dB LAeq for up to 5-6 hours during short sections of track construction. Given the short duration and localised nature, the impact is considered negligible compare to overall duration of the construction period.	Not Significant	No mitigation is required, however best practices measures are proposed. Details are provided in Section 13.8 of the EIAR Chapter 13.	Not significant	13.9

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Construction Effects	13.7.2	<p>Turbine Construction</p> <p>The nearest residential property (R153) is 550 m from the closest turbine, 400 m from the nearest borrow pit, and 300 m from the nearest access track. The second nearest property (R34) is 1 km from the closest access track and at least 1.3 km from the nearest turbine and borrow pit.</p> <p>Given the distance construction activities are unlikely to breach typical construction noise limits suggested within BS 5228 at the nearest noise sensitive receptor locations.</p>	Not Significant	No mitigation is required, however best practices measures are proposed. Details are provided in Section 13.8 of the EIAR Chapter 13.	Not significant	13.9
Construction Effects	13.7.2	<p>Blasting at Borrow Pits</p> <p>Blasting will be minimising blasting activities and ensuring nearby residents are fully warned. Such activities will be of very short duration and undertaken as per the BS 5228 best practices working standards.</p>	Not Significant	No mitigation is required, however best practices measures are proposed. Details are provided in Section 13.8 of the EIAR Chapter 13.	Not significant	13.9
Construction Effects	13.7.2	<p>Grid Connection Construction</p> <p>The grid connection will be installed underground, mainly within forestry roads. Construction noise will come from excavators and dumpers used for trenching. The nearest property is approximately 700 m away, where predicted noise levels are around 36 dB LAeq, which is below the 65 dB limit in BS 5228,</p>	Not Significant	No mitigation is required, however best practices measures are proposed. Details are provided in Section 13.8 of the EIAR Chapter 13.	Not significant	13.9
Operational Effects		<p>Road Traffic Noise</p> <p>Noise from operational traffic on access tracks, including service vehicles near R52, is expected to be negligible, occurring only occasionally and mainly during working hours</p>	Not significant	No mitigation required	Not significant	13.9
Decommissioning Effects	13.7.4	<p>Noise associated with the removal of the turbines and breaking of the exposed part of the concrete bases activities will have high peak levels, like the blasting described in construction effects, but these levels will be brief and occur at large distances from properties where the effects are considered to be negligible.</p> <p>The road traffic and construction traffic noise levels will be expected to increase to the same degree as during the construction phase which will have negligible impact on any of the properties.</p>	Not significant	No mitigation required	Not significant	13.9

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Cumulative Effects	13.7.5	<p>There are no other known construction projects in the area which would add cumulatively to noise levels at the properties in the vicinity of the Proposed Development during construction.</p> <p>The derived noise limits have taken into account cumulative operational noise levels such that a cumulative operational noise impact assessment is inherent in the assessment, as required by the guidance, which assumes that limits apply to cumulative noise.</p>	Not significant	No mitigation required	Not significant	-

Appendix H. Summary of Likely Effect - Cultural and Archaeological Heritage

Table H: Summary of Likely Effects on Cultural and Archaeological Heritage

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Do-Nothing Scenario	14.4.1	<p>In absence of the Proposed Development, the site would continue to be managed as an existing commercial forestry with clear-felling and drainage activity continuing.</p> <p>Potential impacts to sub-surface archaeology (if present) could continue to occur through the process of clear felling. Any additional indirect effects on archaeological, architectural and cultural heritage, in the wider landscape setting would not occur.</p>	No Effect	Not Applicable	None	Not Applicable
Construction Phase Potential Effects						
CH001	14.4.2	<p>CH001 (RMP KE077-001- a hut site), which is located c. 266 m south of the site boundary is the closest Recorded Monument to the wind turbines . However, while the construction works will be visible from the site of the hut, there is no above surface trace of this RMP surviving. As a</p>	Imperceptible Effect Indirect impact to setting only.	No Specific mitigation required. General best practices are provided in Section 14.5.1 of the EIAR Chapter.	Imperceptible	14.5

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		result, no indirect impact on the setting of the RMP during construction works is anticipated.				
CH051	14.4.2 14.4.3	<p>The proposed underground grid connection (UGC) will have a direct effect on the townland boundary between Curragh and Cummeennabuddoge (CH051), as it crosses this feature. The magnitude of impact is considered slight, as only a small portion of the boundary will be disturbed, while the majority remains intact.</p> <p>Proposed tree felling will also result in a direct impact on CH051, but this is similarly assessed as slight given the limited extent of disturbance.</p> <p>Overall, there is potential for direct impacts from construction-related groundworks, as well as indirect impacts on the setting of the townland boundary.</p>	<p>Slight Negative Effect</p> <p>Potential for direct impact from construction groundworks and indirect impact to setting.</p>	Where groundworks have a direct effect on the Knocknagowan / Clydaghroe townland boundary (CH057), a suitably qualified archaeologist will monitor excavation works and create a full descriptive, photographic and survey record of the CH site prior to the removal of any components. A report will be compiled on completion of the monitoring and sent to the Local Authority and National Monuments Service.	Imperceptible	14.5
CH057	14.4.3	<p>The proposed excavation works for Turbine 6, Borrow Pit 3, new access tracks, and tree felling will have direct effects on CH057, the townland boundary between Clydaghroe and Cummeennabuddoge. The magnitude of impact is considered moderate, as only the portion of the boundary will be broken, while the remainder will remain intact.</p> <p>Overall, potential for direct impact from construction groundworks and indirect impact on the setting are anticipated.</p>	<p>Slight Negative Effect</p>	Where groundworks have a direct effect on the Cummeennabuddoge/Clydaghroe townland boundary (CH057), a suitably qualified archaeologist will monitor excavation works and create a full descriptive, photographic and survey record of the CH site prior to the removal of any components. A report will be compiled on completion of the monitoring and sent to the Local Authority and National Monuments Service.	Not significant	14.5
CH059	14.4.3	<p>The proposed new tracks and tree felling will have direct effects on CH059, the townland boundaries within the development site. The magnitude of impact is considered slight, as only small portions of the boundaries will be disturbed, while the remainder will remain intact.</p> <p>Overall, potential for direct impact from construction groundworks and indirect impact on the setting are anticipated.</p>	<p>Slight Negative Effect</p> <p>Potential for direct impact from construction groundworks and indirect impact to setting.</p>	Where groundworks have a direct effect on the Glashacormick / Clydaghroe townland boundary (CH059), a suitably qualified archaeologist will monitor excavation works and create a full descriptive, photographic and survey record of the CH site prior to the removal of any components. A report will be compiled on completion of the monitoring and sent to the Local Authority and National Monuments Service.	Imperceptible	14.5

