Planning and Environmental Consultants

Response to Further Information Request Ref. No. ABP-320089-24

Proposed Clonberne Wind Farm, Co. Galway

DOCUMENT DETAILS

Client:	**Clonberne Wind Farm Limited**
Project Title:	**Proposed Clonberne Wind Farm, Co. Galway**
Project Number:	**240730-c**
Document Title:	**Response to Further Information Request Ref. No. ABP-320089-24**
Document File Name:	**240730-c Clonberne Wind Farm Overall Response - F**
Prepared By:	**MKO** **Tuam Road** **Galway** **Ireland** **H91 VW84**

Planning and Environmental Consultants

Rev	Status	Date	Author(s)	Approved By
01	Draft	31/10/2025	CG/MC	AC/EMC
02	Draft	18/11/2025	CG/MC	AC/EMC
05	Draft	28/11/2025	CG/MC	AC/EMC
F	Final	03/12/2025	CG/MC	AC/EMC

Table of Contents

TABLE OF TABLES

TABLE OF FIGURES

Table of Plates

LIST OF APPENDICES

Appendix 1 – An Coimisiún Pleanála Further Information Request

Appendix 2 – Planning Drawings (Enclosed Separately)

Appendix 3 – TNEI Response

Appendix 4 – Update to Non-Technical Summary

Appendix 5 – Ornithology Tables & Figures

Appendix 6 – Hydro-Environmental Services Response

Appendix 7 – Update to List of Projects Considered in the EIA Cumulative Assessment

Appendix 8 – Traffic & Transport Supporting Documentation

Appendix 9 – Geophysical Survey Report

Appendix 10 – Photomontage Booklet (Enclosed Separately)

Appendix 11 – Triturus Environmental Response

1. INTRODUCTION

MKO have been instructed by our client, Clonberne Windfarm Limited, (the Applicant) to prepare this report in response to a Further Information (FI) Request issued by An Coimisiún Pleanála (the Commission) under Ref. No. 320089-24 on the 15th of May 2025. The FI Request was issued in relation to the proposed Clonberne Wind Farm development which will comprise of 11 no. wind turbines and associated infrastructure located in the townlands of Killavoher, Gortagarraun, Cloonarkan, Lomaunaghroe, Clonbern, Ballagh West, Carrowntryla and Lissybroder, Co. Galway.

The application was submitted to the Commission as Strategic Infrastructure Development (SID) under the provisions of Section 37E of the Planning and Development Act 2000, as amended on the 2nd July 2024. The Commission stated that a response to this FI Request is required by the 17th November 2025 by 5.30pm. An extension to the deadline was requested and subsequently granted, setting a new deadline of the 5th of December 2025.

The FI Request was issued in accordance with Section 37F(1)(a) of the Planning and Development Act 2000, as amended (the 2000 Act), which sought information on a number of items relating to Procedural/Administrative issues, Biodiversity, Roads and Traffic, Cultural Heritage, Landscape and Visual Assessment and Wake Effects as well as a response to any issues raised by Third-Party Observers and Statutory Consultees. **Section 2** of this Response to Further Information (RFI) presents a detailed response to the individual FI items raised by the Commission. **Section 3** of this RFI presents a response to the matters raised by Third-Party Observers and Statutory Consultees.

At the outset, it is reiterated that the Clonberne Wind Farm development is one integrated project comprising of two distinct components:

- The wind farm and its associated infrastructure, which is the subject of this current application under Section 37E of the Act.
- The electrical grid connection works to connect the wind farm to the national grid, which is the subject of a separate application under Section 182A of the Act.

For ease of reference, the following terminology is used throughout the document:

- Where the '**Proposed Project'** is referred to, this relates to all the project components described in detail in Chapter 4 of this EIAR i.e., Wind Farm and Grid Connection.
- Where **'the Site'** is referred to, this relates to the primary study area for the EIAR, as delineated by the EIAR Site Boundary.
- Where the **'Proposed Wind Farm'** is referred to, this this relates to all components within the Wind Farm Application under Section 37E of the Act.
- Where **'Proposed Grid Connection'** is referred to, this refers to his relates to all components within the Grid Connection Application under Section 182A of the Act.

Both the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS) consider the combined impacts of these individual elements of the Proposed Project. line with the Commission's letter and to avoid duplication, this RFI only addresses those issues directly relating to the Proposed Wind Farm application, except where stated otherwise. A separate RFI in relation to the Proposed Grid Connection is also being submitted to the Commission.

1.1 Proposed Project Description

The Proposed Wind Farm as set out in the public notices is as follows:

> *In accordance with Section 37E of the Planning and Development Act 2000 (as amended), Clonberne Windfarm Limited gives notice of its intention to make an application to An Bord Pleanála for permission for a period of 10 years for the following Proposed Project in the*

townlands of Killavoher, Gortagarraun, Cloonarkan, Lomaunaghroe, Clonbern, Ballagh West, Carrowntryla and Lissybroder, Co. Galway. The Proposed Project will consist of the provision of the following:

I. *11 no. wind turbines with an overall turbine tip height of 180 metres; a rotor blade diameter of 162 metres; and hub height of 99 metres, and associated foundations, hardstanding and assembly areas;*
II. *Underground electrical cabling (33kV) and communications cabling;*
III. *Provision for the undergrounding of a section of 38kV overhead electrical cabling (as proposed under GCC Ref No. 24/60230), including the provision of 2 no. 38kV Line to Cable Interface End Masts up to a height of 16.2 metres and associated cable ducting to facilitate the undergrounding of the proposed 38kV cabling;*
IV. *Upgrade of existing tracks/ roads and provision of new site access roads, junctions and hardstand areas;*
V. *Construction of 1 no. new gated site entrance off the R328 Regional Road to facilitate the delivery of the construction materials and turbine components to site;*
VI. *Construction of 2 no. temporary construction compounds and associated ancillary infrastructure including temporary site offices, staff facilities and car-parking areas for staff and visitors, all to be removed at end of construction phase;*
VII. *Development of 1 no. borrow pit;*
VIII. *Provision of 3 no. passing bays adjacent to the L22321 Local Road and an existing access track to facilitate the transport of stone material to the site;*
IX. *Peat and spoil management including the provision of 4 no. peat repository areas and 1 no. spoil repository area;*
X. *Junction accommodation works including temporary accommodation areas adjacent to the N83 National Secondary Road, R328 Regional Road and L6466 Local Road to facilitate the delivery of turbine components to site;*
XI. *Site Drainage;*
XII. *Peatland Enhancement Area;*
XIII. *Biodiversity Enhancement Measures (including the planting of woodland, linear habitat, grassland management and invasive species removal);*
XIV. *Tree felling and hedgerow removal to facilitate construction and operation of the Proposed Project;*
XV. *Operational stage site signage; and*
XVI. *All ancillary works and apparatus.*

A thirty five-year operational life from the date of full commissioning of the entire wind farm is being sought and the subsequent decommissioning.

The application is seeking a ten-year planning permission. A concurrent planning application in relation to a proposed substation which will comprise of a 220kV Gas Insulated Switchgear (GIS) building, an Independent Power Producer (IPP) compound, a Battery Energy Storage System (BESS) compound, underground grid connection and associated cabling to connect the proposed Clonberne Wind Farm to the national grid via the existing Flagford to Cashla 220kV overhead line in the townland of Laughil is also being lodged to An Bord Pleanála.

An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in relation to the project and accompany this planning application.

For completeness, please see below the Proposed Grid Connection description as set out in the public notices:

In accordance with Section 182A of the Planning and Development Act 2000 (as amended), Clonberne Windfarm Limited gives notice of its intention to make an application to An Bord Pleanála for permission for a period of 10 years for the following proposed development in the townlands of Cloonarkan, Clonbern, Laughil, Co. Galway.

The proposed development will consist of the following:

I. Construction of a permanent substation which will comprise of a 220kV Gas Insulated Switchgear (GIS) building, an Independent Power Producer (IPP) compound, a Battery Energy Storage System (BESS) compound, including 4 no. 18-metre high Lightning Monopoles, welfare facilities, car parking, wastewater holding tank, 36-metre-high Telecommunications Mast, 2.6-metre high palisade fencing, external lighting, underground cabling, and all associated infrastructure and apparatus;

II. All works associated with the connection of the proposed Clonberne Wind Farm to the national electricity grid, including the provision of underground electrical cabling (220kV) to the existing Flagford to Cashla 220kV overhead line, in the townland of Laughil;

III. The provision of 2 no. loop-in towers, 2 no. gantries within 2 no. cable compounds to facilitate the connection of the proposed substation to the existing Flagford to Cashla 220kV overhead line;

IV. Construction of 2 no. gated permanent site entrances off the L6501 Local Road to facilitate access to the proposed development and the proposed Clonberne Wind Farm;

V. Provision of 4 no. joint bays, communication chambers and earth sheath links along the underground electrical cabling route and temporary accommodation areas to facilitate underground cabling works;

VI. Provision of a cable access track to facilitate the installation and maintenance of cabling and provide access to the proposed substation;

VII. Reinstatement of the road or track surface above the proposed cabling trench along existing roads and tracks;

VIII. Operational access road to the proposed development and the proposed Clonberne Wind Farm;

IX. Site Drainage;

X. Tree felling and hedgerow removal to facilitate construction and operation of the proposed development;

XI. Operational stage site signage; and

XII. All ancillary works and apparatus.

The application is seeking a ten-year planning permission. The development subject of this application will facilitate the connection of the proposed 11 no. wind turbine Clonberne Wind Farm to the national electricity grid. A concurrent application in relation to the proposed Clonberne Wind Farm is also being lodged to An Bord Pleanála.

An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in relation to the project and accompany this planning application.

1.2 Policy Overview

This section of the RFI provides an update to the policy overview relating to the Proposed Wind Farm since lodgement of the original planning application and should be read in conjunction with Chapter 2 - Background of the EIAR and the Planning Report submitted with the planning application to the Commission under Section 37E of the 2000 Act.

1.2.1 Renewable Energy Policy

European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. No. 274 of 2025)

In November 2023, a revision of the Renewable Energy Directive[1] (RED III), came into force. RED III increases the EU wide renewable energy target from 32% set under the previous revision of the directive to 42.5%, with an ambition to reach 45% by 2030. The increase was proposed under the publication of REPowerEU plan in May 2022. RED III also introduces specific targets for Member States in the industry, transport, and building (district heating and cooling) sectors.

Under RED III, EU member states must identify areas for the acceleration of renewables where projects will undergo a simplified and fast-track procedure. The deployment of renewables will also be of ***"overriding public interest"*** in order to limit the number of legal challenges on new renewable energy installations. These measures came in response to REPowerEU which found that permitting is the biggest bottleneck for deploying wind at scale, with approximately 80 GW of wind power capacity stuck in permitting procedures across Europe.

There was an 18-month period to transpose most of the directive's provisions into national law, with a shorter deadline of July 2024 for some of the provisions related to permitting for renewables, in particular Article 16(f) which establishes the legal presumption that the construction and operation of renewable energy development and storage assets are in the

> *"overriding public interest and serving public health and safety when balancing legal interest in individual cases for the purposes of Article 6(4) and Article 16(1), point (c), of Directive 92/43/EEC [the 'Habitats Directive'], Article 4(7) of Directive 2000/60/EC [the 'Water Framework Directive'] and Article 9(1), point (a), of Directive 2009/147/EC.[the 'Birds Directive']".*

On 6 August 2025, the European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. No. 274 of 2025) were adopted for the purpose of giving effect to Articles 15e(5), 16, 16b, 16c(2), 16d, 16e and 16f of the RED III Directive.

The legislation introduces new decision timelines based on a "completeness check" (ss.34E, 37JB, 295B): 52 weeks for new wind farms, 30 weeks for repowering projects, and one to two years for IROPI cases (two years for projects over 150 kW, one year for projects under 150 kW or repowering). Importantly, renewable energy developments, including related grid and storage infrastructure, are now presumed to be in the **overriding public interest.**

In order to ensure that the RED III target of 42.5% renewable energy share is achieved, EU Member States must notify their climate and energy objectives, targets, policies, and measures to the European Commission and were established under Regulation (EU) 2018/1999 of the European Parliament and of the Council on the Governance of the Energy Union and Climate Action ('the Governance Regulation')1. The Department of the Environment, Climate and Communications (DECC) submitted an updated National Energy and Climate Plan (NECP) 2021-2030 to the European Commission in July 2024. The updated NECP committed to achieving a 43% share of renewable energy in total energy consumption by 2030. In the trajectories set out in the updated NECP, it states that Ireland's proposed trajectory will not be in line with the desired trajectory set out in the Governance Regulation.

Given that Ireland had the lowest share of renewables in energy consumption among EU Member States 20232 (15.3%), the implementation of RED III represents both a legal obligation and an opportunity to remove procedural bottlenecks that hinder critical infrastructure, such as the Proposed Wind Farm.

[1] *Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)*

National Energy Projections (November 2024)

The National Energy Projections report, published by the SEAI in November 2024, sets out the most recent updates to Ireland's progress towards its binding European and National renewable energy targets.

In 2023 RED II set an EU wide target for overall RES of 32% RES in 2030. Member states set their national contributions to the EU-wide target, with Ireland setting it's at 34.1% in 2030. RED III increased the binding EU-wide target for overall RES to at least 42.5% with Ireland subsequently increasing the target to 43% in 2030.

The decarbonisation of the electricity generation is critical considering the need to electrify other sectors such as heating and transport in order to achieve the sectoral decarbonisation targets. By 2030, renewable energy sources are anticipated to dominate electricity generation, particularly experiencing a significant surge later in the decade attributed to the integration of substantial offshore wind projects.

The most notable conclusion drawn from the Report is the significant gap between projections across both the WEM and WAM scenarios and the legally binding national and EU emission reductions targets. The Report states that even with full implementation of CAP24, Ireland is projected to miss its agreed national and EU 2030 targets for energy efficiency, renewable energy share and greenhouse gas emissions reduction.

Figure 1.27 of the Report, copied below (**Figure 1-1**), clearly illustrates the gap between the current installed wind capacity and the relevant Climate Action Plan (CAP) targets.

Figure 1.27: Ireland's installed wind capacity with 2024 estimates, projections to 2030, CAP targets

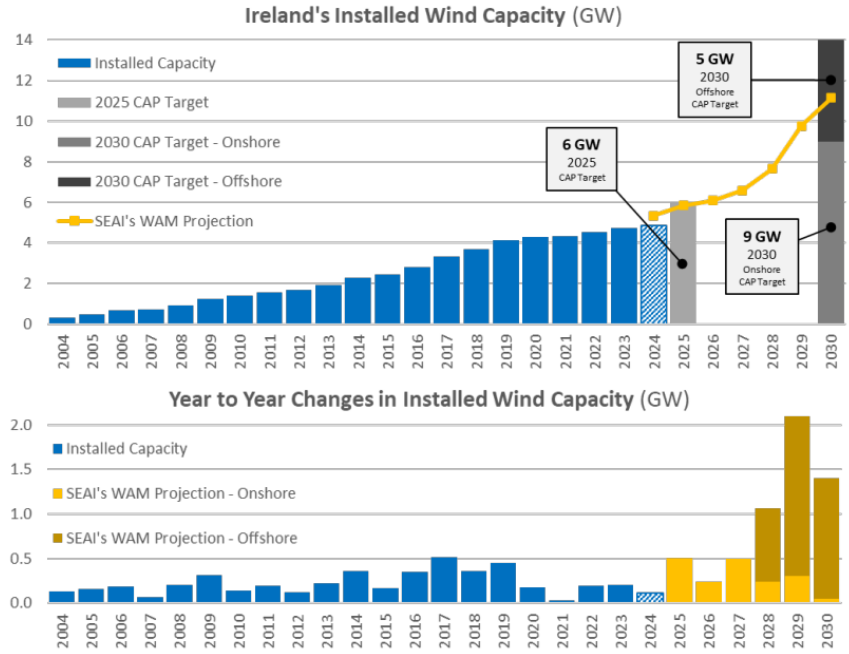


Figure 1-1: Ireland's installed wind capacity with 2024 estimates, projections to 2030, CAP targets

The SEAI projections explore the risk scenarios WEM and WAM, the aim being to address the gap between current policy trajectories and the most ambitious planned policies scenarios. The SEAI scenario modelling do not consider the CAP25 and CAP24, but rather CAP23. The SEAI projections under the 'WAM scenario indicate a total installed capacity of 11.2GW by the end of 2030. The Report goes on to note that "*Over the last 10 years, Ireland has added wind capacity at an average rate of 0.26GW per annum, although this has dropped to a rate of 0.14GW over the last 5 years. To align with the pace of the WAM projections needed to deliver on the 80% RES-E target, the roll out of onshore wind capacity needs to return to the rate previously achieved between 2016 and 2019…*"

The Report projects GHG emissions under the WEM and WAM scenarios. It notes that since April 2023 there has been a "*significant increase in net electricity imports across the interconnectors with the UK*" and "*electricity net-imports were far higher than other years, and higher than projected in the WEM or WAM scenarios…*" . The Report considers the emission ceiling of the first two carbon budget periods – caron budget 1 (CB1) ceiling 2021-2025 (five year cumulative)($MtCO_2eq$) and carbon budget 2 (CB2) ceiling 2026-2030 (five year cumulative)($MtCO_2eq$) in both the WEM scenario and WAM scenario. In the WEM scenario, total greenhouse gas emissions exceed CB1 by 9% by 2025. This overshoot means that 13% of the CB2 budget is consumed before the CB2 period begins. The second sectoral ceiling is then breached during 2028, with the exceedance reaching 27% by 2030. Under the WAM scenario the CB1 ceiling is exceeded by 6% and this overshoot means that 9% of the CB2 budget is consumed before the CB2 period begins. In this scenario the CB2 ceiling is exceeded by 17% by 2030.

It is clear from the projections outlined above that unprecedented action is required as soon as possible: *"Where any exceedance occurs, steeper reductions are required to compensate, leading to a larger reduction required by 2030."*

Energy in Ireland (December 2024)

In December 2024, the Sustainable Energy Authority of Ireland (SEAI) released an annual publication '*Energy in Ireland*' report which looks at trends in national energy use and at the underlying driving forces, such as the economy and weather, and more recently the impacts of high energy prices. It also examines GHG emissions from energy use, energy security, cost competitiveness, and Ireland's progress towards EU renewable energy targets.

The Report identifies that Ireland's national energy-related emissions in 2023 were at their lowest level in over 30 years. Energy-related emissions in 2023 were 31.4 $MtCO_2eq$, down 8.3% on 2022 levels, and lower even than those observed during the height of COVID impacts in 2020. Energy-related emissions fell by over 2.8 $MtCO_2eq$ in 2023 - the largest annual reduction observed in 12 years. The following are some of the key points, relating to renewable energy and energy emissions:

- Ireland's national energy-related emissions have fallen for seven of the last ten years.
- 14.1% of Ireland's primary energy was renewable in 2023, with fossil fuel remaining the dominant source of Ireland's energy.
- Wind generation provided 33.7% of electricity supply in 2023.
- 2023 electricity emissions were 7.6 MtCO2eq, the lowest on record, down 22% on 2022 levels.
- 2023 was the first year in which fossil fuel generation accounted for less than half of Ireland's gross electricity supply.
  In 2023, Ireland had 4.74 GW of installed wind capacity, up 4.5% on the previous year.