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
			indirect impact to setting.			
CH063-CH068	14.4.3	<p>The proposed development, including excavation works, new access tracks, watercourse crossings, and tree felling, will result in permanent direct impacts on these Areas of Archaeological Potential. The magnitude of impact is considered moderate, due to the potential for disturbance of watercourses and unknown subsurface archaeology.</p> <p>In addition, construction activities will give rise to indirect impacts on the setting of cultural heritage receptors; however, these are temporary and limited in duration.</p>	Moderate Negative	<p>As part of an advance works programme prior to construction, a combination of advance geophysical survey (where practical) and advance archaeological test trenching will be carried out by a suitably qualified archaeologist under licence, along the proposed grid connection cable route.</p> <p>In addition, advance archaeological test trenching (where practical) will be carried out by a suitably qualified archaeologist under licence, in areas which are not previously disturbed, and practicable feasible. Results from these archaeological works shall be compiled in a detailed report. This report will be submitted to the National Monuments Service (DoHLGH).</p> <p>A systematic advance programme of archaeological field-walking surveys will also be carried out within construction areas in forestry plantations following tree felling to confirm the conditions predicted in this assessment i.e., that they contain no visible surface traces of potential unrecorded archaeological or architectural heritage sites.</p> <p>All ground disturbance associated with the construction of the Proposed Development will be monitored by a suitably qualified archaeologist working under licence as issued by the minister (DoHLGH) under section 26 of the National Monuments Acts (1994-2014).</p> <p>In the event of archaeological features, finds and/or deposits being encountered during the monitoring, all relevant authorities will be notified immediately.</p>	Slight	14.5

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
				Preservation in-situ or preservation by record (excavation) may be required.		
CH079	14.4.3	The proposed cut and fill associated with the access track at the site entrance, together with tree felling, will have direct impacts on undesignated cultural heritage receptor CH078, a stream identified as an area of archaeological potential. This indicates the possibility of unknown subsurface archaeology that could be affected by the proposed works. The magnitude of impact is considered slight, as while potential archaeology associated with the stream may be disturbed, the stream itself will not be directly crossed.	Slight Effect Potential for direct impact from construction groundworks.	In addition, advance archaeological test trenching (where practical) will be carried out by a suitably qualified archaeologist under licence, in areas which are not previously disturbed, and practicable feasible. Results from these archaeological works shall be compiled in a detailed report. This report will be submitted to the National Monuments Service (DoHGLH). A systematic advance programme of archaeological field-walking surveys will also be carried out within construction areas in forestry plantations following tree felling to confirm the conditions predicted in this assessment i.e., that they contain no visible surface traces of potential unrecorded archaeological or architectural heritage sites. All ground disturbance associated with the construction of the Proposed Development will be monitored by a suitably qualified archaeologist working under licence as issued by the minister (DoHGLH) under section 26 of the National Monuments Acts (1994-2014). In the event of archaeological features, finds and/or deposits being encountered during the monitoring, all relevant authorities will be notified immediately. Preservation in-situ or preservation by record (excavation) may be required.	Imperceptible	14.5
CH002–CH020, CH022, CH135–CH152, CH154-CH159,	14.4.2	The ZTV analysis highlighted that the turbines would be visible from the Paps Archaeological Landscape and 53 recorded monuments within the landscape. Construction activities may also be visible from these monuments, resulting in indirect impacts on the setting of	Imperceptible Effect	No Specific mitigation required. General best practices are provided in Section 14.5.1 of the EIAR Chapter.	Imperceptible	14.5

Particular Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
CH161-CH169, CH195		the cultural heritage receptors. However, these impacts are temporary, as construction is expected to last approximately two years, with crane use limited to around nine months, consequently, the magnitude of indirect impact is considered imperceptible.				
CH037, CH040-CH043, CH075, CH092-CH093, CH095, CH098-CH100, CH153, CH160, CH171-CH176	14.4.2	The ZTV analysis highlighted that the turbines would be visible from 24 recorded monuments outside of the Paps Archaeological Landscape. Construction activities may also be visible from these monuments, resulting in indirect impacts on the setting of the cultural heritage receptors. However, these impacts are temporary, as construction is expected to last approximately two years, with crane use limited to around nine months, consequently, the magnitude of indirect impact is considered imperceptible.	Imperceptible Effect	No Specific mitigation required. General best practices are provided in Section 14.5.1 of the EIAR Chapter.	Imperceptible	14.5
CH216	14.4.3	The proposed excavation works associated with the turbines, borrow pit, substation, grid connection, access tracks, and other supporting infrastructure, as well as tree felling, will result in direct impacts on CH216 (Areas of Archaeological Potential). This area, characterised as blanket peat bog, has the potential to contain previously unknown subsurface archaeological remains. As such, these activities could lead to permanent physical disturbance or loss of any buried archaeology present. In addition to these direct impacts, indirect effects are also anticipated. These may include changes to hydrology, soil conditions, and peat stability arising from construction activities, which could alter the preservation conditions of any remaining archaeological deposits within the wider area.	Moderate Negative	As part of an advance works programme prior to construction, a combination of advance geophysical survey (where practical) and advance archaeological test trenching will be carried out by a suitably qualified archaeologist under licence, along the proposed grid connection cable route. In addition, advance archaeological test trenching (where practical) will be carried out by a suitably qualified archaeologist under licence, in areas which are not previously disturbed, and practicable feasible. Results from these archaeological works shall be compiled in a detailed report. This report will be submitted to the National Monuments Service (DoHLGH). A systematic advance programme of archaeological field-walking surveys will also be carried out within construction areas in forestry plantations following tree felling to confirm the conditions predicted in this	Slight	14.5

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
				<p>assessment i.e. that they contain no visible surface traces of potential unrecorded archaeological or architectural heritage sites.</p> <p>All ground disturbance associated with the construction of the Proposed Development will be monitored by a suitably qualified archaeologist working under licence as issued by the minister (DoHLGH) under section 26 of the National Monuments Acts (1994-2014).</p> <p>In the event of archaeological features, finds and/or deposits being encountered during the monitoring, all relevant authorities will be notified immediately. Preservation in-situ or preservation by record (excavation) may be required.</p>		
Operational Phase Potential Effects						
CH001	14.4.4	The Proposed Development is located on the north-northwest-facing slopes of the Derrynasagart mountains, with views predominantly in this direction. CH001, a hut site, lies approximately 266 m south of the site boundary, from which 7–9 turbines will be visible. However, as there are no above-ground remains, the potential indirect effect on the setting of CH001 during the operational phase is considered imperceptible.	Imperceptible Effect	A heritage opportunity can be incorporated into the Proposed Development design, which will enhance the surrounding monuments. This can be done by incorporating information boards on publicly accessible area within the Proposed Development site. This can contain detailed information on archaeological, architectural and cultural heritage background of the Clydagh Valley and the Paps Archaeological Landscape	Imperceptible	14.5
CH078, CH080	14.4.4	These undesignated cultural heritage receptors are located adjacent to the proposed site entrance and new access road. The new entrance and road along with the associated tree felling will be visible from CH078 and CH080, and it will alter the setting of the receptors. This is judged to be a slight, permanent, indirect effect as the setting is changed but the receptors are not directly impacted.	Slight Effect	A heritage opportunity can be incorporated into the Proposed Development design, which will enhance the surrounding monuments. This can be done by incorporating information boards on publicly accessible area within the Proposed Development site. This can contain detailed information on archaeological, architectural and cultural heritage history of the Clydagh Valley.	Slight	14.5

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
CH060–CH061	14.4.4	<p>These are undesignated cultural heritage receptors located along the northern boundary of the proposed wind farm, with upstanding remains. The immediate setting of these vernacular structures will be indirectly affected by the wind turbines and associated infrastructure.</p> <p>The effect is therefore considered moderate in magnitude, permanent, and indirect as the setting will be changed by the proposed construction, resulting in an overall slight negative effect.</p>	Slight Negative	A heritage opportunity can be incorporated into the Proposed Development design, which will enhance the surrounding monuments. This can be done by incorporating information boards on publicly accessible area within the Proposed Development site. This can contain detailed information on archaeological, architectural and cultural heritage history of the Clydagh Valley.	Slight	14.5
CH047-CH059	14.4.4	<p>For the duration of its use, the project will have a temporary indirect effect on the setting of CH047–CH059 (townland boundaries). Given that townland boundaries are so ubiquitous in the Irish countryside, and that they have been incorporated into the modern agricultural landscape, they are subject to frequent changes in their surroundings. This is judged to be an imperceptible indirect effect as the townland boundaries will remain unchanged.</p>	Imperceptible	No Specific mitigation required. General best practices are provided in Section 14.5.2 of the EIAR Chapter.	Imperceptible	14.5
Decommissioning Phase Effects						
Indirect Effect	14.4.6	<p>Decommissioning activities will result in temporary, indirect visual effects similar to those identified during the construction phase, with works likely to be visible from the Paps Archaeological Landscape (CH083), 53 recorded monuments within the landscape, and 24 recorded monuments in the surrounding area. It will also be visible from CH084–CH088, CH212.</p> <p>The removal of the turbines, which are the most visually prominent elements of the Proposed Development, will eliminate the operational visual impact on these receptors. However, some elements of infrastructure, including access tracks and the substation, will remain in situ, and as such, the setting will remain altered to a degree. This will have a permanent, moderate positive effect on the setting of the monuments.</p>	Temporary effects, with long-term improvement in visual impact	No Specific mitigation required. General best practices provided in Section 14.5.3 of the EIAR Chapter.	Temporary effects, with long-term improvement in visual impact	14.4.6