The Report states that over the last 10-years, Ireland has added wind capacity at an average rate of 0.26 GW per annum, although this has dropped to a rate of 0.14 GW over the last 5-years. To align to the pace of the WAM scenario projections needed to deliver on the 80% RES-E target, the roll-out of onshore wind capacity needs to return to the rate previously achieved between 2016 and 2019. The Report then goes on to state the following**:**

> *"**Increasing wind generation through added wind infrastructure is key to decarbonising Ireland's electricity supply.** The decarbonisation of electricity maximised the positive impact of sustainability technologies like heat pumps and electric vehicles. The recent slow-down in added wind capacity is impacting Ireland's transition to a sustainable energy future. **Renewable capacity must be added faster than electricity demand increases. We must do everything we can to support the roll-out of both onshore and offshore wind** and grid-connected solar PV capacity".* (emphasis added)

1.2.2 Planning & Climate Policy

The Planning and Development Act 2024

The Planning and Development Act 2024 (the 2024 Act) was signed into law by the President on the 17th of October 2024, following its passage through both Houses of the Oireachtas. At the time of lodgement of this planning application, the 2000 Act remains in place until the new Act is commenced by Ministerial Orders, with the Government indicating that this will be done on a phased basis.

The Government has approved an Implementation Plan for the 2024 Act, which sets out the schedule for its phased commencement. The Implementation Plan also outlines a series of initiatives aimed at supporting training and stakeholder engagement across the planning sector to ensure a smooth transition to the new legislative framework. Concurrently, work is ongoing to revise and update the supporting Regulations that will underpin the operation of the 2024 Act.

National Planning Framework First Revision (2025)

On the 8th April 2025, the Government approved the National Planning Framework First Revision (Revised NPF) which was subsequently passed through both Houses of the Oireachtas. The Revised NPF aims to address changes that have occurred in Ireland since 2018.

The Revised NPF provides an updated projection for the population of Ireland, with the population expected to increase to 6.1 million by 2040. This population growth will place further demand on both the built and natural environment, and subsequently, the services required to meet said demands. In order to strengthen and facilitate more environmentally focused planning at the local level, the Revised NPF states that future planning and development will need to:

> *"Tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential."*

National Strategic Outcome 8 ('*Transition to a Carbon Neutral and Climate Resilient Society*') notes that in creating Ireland's future energy landscape, new energy systems and transmission grids will be necessary to enable a more distributed energy generation which connects established and emerging energy sources, i.e. renewables, to major sources of demand.

Chapter 9: Climate Transition and Our Environment, aims to address key national environmental challenges including the transition to a climate neutral economy, sustainable land management, renewable energy and resource efficiency. As per **NPO 70,** the Revised NPF highlights the importance of renewable energy infrastructure to achieve national climate action targets.

> *"Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050."*

Regional Renewable Energy Capacity Allocations have been introduced under the Revised NPF. This was one of the key actions for CAP24 and is supported under CAP25. The Northern and Western Region, in which the Proposed Project is located, is allocated a target of installing an **additional 1,389 MW of onshore wind energy by 2030.**

Under **NPO 74** Regional Assemblies are required to plan for the delivery of the regional renewable electricity capacity allocations outlined in the Revised NPF and identify allocations for each of the local authorities within their RSES. Furthermore, **NPO 75** requires Local Authorities to plan for the delivery of Target Power Capacity (MW) allocations consistent with the relevant RSES, through their City and County Development Plans. At the time of writing, no local Target Power Capacity allocations have been

established, however it is clear from the regional allocation that the Northern and Western Region is set to deliver a significant amount of onshore wind energy in the coming years.

The introduction of renewable energy targets represents a more active and prescriptive approach to land use planning for renewable energy development. The Revised NPF aligns the national target of 9GW of onshore wind energy with the policies and objectives of Local Authorities.

In regard to this, it is clear that the provision of new renewable energy generation through the Proposed Wind Farm is in line with aims and objectives of the Revised NPF, which seeks to transition to a carbon neutral economy.

National Development Plan – 2025 Review

The National Development Plan Review 2025 (NDP) sets out a comprehensive capital investment framework for the period 2026–2035, totalling €275.4 billion. Within this framework, wind energy is recognised as a key enabler of the State's legally binding commitment to reduce GHG gas emissions by 51% by 2030, including a 75% reduction in emissions from the electricity sector, compared to 2018 levels. Proposed Project

The NDP highlights the "*the continued focus and commitment of this Government to climate action and to ensuring Ireland is well positioned to realise the benefits of the transition to a green and sustainable economy*". The NDP emphasises Ireland's climate and renewable energy commitments, "*in addition to the national climate objective and 2030 target, Ireland has similar obligations under the Paris Agreement to limit global warming, and at a European level as part of the European Climate Law to reduce GHG emissions by at least 55% by 2030 compared to 1990 levels, and to achieve climate neutrality by 2050*".

To support the expansion of renewable electricity generation, the Government has allocated €3.5 billion in equity funding to ESB Networks and EirGrid to enhance grid transmission and distribution infrastructure, which will directly facilitate increased integration of wind energy developments such as the Proposed Wind Farm.

Climate Action Plan 2025

The Climate Action Plan 2025 (CAP25) represents the third statutory update to Ireland's climate roadmap under the Climate Act. Building on the foundations laid by previous plans, CAP25 refines and strengthens the strategies necessary to deliver Ireland's legally binding carbon budgets and sectoral emissions ceilings. It sets out a clear trajectory to reduce greenhouse gas emissions by 51% by 2030 and to achieve climate neutrality no later than 2050.

A cornerstone of CAP25 is the decarbonisation of Ireland's electricity system through a substantial increase in renewable energy generation. The plan reaffirms ambitious targets for renewable electricity share which includes 80% by 2030, and 50% by 2025. This is to be achieved through the accelerated deployment of onshore wind (2 GW by 2025; 9 GW by 2030), offshore wind (8 GW by 2030), and solar energy (up to 5 GW by 2025; 8 GW by 2030).

The Proposed Wind Farm accords with the provisions of CAP25. The Proposed Wind Farm will contribute to the achievement of 80% renewable energy and the delivery of 9GW of onshore wind by 2030. The Proposed Wind Farm will reduce Ireland's reliance on imported fossil fuels for electricity generation and contribute to energy security by generating indigenous renewable wind energy.

Programme for Government – Securing's Ireland's Future (January 2025)

The Programme for Government 2025 – Securing Ireland's Future (January 2025) places specific emphasis on climate change, recognising that time is critical in addressing the climate crisis. The

Programme states that the Government is committed to taking *"decisive action to radically reduce our reliance on fossil fuels and to achieve a 51% reduction in emissions from 2018 to 2030, and to achieving net-zero emissions no later than 2050".*

The Programme states that the next ten years are a critical period in addressing the climate crisis, and therefore, a deliberate and swift approach to reducing more than half of Ireland's carbon emissions over the course of the decade (2020-2030) must be implemented. The programme states that the Government are committed to reducing GHG emissions by an average 7% per annum over the next decade in a push to achieve a net zero emissions by the year 2050.

With regard to renewable energy generation, the Programme notes that the Government is committed to the rapid decarbonisation of the energy sector. The Programme states the Government's ongoing support and commitment to take "*the necessary action to deliver at least 70% renewable electricity by 2030"*. This target has been updated by subsequent Climate Action Plans.

The Proposed Wind Farm aligns with the Programme for Government as it will contribute to the achievement of 80% renewable energy and the delivery of 9GW of onshore wind by 2030. Subsequently, the Proposed Wind Farm will support the Government's commitment to reducing reliance on fossil fuels and achieving net-zero by 2050.

Carbon Budgets

The first national carbon budget programme proposed by the CCAC, approved by Government and adopted by both Houses of the Oireachtas in April 2022 comprises three successive 5-year carbon budgets. The total emissions allowed under each budget are shown in **Table 1-1** below.

Table 1-1: Carbon Budgets of the Climate Change Advisory Council

	2021 – 2025 Carbon Budget 1	**2026 – 2030 Carbon Budget 2**	**2031 – 2035 Provisional Carbon Budget 3**
	All Gases		
Carbon Budget ($MtCO_2eq$)	295	200	151
Annual Average Percentage Change in Emissions	-4.8%	-8.3%	-3.5%
The figures are consistent with emissions in 2018 of 68.3 $MtCO_2eq$ reducing to 33.5 $MtCO_2eq$ in 2030, thus allowing compliance with the 51% emissions reduction target by 2030.			

Section 6C of the Climate Act provides that the Minister shall prepare, within the limits of the carbon budget, the Sectoral Emissions Ceilings. These ceilings set out the maximum amount of GHG emissions that are permitted in each sector. The Government approved Sectoral Emissions Ceilings on 28th July 2022. The electricity sector is allocated a sectoral ceiling of 40 $MtCO_2eq$ for the first budget (2021-2025) and a sectoral ceiling of 20 $MtCO_2eq$ for the second budget period (2026-2030). In 2024, electricity sector emissions were reported to be 6.3 $MtCO_2eq$ [2].

The Environmental Protection Agency (EPA) reported in May 2025[3] that the first two carbon budgets (2021-2030) – which aim to support the achievement of the 51% emissions reduction target - would not be met. In regard to the first carbon budget it is projected that it will be exceeded by 12 Mt CO_2eq in the 'With Existing Measures (WEM)' scenario and by 8 Mt CO_2eq in the 'With Additional Measures (WAM)' scenario. Section 6D – paragraph 5 – of the Climate Act states that non-achievement of the first carbon budget would see the excess emissions carried forward into the second budget period and the

[2] *Climate Change Advisory Council Annual Review 2025 (April, 2025) https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR2025-Electricity-FINAL.pdf*
[3] *Ireland's Greenhouse Gas Emissions Projections 2023-2050, EPA, May 2025*

second carbon budget would be reduced by that amount. If this occurs this would make achievement of the second budget substantially more difficult. Taking into account the projected excess from the first carbon budget, it is projected that the second carbon budget will be exceeded by 114 $MtCO_2eq$ in the WEM scenario and 77 $MtCO_2eq$ in the WAM. As a result of this, it is stated that *"far higher emissions cuts will be needed to comply with Budget period 3 and subsequent carbon budgets".*

According to the EPA, Ireland is not on track to meet the targets for the first and second carbon budget periods, as set out by the CCAC. As such, it is imperative that projects such as the Proposed Project are consented as they have the potential to decrease carbon emissions through the provisions of renewable electricity to the national grid, thus decreasing the country's reliance on carbon-emitting fossil fuels.

Ireland's Greenhouse Gas Emissions Projections

In May 2024, the Environmental Protection Agency (EPA) published *Ireland's Greenhouse Gas Emissions Projections 2023–2050*, outlining progress towards national and EU climate targets. The report produced two scenarios: *With Existing Measures* (WEM), based on policies in place up to 2022, and *With Additional Measures* (WAM), which included further planned actions such as those in the Climate Action Plan 2024 (CAP24). Despite the inclusion of these additional measures, Ireland was projected to exceed both carbon budgets for 2021–2030 by a wide margin, miss the 51% emissions reduction target (compared to 2018), and fall short of sectoral emissions ceilings across most sectors. The WAM scenario also indicated that Ireland would not meet its 42% EU ESR emissions reduction target by 2030, even when accounting for flexibilities. Notably, the Energy Industries sector was projected to see significant emissions reductions, driven by the expansion of wind and other renewable electricity generation.

In May 2025, the EPA published an updated report on Ireland's Greenhouse Gas Emission Projections, titled 'Ireland's Greenhouse Gas Emissions Projections 2024—2055', which reaffirmed and further emphasised the previous 2023-2050 trends.

The main findings of the report are the following:

- Ireland is not on track to meet the 51 per cent emissions reduction target (by 2030 compared to 2018) which include many 2024 Climate Action Plan measures. Greenhouse gas emissions are projected to be 9 to 23 per cent lower by 2030 (compared to 2018) which places Ireland further from the 2030 national climate target compared to previous assessments.
- Budget period 1 (2021-2025) of 295 Mt CO2eq is projected to be exceeded by between 8 to 12 Mt CO2eq. Budget period 2 (2026-2030) of 200 Mt CO2eq is also expected to be exceeded by a significant margin of 77 to 114 Mt CO2eq (with carryover from Budget period 1).
- Sectoral emissions ceilings for 2030 are projected to be exceeded by the Buildings, Electricity, Industry and Transport sectors;
- Ireland is not projected to meet its EU target, set under the Effort Sharing Regulation, of a 42 per cent emissions reduction by 2030 (compared to 2005) even with flexibilities applied. This assessment shows that greenhouse gas emissions will be reduced by 10 to 22 per cent by 2030 (compared to 2005) without the use of flexibilities and by 13 to 26 per cent with the use of flexibilities.
- Additional measures and accelerated implementation of existing measures is necessary to meet both National and EU targets. Projected gaps to National and EU 2030 targets reported this year are larger than last year due to more conservative delivery of measures and associated estimates of emission reductions by 2030.
- From 10.6 Mt CO2eq in 2018, emissions from the Energy Industries sector are projected to decrease to between 3.4 and 4.4 Mt CO2eq in 2030 (a 59 to 68 per cent reduction). Renewable energy generation at the end of the decade is projected to range from 60 to 68 per cent of electricity generation.

It is stated in the report that the target of 80% share renewable electricity (RES-E) is not projected to be reached. In addition to this, the CAP24 target of 9GW of onshore wind, is projected to fall short in the WAM scenario, with a predicted 7.1MW delivered.

2. FURTHER INFORMATION REQUEST

This section of the RFI addresses each of the individual FI items in detail. It should be read in conjunction with the relevant supporting information enclosed with and/or appended to this report. The Commission's FI items have been categorised as follows:

- Procedural/Administrative Issues,
- Biodiversity,
- Roads and Traffic,
- Cultural Heritage,
- Landscape and Visual Assessment,
- Wake Effects.

A copy of the FI Request issued by the Commission (Ref. No. 320089-24) has also been enclosed with this RFI as **Appendix 1** ***'An Coimisiún Pleanála Further Information Request'*** in the interests of clarity.

2.1 Procedural/Administrative Issues

2.1.1 Further Information Item No.1

The pre-application consultation undertaken provided for consideration of 11 no. 4.8MW turbines with a tip height of 170 meters. The tip height of the 11 no. turbines subject of this application is stated to be 180 meters.

In this regard you are requested to submit a statement setting out your opinion as to the validity of the application in the context of the development as presented in the pre-application application.

2.1.1.1 Response to FI Item No. 1

For clarity, the current threshold for Strategic Infrastructure Development (SID) as set out in the Seventh Schedule of the 2000 Act, is as follows:

> ***"An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total power output greater than 50MW".***

Under Section 37A(2) of the Act the project must satisfy one or more of the following criteria:

a) The development must be of strategic economic or social importance to the State or the Region in which it would be situate,

b) The development would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework (NPF) or in any Regional Spatial and Economic Strategy (RSES) in force in respect of the area or areas in which it would be situate,

c) The development would have a significant effect on the area of more than one planning authority.

In this regard, the Applicant engaged with the Commission under the provisions Section 37B of the 2000 Act, as to whether the Proposed Wind Farm would meet the thresholds of the Seventh Schedule of the 2000 Act.

The consultation process presented a wind farm development of 11 no. turbines with an installed capacity which would the exceed the generating capacity threshold specified in the Seventh Schedule, and which would also satisfy one or more criteria under Section 37A(2) of the 2000 Act, on grounds that the project is of strategic, economic and social importance to the state, and will contribute to the fulfilment of National and regional policy objectives.

On the 14th October 2020, MKO on behalf of the Applicant, sought to close the consultation process with the Commission. In this letter, it was stated that the Proposed Wind Farm should be considered SID for the following reason:

> *"The Proposed Project will have approximately 11 turbines which are intended to have a generating capacity of circa 4.8MW each (the final turbines to be installed on site will be subject to a competitive tender process). As such the Proposed Project will have a total output (of approximately 52.8MW) which will be in excess of the 50MW threshold set out under the Planning and Development Act 2000 (as amended). The proposal will therefore exceed the generating capacity threshold specified in the 7th schedule."*

The close out letter also set out in detail, the reasons why it is considered that the Proposed Wind Farm satisfies one or more criteria under Section 37A(2) of the 2000 Act.

In conclusion, it was considered that the Proposed Wind Farm exceeded the relevant thresholds set out in the Seventh Schedule and satisfied the criteria set out in section 37A(2) of the 2000 Act and it was therefore contended that the project constituted SID, with determination of this matter ultimately sought from the Commission.

The determining factor considered relevant for the Proposed Wind Farm meeting the relevant threshold set out in the Seventh Schedule of the 2000 Act, was in relation to the power output (in Megawatts (MW)) of the Wind Farm, and at no point was the tip height of the wind farm, which at the time was presented as 170m, considered relevant in relation to this threshold.

The Commission subsequently confirmed on the 9th of November 2020, that it was of the opinion that the Proposed Wind Farm falls within the scope of paragraph 37A(2) and 37A(2)(b) of the 2000 Act. Accordingly, the Commission decided that the Proposed Wind Farm ***"would be strategic infrastructure within the meaning of the Planning and Development Act, 2000, as amended",*** and therefore any application for permission would have to be made directly to the Commission under section 37E of the 2000Act. Notably, neither the Commission's determination letter nor the accompanying Inspector's Report make reference to the turbine tip height as a factor in reaching this decision.

The accompanying Inspector's report states the following:

> ***"Based on the information submitted by the prospective applicant through the consultation process, the Proposed Project would include 11 turbines, each with a power output of 4.8 MW, and hence would provide a total power output of 52.8MW. The Proposed Project would exceed the 50MW threshold of the Seventh Schedule development under Class 1 (Energy Infrastructure). Therefore, the Proposed Project satisfies Section 37A(1) of the Act."***

The Inspector also considered the Proposed Wind Farm against the criteria stipulated Under Section 37A(2) of the Act and found that it:

1) **Would be of strategic economic importance to the state and the Region, and:**
2) **Would meet relevant national policy objectives of the National Planning Framework and would serve to fulfil the relevant regional policy of the RSES for the Northern and Western Regional Assembly.**

The Inspector ultimately considered the Proposed Wind Farm to be SID for the following reasons and considerations:

> *"9.1. Having regard to the size, scale and location of the proposed windfarm and related development, and to the policy context, it is considered that the Proposed Project comprising the development of a 11 turbine windfarm with associated infrastructure and an overall output of 52.8 MW and associated connection to the electricity grid infrastructure on a site in the townlands of Clonbern, Cloonarkan, Lomaunaghroe, Gortagarraun, Kilmurray and Killavoher, County Galway constitutes development that falls within the definition of energy infrastructure*

in the Seventh Schedule of the Planning and Development Act 2000, as amended, thereby satisfying the requirements set out in Section 37A(1) of the Act.

9.2. The Proposed Project is also considered to be of strategic importance by reference to the requirements of Section 37A(2)(a) and 37A(2)(b) of the Planning and Development Act 2000, as amended. An application for permission for the Proposed Project must therefore be made directly to An Bord Pleanála under Section 37E of the Act."

The Commission's assessment was therefore entirely based on the generating capacity of the wind farm and its strategic and economic importance under Section 37A(2).

In Conclusion, the determining factor for SID determination, is the generating capacity of the wind farm in question and its satisfaction of one or more criteria under Section 37A(2) of the 2000 Act. The Proposed Wind Farm clearly exceeds the relevant threshold as set out in the Seventh Schedule of the 2000 Act and also satisfies the relevant criteria under Section 37A(2) of the 2000 Act on grounds of its strategic and economic importance and its contribution to national and regional climate and planning policy objectives.

The Commission's determination along with the accompanying Inspector's report was clearly based on these factors and not in relation to turbine tip height.

Accordingly, the changes in turbine tip height does not affect the validity of the application, as submitted, nor on the SID Determination made by the Commission.