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Direct Effects	14.4.7	No direct impacts are predicted during the decommissioning phase. All activities will utilise existing site tracks and public roads, and no new ground disturbance will occur. Turbines will be removed using established access and transport methods, while infrastructure such as turbine foundations, hardstands, the substation, and grid connection will remain in situ, with disturbed areas allowed to naturally revegetate. Any direct physical impacts associated with ground disturbance will have occurred during the construction phase and are assumed to have been addressed through appropriate mitigation. As such, no additional direct impacts or mitigation measures are required during decommissioning.	No Effect	No Specific mitigation required. General best practices provided in Section 14.5.3 of the EIAR Chapter.	None	14.4.7
Cumulative Effect						
Direct Impact	14.4.8	Existing and proposed windfarms within the wider area, along with the Knocknamork and Clydagroe Extension underground cable routes, have the potential to result in overlapping direct impacts on similar receptors, including townland boundaries and areas of archaeological potential. The available excavation records indicate that no archaeology was identified, or that no excavation was required, for these developments. With the implementation of appropriate mitigation, the Proposed Development is not expected to contribute to cumulative impacts on archaeology. The potential identification of previously unknown subsurface archaeology may also provide additional archaeological knowledge.	Neutral Effect	No additional mitigation proposed	Neutral Effect	14.4.8
Indirect Effect on Settings	14.4.8	The Curragh/Coomacheo and Knocknamork Wind Farms, located in proximity to the Proposed Development Site, have the potential to contribute to cumulative effects on shared receptors, including the Paps Archaeological	Long-term, Reversible, Moderate	No additional mitigation proposed	Slight	14.4.8

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Landscape. Curragh/Coomacheo is visible from the eastern extent of the landscape, while views of Knocknamork are largely screened by topography and vegetation.</p> <p>The permitted windfarms at Inse Mhór (c.7.5 km southwest) and Gortyrhilly (c.9.5 km south) are largely obscured by topography and are therefore not considered to contribute to cumulative effects.</p> <p>The Proposed Development, in combination with nearby windfarms, may increase the long-term, reversible, moderate negative effect on the wider archaeological landscape, particularly in southern and eastern views. However, intervisibility between monuments remains unaffected, and the cumulative impact is limited to a slight negative, long-term, reversible indirect effect on setting.</p>	Negative Effects			

Appendix I. Summary of Likely Effect- Shadow Flicker

Table I: Summary of Likely Effects on Sensitive Receptors

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Residential Receptors	15.3.1	<p>Do-Nothing Scenario</p> <p>If the Proposed Development were not to proceed, there would be no potential for shadow flicker effects on dwellings within the study area of the Proposed Development.</p>	No Effect	No mitigation required	None	15.4
Residential Receptors	15.3.2	<p>Construction Phase</p> <p>As the proposed wind turbines will not be operational during the construction phase, shadow flicker will not occur.</p>	No Effect	No mitigation required	None	15.4

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Residential Receptors	15.3.3	Operational Phase Both daily and annual shadow flicker predictions show incidence of shadow flicker at two receptors in excess of the significance threshold.	Significant Effect	Curtailement, along with other general measures, is proposed, details are provided in Section 15.3.3 of the EIAR Chapter 15.	Not Significant	15.4
Residential Receptors	15.3.4	Decommissioning Phase As the proposed turbines will not be operational during the decommissioning phase, shadow flicker will not occur.	No Effect	No mitigation required	None	15.4
Cumulative Effects	15.4	Cumulative Effects There are two additional dwellings within the shadow flicker envelope of both the Proposed development and Knocknamork windfarm. However, there is no risk of shadow flicker from the Proposed Development at these two dwellings as they lie to the south of the Proposed Development. They are at no risk of experiencing cumulative effects No other receptors are located within overlapping study areas for other windfarms.	No Effect	No mitigation required	None	15.4

Appendix J. Summary of Likely Effect- Material Assets (including Telecommunications and Aviation)

Table J: Summary of Likely Effects on Material Assets (including Telecommunications and Aviation)

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Aviation						
Do-Nothing Scenario	16.3.4	If the Proposed Development were not to proceed, there would be no impact on aviation operations within or surrounding the area.	No effects	No mitigation required	None	16.3.5
Construction	16.3.4	As none of the turbines will be functional and rotating during the construction phase, there will be no effects on aviation. During the erection of the wind turbines, cranes will be fitted with appropriate aviation warning lighting to alert pilots to the presence of tall structures.	No effects	No mitigation required.	None	16.3.5