2.1.2 Further Information Item No.2

Point (iii) of the public notices which sets out the nature and extent of the development for which permission is being sought refers to the provision for the undergrounding of a section of 38kV overhead electrical cabling (as proposed under Galway County Council planning ref. 24/60230) including the provision of 2 no. 38kV Line to Cable Interface End Masts up to a height of 16.2 metres and associated cable ducting to facilitate the undergrounding of the proposed 38kV cabling.

The said planning application as detailed in the public notices has been withdrawn.

Revised public notices with the necessary revisions made to provide for the accurate nature and extent of the development for which permission is being sought are required.

The necessary revisions to the plans and details accompanying the application are also required.

2.1.2.1 Response to FI Item No.2

In response to FI Item No.2, it has been agreed with the Commission that revised public notices are not required at this time and will be requested by the Commission after receipt of the RFI. In light of this, no changes have been made to any of the documentation submitted with the application.

However, updated drawings have been prepared to remove reference to the 38kV overhead line and are included with this RFI as **Appendix 2 *'Update to Planning Drawings'***, which are enclosed separately. The following drawings outlined in **Table 2-1** have been updated in relation to this change:

Table 2-1: Schedule of Updated Planning Drawings, as included in Appendix 2 of the RFI

Drawing No.	Drawing Title	Scale	Page Size
180740 – 01 FI	Location Context Map	1: 50,000	A3
180740 – 03 FI	Site Layout Key Plan (1:5,000)	1: 5,000	A3
180740 – 04 FI	Site Layout Sheet 1 of 3	1: 5,000	A1

Drawing No.	Drawing Title	Scale	Page Size
180740 – 05 FI	Site Layout Sheet 2 of 3	1: 5,000	A1
180740 – 07 FI	Site Layout Key Plan (1:2,500)	1: 2,500	A3
180740 – 08 FI	Site Layout Sheet 1 of 8	1: 2,500	A1
180740 – 09 FI	Site Layout Sheet 2 of 8	1: 2,500	A1
180740 – 10 FI	Site Layout Sheet 3 of 8	1: 2,500	A1
180740 – 12 FI	Site Layout Sheet 5 of 8	1: 2,500	A1
180740 – 13 FI	Site Layout Sheet 6 of 8	1: 2,500	A1
180740 – 16 FI	Turbine 1 Layout	1:500	A3
180740 – 17 FI	Turbine 2 Layout	1:500	A3
180740 – 18 FI	Turbine 3 Layout	1:500	A3
180740 – 19 FI	Turbine 4 Layout	1:500	A3
180740 – 20 FI	Turbine 5 Layout	1:500	A3
180740 – 21 FI	Turbine 6 Layout	1:500	A3
180740 – 31 FI	Temporary Construction Compound 1	1:500	A3

2.1.3 Further Information Item No.3

Sections 8.3.1 and 9.3.1 of the EIAR notes that 40% of the site is bog where peat cutting in the form of private turbary plots is widespread, with some peat harvesting to the west and southeast of the site. Reference to peat harvesting throughout the Peat Stability Assessment Report is noted. Turbines and ancillary development are proposed to be located within the area(s) subject of this peat harvesting.

- ***a) You are required to clarify the nature and extent of the peat harvesting area(s) within the site. The extent of the area(s) should be calculated and delineated on an appropriately scaled map(s).***
- ***b) Confirm whether the Proposed Project is to utilise the drainage network installed for the purposes of this peat harvesting.***
- ***c) Confirm whether peat harvesting is to continue during the lifetime of the wind farm and clarify that the proposed drainage plan can be effectively implemented whether or not peat harvesting is taking place.***
- ***d) Confirm that should peat harvesting continue during the lifetime of the wind farm that it has been appropriately included and assessed in the EIAR and AA.***

2.1.3.1 Response to FI Item No. 3

Clarification in relation to this FI Item has been broken down into for points (a – d) below.

a) A drone survey was conducted in October 2025 to verify the extent of peat harvesting areas within the site. Approximately 109.2 hectares (ha) of the Proposed Wind Farm site has been subject to historic or current "peat harvesting" practices. Figure 2-1 delineates the areas within the site that have been or are subject to peat harvesting (Areas A and B). This figure also delineates areas of heavily drained, uncut raised bog, within which drainage channels have been installed to facilitate harvesting. These areas measure 20.6ha in total. The southernmost of these uncut raised bog areas is proposed for enhancement as part of the Proposed Project (as detailed in Section 4.3 of Appendix 6-6 of the EIAR). It should also be noted that peat harvesting activities in Area A are

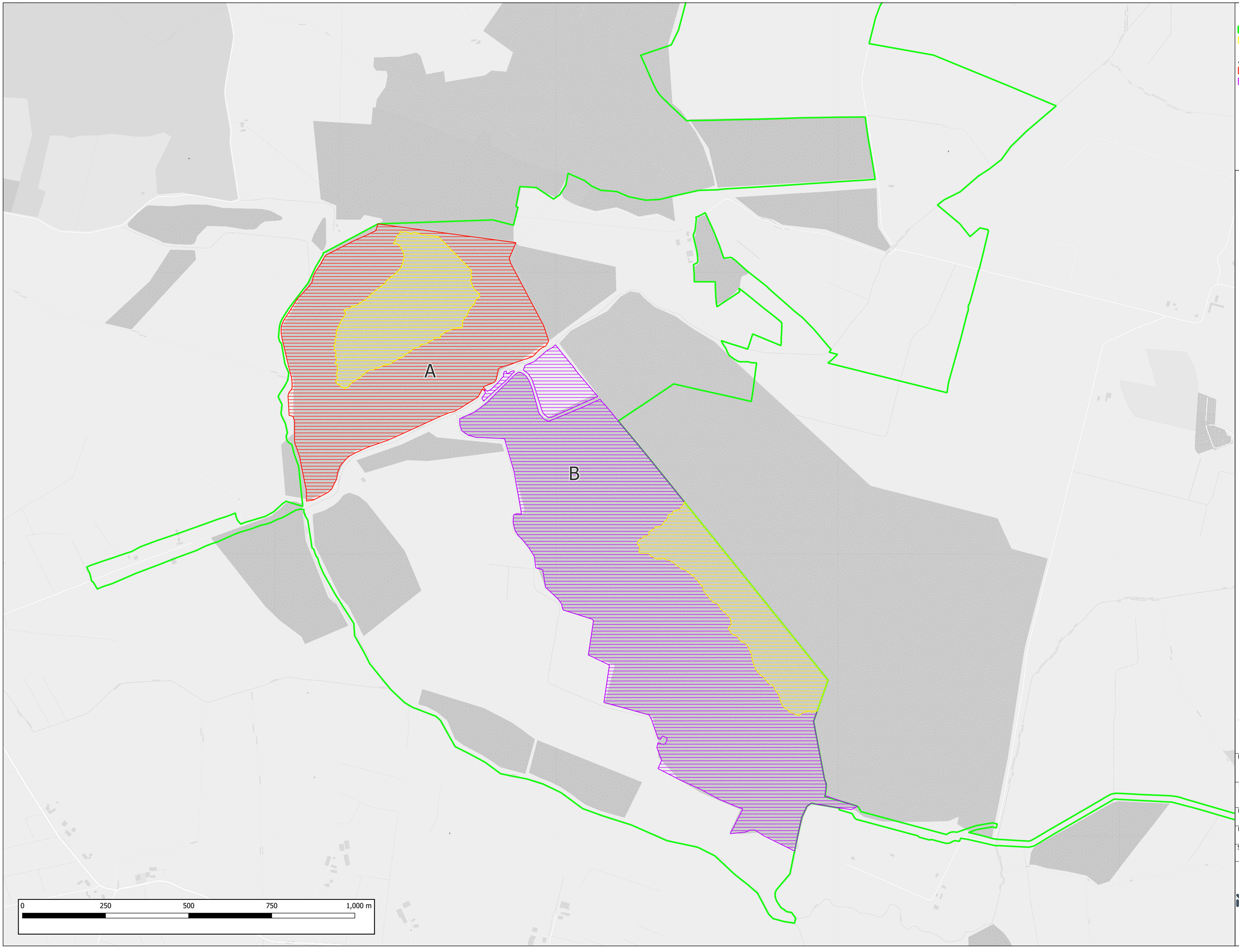
expected to cease at the end of 2025 and peat harvesting activities within Area B ceased approximately 4 years ago.

b) As stated in Chapter 9, Section 9.5.2.3, of the EIAR, an extensive network of forestry, bog, field and roadside drains already exists within the Site, and these will be integrated and enhanced as required and used within the Proposed Project drainage system. Therefore, it can be confirmed that the Proposed Project will utilise some existing drainage channels which have been installed for the purposes of peat cutting/harvesting. The integration and enhancement of existing artificial drainage networks as part of site drainage systems is standard practice as part of wind farm developments.

c) As stated within the response to item (a) above, peat harvesting activities in Area A are expected to cease at the end of 2025 and peat harvesting activities within Area B ceased approximately 4 years ago. On-site peat harvesting activities will, therefore, not occur in conjunction with the construction or operational phases of the Proposed Project. The integration and enhancement of the bog drains into the drainage system for the Proposed Project can be effectively implemented in the absence of peat harvesting activities being undertaken.

d) Peat harvesting will not continue at the Proposed Wind Farm site during the proposed 35-year operational life, as all peat harvesting within the Site is due to cease by the of 2025.

As stated above, all peat harvesting is expected to cease at the end of 2025. It should be noted that any historic peat harvesting that has occurred on the site is not connected to the Applicant, nor the Proposed Project is any way. The planning application does not seek to carry out peat extraction activities and is for an entirely separate development, the construction of a wind farm development.



Map Legend

- EIAR Site Boundary
- Drained, Uncut, Peatland Harvesting areas (20.58ha)

Areas of Harvested Peat (88.6ha)

- Area A
- Area B

Drawing Title

Peat Harvesting Areas

Project Title	
Proposed Clonberne Wind Farm Development, Co. Galway	
Drawn By: MC	Checked By: EMc
Project No.: 240730-c	Drawing No.: Figure 2-1
Scale: 1:5,000	Date: 03.12.2025

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email:info@mkoireland.ie
Website:
ww.mkoireland.ie

2.1.4 Further Information Item No.4

Confirm that all existing and permitted dwellings and other sensitive receptors within 1.62km of the proposed turbines for the shadow flicker assessment and 2km of proposed turbines for the noise assessment are accounted for and delineated on the relevant plans and drawings that accompany the application.

Should additional properties be identified for inclusion, details of their location and numbering to be provided.

2.1.4.1 Response to FI Item No. 4

As the part of the preparation of the response to this FI item, a full review of all sensitive receptors within the shadow flicker and noise study areas was undertaken. An updated search of Galway County Council planning portal, and nationwide Eircode database was undertaken in August 2025. This search encompassed all existing, proposed and permitted dwellings and other sensitive receptors within 1.62km of the proposed turbines for shadow flicker assessment and 2km of proposed turbines for the noise assessment.

1 no. additional sensitive receptor (a proposed dwelling for which a planning application was submitted in March 2024) was identified within 1.62km of the proposed turbines. This additional sensitive receptor has been assigned the ID House No. 248 (H248). The updated search also identified a mapping discrepancy for House No. 161 (H161), which brings it within the 1.62km buffer for shadow flicker. Therefore, shadow flicker modelling has been conducted for these two sensitive receptor locations.

Updated noise prediction modelling was also undertaken for the revised coordinates for H161 and the additional sensitive receptor (H248).

Shadow Flicker Modelling

For House No.'s 161 and 248, WindPRO computer software was used to model the predicted daily and annual shadow flicker levels in significant detail, identifying the predicted daily start and end times, maximum daily duration and the individual turbines predicted to give rise to shadow flicker. The methodology applied is outlined in Chapter 5, Section 5.2 of the EIAR.

The predicted shadow flicker levels have been modelled for both identified sensitive receptors located. As detailed in **Table 2-2**, the predicted shadow flicker model results indicate:

- H161 is theoretically predicted to experience zero shadow flicker;
- H248 is theoretically predicted to experience some shadow flicker, but is not in exceedance of the DoEHLG 2006 Guidelines thresholds for daily shadow flicker or annual shadow flicker.

Therefore, no further mitigation measures are required.

Table 2-2: Maximum Potential Daily and Annual Shadow Flicker at the Proposed Wind Farm for House ID 161 and 248.

House ID	ITM Coordinates (Easting)	ITM Coordinates (Northing)	Description	Distance to Nearest Turbine (metres)	Nearest Proposed Turbine No.	Max. Daily Shadow Flicker: Pre-Mitigation (hrs:min:sec)	Max. Annual Shadow Flicker: Pre-Mitigation (hrs:min:sec)	Max. Annual Shadow Flicker Adjusted for Average Regional Sunshine (hrs:min:sec)	Proposed Turbine(s) Giving Rise to Daily Shadow Flicker Exceedance	Mitigation Strategy Required (Daily)	Mitigation Strategy Required (Annual)
161	555844	758942	Dwelling	1616	T01	00:00:00	0:00:00	0:00:00	N/A	No	No
248	552757	755713	Dwelling	1310	T07	00:29:00	19:52:00	4:51:23	T08, T09	No	No

Noise Modelling

In order to assess the two identified sensitive receptors in relation to noise and vibration, the construction and operational noise predictions have been undertaken in line with the methodologies set out in the Chapter 12 of the EIAR.

Predicted construction noise levels compared with the Category A thresholds outlined in Section E.3 of BS 5228: Part 1 2009+A1:2014 indicate that construction noise for the Proposed Project are below the guidelines considered acceptable at all receptors (including H248 and the revised location for H161) for all phases of the Proposed Project. Therefore, no significant effects due to construction noise are anticipated.

Predicted operational noise levels indicate that at H248 and the revised location for H161, wind turbine noise from the proposed wind turbines are below the Total DoEHLG 2006 Noise Limits. Therefore, no significant effects due to operational noise are anticipated.

Both a summary of the results, and detailed noise level predictions for H161 and H248 are presented in **Appendix 3 *'TNEI Response'*** .

MKO confirm that other than the discrepancy associated with H161 and the omission of H248 from the list of sensitive receptors in the EIAR, all other existing and permitted sensitive receptors have been accounted for in the shadow flicker and noise assessments and delineated in Figure 5-3 and Figure 12-1 of the EIAR respectively.

2.1.5 Further Information Item No.5

Table 0-1 of the Non-Technical Summary which provides details of the proposed wind turbine locations, their grid reference coordinates and proposed top of foundation levels is incorrect and does not refer to the development subject of the application. The table should be rectified and the document amended accordingly.

2.1.5.1 Response to FI Item No. 5

It is acknowledged that the details included in Table 0-1 of the Non-Technical Summary are incorrect. The correct information, as assessed in the EIAR and NIS is provided in Table 4-1 of Chapter 4 Description. The correct table is detailed below (**Table 2-3**), and the Non-Technical Summary has been updated to reflect this. An update to the Non-Technical Summary submitted with planning application subject of this RFI (ABP-320087-24) can be found at **Appendix 4 *'Updated Non-Technical Summary'*** of this RFI.

Table 2-3: Revised Information replacing that provided in the Table 0-1 of the Non-Technical Summary

Turbine	ITM Coordinates		Top of Foundation Elevation (m OD)
	Easting	Northing	
T1	554967	757585	78m
T2	555669	757319	70.5m
T3	554635	757213	73.5m

Turbine	ITM Coordinates		Top of Foundation Elevation (m OD)
	Easting	Northing	
T4	555160	757117	72.5m
T5	555569	756775	70.5m
T6	554481	756822	66m
T7	553833	756697	67m
T8	553990	756165	67m
T9	554333	755812	70.5m
T10	554971	755827	69.5m
T11	554831	756309	73m

2.1.6 Further Information Item No.6

Submit a detailed response to the submissions received from observers, prescribed bodies and the local authority to the application.

2.1.6.1 Response to FI Item No. 6

Section 3 of this RFI responds to all Third Pary and Statutory Consultee submissions related to the Proposed Wind Farm and seeks to resolve any concerns raised while emphasising the thorough and robust nature of the EIAR, NIS, and supporting documentation.

It first provides a structured response to Statutory Consultees followed by an analysis of submissions received from Third-Party observers, which have been grouped by theme.

2.2 Biodiversity

2.2.1 Further Information Item No.1

Section 7.2.4.2.6 (waterbird distribution and abundance surveys) of Chapter 7 (Ornithology) of the EIAR states that "significant wetland sites" were surveyed for waterbird populations. Please provide a scaled map showing the locations of the "significant wetland sites" (labelled). Please provide a table showing the distance of each of the "significant wetland sites" to the EIAR site boundary and to the turbine locations.

2.2.1.1 Response to FI Item No. 1

An updated figure (Figure 7.7a) is provided in **Appendix 5** ***'Ornithology Tables & Figures'*** of this RFI response, this figure includes all wetlands and waterbodies surveyed during the waterbird distribution and abundance surveys. **Table 2-4** below also lists these locations and the distance from the Proposed Wind Farm site and the nearest proposed turbine.

Table 2-4: Wetlands and waterbodies surveyed during the waterbird distribution and abundance surveys

Location	Distance to Wind Farm site (m)	Distance to Nearest Proposed Turbine (m)
Addergoole More	3,339	4,741
Annaghbeg	7,061	7,663
Annaghmore West/Templemoyle	6,883	7,558
Ballinlass	1,562	3,164
Ballyedmond	1,759	1,970
Ballymoney Bridge	7,330	8,429
Baunoges Dunmore	5,115	6,712
Boleylaan	2,081	3,379
Brackloon	862	1,588
Cappadavock	2,334	2,816
Carrowkeel	1,446	2,753
Carrownagur Lough	3,337	4,006
Cashel	6,452	7,446
Castletown	5,733	6,093
Claddagh West	556	1,084
Cloonarkan	0	131
Clooncun	5	83
Cullbeg	3,754	4,784
Doo Lough	3,333	3,659
Dunblaney	769	1,233
Glenamaddy Turlough	7,060	7,479
Gorteen	1,560	3,058
Gorteenlahard Turlough	7,225	8,047
Grange	7,208	7,846
Horseleap Lough	8,180	8,983
Kilgarriff North	1,521	1,773
Kilmurray Turlough	580	850
Kiltullagh Lough	4,628	5,047
Laughil	285	585
Lehurick	4,968	5,382
Levally Lough	2,019	2,266
Lomaunaghroe	3	856
Lough Nahask	5,956	6,593
Moneen Lake	2,555	3,217
Mountsilk	6,876	7,659
Park West	3,318	3,732
Pollagarraun	7,552	7,953

Location	Distance to Wind Farm site (m)	Distance to Nearest Proposed Turbine (m)
Ryehill	2,457	3,307
Shannagh Beg	6,035	6,453
Shantallow	2,753	3,083
Shanvally	1,054	2,361
Summerville Lough	6,883	7,628
Tullaghaun	5,811	6,169

2.2.2 Further Information Item No.2

Please provide a scaled map showing the locations of turloughs/loughs (labelled) in the surrounding area of the Proposed Project (to at least 8km radius of EIAR boundary). Please provide a table showing the distance of each of the turloughs/loughs to the EIAR site boundary and to the turbine locations.

2.2.2.1 Response to FI Item No. 2

Figure 7.10 shows waterbodies within 8km of the proposed turbines that were surveyed and is provided in **Appendix 5** ***'Ornithology Tables & Figures'*** of this response. **Table 2-5** below lists these waterbodies and the distance from the Wind Farm Site and the nearest proposed turbine.

Table 2-5: Waterbodies within 8km of the proposed turbines

Location	Distance to Wind Farm Site (m)	Distance to Nearest Proposed Turbine (m)
Annaghbeg	7,061	7,663
Baunoges Dunmore	5,115	6,712
Boleylaan	2,081	3,379
Carrowkeel	1,446	2,753
Carrownagur Lough	3,337	4,006
Cashel	6,452	7,446
Doo Lough	3,333	3,659
Glenamaddy Turlough	7,060	7,479
Gorteenlahard Turlough	7,225	8,047
Horseleap Lough	8,180	8,983
Kilgarriff North	1,521	1,773
Kilmurray Turlough	580	850
Kiltullagh Lough	4,628	5,047
Levally Lough	2,019	2,266
Lomaunaghroe	3	856
Lough Nahask	5,956	6,593
Moneen Lake	2,555	3,217
Mountsilk	6,876	7,659
Park West	3,318	3,732
Pollagarraun	7,552	7,953
Summerville Lough	6,883	7,628

2.2.3 Further Information Item No.3

Kilmurray turlough is identified as a "significant wetland site" in Chapter 7 (Ornithology) of the EIAR. An assessment of the likely effects on Kilmurray turlough in terms of hydrology/hydrogeology does

not appear to have been included in Chapter 9 (Hydrology and Hydrogeology) of the EIAR. Please provide an assessment of the likely effects from the Proposed Project on Kilmurray turlough and potential indirect effects on the bird species that it supports. You are requested to also clarify that all other turloughs/loughs/significant wetland sites in the surrounding area have been considered in the assessment (including indirect effects on birds).

2.2.3.1 Response to FI Item No. 3

This FI Item is addressed separately by Hydro Environmental Services (HES) in **Appendix 6** ***'Hydro-Environmental Services Response'*** of this RFI.

In summary, Kilmurrary was assessed in the Hydrology and Hydrogeology Chapter (Chapter 9) of the EIAR, however it was referred to as 'Gortagarraun Turlough'. Kilmurray turlough (Gortagarraun Turlough) was one of the several groundwater monitoring locations used in the EIAR hydrogeological assessment for the determination of groundwater flow directions and groundwater contour mapping. From a hydrological/ hydrogeological perspective there is no potential for the Proposed Wind Farm to impact on Kilmurray Turlough, given its positioning up-gradient of the Proposed Wind Farm and lack of hydrological connectivity. There is therefore no potential for any indirect effects on bird species which utilise Kilmurray Turlough as a result of any changes to the hydrological regime within the wind farm site.

MKO confirm that all wetland sites/turloughs/loughs that had potential to be impacted by the Proposed Project have been assessed in regard to hydrology and hydrogeology. Given no significant effects on groundwater and surface water are predicted as a result of the Proposed Project, there will be no significant indirect effects on any avian species which utilise wetland bodies in the surrounding area. Furthermore, it must be stated that the design and impact assessment of the Proposed Project was a collaborative process, within which the project teams considered the impact assessment and findings of all relevant chapters. Sites assessed from a solely ornithological perspective have been outlined in **Tables 2-4** and **Table 2-5** above.

2.2.4 Further Information Item No.4

Please provide details of the ornithology surveys which were undertaken at the proposed borrow pit location, including survey types, dates of surveys and results.

2.2.4.1 Response to FI Item No.

The borrow pit was surveyed during the multidisciplinary walkover survey on the 23/11/2023. There were no observations of Key Ornithological Receptors (as listed in Chapter 7, Section 7.5.2 of the EIAR) identified during this survey. Furthermore, the turlough at Lomaunaghroe, which is adjacent to the borrow pit, was surveyed during the waterbird distribution surveys from October 2017 to March 2020 and from October 2022 to September 2023. The results of these surveys are presented in Appendix 7-4 of the EIAR as lodged for each species observed.

2.2.5 Further Information Item No.5

Section 7.10.1 of Chapter 7 notes that assessment material for the ornithology cumulative assessment was compiled and verified on 23/11/2023. The cumulative effects assessment (ornithology) should be updated to include any more recent developments, including but not limited to those where the status has since changed from pre-application stage to submitted for consent and/or permitted. Aside from wind energy developments, the cumulative effects assessment (ornithology) should also include other plans or projects in , the area which could result in significant habitat loss, increased mortality or displacement/disturbance, including but not limited to overhead line developments.

2.2.5.1 Response to FI Item No. 5

The plans and projects included in the ornithological cumulative assessment have been reviewed and were updated as part of this RFI . Only three changes were identified for wind energy developments within 25km of the site, these are:

1. Park Athenry single turbine (Pl Ref. 23/74) – status change from 'permitted' to 'existing'.
2. Cooloo Wind Farm (ACP Ref. ABP.316466) – turbine coordinates now available.
3. Shancloon Wind Farm (ACP 317307, 321507) – turbine dimensions now available.

No new wind farm applications have been submitted in the area and no wind farm developments that were at the pre-planning stage at the time of lodgement have been submitted.

A review of other plans and projects outside of wind energy developments has been undertaken.

Other plans and projects have been included as part of the cumulative assessment, which is detailed at Section 7.10.1 of the EIAR. An updated list of planning application considered as part of the cumulative assessment is presented in **Appendix 7** ***'Update to List of Projects Considered in the EIA Cumulative Assessment'*** of this RFI. **Table 2-6** below presents a list of planning applications which have been submitted since the EIAR was prepared, with potential to have significant cumulative impacts in-combination with the Proposed Wind Farm.

Table 2-6: New planning applications for large-scale developments

Pl. Ref. No.	Description	Approximate distance to nearest turbine
GCC 2461190	Amendment application for solar farm and grid connection.	12km
GCC 2560096	Permission for an electrical transformer compound	13km
GCC 2560236	Amendments to previously granted substation	9km
GCC 2560911	Construction of 39 no. residential units	15km
MCC 2460737	Permission to construct an Air Ambulance station	23km
MCC 2560272	Permission for a renewable energy project	17km
ACP 321022	Development of quarry	1km
ACP 322025	Construction of housing development with 23 no. dwellings	15km

No applications have been submitted that would materially alter the findings of the cumulative assessment undertaken as part of the EIAR and no significant cumulative effects are predicted for any of the Key Ornithological Receptors.

2.2.6 Further Information Item No.6

You are requested to clarify if wake effects will arise from the Proposed Project on birds. Consideration to these issues should be given.

2.2.6.1 Response to FI Item No. 6

There is little research to suggest that wake effect has a significant direct impact on bird species. Research on this topic is limited, with many papers referred to being up to 15 years old, and no subsequent research has been completed to expand on the points raised in these papers to establish the extend to which this impact may affect birds. However, the likely effects on ornithological receptors caused by the wake effect would be collision risk (colliding with turbines due to the turbulence caused) or barrier effect (birds avoiding the wake of a turbine due to the turbulence). Both of these effects are assessed within the EIAR as lodged, please see Section 7.6.2 of the EIAR. Collision risk effects no greater than low effect significance (Percival, 2003) were anticipated, which is not significant. For barrier effect, effects no greater than low effect significance (Percival, 2003) were anticipated, which is not significant.

2.2.7 Further Information Item No.7

Please update the following figures/tables related to Chapter 7 (Ornithology) of the EIAR:

- ***Figure 7.3 (Breeding walkover transects) — transect locations need to be specifically labelled (e.g. 1,2,3, T1, T2 etc) to match information in Appendix 7-2.***
- ***Figure 7.4 (Breeding Raptor Survey Areas) — label 2018/2019 areas to match information in Appendix 7-2.***
- ***Figure 7.5 (Winter walkover transects) - transect locations need to be specifically labelled to match information in Appendix 7-2.***
- ***Figure 7.6 (HH Roost Survey Areas) — add HHVP3 and HHVP4 to match information in Appendix 7-2.***
- ***Figure 7.8 (Connectivity VP Survey Location) — add Kilmurray turlough location.***
- ***Table 8 Appendix 7.2 (Breeding Red Grouse survey effort) — add transect locations to the table for the two 2023 surveys.***
- ***Please provide figures to accompany the waterbird distribution surveys and incidental observations that are presented in Appendix 7.4.***

2.2.7.1 Response to FI Item No.7

In response to FI Item No. 7, the requested figures and have been updated and are provided as Figures 7.3a to 7.8a at **Appendix 5** ***'Ornithology Tables & Figures'*** of this RFI**.** Table 8, Appendix 7-2, has also been updated and is provided in Table 1 of this Appendix.

During waterbird distribution and abundance surveys, the spatial distribution of observations were recorded within the location column of the survey data tables (see Appendix 7-4 for each waterbird species). Please refer to Figure 7.7a of **Appendix 5** ***'Ornithology Tables & Figures'*** of this response for the locations referred to in the table. Higher resolution spatial data (i.e. exact locations within each surveyed site) was not recorded, to reflect that waterbird species were using these wetlands/waterbodies as a whole and not in one stationary location. An updated Figure 7.4 is not provided, as the requested labels are not available, however, as the figure shows there was comprehensive coverage of the survey area during surveys.

2.2.8 Further Information Item No.8

Table 6-3 of the EIAR indicates that a pathway for likely significant effects on the Kiltullagh Lough pNHA has been identified and is therefore determined to be within the Proposed Project's Likely Zone of Impact. However, this site has been omitted from further assessment in the remainder of Chapter 6. If a pathway is confirmed, the Chapter should be updated to identify Kiltullagh Lough pNHA as a Key Ecological Receptor (KER).

2.2.8.1 Response to FI Item No. 8

In relation to Kiltullagh Lough pNHA, Table 6-3 of the submitted EIAR states the following:

> *"There is no potential for direct effects on this pNHA as the project footprint is located entirely outside the designated site.*
>
> *This pNHA is designated for lake habitats and waterfowl populations. There is no identifiable surface water connectivity between the Proposed Project and this pNHA. This pNHA is underlain by the same groundwater body, the Clare-Corrib, as the Site. As outlined in Chapter 9 'Hydrology' of this EIAR, groundwater drains from the site in a southerly/south-westerly direction. Given the northeasterly location of this pNHA relative to the Site, there is no potential for indirect effects on this pNHA as a result of groundwater deterioration arising from the Proposed Project."*

This screening determination correctly asserts that there is no potential for either likely significant direct or indirect effects on Kiltullagh Lough pNHA. However, the concluding sentence incorrectly states that:

> *"A pathway for likely significant effect on this pNHA was identified. This site is within the Likely Zone of Impact and is considered further in this assessment."*

This conclusion contradicts the aforementioned screening determination and was included in error. The conclusion of the screening determination should instead read:

> *"This pNHA is outside the Likely Zone of Impact and no further assessment is required."*

2.2.9 Further Information Item No.9

As per Table 6-20 (Key Ecological Receptors identified during the assessment) of the EIAR, it is indicated that the site surveys did not identify any other protected faunal species (i.e. 'Additional protected fauna') with the potential to be significantly affected by the Proposed Project at the population level. For this reason, no additional species have been included as KERs. It is noted that Pine Marten (Mattes mattes), Irish Hare (Lepus timidus) and the Common frog (Rana temporaria) were recorded on the site. Observations on the application received by the Board detail other species such as the Irish Stoat (Mustela erminea subsp. Hibernica), Common lizard (Zootoca vivipara), and smooth newt (Lissotriton vulgaris) as being documented on the site. You are requested to set out its rationale for the exclusion of the forementioned species as KERs. Should the EIAR be revised to include any of the relevant species as KERs, suitable mitigation measures should be outlined.

2.2.9.1 Response to FI Item No.9

Table 6-20 of the EIAR considers whether there are any potential pathways for significant effects on ecological receptors as a result of the Proposed Project. Any ecological receptors that are determined to be of National or International, County or Local Importance (Higher Value) following the criteria set out in NRA (2009) are considered to be Key Ecological Receptors (KERs) for the purposes of ecological impact assessment if a pathway for effects thereon is identified. The EIAR identified the following faunal species as Key Ecological Receptors (KERs) in the context of the Proposed Project and carried out a full impact assessment and applied mitigation to avoid identified potential impacts where required: otter (Section 6.7.2.2.1 of the submitted EIAR), marsh fritillary (Section 6.7.2.2.2), badger (Section 6.7.2.2.3) and bats (Section 6.7.2.2.4).

While pine marten, common frog and Irish hare were recorded within the site during the surveys undertaken by MKO and observations on the application have claimed that Irish stoat, smooth newt and common lizard are also known to use the site, no pathways for significant effects on these species were identified in the EIAR and these species were not identified as KERs. The above species were not

recorded breeding within or adjacent to the footprint of the Proposed Project. Pine marten was observed on a trail camera deployed at a ground-level burrow within an area of conifer plantation within the site, however, the species was not recorded entering or exiting the burrow and the trail camera footage showed that the burrow was in use by mice. Furthermore, the burrow lies outside of and approximately 62m from the infrastructure footprint.

In relation to the above mentioned species, while there are areas of suitable habitat for these species within the overall site, including woodland, scrub, grassland, bog and aquatic habitats, the infrastructure footprint of the Proposed Project is relatively small in the context of the site and the wider landscape and will be predominantly restricted to species-poor cutover bog, conifer plantation and agricultural grasslands as well as very small areas of woodland and semi-natural grassland loss. The areas of these habitats to be lost are very small in comparison to their overall cover within the site. Additionally, in relation to common frog and smooth newt, there are no proposed changes to river morphology and no in-stream works are required for the Proposed Project.

Based on the results of the ecological surveys undertaken, which did not identify populations of these species of greater than local importance utilising the site, and the presence of other suitable habitat for these species within the Site, no potential pathway for significant impacts on populations of these species at any geographical scale are anticipated.

In addition to the above, given the proposed Biodiversity Management and Enhancement Plan (BMEP), included as Appendix 6-6 of the EIAR, sets out the replanting of 2.89ha of native woodland, 1,875m of native hedgerows and treelines, as well as the enhancement of 11.6ha of raised bog and 6.17ha of Molinia meadow, the enhancement scheme will provide increased, linked-up areas of foraging for fauna. It should be noted that both Mustelid species outlined in the FI response Item will benefit from the establishment of native woodland and hedgerows/treelines within the Site, given that both pine marten and the Irish stoat are particularly well adapted to woodland habitats. Furthermore, the enhancement of wetter habitats (raised bogs and Molinia meadows) will provide shelter as well as breeding and foraging habitat for both amphibian species outlined above. The common lizard, as well as the Irish hare similarly utilise peatland habitats, wet pastures and tall, tussocky vegetation for shelter, all of which will be enhanced as part of the Proposed Project. While not considered as KERs in the EIAR, no significant effects are anticipated on any of these species and there is the potential for all species to benefit from the enhancement measures outlined in the BMEP..

2.2.10 Further Information Item No.10

Clarify the extent of habitat loss required from the provision of the 3 no. passing bays on the L-22321.

2.2.10.1 Response to FI Item No.10

In response to FI Item no.10, an additional site visit was carried out on the 1st of August 2025 by MKO ecologists Katy Beckett (B.A., M.Sc.) and Ryan Connors (B.Sc., M.Sc.) in order to map in detail the habitats present within the footprint of the 3 no. passing bays on the L-22321. The multi-disciplinary ecological walkover survey of the 3 no. passing bays was undertaken in accordance with NRA Guidelines on 'Ecological Surveying Techniques for Protected Flora and Fauna on National Road Schemes' (NRA, 2009[1]). Habitats were classified in accordance with the Heritage Council's 'Guide to Habitats in Ireland' (Fossitt, 2000[2]). Habitat mapping was undertaken with regard to guidance set out in 'Best Practice Guidance for Habitat Survey and Mapping' (Smith *et al*., 2011[3]). Plant nomenclature for vascular plants follows 'New Flora of the British Isles' (Stace, 2019[4]).

The easternmost passing bay is located within a road verge classified as **Dry meadows and grassy verges (GS2) (Plate 2-1)** largely comprising false oat grass (*Argenteum elatius*) and cleavers (*Galium aparine*), as well as dandelion (*Taraxacum* agg.), meadowsweet (*Filipendula ulmaria*), nettles (*Urtica dioica*), field horsetail (*Equisetum arvense*), angelica (*Angelica sylvestris*), cock's-foot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), smooth sowthistle (*Sonchus oleraceus*), great willowherb (*Epilobium hirsutum*) and

common knapweed (*Centaurea nigra*). To the north of this is an agricultural field classified as **Wet grassland (GS4)**, dominated by tussocks of soft rush (*Juncus effusus*), occasional meadowsweet and grazed Yorkshire fog, white clover (*Trifolium repens*), perennial rye grass (*Lolium perenne*) and dandelions. The construction of this passing bay will result in the loss of 0.0020 ha of grassy verges and 0.0021 ha of agricultural wet grassland.

Plate 2-1: The easternmost passing bay, comprising of Dry meadows and grassy verges (GS2) along the roadside, and Wet grassland (GS4) to the north

The central passing bay is located at the entrance to a farmyard and consists of **Recolonising bare ground (ED3)** which grades into **Dry meadows and grassy verges (GS2)** at the margins (**Plate 2-2**). Species recolonising the bare ground included annual meadow grass (*Poa annua*), greater plantain (*Plantago major*), lesser trefoil (*Trifolium dubium*), white clover, common daisy (*Bellis perennis*) and perennial rye grass. The adjacent grassy verge was comprised largely of Yorkshire fog, white clover, creeping buttercup (*Ranunculus repens*) and nettles, as well as small amounts of common ragwort (*Jacobaea vulgaris*), burdock (*Arctium* sp.), wild carrot (*Daucus carota*), cock's-foot and dandelion. The construction of this passing bay will result in the loss of 0.0014 ha of grassy verges and 0.0027 ha of recolonising bare ground.

Plate 2-2: The central passing bay, comprising of Dry meadows and grassy verges (GS2) and Recolonising bare ground (ED3) at the entrance to a farmyard.