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Operational	16.3.4	The Proposed Development is located over 30km from both Cork and Kerry Airports and is also beyond the 15km limit of the Outer Horizontal Surface (OHS) associated with either aerodrome. Therefore, the turbines will have no effect on the operations of Cork and Kerry Airport. An Instrument Flight Procedure (IFP) assessment, undertaken at the request of the Irish Aviation Authority (IAA), confirmed that the Proposed Development will not result in any significant effects on aviation receptors.	No effects	No mitigation required.	None	16.3.5
Decommissioning	16.3.4	Due to the nature of the decommissioning phase there will be no risk once the turbines are removed.	No effects	No mitigation required.	None	16.3.5
Cumulative	16.3.4	Due to the lack of significant effects, there is no potential for cumulative effects with other schemes.	No effects	No mitigation required.	None	16.3.5
Telecommunication						
Do-Nothing Scenario	16.4.4	If the Proposed Development were not to proceed, there would be no impact on existing telecommunication links within or surrounding the area	No effects	No mitigation required.	None	16.4.5
Construction	16.4.4	Temporary electromagnetic emissions may arise from the use of electrical tools and generators prior to the provision of mains electricity. However, all such equipment is required by Irish and European law to comply with the EMC Directive 2014/30/EU, ensuring emissions remain within acceptable limits and do not interfere with telecommunications or other devices. The use of tall cranes during turbine assembly will occur in proximity to the turbine locations but will remain sufficiently buffered from all telecommunications links, avoiding any risk of disruption.	Not significant effects	No additional mitigation has been proposed.	Not significant	16.4.5
Operational	16.4.4	As analogue television has been phased out and replaced by digital terrestrial broadcasting, the potential for interference from large structures has been greatly reduced. Digital signals are more resistant to reflection, and the increased transmitter output further mitigates any risk of signal disruption. Consultation and technical analysis (Ai Bridges, Technical Appendix 16-1 Telecommunications Impact Study) confirmed sufficient clearance between all proposed turbines and existing telecommunication links, ensuring no operational interference.	Not significant effects	No additional mitigation has been proposed.	Not significant	16.4.5
Decommissioning	16.4.4	When decommissioning of the Development takes place, effects associated with this phase on telecommunications will be similar to those at the construction phase.	Not significant effects	No additional mitigation has been proposed.	Not significant	16.4.5

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Cumulative	16.4.4	Due to the lack of significant effects, there is no potential for cumulative effects with other schemes.	No Effect	No mitigation required	None	16.4.5
Resources and Utility Infrastructure						
Quarries						
Do-Nothing Scenario	16.5.1	If the Development were not to proceed, there would be no associated impact on quarry operations in the area and quarrying activities would continue.	No Effect	No mitigation required	None	-
Construction	16.5.1	The construction of the Development will impact natural resources as aggregates, which will be sourced from the quarries in proximity to the Proposed Development Site. The use of imported material during the construction phase will have a slight, permanent negative impact on the non-renewable resources of the area. This impact is considered to be imperceptible in the long-term	Slight, permanent negative and not significant , during construction, imperceptible and not significant in the long-term.	No mitigation proposed	Slight, permanent negative and not significant , during construction, imperceptible and not significant in the long-term.	-
Operational	16.5.1	It is likely that a small amount of granular material may be required to maintain access tracks during operation which could impact the source quarry.	Negligible and not significant	No mitigation proposed	Negligible and not significant	-
Decommissioning	16.5.1	The decommissioning phase will have no impact on the source quarry as no groundworks entailing the importation of aggregate would be required.	No Effect	No mitigation required	None	-
Cumulative	16.5.1	The use of imported material during the construction phase will have a slight, cumulative, permanent negative impact on the non-renewable resources of the area.	Slight, permanent negative and not significant , during construction, imperceptible and not significant in the long-term.	No Mitigation proposed	Slight, permanent negative and not significant , during construction, imperceptible and not significant in the long-term.	-

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Electricity Infrastructure	16.5.2	The nearest overhead electricity line is the Clonkeen to Clashavoon 110kV line which runs northwest - south east on the opposite side of the N22 from the proposed Site entrance. No underground electricity lines have been identified with the potential to be affected by the Proposed Development.	No Effect	No mitigation required	None	-
		Cumulative Effect No cumulative effects on electricity networks are likely during the operational and decommissioning phases.	No Effect	No mitigation required	None	-
Gas Utilities	16.5.3	There are no gas mains located within the Proposed Development Site. Gas Networks Ireland have responded to consultation illustrating there are also no existing services along the Grid Connection Route or the Turbine Delivery Route.	No Effect	No mitigation required	None	-
Water Utilities	16.5.3	No water utilities have been identified with the potential to be affected by the Proposed Development.	No Effect Not Significant	No mitigation required	None Not significant	
Waste Utilities						
Construction	16.5.4	<ul style="list-style-type: none"> Less than 0.74kg/person typical non-hazardous waste will be generated, due to limited working hours; Self-contained port-a-loo units will be used during the construction phase. Maximum sanitary waste production during the construction phase is estimated at 60 litres per person per day. There will be no on-site treatment of wastewater. There is no expected chemical/fuel/oil waste other than from rags and residual amounts in containers. Without mitigation, the effects would be slight and medium-term in duration. There is no expected refuelling waste other than from absorbent materials containing small amounts of residual oil used to clean up small incidental spillages during the refuelling process. Without mitigation, the effects would be slight and medium-term in duration. Packaging (non-hazardous) will include cardboard, wood and plastics used to package turbine components. The occurrence of 10kg of plastic per turbine blade, between 40 and 50 pallets and 50 to 60 cable drums are expected. This will be removed from site for re-use by an authorised person(s); 	Potential slight and medium-term Not significant effect due to use of chemicals, fuels and oil. Not Significant for all other waste types.	Best practices and mitigation proposed in Construction Environmental Management Plan (CEMP)	Not Significant	16.5.4

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Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<ul style="list-style-type: none"> Excavated materials will be required for habitat and ecological restoration, reprofiling and backfilling. No surplus excavated material will require removal from within the Proposed Development Site. No metal waste will be generated 				
Operational	16.5.4	No waste (non-hazardous or hazardous) will be generated during this phase	Not significant	No additional measures required.	Not significant	
Decommissioning	16.5.4	<ul style="list-style-type: none"> Less than 0.74kg/person typical non-hazardous waste will be generated, due to limited working hours; No excavated material will be generated Maximum sanitary waste production during the decommissioning phase is estimated at 60 litres per person per day. There will be no on-site treatment of wastewater. 100 tonnes of steel (non-hazardous) will be removed from turbine bases. There is no expected chemical/fuel/oil waste other than from rags and residual amounts in containers during the decommissioning phase. Without mitigation, the effects would be slight and medium-term in duration There is no expected refuelling waste other than from absorbent materials containing small amounts of residual oil used to clean up small incidental spillages during the refuelling process. Without mitigation, the effects would be slight and medium-term in duration 	Potential slight and medium-term Not significant effect due to use of chemicals, fuels and oil. Not Significant for all other waste types.	Best practices and mitigation proposed in Construction Environmental Management Plan (CEMP)	Not Significant	16.5.4
Cumulative	16.5.4	The negligible quantities of waste generated as part of the construction, operation and decommissioning phases will not give rise to cumulative effects.	No Effect	No additional measures required.	No Effect	-

Appendix K. Summary of Likely Effect- Risks and Major Accidents

Table K: Summary of Likely Effects on Sensitive Receptors

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Major Accident/Natural Disaster Risks to the Proposed Development						
Meteorological	17.5.1	<p>Severe weather events may occur during construction, such as strong winds or heavy rainfall, but works will be suspended during extreme conditions following Met Éireann weather warnings. Once constructed, turbines are designed to safely withstand severe winds and precipitation in line with international standards.</p> <p>Likelihood: Unlikely during Construction/Decommissioning; Very Unlikely during Operation Consequence: Minor</p>	Negligible and not significant	No Mitigation Proposed	Negligible and not significant	17.8
Hydrological	17.5.1	<p>The site is not located within any flood-prone area according to OPW mapping. Flood risk from surface water has been assessed and found to be minimal. Appropriate drainage design will manage surface water during construction and operation.</p> <p>Likelihood: Very Unlikely Consequence: Minor</p>	Imperceptible and not significant.	No Mitigation Proposed	Imperceptible and not significant.	17.8
Fire	17.5.1	<p>The mild, moist Irish climate limits wildfire potential, though young plantations can be vulnerable during dry spells. Fire risk will be managed through monitoring of Met Éireann’s Fire Weather Index and adherence to Department of Agriculture notices. Work will stop during high-risk periods. A significant wildfire could damage infrastructure, but the likelihood is extremely low.</p> <p>Likelihood: Very Unlikely Consequence: Serious</p>	Low and not significant.	No Mitigation Proposed	Low and not significant.	17.8

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Terrorism	17.5.1	<p>The site's remote location and the absence of any history of attacks on renewable energy infrastructure in Ireland make terrorism an extremely unlikely risk.</p> <p>Likelihood: Very Unlikely Consequence: Minor</p>	Negligible and not significant	No Mitigation Proposed	Negligible and not significant	17.8
Risk of Major Accidents/ Natural Disasters posed by the Proposed Development						
Hydrological	17.5.2	<p>Minor alterations to surface drainage may occur during construction due to forestry removal and groundworks, but no significant change to runoff or flood risk is expected. Appropriate drainage will be installed to prevent increased flow rates.</p> <p>Likelihood: Very Unlikely Consequence: Minor</p>	Negligible and not significant	No Mitigation Proposed	Negligible and not significant	17.8
Geological	17.5.2	<p>Peat depths across the site vary from 0–5.4m, with most areas less than 2m. A detailed Peat Stability Risk Assessment (PSRA) found an overall low to negligible risk. Construction will follow buffer and stockpile restrictions, and a Site Emergency Response Plan will be in place.</p> <p>Likelihood: Very Unlikely for Construction; Extremely Unlikely for Operation/Decommissioning Consequence: Serious</p>	Low and not significant.	No Mitigation Proposed	Low and not significant	17.8
Contamination	17.5.2	<p>Fuel will be stored in bunded tanks with secondary containment during construction. Both containment systems would have to fail for a release to occur. During operation and decommissioning, no significant fuel storage will take place.</p> <p>Likelihood: Very Unlikely for Construction Consequence: Serious</p>	Low and not significant	No Mitigation Proposed	Low and not significant	17.8

Particular Receptors /	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Road	17.5.2	<p>Construction traffic will increase public road use by approximately 0.6–1.5% during the peak period. Statistical analysis shows this is unlikely to result in a single additional collision over the 24-month construction phase. Operational and decommissioning traffic volumes will be much lower.</p> <p>Likelihood: Unlikely Consequence: Limited</p>	Slight and not significant	No Mitigation Proposed	Slight and not significant	17.8
Fire / Explosion	17.5.2	<p>Diesel will be stored in limited quantities, away from other infrastructure, and has a high flashpoint (55°C). Any use of explosives for borrow pits will be by licensed contractors under strict regulation, with no on-site storage. The risk of turbine fire is rare and would result in only localised damage.</p> <p>Likelihood: Unlikely Consequence: Minor</p>	Negligible and not significant	No Mitigation Proposed	Negligible and not significant	17.8
Industrial Accident	17.5.2	<p>Based on statistics available from the SafetyOn (the health and safety organisation for the onshore wind sector in the UK), the likelihood of an incident during construction or operation is very low. Expected total working hours make the occurrence of an incident statistically unlikely. No fatalities have been recorded in recent datasets, and most incidents were minor.</p> <p>Likelihood: Unlikely Consequence: Minor</p>	Low and not significant	No Mitigation Proposed	Low and not significant	17.8
Cumulative Risks	17.7	<p>Cumulative risks associated with the Proposed Development are limited. The only potential for cumulative interaction arises from increased road traffic due to overlapping construction activities from other nearby wind farm developments. However, assessment within the Traffic and Transport Chapter has determined that overlap of peak construction periods is unlikely, as each development is at a different planning and construction stage.</p> <p>High traffic-generating activities such as concrete and stone importation are of short duration and would be naturally staggered due to limited local supply capacity.</p>	Negligible and not significant	Implementation of Construction Traffic Management Plans (CTMPs) for all developments will ensure coordinated scheduling, communication with local authorities, and the avoidance of excessive cumulative HGV traffic.	Negligible and not significant	17.8

Particular Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		The cumulative increase in traffic is not expected to result in any measurable increase in road traffic collisions (RTCs), even in a scenario where traffic volumes temporarily double during peak periods.				