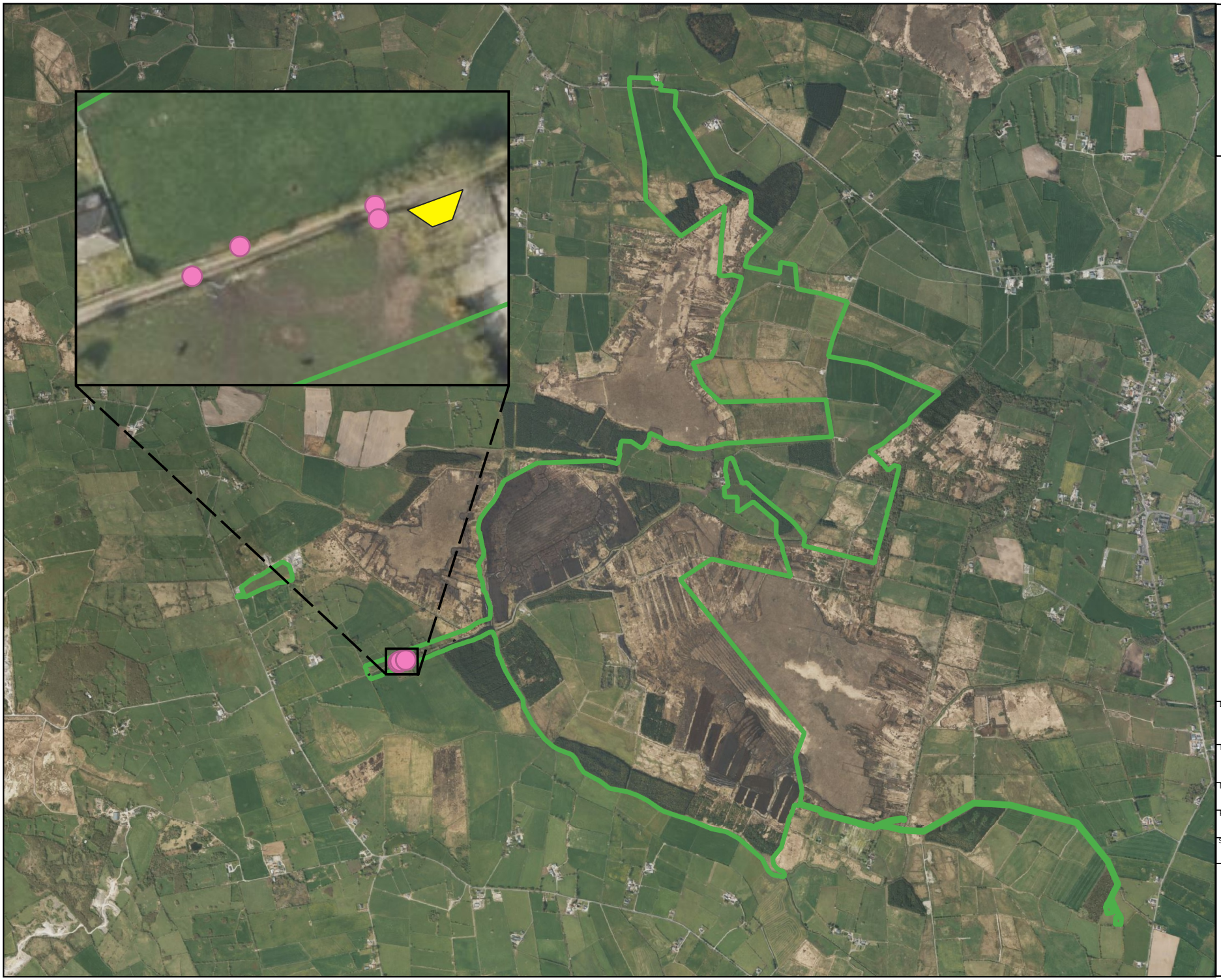
The westernmost passing bay is located at the entrance to an agricultural field (**Plate 2-3**). It consists of an area of **Recolonising bare ground (ED3)** at the field entrance, and extends into the adjacent **Improved agricultural grassland (GA1)**. The agricultural field comprised largely of Yorkshire fog, perennial rye grass and white clover. Similar species were also recorded recolonising the field entrance, including Yorkshire fog, common daisy, greater plantain, dandelion, perennial rye grass and annual meadow grass. Separating these two habitats is a short wall comprising concrete blocks, which is categorised as **Buildings and artificial surfaces (BL3)**. This wall was overgrown with scrubby species including brambles (*Rubus fruticosus* agg.), nettles and cleavers. The construction of this passing bay will result in the loss of 0.0019 ha of recolonising bare ground and 0.0022 ha of improved agricultural grassland, as well as approximately 5.5m of concrete block wall.

Plate 2-3: The westernmost passing bay, comprising of Recolonising bare ground (ED3), a short concrete block wall and Improved agricultural grassland (GA1) at the entrance to the field

The total habitat loss resulting from the 3 no. passing bays along the L-22321 will be 0.0046 ha of Recolonising bare ground (ED3), 0.0034 ha of Dry meadows and grassy verges (GS2), 0.0021 ha of agricultural Wet grassland (GS4) and 0.0022 ha of Improved agricultural grassland (GA1). Approximately 5.5m of a concrete block wall categorised as Buildings and artificial surfaces (BL3) will also be lost. These habitats at these locations are all common within the local agricultural landscape and are considered to be of no more than local importance.

In addition to the above habitats at the passing bay locations, during the additional multidisciplinary ecological walkover survey greater knapweed (*Centaurea scabiosa*) was recorded at four locations along the L-22321, outside of and >6m from the footprint of the proposed passing bays. This roadway is also proposed to be used by HGVs travelling from the proposed borrow pit. Greater knapweed is listed as Near Threatened (NT) on Ireland's Red List No. 10: Vascular Plants (Wyse Jackson *et al*., 2016[5]). At all four locations this species was recorded growing from the limestone walls that border the road and was flowering at the time of survey (**Plate 2-4**). A map of the recorded locations is also shown in Figure 2-2 below. As the species was recorded outside of and >6m from the footprint of the proposed passing bays, there is no potential for loss or disturbance of this species . The average road width along this access road is c.3.2m, therefore this road will accommodate HGVs travelling to and from the proposed borrow pit without any need for road widening works or verge cutting. There will therefore be no damage incurred to greater knapweed plants and no loss of potential suitable habitat for the species along this route.

Plate 2-4: Greater knapweed (Centaurea scabiosa) shown growing from a limestone wall along the northern boundary of the L-22321.



Map Legend

- EIAR Site Boundary
- Greater knapweed
- Proposed Passing Bays

Drawing Title

Locations of Greater Knapweed

Project Title

Proposed Clonberne Wind Farm, Co. Galway

Drawn By	Checked By
KB	SM
Project No.	**Drawing No.**
180740	Figure 2-3
Scale	**Date**
1:25,000	20.10.2025

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email:info@mkoireland.ie
Website: ww.mkoireland.ie

2.2.11 Further Information Item No.11

Stands of mature trees line either side of the eastern extent of the L-22321. The road is to be used by HGVs accessing the site from the proposed borrow pit. You are requested to provide its rationale for the exclusion of this section of the L-22321 from the surveys which have informed both the Bat Survey Report (Appendix 6-2) and Chapter 6 of the EIAR. You are invited to undertake surveys at this location if lacunae is identified and to submit the results. If necessary, the Bat Survey Report and EIAR should be amended accordingly.

2.2.11.1 Response to FI Item No. 11

This section of the L-22321 was excluded from the initial Bat Survey Report (Appendix 6-2) and EIAR following a desk-based assessment and preliminary site walkover, which indicated limited suitability for roosting bats due to the absence of significant Potential Roost Features (PRFs) and the predominance of younger or structurally simple trees, which reduces suitability for bat roosts. In addition, the proposed works along this section were anticipated to be minor, involving only limited trimming of overhanging branches rather than tree removal. Based on this preliminary assessment, survey effort was focused on areas with higher roost potential and within the Proposed Project footprint.

However, to address the request, a detailed ground-level tree assessment was carried out on 1st September 2025 along the eastern extent of the L-22321. The section comprises semi-mature/mature ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), and hawthorn (*Crataegus monogyna*) lining both sides of the road, with some upper limbs extending over the carriageway.

Of all trees assessed along this route, only one ash tree contained a PRF (butt rot at the base of the trunk; see Plates 2-5 & 2-6). No evidence of bat roosts was identified in this tree or any others during the inspection. All remaining trees were assessed as having no suitability (*None*) for roosting bats. Minor trimming of overhanging branches will be required to facilitate HGV access to the proposed borrow pit; overhanging limbs were inspected during the survey and no PRFs were identified. A representative selection of the assessed trees is shown in **Plate 2-5** to **Plate 2-10**.

The ash tree with the PRF, along with all other trees, will be retained as part of the proposed works. Given the absence of confirmed roosts, roosting features and the limited trimming proposed, no significant effects on bats are anticipated.

The findings confirm that the Bat Survey Report and EIAR remain valid. No amendments are required to the main conclusions.

Plate 2-5: East aspect of ash tree with butt rot assessed as PRF-I. No evidence of roosting bats identified

Plate 2-6 :West aspect of the same PRF-I ash tree

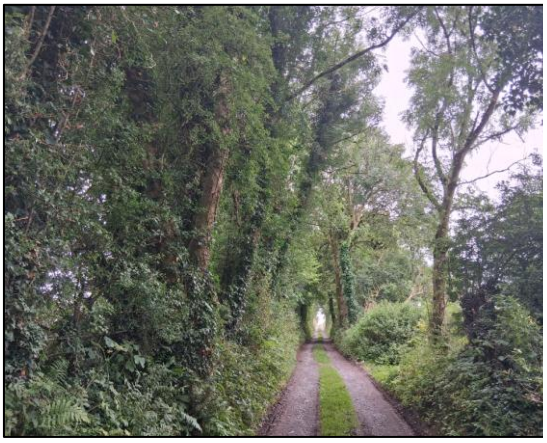


Plate 2-7: Ash treelines on either side of the L-22321

Plate 2-8: Overhanging limb of an ash tree. No PRF identified

Plate 2-9: Sycamore tree assessed as having no roosting suitability

Plate 2-10: Hawthorn trees along L-22321. No roosting potential

2.2.12 Further Information Item No.12

It is noted that there are 2 no. watercourses (Levally Stream) crossings on the L-22321. Outline suitable mitigation measures to prevent sediment laden surface water run-off from entering the existing watercourses along this access route. Section drawings of the watercourses with the proposed mitigation detailed thereon to be submitted.

2.2.12.1 Response to FI Item No.12

A response to FI Item no.12 has been provided by and is included in Section 4 of **Appendix 6** ***'Hydro-Environmental Services Response'*** and drawings have been enclosed in **Appendix 2 'Update to Planning Drawings'**. To summarise, this response provides a range of mitigation measures for both watercourses, including edge protection at the bridge locations, drainage grips, silt fencing and daily road sweeping during the construction phase. Two no. drawings of cross sections and proposed temporary drainage control mitigation measures at both bridges. To conclude, the outlined mitigation measures will prevent any sediment laden run-off from entering the aforementioned watercourses at both bridge locations.

2.2.13 Further Information Item No.13

It is outlined within the Peat and Spoil Management Plan (Appendix 4-3 of the EIAR) that controlled quantities of peat and spoil shall be side-cast adjacent to access roads, i.e. 17,990m3 as per Table 8-2 (Summary of preliminary peat reinstatement volumes). Given the location of the existing and proposed internal roads relative to on-site watercourses, you are requested to identify the locations where it is proposed to side cast peat and soil and provide suitable mitigation measures, where necessary, to avoid the siltation of nearby drainage ditches or watercourses.

2.2.13.1 Response to FI Item No.13

In Response to FI Item no.13 final areas for placement of side cast peat will be agreed with the Contractor in consultation with an Ecological Clerk of Works (ECoW) and Geotechnical Engineer to avoid potential impacts on hydrology. Controlled quantities of peat and spoil shall be side cast adjacent to access roads and other infrastructure only where it can be placed in a stable formation, i.e. where the topography and ground conditions allow. These areas will also ensure the following buffers and mitigation measures:

- Peat stockpile restriction areas have been identified within the Peat and Spoil Management Plan (PSMP), submitted as Appendix 4-3 of the EIAR. These areas shall not be used for the proposes of stockpiling peat/side casting or overburden materials.
- Placement of peat material, including temporary and side casting, shall be carried out in the permitted areas only. No peat material shall be stored, side cast, or used for landscaping in the designated Safety Buffer Areas.
- To prevent impacts to watercourses and drainage ditches, in addition to the peat stockpile restriction areas, no side cast peat or spoil will be stored in areas with a slope angle of greater than 5°, or areas within 50m of a watercourse (including site ditches/sheughs). This will reduce the potential for sediment to be transferred to the wider hydrological system.
- The effect of drainage or water runoff shall be considered when placing peat or spoil adjacent to access roads. Peat and spoil material shall not interfere with drainage, risk blocking of drainage systems or runoff into drainage systems.

Figure 2-3 below demonstrates watercourse buffer which will be applied, within which side-casting of peat and spoil will not be permitted. Please refer to the Figures A-2-1, A-2-2 and A-2-3 of the Peat and Spoil Management Plan (Appendix 4-3 of the EIAR) which demonstrate the safety buffer areas and peat stockpile restriction areas, within which side-casting of peat and spoil will also not be permitted.

Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- Proposed New Roads
- Proposed Existing Roads to be Upgraded
- Proposed Operational Access Road
- Watercourses 50m Buffer
- Proposed Cable Route and Cable Access Track

Drawing Title: Restricted areas for peat and spoil side-casting adjacent to access roads with respect to watercourses.	
Project Title: Proposed Clonberne Wind Farm Development, Co. Galway	
Drawn By: KM	Checked By: EMc
Project No.: 240730-c	Drawing No.: Figure 2-3
Scale: 1:7,700	Date: 25/08/2025

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email:info@mkoireland.ie
Website:
ww.mkoireland.ie

2.2.14 Further Information Item No. 14

It is noted that it is proposed to upgrade a section of the internal access road between watercourse crossing no. C4 and C5. Given the location of this access road relative to the Levally Stream, you are requested to submit section drawings to illustrate the relationship between the upgraded access road and the existing watercourse and include the mitigation (silt fences etc.) as proposed to prevent direct surface water runoff. A section drawing should also be submitted of watercourse crossing no. C5.

2.2.14.1 Response to FI Item No.14

Cross-sections of the internal access road (proposed for upgrade) and the adjacent Levally Stream between watercourse crossing no. 'C4' and 'C5' are shown on Drawing P1508-2-1125-A3-FI-103-00A of **Appendix 2** ***"Update to Planning Drawings***, along with proposed temporary mitigation measures. Cross-section XS8 is located at proposed watercourse crossing 'C5'. Double silt fencing is proposed between the internal access road and the existing watercourse, with an interceptor drain located adjacent to the north of internal access road. The prescribed mitigation measures will ensure that direct surface water runoff of silt laden water will not occur at these watercourse crossing locations.

2.2.15 Further Information Item No.15

Confirm whether it is necessary to backfill an existing drainage ditch to provide for the proposed spoil storage area. The proximity of the proposed spoil storage area to Levally Stream and the Annex I habitat 'Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430)' is noted. Consideration to be given to additional mitigation measures to prevent silt laden surface water run-off from entering the nearby watercourses at this location. Section drawings showing the relationship between the spoil storage area and the nearby watercourse and drainage ditches to be submitted.

2.2.15.1 Response to FI Item No.15

A response to FI Item no.14 has been addressed in Section 6 of *Appendix* ***6*** 'H***ydro-Environmental Services*** Response'**.** In summary cross sections of the proposed spoil storage area along with proposed drainage control mitigation measures has been provided (see Drawing P1508-2-1125-A3-FI-104-00A of **Appendix 2**), a 5m setback distance will be maintained between the proposed spoil storage area and the main field boundary drains, and a range of mitigation measures have been provided, including a 50m watercourse buffer between the Levally stream and the proposed spoil storage area, a 5m setback distance between the storage area and the main drains to the north south and west of the storage area, a row of silt fencing between both the Levally Stream and the main drains, with the Levally stream featuring 2 no. rows of silt fencing and a collector drain downslope of the proposed spoil storage area to capture all runoff and diverting it to a suitably sized settlement pond. As a result of these mitigation measures, silt laden surface water runoff from the proposed spoil storage area will be prevented from entering nearby watercourses.

The Annex I habitat *Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]* was identified downstream of this area and was included as a KER in the submitted EIAR. This Annex I habitat is not located within the footprint of the Proposed Project and is not located within this drainage ditch. Provided that the prescribed mitigation measures above and in the EIAR are strictly adhered to, there will be no negative impacts on this Annex I habitat, or any downstream aquatic receptors.

2.3 Roads and Traffic

2.3.1 Further Information Item No.1

Abnormal Size Load Delivery Route

- ***An observation is on file from a landowner at the junction of the N83 and the L6466 (Junction 9a) stating that he has not given his consent to the inclusion of his land or to the lodgement of the application.***
- ***Junction 9b (bend on L-6466) appears to require the removal of a stand of trees/vegetation on lands along northern side of the L-6466 and the run-over area for the turbine plant deliveries encroaches on lands on the southern side of the L-6466 (i.e. Figure 15-23b of Appendix 15-4). This location is not included within the application but is included in the EIAR for assessment.***

You are requested to demonstrate that it has the consent of the relevant landowner(s) to include the land(s) within the proposed application. Details of alternative access arrangements should be provided should the relevant landowner(s) consent not be secured to allow for the works identified as necessary along the turbine delivery route. Alterations as necessary to the letter of consent to make the application should also be made and submitted.

Please ensure that all relevant drawings, maps and figures in the documentation accompanying the application accurately reflect the extent of the site to which the application refers and does not include lands where the consent of the relevant landowner(s) has not been secured to make the application. Any revisions/amendments to be detailed and submitted.

2.3.1.1 Response to FI Item No. 1

In response to FI Item No.10, a further assessment of the delivery of turbine components to site was undertaken by Alan Lipscombe Traffic and Traffic Consultants. It is now proposed to alter the turbine delivery route, as illustrated in in Figure FI1 included in **Appendix 8** ***'Traffic & Transport Supporting Documentation'*** of this RFI and the turns and bends previously shown as locations 9a, 9b and 10 will no longer need to be negotiated by abnormally sized loads and therefore no accommodation areas, nor consent from landowners at the junctions in question are now required.

It is now proposed that the turbine delivery route will continue north on the N83 to the village of Dunmore before turning right onto the L6157, indicated on Figure FI1 as Location A. The route then heads east on the L6157 skirting the village to the south to the junction with the R328, indicated as Location B. From this point the turbine delivery route travels south on the R328, passing through a sharp left hand bend at the bend identified as Location C before travelling towards the wind farm access.

Autotrack assessments for the blade and tower transport vehicles negotiating the new locations on the turbine delivery route, Locations A, B and C are shown in Figures FI2 to FI7 (see **Appendix 8** ***'Traffic & Transport Supporting Documentation***). For the transportation of the blade through these locations it is proposed to raise the blade to an angle of 60° using a specialised blade adapter in order to significantly shorten the vehicle footprint. It is noted that the use of an adapter vehicle capable of travelling with the blade in a horizontal position, which is appropriate for the vast majority of the route, and also lifting the blade just for these 3 locations. Figures FI2 to FI7 show that based on the proposed methods of delivery, the abnormally sized blade and tower vehicles will be accommodated at locations A, B and C without any interventions to the network. As for the entire delivery route, these deliveries will be made at night with transient traffic management measures provided by An Garda Siochana and the haulage company.

In conclusion, it is confirmed that the Applicant has secured that consent from all relevant landowners for the inclusion of their land within the Proposed Wind Farm application. Accordingly, the application boundary has been updated to reflect this position and all relevant Planning drawings have been updated to reflect the lands for which the Applicant has secured consent. The following drawings have been updated:

- 180740 – 01 – Location Context Map.
- 180740 – 03 Site Layout Keyplan (1:500)
- 180740 – 07 Site Layout Keypan 1:2500).

Please refer to **Appendix 2** ***'Update to Planning Drawings'*** , enclosed separately, of this RFI for further details.

2.3.2 Further Information Item No.2

The Proposed Project in its current form fails to accord with Development Management Standard 28 of the Galway County Development Plan given the restricted eastern visibility splay from the construction entrance on the R328 (Junction A). Notwithstanding the mitigation measures proposed, you are requested to install an Automatic Traffic Counter (ATC) to determine the 85th percentile (design speed) at this location. Demonstrate the vertical envelope of visibility (i.e. intervisibility in relation to crest/sag road profile) onto the R-328 in accordance with the relevant TII standards.

2.3.2.1 Response to FI Item No.2

In Response to FI Item No.2, a speed survey was undertaken on the R328 at the location of the Proposed Wind Farm access junction for a period of 7 days commencing on Tuesday 7th November 2025. The survey was undertaken by the specialist transport survey company Traffinomics with the summary results as follows;

- Observed eastbound 85th percentile speed = 85.95 kph
- Observed westbound 85th percentile speed = 81.00 kph.

It is noted that the direction that the visibility splay is restricted, that is looking east from the junction, the speed of the approaching traffic at 81.00 kph is close to the designated speed limit of 80 kph.

The vertical cross section for the access junction on the R328, together with the visibility splays in the horizontal plane are shown in Figure FI8. The figure shows that the visibility splay stated that are available in plan (160m to the west and 67m to the east) are available in the vertical plane. The vertical visibility splays are taken from a driver height of 1.05m to an object height of 1.05m in accordance with DN-GEO-03060 TII Geometric Design of Junctions.

Please see **Appendix 8** ***'Traffic and Transport Supporting Documentation'*** for summary statistics of this speed survey.

2.3.3 Further Information Item No.3

Submit a proposed boundary treatment plan for the access with the R329 (Junction A) following the completion of the abnormal load delivery phase and following completion of the overall construction phase of the development.

2.3.3.1 Response to FI Item No.3

A boundary treatment plan has been prepared and included in **Appendix 2** ***'Update to Planning Drawings',*** of this RFI.

2.3.4 Further Information Item No.4

Submit revised drawings which shows the current extent of hedgerow and/or boundary walling setback for all entrances in order to achieve clear and unobstructed sightlines in both directions. If necessary, letter(s) of consent from any adjoining landowner(s) shall be provided, consenting to set

back of their boundary in order to achieve clear and unobstructed sight distances. The applicant shall also demonstrate that any adjoining lands to achieve required sight distance triangles are within their control.

2.3.4.1 Response to FI Item No.4

It is noted that the visibility splay at Junction A does not comply with the requirement of 160m requirement applicable for the 80kph speed limit on the R328. It is not proposed to amend existing boundaries to achieve the appropriate sightlines. Instead, it is proposed that this junction is managed on a strictly temporary basis during the construction phase, subject to the implementation of appropriate traffic management measures, and then permanently closed once the development becomes operational. The temporary management measures which will be implemented include:

- A temporary reduction of the speed limit on this section of the R328 to 50km/h during the 18 month construction phase of the Proposed Project,
- Introduction of traffic signs and provision of a flagman when this access junction is in use,
- The closure of the access junction by means of temporary fencing and gates when not in use,
- The permanent closure of the site access junction on completion of the construction phase.

The detailed traffic management measures proposed will be submitted to Galway Councils Roads section for agreement prior to the commencement of the construction phase. Similarly, liaison with the relevant authorities including the roads section of Galway County Council, and An Garda Siochana will be carried out during the delivery phase of the large turbine vehicles, when an escort for all convoys will be required.

A list of management measures has been provided in Section 15.1.10, and summarised above, which will ensure that there is no potential for any significant effects on traffic and road going vehicles/personnel during the construction of the Proposed Wind Farm.

As outlined in Chapter 15, Section 15.1.10, of the EIAR, no boundary wall or hedgerow set backs are proposed for Proposed Project Access Junctions B to H. Appropriate visibility splays are available at Junctions B to E, while Junctions F and H will be subject to traffic management measures during the construction phase and operational phase, respectively.

2.3.5 Further Information Item No.5

The design information examined as part of the Road Safety Audit detailed in section 1.4 is noted. This does not include proposed roadside interventions on the turbine delivery route. You are requested to submit an updated Road Safety Audit to include their consideration.

2.3.5.1 Response to FI Item No.5

A response to FI item No.5 is prepared by Road Safety Audit Team Leader, Martin Deegan of Traffico.

ROAD SAFETY AUDIT TEAM LEADER'S RESPONSE:

> *"I have subsequently reviewed the following Figures, and draw attention to my initial comments relating to each:*
>
> ***Figures 15-6 to 15-21** – These are the autotracks undertaken for Locations 1 to 8. I note that no physical works or changes are proposed to the permanent road environment.*
>
> ***Figures FI2 to FI7** – These are autotracks for the new autotrack locations A, B and C. I note that no physical works or changes are proposed to the permanent road environment.*

*The road safety audit process has been designed to consider potential safety risks attached to changes proposed to the road environment. The need for a road safety audit is triggered by a design intervention which will result in a permanent change to the road environment. None of the Figures listed above propose a design intervention which will result in a permanent change to the road environment. On this basis I do not see the value or the need to complete a *new road safety audit.*

**A road safety audit considers a snap shot in time of the design development, taken at the time of the audit. An audit cannot be updated, instead, a new audit would be commissioned to consider a revised design proposal, noting the figures listed above do not constitute a revised design proposal."*

Please see Appendix 15-4 of the EIAR for figures 15-6 to 15-21 and **Appendix 8 *'Traffic & Transport Supporting Documentation'*** of this RFI for figures FI2 to FI7.

2.3.6 Further Information Item No.6

Quantify the daily number of HGV traffic movements on local roads L2232 and L-22321 to be generated by the borrow pit.

2.3.6.1 Response to FI Item No. 6

The location of the junction on the L-2232 for the borrow pit is shown as Junction G on the extract from Figure 15-2c of the EIAR, and the junction between the L2232 and the L-22321 that provides access to the site is shown as Junction F. The total volume of material that will be extracted from the borrow pit and delivered to the Wind Farm site via the L-2232 and the L-22321 will be 106,770m3. Based on a conversion of 2.5 tonnes per m2, and 25 tonnes per vehicle, this equates to 10,677 loads. As stated in Section 15.1.4.2.1 of the EIAR this stage of the construction will last 332 working days, resulting in an average of 32 loads delivered daily, or 64 HGV movements, or 153 pcus per day, on this section of the L-2232 and the L-22321. This will result in just over 3 HGV return trips per hour over a 10 hour day. As noted in Section 15.1.10 of the EIAR, both of these junctions will be attended by a Flagman during the construction stage, who will be in radio contact in order to co-ordinate movements. It is noted that there will be just one HGV movement being made at any one time, with no HGV travelling in opposing directions meeting.

2.3.7 Further Information Item No.7

Since the lodgement of the application Galway County Council has granted permission for a quarry with an area of c.6.2ha on the opposite side of local road L2232 to the proposed borrow pit (file reference number 24/60013). The permission provides for reprofiling works on the L2232. It is noted that the development as permitted is subject of a current appeal with the Board under ref. ABP 321022-24. Please address the cumulative impacts on the receiving road network should the borrow pit and quarry be worked in parallel and revise the EIAR and supporting documentation accordingly.

2.3.7.1 Response to FI Item No. 7

The proposed Lomaunaghbaun Quarry (GCC file reference number 24/60013) is located opposite the proposed borrow pit on the L-2232 indicated as Junction G in the extract from Figure 15-2c of the EIAR inserted below as **Figure 2-4**. Upon review of the EIAR submitted with its application, it is identified that in the event that the Lomaunaghbaun Quarry is granted permission by the Commission, it will generate a maximum of 15 HGV trips to and from the quarry (or 30 movements daily, or 72 pcus), all of which will travel south on the L-2232 past Junction F that will be used for access to the Proposed Wind Farm site for HGV trips generated by the borrow pit. This equates to an average of 1.5 loads or 3 HGV movements per hour. The total HGV volumes that are forecast to be generated on the approx. 0.6km section of the L-2232 during the construction phase of the proposed Wind Farm, and by the

Lomaughnabaun Quarry are shown in **Table 2-7**. It is estimated that there will be a total of just over 9 HGV movements generated in one hour, with an additional 226 pcus generated in one day. The following points are noted.

- As stated previously, there will be no occasion when HGVs generated by the wind farm borrow pit will meet in opposing directions on the L-2232, as these movements will be coordinated by flagmen.
- The flagmen operating at the 2 junctions for the wind farm will also observe the 3 movements generated per hour by the quarry and will co-ordinate wind farm movements to avoid meeting these vehicles.
- On the rare occasion that HGVs meet in opposing directions forward visibility is clear on this section of the L-2232 providing good intervisibility between drivers, and an opportunity for one HGV to dwell at a location where the vehicles can pass.
- On this section of the L-2232 it was estimated in the EIAR prepared for the Lomaunaghbaun Quarry that the total traffic volumes generated on this section of the L-2232 would be 354 pcus in the year 2024, increasing to 438 pcus in the year 2034. With the additional temporary traffic generated by the borrow pit (154 pcus) this would increase to 592 pcus in a 12 hour period by the year 2034. While there is no existing guidance in Ireland with respect to the link capacity for roads with the characteristics of this section of the L-2232, that is generally one-way with passing opportunities. Reference is made to a UK Department for Transport Traffic Advisory Leaflet 2/041 where it is recommended that a maximum hourly capacity for a single lane road with passing opportunities is 300 vehicles per hour, or a 12-hour capacity of 3,600 pcus. Based on this, and the traffic volumes considered above, it is estimated that with the construction of the proposed wind farm occuring at the same time that the Lomaunaghbaun Quarry is operational this section of the L-2232 would operate at a maximum of 17% of its link capacity.

It is therefore forecast that the potential cumulative impacts between the activity generated by the borrow pit for the Proposed Clonberne Wind Farm and the Lomaughnabaun Quarry will be negative, temporary and will be slight in terms of severity. There will be no Significant Impacts.

Table 2-7: HGV Movements generated by the Borrow Pit and by neighbouring Lomaunaghbaun Quarry

Use	Time period	Load	Movements	2-way pcus
Borrow pit	10 hour day	32	64	154
	1 hour	3.2	6.4	15
Lomaugnabaun Quarry	10 hour day	15	30	72
	1 hour	1.5	3	7
Total	10 hour day	47	94	226
	1 hour	4.7	9.4	23

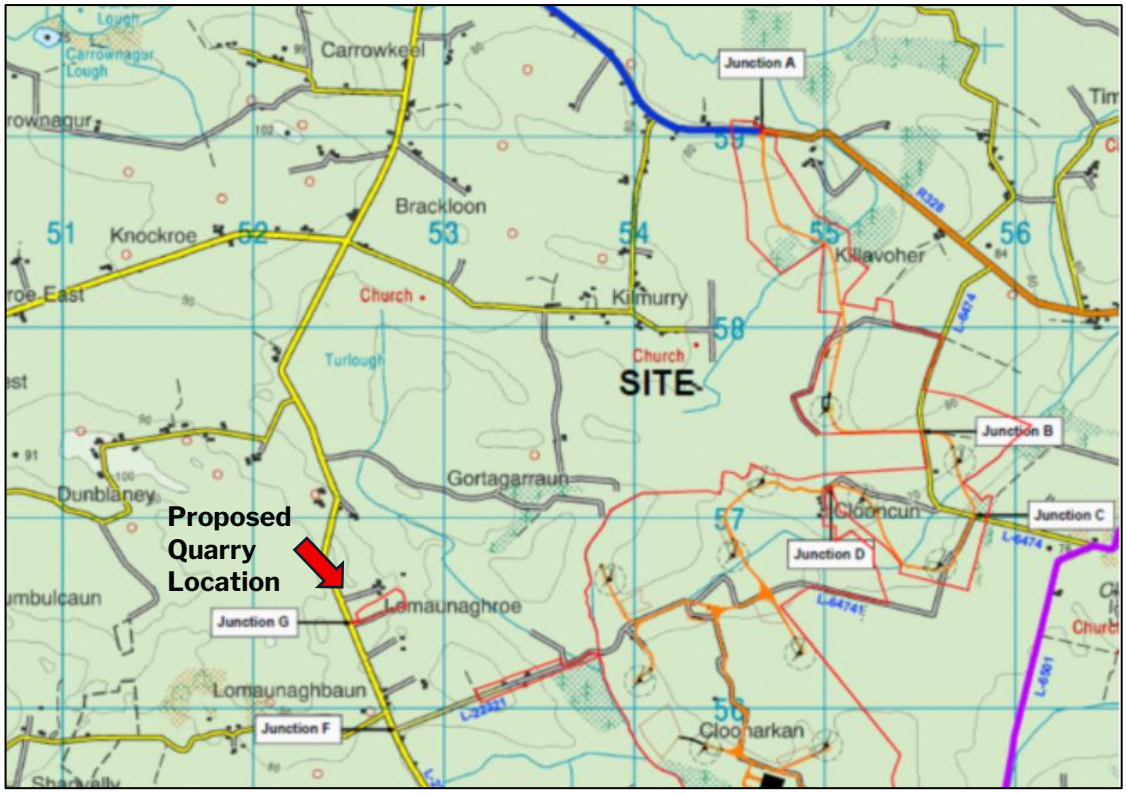


Figure 2-4: Extract from Figure 15-2c of the EIAR

2.4 Cultural Heritage

Recorded Monument GA030-073 ---- (Enclosure) is located c. 22m to the east of the hardstand for T2. While this monument is partially upstanding and visible in the landscape, it may have a larger sub-surface extent. You are requested to undertake an archaeological geophysical survey at the location for T2, its associated infrastructure and general environs and provide a report on the findings.

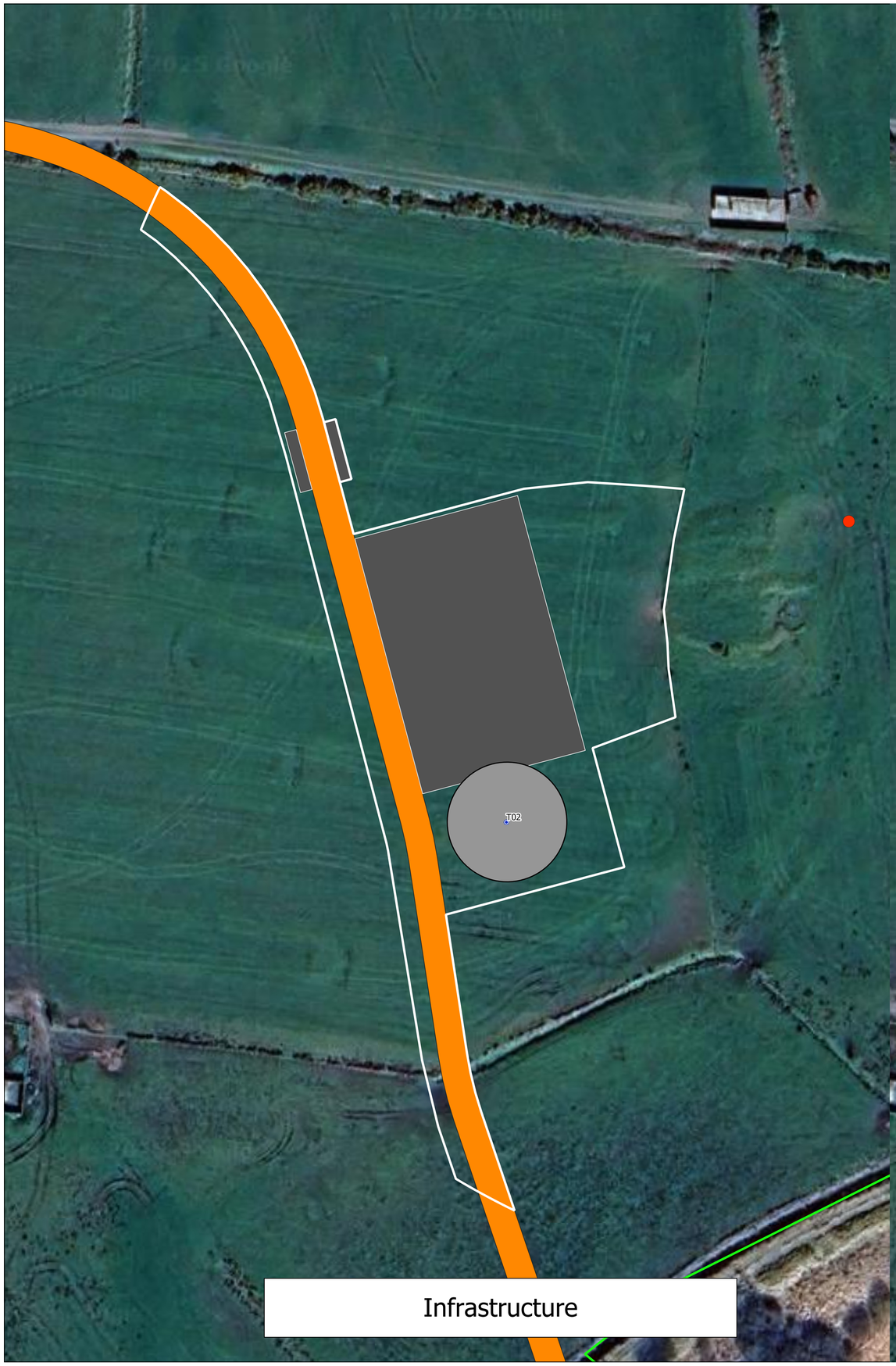
2.4.1 Response to FI Item

In Response to this FI Item an archaeological geophysical survey was commissioned by the Applicant and has been conducted at the location of T2 Ger Dowling (PHD, MIAI).This report has been included as **Appendix 9 *'Geophysical Survey Report'*.** This report is divided in two parts - Part One outlining the survey information and Part Two outlining the planning background to the geophysical survey works.

To summarise, an area covering c. 0.65 ha was selected for a high-resolution magnetometer (fluxgate gradiometer) survey. The area selected incorporated all infrastructure and proposed works areas within 100m of the Recorded Monument GA030-073 ---- (Enclosure).

The survey did not identify any anomalies of obvious archaeological significance, and no evidence was encountered to indicate a larger, subsurface footprint to enclosure GA030-073. Several isolated 'pit-type' responses were recorded, as well as traces of past cultivation. Notwithstanding the above, mitigation measures to ensure no significant direct or indirect effects on this Recorded Monument are provided in Section 13.4.3.3 of the EIAR, which includes the establishment a 20m buffer zone around the monument and establishment of durable temporary fencing with keep out signage to delineate this buffer. A figure showcasing the survey area and geophysical survey imagery is included below in Figure 2-5.

Please refer to **Appendix 9 *'Geophysical Survey Report'*** completed by Ger Dowling (PHD, MIAI) for further details.



Infrastructure

Greyscale Image of Gradiometry Results

Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- Geophysical Survey Area
- Proposed New Roads
- Proposed New Roads
- Proposed Crane Platform Hardstanding
- Proposed Turbine Foundations

Drawing Title
Survey Area for Archaeological Geophysical Survey

Project Title
Proposed Clonberne Wind Farm Development, Co. Galway

Drawn By	Checked By
KM	EMc
Project No.	Drawing No.
240730-c	Figure 2-5
Scale	Date
1:500	25/08/2025

MKO
Planning and Environmental Consultants
Tuam Road, Galway
Ireland, H91 VW84
+353 (0) 91 735611
email:info@mkoireland.ie
Website:
ww.mkoireland.ie

2.5 Landscape and Visual Assessment

Provide a photomontage from the following viewpoint: Clonberne graveyard and protected structures Clonbern Old Graveyard (RPS.41) and Dennis Mausoleum (RPS 40).

2.5.1 Response to FI Item

In response to FI Item No. 1 a new photomontage, titled 'Proposed Clonberne Wind Farm FIR has been provided by the MKO Lanscape and Visual Impact Assessment (LVIA) team at the Clonbern Old Graveyard and is included with this RFI as **Appendix 10** ***'Photomontage Booklet'*** and is enclosed separately.

The photomontage booklet which accompanies this RFI has been assessed in the **Table 2-8** below and follows methodology set out in Section 1.6.3 of EIAR Appendix 14-1 – LVIA Methodology.

Table 2-8: Photomontage Assessment Table

Viewpoint 1– Clonberne Graveyard			
Viewpoint Description and Details	View from the Clonbern Old Graveyard (RPS.41) and Dennis Mausoleum (RPS 40) protected structures. It is located approximately 950m east of the nearest proposed turbine, T5. Grid Reference: E 556,506, N 756,546 Number of proposed turbines visible: 11/11		
LCA and Sensitivity to Wind Farm Developments	G LCU 5e – North River Clare Basin Unit - Low	Visual Receptor(s) and Sensitivity	Protected Structure - High
Description of 'Existing View'	Views available from this viewpoint are relatively short ranging where mature treelines limit views to the agricultural fields surrounding this viewpoint. There are some slightly longer-ranging views in the left side of this view, where the locally rolling terrain allows visibility of treelines along the background of the view.		
Proposed Photomontage Description	The proposed turbines are seen over a large extent of the view. They are seen in a staggered layout along the skyline, beyond the trees in the midground.		
Cumulative Effects	The permitted Cloonascragh Wind Turbine would be located 14.5km southwest of this viewpoint, where intervening treelines would predominantly screen visibility of this permitted turbine. No cumulative visual effects would arise as a result of this permitted turbine. The existing Cloonlusk turbines are located approximately 13.6km southwest from this viewpoint. These existing turbines would be visible in succession relative to the turbines of the Proposed Project, although they would be seen as small elements in the background along the surrounding treelines of the landscape. No Significant cumulative visual effects would arise as a result of these existing turbines.		