Appendix L. Summary of Likely Effect- Interactions of the Foregoing

Table L: Summary of Likely Effects

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
Population and Human Health -Landscape and Visual Impact	18.3.1	No significant effects on vehicular, recreational or settlements or residential receptors during any phase of the Proposed Development. Neither are any of the 27 viewpoints assessment are predicted to experience significant effects. no significant effects on population and human health are predicted during any phase of the Proposed Development.	Not Significant	a full suite of mitigation measures has been included in the relevant Chapters of the EIAR. The implementation of these mitigation measures will reduce or remove the potential for these effects. Information on potential residual effects and their significance is also presented in each relevant Chapter.	Not Significant	18.5
Population and Human Health -Soils, Hydrology and Hydrogeology	18.3.2	Potential for peat landslide to have an effect of people during the construction and operational phases of the Proposed Development (no potential risk is identified for the decommissioning phase). A Peat Stability Risk Assessment has been conducted with the assessment concluding the peat stability risk for the proposed infrastructure is negligible to low.	Negligible Low and not significant		Not Significant	18.5
Population and Human Health -Hydrology, Water Quality and Flood Risk	18.3.3	The construction phase of the Proposed Development has the potential to give rise to some water pollution as a result of site activities, and any water pollution could have a potential significant effect on other users of that water within the catchment. Potential surface water abstractions for human consumption were identified as part of the assessment with no abstractions identified with the potential to be affected by the Proposed Development.	No Effect		No Effect	18.5

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Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		No potential for interaction between Population and Human Health.				
Population and Human Health -Air and Climate	18.3.4	No significant effect on human receptors during any phase of the Proposed Development	Not Significant		Not Significant	18.5
Population and Human Health -Noise	18.3.5	There will be short term breaches of the applicable noise level at Receptor 52 during the construction phase of the Proposed Development due to the construction of an access track in the vicinity of this receptor (construction phase), however, the short duration of this activity means that the effect would be non-significant. Significant noise impact is predicted at R65 during the night-time and R153 during the operational phase of the Proposed Development.	Not Significant		Not Significant	18.5
Population and Human Health -Shadow Flicker	18.3.6	The potential for shadow flicker at two properties during the operation phase of the Proposed Development.	Not Significant		Not Significant	18.5
Population and Human Health -Risk of Major Accidents	18.3.7	no significant risk of major accidents with the potential to affect population and human health during any phase of the Proposed Development.	Not Significant		Not Significant	18.5
Landscape and Visual Impact Assessment - Archaeology, Architectural and Cultural Heritage	18.3.8	The assessment of heritage site has confirmed Proposed Development (operational phase) will have a long-term negative moderate (indirect –visual) effect on the surrounding archaeological, architectural and cultural heritage landscape, specifically CH083 The Paps Archaeological Landscape. Landscape and Visual Impact Assessment identifies a significant effect on the landscape resources within the Proposed Development Site and on the Kerry County Council (KCC) Visually Sensitive Area during the operational phase of the Proposed Development. This area partially overlaps with the Paps Archaeological Landscape.	Significant effect		Significant effect	18.5
Traffic and Transport-Air and Climate	18.3.9	The increase in traffic volumes associated with the construction and decommissioning phases of the Proposed Development has the potential to result in increasing air pollution from dust arising due to movements of vehicles on unsurfaced roads within the site.	Not Significant		Not Significant	18.5

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>Chapter 10: Transport and Access assessment has determined that the increase in traffic volumes on the road network is non-significant; however, Chapter 12: Air and Climate assessment has determined that there is the potential for a significant negative effect due to dust arising as a result of vehicle movements within and exiting the site during the construction and decommissioning phases.</p> <p>A number of mitigation measures is therefore proposed which, when implemented will reduce the impact to Non-Significant.</p> <p>There will be no increase in overall traffic volumes during the operational phase of the Proposed Development and no associated effects on air and climate</p>				
Traffic and Transport – Noise	18.3.10	<p>According to the transport assessment undertaken as part of this EIAR, the increase in traffic volumes as a result of the construction of the Proposed Development would be no more than 15% along the existing road network. Therefore, the contribution to the overall noise environment would be negligible and Non-Significant.</p> <p>The effect on noise receptors as a result of decommissioning is considered to be the same as construction. There is no predicted effect as a result of the operational phase.</p>	Not Significant		Not Significant	18.5
Traffic and Transport – Major Accidents and Natural Disasters	18.3.11	<p>Chapter 17:Major Accidents and Natural Disasters identifies that he construction of the Proposed Development will result in an increase in road traffic volumes on public highway which potentially increases the risk of a road traffic collisions (RTC). As any RTC would require the involvement of emergency services all RTCs are considered as Major Accidents for the purpose of that assessment.</p> <p>The Chapter concludes using an average of the annual RTC statistics compiled as part of the traffic statistics of 27 collisions per year, the construction of the Proposed Development is not likely to result in a single additional RTC over the course of the 24 month construction period.</p> <p>Similar impacts would be expected for decommissioning with negligible effects anticipated for operation. Accordingly no</p>	Not Significant		Not Significant	18.5