	The proposed Laurclavagh turbines would be located approximately 19.9km southwest of this viewpoint, where they would be visible in succession relative to the turbines of the Proposed Project, although they would be seen as small elements in the background along the surrounding treelines of the landscape. No Significant cumulative visual effects would arise as a result of these existing turbines. The proposed Cooloo turbines would be located approximately 6.1km south of this viewpoint, where they would be viewed in succession relative to the proposed turbines. These proposed turbines would be visible over a short horizontal extent at a greater set-back distance relative to the proposed turbines. Therefore, it is deemed that Slight cumulative visual effects would arise.
Sensitivity of Visual Receptor(s) ***(See definition in LVIA Methodology Appendix 14-1)***	Medium – Receptors represented by this viewpoint have been deemed to be 'Medium', where receptors to this location are not focused on the views from here. There are no designated views in proximity to this location, where views are typical of a working agricultural landscape.
Magnitude of Change ***(See definitions in LVIA Methodology Appendix 14-1)***	Substantial – The proposed turbines are in close proximity to this viewpoint location, where they are seen to introduce tall vertical elements over a large horizontal extent of the view.
Significance of Effect	Medium x Substantial = Moderate = Significant (EPA, 2022) "An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment."
Mitigation Factors	Receptors at this location are not focused on the views from this location; The intervening fields and treelines adds perspective where the proposed turbines are seen as being set-back from this viewpoint; The Clonbern Old Graveyard (RPS.41) and Dennis Mausoleum (RPS 40) are visually set-back from the proposed turbines, where the proposed turbines do not appear within the immediate visual context of the graveyard; Views in the direction of the proposed turbines are limited by the treelines, where slightly more longer ranging views over the wider landscape are offered south of this viewpoint, not in the direction of the proposed turbines.
Residual Effect ***(Incl. mitigating factors)***	Moderate (EPA, 2022) "An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends."

2.6 Wake Effects

Address the potential for wake effects including consideration of effects on agricultural lands.

2.6.1 Response to FI Item

Turbine wake effects describe the phenomenon in which downstream of moving wind turbines a region of slower wind speeds and increased turbulence is created. As wind passes through the turbine rotor blades, kinetic energy is converted to mechanical energy, allowing for electricity generation and reducing wind speed behind the wind turbine. The wake effect is a fundamental aspect taken into consideration in wind farm layout and design in order to reduce effects on yields.[4]

Turbine wake effect is an operational consideration which has been taken into account within the design of the Proposed Project. The literature notes that, while micrometeorological effects of wind turbines have been assessed globally, there is little evidence of measured effects on biotic or abiotic receptors such as temperature or agriculture. There is a distinct lack of research in this area relating to areas in Europe including the UK and Ireland[5]. No body of work has been published which would link the turbine wake effect to having an impact on downstream lands, agriculture, livestock or local temperature variations.

[4] https://vortexfdc.com/blog/wakes-and-blockage/
[5] *Sander, L., Jung, C., & Schindler, D. (2024). Global Review on Environmental Impacts of Onshore Wind Energy in the Field of Tension between Human Societies and Natural Systems. Energies, 17(13), 3098.* https://doi.org/10.3390/en17133098

3. RESPONSE TO SUBMISSIONS

This section of the RFI provides a comprehensive response to submissions received from Third Parties and Statutory Bodies, as requested in FI Item No. 6 under the 'Procedural/ Administrative Issues' section of the FI Request.

3.1 Statutory Consultees

A total of 6 submissions were submitted to the Commission from Statutory Consultees in relation to the Proposed Wind Farm. **Table 3-1** below identifies the Statutory Consultees who lodged a submission to the Commission in relation to the Proposed Wind Farm and who in the project team is responsible for the corresponding response.

Table 3-1: List of Statutory Consultees and Lead Author for Response

Statutory Consultee	Themes Included	Lead Author for Response
Irish Aviation Authority	Aviation Safety	MKO
Health and Safety Authority	N/A	MKO
Inland Fisheries Ireland	Hydrology, Drainage	MKO/Hydro-Environmental Services
National Environment Health Service	Noise	TNEI
Deparment of Housing, Local Governemnt & Heritage (The DAU)	Archaeology	Tobar Archaeology
Transport Infrastructure Ireland	Traffic & Roads	MKO/Alan Lipscombe
An Taisce	Hydrology, Ecology	Triturus Environmental
Galway County Council	Traffic and Transport, Landscape and Visual	Alan Lipscombe/MKO

3.1.1 Irish Aviation Authority

The Irish Aviation Authority (IAA) have raised no objections to the Proposed Wind Farm and requested that conditions related to aeronautical obstacle warning light scheme and as-constructed coordinates are provided to them under planning conditions, should planning permission be granted.

The IAA also requested that they are notified of intentions to commence crane operations with at least 30 days prior notification of their erection.

The applicant agrees to these conditions should the Commission approve planning permission for the Proposed Wind Farm.

3.1.2 Health and Safety Authority

The Health and Safety Authority (HSA) made an observation to the Commission, stating that they have no observations to put forward on the Proposed Wind Farm as it falls outside of the scope of Regulation

24(2) of the Chemical Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 Of 2015).

3.1.3 Inland Fisheries Ireland

A submission was received from Inland Fisheries Ireland (IFI) concerning recommendations for the protection of water quality and the aquatic environment.

> *"All watercourses that will receive drainage from the construction sites of the turbines or the access roads must be assessed before and after the construction phase (should the project be permitted) in terms of aquatic biodiversity with particular emphasis on fish, fish spawning grounds and fish habitat in general. It is noted that Triturus Environmental Ltd. were commissioned by MKO to conduct the baseline aquatic surveys for the Proposed Project."*
>
> *Any instream works or other works which may impact directly on a watercourse should only be carried out from 1st July to 30th of September each year (so as to avoid impacting on the aquatic habitat during the salmonid spawning season). It would be important that appropriate scheduling of works is allowed for."*

Detailed aquatic surveys were carried out to inform the EIAR submitted with the planning application for the Proposed Project including the Proposed Wind farm and included fisheries assessments and fish habitat appraisals of watercourses downstream of the Proposed Project site (as discussed in Chapter 6 of the EIAR).

Dedicated aquatic surveys were undertaken by Triturus Environmental Ltd. of all freshwater watercourses which could be affected directly or indirectly by the Proposed Project and associated infrastructure. The surveys were undertaken in 2021, as outlined in the submitted EIAR, and repeated in 2024. The updated surveys undertaken in 2024 were completed after the submission of the planning application for the Proposed Project, however the results have been appended to this submissions response in order to provide supporting documentation and updated baseline information. The surveys undertaken included macroinvertebrate/Q sampling, riverine habitat assessments, fisheries habitat assessments, electrofishing, white-clawed crayfish surveys, macrophyte and aquatic bryophyte surveys, eDNA sampling as well as otter surveys. The survey methodologies and results are detailed in Sections 6.4.3.3.5 and 6.6.2.7 of Chapter 6, Appendix 6-3 (2021 surveys) of the EIAR and **Appendix 11 *'Triturus Environmental Response'*.**

There are no proposed changes to river morphology and no in-stream works are required for the Proposed Project. All watercourse crossings will comprise either clear span bridges or horizontal directional drilling. All major infrastructure is located over 50m from any watercourse, however the upgrade of existing access tracks and construction of new tracks will involve some works within 50m of watercourses and new watercourse crossings. However, it should be noted that no instream works are proposed to natural watercourses, and a suite of measures are in place to avoid any adverse effects on watercourses. These measures are described in full in Chapter 9 of the EIAR.

While a potential pathway for deterioration of water quality in watercourses within and downstream of the Proposed Project site was identified within the EIAR prepared for the Proposed Project, a suite of mitigation measures are prescribed in Section 6.7.2.1.1 Chapter 6 and Chapter 9 of the EIAR. These mitigation measures block any potential pathway for significant deterioration of water quality as a result of construction and operational activities associated with the Proposed Project.

It has been noted that Inland Fisheries Ireland (IFI) in their submission recommend pre- and post-construction monitoring of downstream watercourses with an emphasis on fish, fish spawning grounds and fish habitat in general. To allow for this, while a comprehensive aquatic baseline has been provided to inform the EIAR submitted with the planning application, a suite of aquatic surveys will also be undertaken both prior to the commencement of construction works within the Proposed Project site and following the completion of the construction, by suitably qualified ecologists under the appropriate

licences. These surveys will include all aquatic surveys undertaken as part of the baseline assessments, as outlined in Section 6.2.2.7 and described in detail in the Aquatic Baseline Reports included in Appendix 6-3 of the EIAR and **Appendix 11 *'Triturus Environmental Response'***. This includes fisheries assessments (electro-fishing and fisheries habitat appraisals), white-clawed crayfish surveys, macrophyte and aquatic bryophyte surveys, biological water quality sampling (Q-sampling) or macro-invertebrate sweep sampling (where applicable), general river habitat assessments and any additional surveys deemed necessary by the ecologist. Survey locations will encompass all freshwater watercourses which could be affected directly or indirectly by the Proposed Project and associated infrastructure. The developer will be required to adhere to these measures in addition to the measures outlined within Chapter 6 of the EIAR submitted with the planning application.

Please also see **Appendix 11 *'Triturus Environmental Response'*** for additional responses to queries raised by IFI.

3.1.4 National Environmental Health Service

A submission was received from the National Environmental Health Service (NEHS) in relation to likely effects noise and vibration from the Proposed Project including the Proposed Wind Farm. A response to this submission is outlined in **Appendix 3 *'TNEI Response'*** of this report. To summarise, TNEI consider the noise impact assessment methodology to represent both current national guidance and best available science.

3.1.5 The Department of Housing, Local Government and Heritage – The Development Applications Unit

A submission was received from the Development Applications Unit (DAU) which related to archaeology and which noted requirements that should be included as a condition of any grant of planning permission.

Table 3.2 below sets outs the requirements stated in the DAU submission, along with the corresponding response. The response has been prepared by Tobar Archaeological Services.

Table 3-2: Response to DAU submission

FI Item	Response
1. *All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 13 of the EIAR (Tobar Archaeological Services; date 20 June 2024) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this Order.*	As set out in Chapter 13 of the EIAR a number of mitigation measures are proposed regarding the recorded and unrecorded archaeological and cultural heritage resource. The mitigation measures proposed therein regarding those assets are summarised as follows: One recorded monument, GA030-073---- Enclosure, is located within the Proposed Wind Farm Site. The outer extent of the monument as discerned by the site inspection and a review of the available historic OS mapping at its closest point is located c. 22m to the east of the hardstand for T2. While direct effects to the monument itself are not identified, some mitigation is proposed in order to avoid accidental damage to the enclosure during the construction stage of the Proposed Project. The mitigation measures proposed in Chapter 13 of the EIAR in relation to the recorded monument, and which will be implemented, are as follows: › A buffer zone of 20m will be established around recorded monument GA030-073---- prior to the commencement of construction works associated with the Proposed Wind Farm. › The buffer should comprise durable temporary fencing with keep out signage. › The presence of the monument and the requirement for the buffer zone will be added to the Construction and Environmental Management Plan (CEMP) for the Proposed Project. › No ground works, storage of materials or tracking of machinery will take place within the buffer zone. Also identified in Chapter 13 was a potential direct effect to sub-surface archaeological sites or features, should they exist within the Proposed Wind Farm Site. The mitigation measures proposed in Chapter 13 of the EIAR in relation to sub-surface archaeology, and which will be implemented, are as follows: › Pre-development archaeological testing of the Proposed Project infrastructure in peatland or greenfield areas will be carried out under licence from the National

	Monuments Service. This is in order to identify any archaeological features at the earliest stage possible in the project to allow time to deal with any requirements such as preservation in situ (redesign / avoidance) or preservation by record (archaeological excavation). › A report on the testing will be compiled on completion of the work and submitted to the NMS and the Planning Authority. › Further mitigation such as preservation in situ (avoidance), preservation by record (excavation), buffer zones may be required depending on the results of the testing. › Archaeological monitoring of all groundworks during the construction stage of the Proposed Project by a licensed archaeologist. › A report on the monitoring will be compiled on completion of the work and submitted to the NMS and the Planning Authority.
2. *The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out a pre-development Archaeological Geophysical Survey at the location of Turbine 2, its associated infrastructure and environs in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works. This shall be in addition to any mitigation measures outlined in Chapter 13 of the EIAR.* a. *The Archaeological Geophysical Survey must be carried out under licence from the National Monuments Service and in accordance with an approved method statement. Having completed the work, the archaeologist shall submit a written report to Department of Housing, Local Government and Heritage and the Planning Authority describing the results of the geophysical survey.* b. *The results of the geophysical survey shall inform the design an appropriate exclusion zone to protect the monument during construction and decommissioning phases.* c. *The results of the geophysical survey shall inform the design of any trench array to assess the location of Turbine 2 and its associated*	A geophysical survey of T2, its associated hardstand area and a length of c. 219m of adjacent proposed road was carried out under detection device licence 25R0306 in July 2025. The survey, undertaken by Ger Dowling (PhD), comprised a high-resolution magnetometer (fluxgate gradiometer) survey which was implemented over an area of approximately 0.65 hectares, immediately west of GA030-073---- Enclosure. The survey did not detect any anomalies of obvious archaeological potential. Also, no evidence was encountered to suggest a larger, sub-surface footprint to the adjacent recorded monument GA030-073---- Enclosure. A number of isolated pit-type responses were detected which may be archaeological in nature or comprise natural variations in the underlying subsoil. Evidence for past cultivation was also noted in the survey. A report on the geophysical survey was submitted to the National Monuments Service in compliance with the conditions of the detection device licence. In response to Point 2 b of the requirement above, as no additional potential sub-surface features relating to the adjacent enclosure GA030-073---- were noted in the geophysical survey the 20m buffer zone as proposed in Chapter 13 of the EIAR is considered appropriate with no requirement for a larger buffer zone identified. In response to Point 2 c of the requirement, the results of the geophysical survey will be used to inform the test trench layout at T2. The trench layout which will form part of the overall Advance Archaeological Test Trenching programme will target the isolated pit-type responses detected by

infrastructure as part of the overall Advance Archaeological Test Trenching programme.	the geophysical survey as well as generally testing the proposed T2, hardstand and access road footprint.
3. *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 and to submit an archaeological impact assessment report for the written agreement of the planning authority, following consultation with the National Monuments Service of the Department, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.* a. *The report shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (archaeological excavation) and/or monitoring may be required.* b. *Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service of the Department, shall be complied with by the developer.* c. *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.*	As detailed in Section 13.4.3.4 of Chapter 13 pre-development archaeological testing of the proposed project infrastructure will be carried out under licence from the National Monuments Service. A report on the testing will be compiled on completion of the work and submitted to the NMS and the Planning Authority. The report will include an archaeological impact assessment. Further mitigation including preservation in situ (avoidance), preservation by record (excavation) and/or buffer zones may be required depending on the results of the testing.
4. *A suitably qualified archaeologist shall be retained to advise on and establish appropriate Exclusions Zones around the external-most elements of vulnerable Heritage Assets (as identified in Chapter 13 of the EIAR or by any subsequent investigations associated with the project).*	The requirement for buffer or exclusion zones around cultural heritage assets was identified in Chapter 13 of the EIAR to include recorded monument GA030-073---- Enclosure located within the Proposed Wind Farm Site. As detailed in the mitigation measures in Chapter 13 the following buffer/exclusion zones are proposed and the location, extent and demarcation of each will be agreed in advance with the National Monuments Service and the planning authority. As detailed

a. *The design of the Exclusion Zone to protect Recorded Monument GA030-073- — (Enclosure) shall be informed by the results of the Advance Geophysical Survey and Advance Test Excavation.* b. *Exclusion Zones shall be fenced off or appropriately demarcated for the duration of construction works in the vicinity of the monuments. The location and extent of each Exclusion Zone and the appropriate methodology for fencing off or demarcating at each location shall be agreed in advance with the Department of Housing, Local Government and Heritage and the planning authority.* c. *No groundworks of any kind (including but not limited to advance geotechnical site investigations) and no machinery, storage of materials or any other activity related to construction will be permitted within Exclusion Zones.*	above, the results of the geophysical survey undertaken at T2 immediately west of GA030-073---- Enclosure do not necessitate a larger buffer zone. › A buffer zone of 20m will be established around recorded monument GA030-073---- prior to the commencement of construction works associated with the Proposed Wind Farm. › The buffer should comprise durable temporary fencing with keep out signage. › The presence of the monument and the requirement for the buffer zone will be added to the Construction and Environmental Management Plan (CEMP) for the Proposed Project. › No ground works, storage of materials or tracking of machinery will take place within the buffer zone.
5. *The Construction Environment Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the Proposed Project as set out in Chapter 13 of the EIAR and by any subsequent archaeological investigations associated with the project. 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.*	As detailed in Chapter 13 of the EIAR all mitigation measures set out there in pertaining to archaeological or cultural heritage constraints will be included in the CEMP. The CEMP will include the location of all archaeological and cultural heritage constraints, will identify any potential direct or indirect impacts to same and will detail all mitigation measures to be implemented to ensure the protection of the archaeological and cultural heritage assets during all phases of site preparation and construction activity.
6. *The applicant shall retain the services of a suitably qualified archaeologist to advise on an archaeological mitigation plan for decommissioning of the development, to include mitigation measures for the removal of the turbines and the protection of any archaeological sites and monuments that are in situ at the site. The Decommissioning Plan shall be updated to include the location of any archaeological or cultural heritage constraints as set out in Chapter 13 of the EIAR and by any subsequent archaeological*	No potential significant effects to the archaeological or cultural heritage resource as a result of the decommissioning phase of the Proposed Project were identified in Chapter 13 of the EIAR as it is considered that the mitigation measures implemented during the construction phase of the project will have dealt with any potential effects. Notwithstanding this, as per point no. 6 of the DAU submission, a suitably qualified archaeologist will be retained to advise on an archaeological mitigation plan for the decommissioning phase of the proposed project. The Decommissioning Plan will include the location of all archaeological and cultural heritage constraints as set out in Chapter

investigations associated with the project. It shall clearly describe all identified likely impacts from decommissioning – both direct and indirect- and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during decommissioning works.	13 and any additional constraints identified as a result of any subsequent archaeological investigations carried out as part of the Proposed Project. The Plan will identify any potential direct and indirect impacts which may arise from the decommissioning phase of the project and set out any mitigation measures deemed necessary to alleviate such potential impacts.
7. *The planning authority and the National Monuments Service of 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.*	A final report detailing the results of archaeological monitoring of ground works and any archaeological investigations such as archaeological testing and excavation undertaken as part of the Proposed Project will be compiled on completion of the site work. The report will be illustrated with relevant drawings, photographs and plans and will also contain any necessary specialist reports. The final report will be submitted to the National Monuments Service and the planning authority.