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		significant effects are anticipated for any phase of the Proposed Development				
Biodiversity – Ornithology	18.3.12	The Proposed Development has the potential to affect the ecological and ornithological receptors and including the qualifying species of Statutory Designated Sites in the vicinity. The effects on these sites is considered in the Natura Impact Statement(NIS) accompanying the consent application. However, there is no overlap between the qualifying species or habitats of the designated sites.	Not Significant		Not Significant	18.5
Biodiversity – Hydrogeology	18.3.13	The Proposed Development will result in the loss of peat and the associated plant communities during the construction phase of the Proposed Development. The habitats associated with the peat will be restored and enhanced in accordance with the measures identified in Chapter 8: Biodiversity with new and restored habitats reaching maturity during the operation phase. There will be no effect of biodiversity during the decommissioning phase as only the above ground structures will be removed with no disturbance to habitats and species.	Not Significant		Not Significant	18.5
Biodiversity – Hydrology	18.3.14	Chapter 8: Biodiversity identifies that there is the potential for the construction of the Proposed Development to result in pollution reaching the watercourses on Site which then in-turn drain into the River Clydagh as part of the SAC. Pollution could change the water quality, biology and chemistry of the watercourses flowing through and draining the Site and consequently the aquatic species they support. The water quality assessment presented in Chapter 11: Hydrology, Water Quality and Flood Risk has determined that predicted effect of discharges from the site as a result of the Proposed Development would cause no significant adverse effect to concentrations of suspended solids in the SAC, and no significant effect to qualifying interests. However, the assessment for the release of nutrients into the River Clydagh as a result of pre-construction felling, concludes that without mitigation there would be a potentially major adverse effect which would affect qualifying interests in the Killarney	Not Significant		Not Significant	18.5

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC.</p> <p>This requires the implementation of the mitigation measures presented in Chapter 11: Hydrology, Water Quality and Flood Risk. With the implementation of those measures the residual effect on both water quality and biodiversity receptors are considered non-significant.</p>				
Biodiversity – Noise	18.3.15	The noise effects of the Proposed Development would be limited to short term disturbance during the construction and decommissioning and would be non-significant. The noise generated during the operational phase is not considered to have the potential in impact on biodiversity receptors.	Not Significant		Not Significant	18.5
Ornithology – Noise	18.3.16	The noise effects of the Proposed Development would be limited to short term disturbance during the construction and decommissioning and would be non-significant. The noise generated during the operational phase is not considered to have the potential in impact on ornithology receptors	Not Significant		Not Significant	18.5
Soils, Geology and Hydrogeology – Hydrology Water Quality and Flood Risk	18.3.17	<p>Interaction between surface and groundwater are considered in Chapter 11: Hydrology, Water Quality and Flood Risk which determined that excavations required as part of the construction phase may result in the discharge of contaminated water to surface water receptors. Mitigation in the form of settlement ponds and filter strips to reduce any potential impact in that instance.</p> <p>The Proposed Development will include permanent and temporary spoil storage. Exposed soils have potential to release fine sediments in surface water runoff or where excavations come in contact with surface watercourses. Measures to control reduced quality runoff from spoil comprise filtration of runoff over intact vegetated buffers, and / or collection and treatment of runoff in settlement features.</p> <p>Storage of peat may also cause barriers and affect preferential surface water flow routes. Consequently, temporarily or permanently redirected surface water flows may starve areas</p>	Not Significant		Not Significant	18.5

Particular / Receptors	EIAR Section	Likely Effects	Significance of Effect	Mitigation Proposed	Post Mitigation Residual Effect	EIAR Section
		<p>where water currently flows, or cause flooding of areas where water currently does not flow.</p> <p>Spoil drainage will be designed on a bespoke basis for spoil storage areas to allow controlled dewatering and prevent washout of suspended solids to the receiving water environment.</p> <p>With the application of the mitigation measures described in Chapter 11: Hydrology, Water Quality and Flood Risk, the residual risk to hydrology receptors is considered as Not Significant.</p>				
Soils, Geology and Hydrogeology – Major Accidents and Natural Disasters	18.3.18	Chapter 17: Major Accidents and Natural Disasters identifies peat landslide as posing a risk of a major accident. As discussed above the peat stability risk has been determined to be low to negligible with the associated low risk of a major accident as a result of peat landslide. This applies to all phases of the Proposed Development.	Low to negligible and not significant		Not Significant	18.5
Hydrology Water Quality and Flood Risk – Major Accidents and Natural Disasters	18.3.19	<p>Chapter 17: Major Accidents and Natural Disasters identifies flooding as posing a risk both to the Proposed Development through a natural disaster and a major accident as a result of the Proposed Development.</p> <p>Flood Risk Assessment undertaken as part of this EIAR (Technical Appendix 11-1). This concludes that the Proposed Development is not considered as being at risk of flooding.</p> <p>The alteration of natural drainage systems and changes in land use can result in increased run off rates and cause flooding downstream.</p> <p>The Proposed Development will include the removal of forestry and a change in habitat; however, this is not dissimilar to the changes experienced through the normal crop rotation on the Proposed Development Site and will not result in a significant change to the hydrological regime (see Chapter 11 of the EIAR).</p> <p>Accordingly, there is no significant risk of a major accident or natural disaster as a result of the Proposed Development.</p>	Not Significant		Not Significant	18.5