3.1.6 Transport Infrastructure Ireland

A submission was received from the Transport Infrastructure Ireland (TII) in relation to traffic and roads. The Applicant confirms that the Proposed Wind Farm can comply with the observations and recommendations provided by TII should they be adopted as conditions by the Commission in any grant of planning permission.

3.1.7 An Taisce

A submission was received from An Taisce which related to ecology and hydrology. These observations are addressed below and in **Appendix 11 *'Triturus Environmental Response'***:

> *"**Habitats Directive:** Furthermore, we note the hydrological connectivity of the waterbodies present within the subject site with the Lough Corrib SAC (site code: 000297). We advise that the applicant's mitigation measures with regard to preventing adverse impacts upon this European site be closely considered by the Board."*

A potential pathway for likely significant effects on Lough Corrib SAC was identified in the Appropriate Assessment Screening Report (AASR) prepared for the Proposed Project due to hydrological connectivity between the watercourses within the Proposed Project site and the SAC. Therefore, a Stage 2 Natura Impact Statement (NIS) was prepared which examined the potential for adverse effects on this SAC in light of its conservation objectives. The potential pathway for adverse effects on Lough Corrib SAC due to deterioration of water quality via downstream hydrological connectivity with the SAC was identified, as well as the potential for effects on aquatic Qualifying Interests (QIs) where they may occur downstream as a result of degradation of supporting habitat. As a result a comprehensive range of site-specific mitigation measures were prescribed within the NIS (as well in Sections 6.7.2.1.1 and 6.7.3.1.1 of Chapter 6 and Chapter 9 of the EIAR) to block any pathways for deterioration of water quality during construction and operation of the Proposed Project. Therefore, provided that these measures are implemented in full, there is no potential for adverse effects on Lough Corrib SAC.

> *"**Wetland Area:** The subject site traverses a significant wetland complex which may contain significant habitat for a variety of flora and fauna species. Much of it also appears degraded and could be an appropriate site for wetland rehabilitation efforts. We note that the proposal traverses or is in close proximity to the Gortagarraun Bog and Cutover, Cloonarkan, Clonbern Bog, Clonbern Cutover, Kilmurry Killavoher Bog and Cutover and the Brackloon/Kilmurry Bog, all of which were identified during the North East Galway Wetlands Survey 2021. We would query the extent to which alternative sites have been considered in light of the significant wetland complex existing at this site, and the potential for restoration to occur which could revive the carbon sequestration properties of this network of boglands and reintroduce unique flora and fauna to the region. We advise that the Board closely considers the carbon sink implications of wetland restoration and weighs this against the decarbonisation benefits of renewable power."*

Specific details relating to the selection of the Project site are detailed in Chapter 3, Section 3.2.3.1 of the EIAR. Consideration to alternative energy sources was also addressed in *Chapter 3 – Site Section and Reasonable Alternatives* of the EIAR. Section 3.2.4 of this chapter details alternative renewable energy technologies, including offshore wind, as well as solar.

Additionally, there are no current plans to undertake peatland rehabilitation efforts in this area, with much of the site continuing to undergo intensive peat extraction activities as shown in Plate 6-6 of the EIAR. Therefore if the Proposed Project were not to go ahead, as outlined in Chapter 6, Section 6.7.1 of the EIAR, under a 'Do-Nothing' scenario the peatland habitats within the site would continue to be managed for active peat extraction including areas of uncut raised bog. Chapter 11, Section 11.6.1 of the EIAR further considers the 'Do-Nothing' effect, stating that if the Proposed Project were not to proceed, the opportunity to significantly reduce emissions of greenhouse gas emissions, including

carbon dioxide (CO_2), oxides of nitrogen (NO_x), and sulphur dioxide (SO_2) from fossil fuels to the atmosphere would be lost. due to the continued dependence on electricity derived from coal, oil and gas-fired power stations, rather than renewable energy sources, such as the Proposed Project. Furthermore, the opportunity to capture part of Galway's valuable renewable energy resource would be lost, as would the opportunity to contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions as described in Section 11.3 of the EIAR.

The Proposed Project has been deliberately designed to avoid loss of peatland habitats insofar as possible. As outlined in Table 6-23 of the EIAR, the Proposed Project also provides for the ecological enhancement of areas of uncut raised bog through rewetting to promote the development of wetland vegetation. A Biodiversity Management and Enhancement Plan (BMEP) has been prepared for the Proposed Project which provides for the ecological enhancement of an area of approximately 11.8ha of uncut but drained raised bog at the south-eastern end of the site through drain blocking and rewetting. This will help to raise the water table and promote the development of wetland vegetation. The area proposed for restoration adjoins an area of larger uncut and undrained raised bog to the east and which lies outside the site boundary. The area proposed for rewetting has been heavily drained through the insertion of parallel drains and has been subject to intensive turf cutting to the north, south and west where it is characterised by steep facebank and surrounded by cutover bog. The proposed measures for enhancement are fully described in the BMEP that is provided as Appendix 6-6 to the EIAR. The habitat replacement and enhancement areas are also mapped in this management plan.

3.1.8 Galway County Council

A submission was received from Galway County Council on the planning application for the Proposed Grid Connection element of the Proposed Project (ABP-320087-24), however some of the concerns expressed are most relevant to planning application (ABP-320080-24), subject of this RFI And are addressed below.

Traffic and Transport

Table 3-3 below sets outs the observations outlined in the GCC submission, along with the corresponding response. The response has been prepared by Alan Lipscombe Traffic & Transport Consultants.

Items 3-6 outlined in **Table 3-3** above are related to the Proposed Wind Farm aspect of the Proposed Project. As such a response to these items is included also included in Section 3.1.8 of the RFI submitted for the planning application for the Proposed Wind Farm (ABP-320089-24).

Table 3-3: GCC Traffic & Transport related observations and corresponding responses

Item no.	GCC Observation	Response
Item 1	The surrounding local road network comprises sections through bog road terrain in relation to grid connection works, as proposed on the LS-6501, which is a narrow road of circa width <3m, a road profile within a raised cutting with deep open ditches on each verge within sections of predominantly peat terrain. The acquired visibility triangle from grid connection entrance onto LS-6501 will further generate significant roadside intervention	*The mitigation measures proposed for the Proposed Project set out in Section 15.1.13.5.2 of the EIAR includes pre and post construction road condition surveys. A pre-condition survey of roads associated with the Proposed Project will be carried out prior to construction commencement to record the condition of the road. A post construction survey will be carried out after works are completed. The timing of these surveys will be agreed with the local authority. These will include a structural assessment (falling weight deflection) and road improvement works prior to construction where required. As stated in the EIAR it is proposed to agree works with Galway County Council prior to construction.*
Item 2	Considering directly the Road Classification of the local secondary LS-6501 and proposed Grid connection underground ducting excavation works through pavement foundations in peat areas where the resulting carrying capacity of the surrounding public road network is a serious concern. Pavement study including (falling weight deflection) and core testing of the preferred route to be taken by HGV's and or abnormal loadings from the proposed site entrance and along the specified roadway (route) to the proposed site junction of the public road was not demonstrated.	*This response is as provided in the response to item 1 above, however, it should also be noted that while there will be abnormally sized vehicles associated with the Proposed Project, all axle loads will be within accepted limits.*
Item 3	The applicant failed to demonstrate that surrounding culverts and structures crossed over by HGV's and / or including potential abnormal weight loads associated with the development and delivery route and presented in the format of a structure report in relation to demonstrating the structural design details of their structural adequacy to facilitate identified route to subject site.	*This response is as provided in the response to item 1 above, however, it should also be noted that the structural integrity of all structures and culverts on the proposed delivery route will be subject to a pre-commencement inspection upon a grant of permission.*
Item 4	The visibility sight distance triangles where the maximum speed limit resides whilst owing to the sub optimum horizontal and vertical alignment of the road	*As set out Section 15.1.10 of the EIAR, the full 160m visibility splay required for the 80 kph speed limit is available at Junction A on the R328 looking west, while the splay*

	and where the subject site proposes to introduce site entrance(s) onto the R328 and LS 6501 is severely restricted whilst contravening DM standard 28 of the Galway County Development Plan 2022 – 2028. The vertical envelope of visibility (ie intervisibility in relation to crest / sag road profile) onto the R-328 has not been demonstrated in accordance with TII standards.	*looking east is constrained to 67m due to a neighbouring site boundary. A series of traffic management measures is proposed in mitigation for this temporary junction, which are also set out in Section 15.1.10 of the EIAR. The junction design at this location, the available visibility splays, and the traffic management measures, were all included in the Stage 1 Road Safety Audit. Visibility in the vertical plane is addressed in Roads and Traffic FI Item no. 2 (Section 2.3.2 above.)*
Item 5	The Wind Farm delivery route through the LS-6466 is potentially hazardous on a narrow local public road with sections of steep open ditch verge profiles whilst swept path analysis has further demonstrated significant intervention where the aforementioned local road junction adjoins the N83 and the R328 respectively.	*The proposed TDR has now been altered and will no longer utilise the LS-6466 between the N83 and the R328. Please refer to the response provided for Roads and Traffic FI Item no.1 response (Section 2.3.1above).*
Item 6	The Road Safety Audit appears not to have considered the safety and impact implications of the significant road side interventions from swept path analysis and trafficked movements onto National, local and regional roads. In their report the Roads Section note that having regards to additional turning movements generated, sight entrance visibility and the scale of remedial works required and would interfere with the safety and free flow of traffic and endanger public safety by reason of traffic hazard, obstruction of road users or otherwise and therefore would be contrary to the proper planning and sustainable development of the area.	*With regards to the Stage 1 Road Safety Audit and the Turbine Delivery Route, please refer to the Roads and Traffic FI Item no. 5 (Section 2.3.5 above). With respect to the Wind Farm Access Junctions A to F, all were included in the Stage 1 Road Safety Audit, undertaken by Traffico, dated 2024, which is appended to the EIAR. It is noted that the Audit Team accepted all response to the 3 items raised by the Audit Team, as summarised in Section 15.1.11 of the EIAR, and in the Road Safety Audit Feedback Form, included as Appendix A of the Audit report. It is noted that Stages 2 and 3 Road Safety Audits will be undertaken as the Proposed Project progresses. In summary there are no outstanding safety concerns raised by the Auditors.*

Landscape and Visual

GCC have highlighted concerns with the visual aspect of the proposed turbines, stating:

> *"… concerns have been identified with respect to the wind turbine element of the overall project from certain viewpoints as demonstrated in photomontage and wireline visuals presented."*

Section 1.5 of the *Appendix 14-1: LVIA Methodology* has outlined the process for selecting viewpoint locations. On completion of desk study analysis, locations for photomontage capturing were selected, however when on-site roadside vegetation and other screening elements limit where photomontages can be captured, photomontage viewpoints are selected to best represent available views towards the proposed wind turbines. As highlighted in Section 1.5.1.2 of Appendix 14-1, it should be noted that these visualisations can only represent a view from a single location, and should never be considered as a substitute to visiting a viewpoint in the field. An assessment of effects regarding these viewpoints have been presented in *Appendix 14-3: Photomontage Assessment*, which have considered receptors in proximity to these viewpoints, reflecting their sensitivity and magnitude of change experienced following EPA (2022) guidance as outlined in Section 1.6.3 of the Appendix 14-1.

Further discussion on the visual effects as a result of the Proposed Wind Farm can be seen in Section 14.7.3.3.3 of the EIAR, where views represented by photomontages and photowires have been addressed in the context of receptors in proximity to them. Further insights onto this can be read in Section 3.2.19 of this RFI document.

3.2 Third-Party Submissions

A total of 186 third-party submissions were submitted to the Commission in relation to the Proposed Wind Farm. **Table 3-4** below outlines the common themes identified within the Third-Party submissions and specifies who in the project team is responsible for the corresponding response.

Table 3-4: Key Themes from Third-Party Submissions and Lead Authors for Response

Theme	Lead Author for Response
Noise Pollution	TNEI
Planning Policy	MKO
Lack of Community Engagement	MKO
Human Health & Economic Effects	MKO
Impact on Property Prices	MKO
Landowner Consents	MKO
Cumulative Impact Assessment	MKO
Insufficient & Inaccurate Information provided in the EIAR	MKO
Agricultural Impact	MKO
Impact on Material Assets	MKO
Proposed Project Design	MKO

Climate	MKO
Cultural Heritage	Tobar Archaeology
Hydrology / Hydrogeology	Hydro Environmental Services
Bats	MKO
Ornithology	MKO
Terrestrial Ecology	MKO
Aquatic Ecology	Triturus Environmental
Landscape and Visual Impact	MKO

3.2.1 Noise Pollution

A number of Third-Party submissions raise concern in relation to noise effects due to the construction and operation of the Proposed Wind Farm.

Chapter 12 of the EIAR describes the comprehensive assessment undertaken by TNEI Services Ltd (TNEI) of potential noise and vibration impacts associated with the Proposed Project including the Proposed Wind Farm and its component parts. This includes an assessment of construction and operational noise. Separately, a construction noise impact assessment and an operational noise impact assessment are provided as Technical Appendix 12-1 Construction Noise Report and Technical Appendix 12-2 Operational Noise Report of the EIAR.

In addition, Responses to noise related observations has been prepared and is included in **Appendix 3** ***'TNEI Response'*** of this document.

3.2.2 Planning Policy

A number of submissions make reference to policy and legislation in relation to the Proposed Project, particularly in relation to the Galway County Development Plan 2022-2028 (GCDP), with claims that the Proposed Project is in contravention of the GCDP.

It is demonstrated within Ch.2 of the EIAR and the Planning Report that the Proposed Project is consistent with the GCDP, which acknowledges renewable energy in reducing anthropogenic greenhouse gas emissions and the contribution of renewable energy in achieving national and EU target net zero greenhouse gas emissions by 2050. In addition, the Proposed Project is located in an area classified as *'Acceptable in Principle'* and *'Open To Consideration'*, which are identified in the Local Authority Renewable Energy Strategy (LARES) as the two most favourable areas for wind energy development in County Galway.

Furthermore, as documented throughout the Planning Report, EIAR and reiterated in Section 1.2 of this RFI, the Proposed Wind farm is strongly supported by European, national and regional policies and guidelines aimed at achieving the transition to a low carbon and climate resilient economy, increasing renewable energy generation, and enhancing energy security. Specifically the Proposed Wind Farm will contribute to achieving the target of generating 9GW of electricity from onshore wind and 80% renewable energy share by 2030, as set out in CAP25.

A number of Third-Party submissions queried compliance of the Proposed Project with objectives NHB 1, NHB 2, NHB 3, NHB 4, NHB 5, WTWF 1, TWHS 1, TWHS 3 and IW 1 of the Galway County Development Plan 2022-2028. The compliance of the Proposed Project with these objectives has been addressed in Table 6-33 of Chapter 6 of the EIAR, in addition to NHB 6, NHB 7, NHB 8, NHB 9, WR 1, P 1, P 2, P 3, IS 1, IS 2 and TWHS 2. As stated in Table 6-33 Chapter 6 of the EIAR, the Development Plan was comprehensively reviewed, with particular reference to Policies and Objectives that relate to biodiversity, protected species, designated sites and other natural heritage interests. A comprehensive Screening for Appropriate Assessment (AASR) and Natura Impact Statement (NIS) was also submitted with the planning application for the Proposed Project in which cumulative impacts with regard to European Sites was assessed. No potential for negative cumulative impacts when the policies and objectives outlined within the Galway County Development Plan were considered in conjunction with the Proposed Project were identified. No developments or projects identified within the Development Plan were found to occur in the wider area surrounding the Proposed Project.

3.2.3 Lack of Community Engagement

Concerns have been raised regarding the impact of the Proposed Wind Farm on the community and the lack of community consultation process undertaken as part of this project. Submissions have claimed that there was a lack of meaningful public engagement, with insufficient information, and ineffective communication, leading to community consultation that is not in line with the 2006 Wind Energy Development Guidelines. Chapter 2 and Appendix 2-1 of the EIAR provide comprehensive detail on the extensive community consultation that occurred and on the substantial community benefit fund associated with the proposal.

From the end of 2022 and over the course of 2023, there was ongoing communication between members of the local community and the project Community Liaison Officer, representing the project developers. This communication took place predominantly via email and phone and was predominantly concerned with the same themes that had been encountered earlier in the consultation process, such as visual and noise impact, property prices, etc.

These community engagement activities have been completed in line with the recommendations as set out in the *Draft Revised Wind Energy Development Guidelines (December 2019) – Community Engagement* which states that developers of proposed wind farms should, in advance of submitting applications for planning permission, take:

Clonberne Windfarm Ltd has engaged and consulted with the local community from an early stage of the pre-planning phase of the proposed Clonberne Wind Farm development. This process of community engagement has proven highly valuable as a means of identifying the key concerns of the local community in relation to the Proposed Project, and the issues raised by local residents during the consultation process have informed and shaped the project proposal in several ways.

The development of the proposed Clonberne Wind Farm will provide a direct and prolonged economic benefit to the communities surrounding the site through the Community Benefit Fund, and through employment opportunities during the construction process. The developers are committed to maintaining the strong community engagement approach throughout the post-application stage and, if planning permission is granted, will continue to consult with and be available to residents through the construction and operational lifespan of the Clonberne Wind Farm.

3.2.4 Human Health & Shadow Flicker and Economic Effects

Health Effects & Shadow Flicker

Some third-party submissions raise concerns in relation to the potential for negative health effects associated with the Proposed Wind Farm due to the scale of the turbines proposed and proximity to

local residents and local communities as well as the wide range of organisations, schools, sports clubs and other associated activities. Concern was raised regarding potential for noise pollution, infrasound, health effects, and shadow flicker and impacts on mental health.

As discussed in Section 5.6 of Ch.5 of the EIAR, while there are anecdotal reports of negative health effects on people who live very close to wind turbines, peer-reviewed research largely does not support these statements. There is currently no published credible scientific evidence to positively line wind turbines with adverse health effects.

Extensive research has been carried out in the US, Canada, UK, Australia and by the World Health Organisation (2018) and the HSE (2017). All studies conclude that that exposure to wind farms does not trigger adverse health effects.

The Health Service Executive (HSE) 'Position Paper on Wind Turbines and Public Health' was published in February 2017 to address the rise in wind farm development and concerns regarding potential effects on public health. The paper discusses previous observations and case studies which describe a broad range of health effects that are associated with wind turbine noise, shadow flicker and electromagnetic radiation

A number of comprehensive reviews conducted in recent years to examine whether these health effects are proven has highlighted the lack of published and high-quality scientific evidence to support adverse effects of wind turbines on health.

The HSE position paper determines that current scientific evidence on adverse effects of wind farms on health is weak or absent. Further research and investigative processes are required at a larger scale in order to be more informative for identifying potential health effects of exposure to wind turbine effects. They advise developers on making use of the Guidelines, as a means of setting noise limits and set back distances from the nearest dwellings.

It should be noted that the Proposed Wind Farm complies with the Draft Revised Wind Energy Guidelines 2019 (referred to as the draft Guidelines) of a 4x tip height set back from the nearest non-involved Sensitive Property in order to protect for visual amenity. It should also be noted that in relation to noise and shadow flicker, turbine technology allows for the turbines to be controlled to achieve the necessary guideline limits, including any revised guidance requirements. Concern has also been raised for depopulation in the area due to the Proposed Wind Farm . There has been no credible evidence provided that has shown a positive correlation between Wind Farms and rural depopulation. No peer reviewed studies have proved a link between wind farm sites and depopulation.

Concern has been raised in regard to the health impacts of electromagnetic fields. It should be noted that there has been no credible evidence that electromagnetic fields can impact human health, with a study by *McCallum et al*. (2014), stating that magnetic field levels in the vicinity of wind turbines were lower than levels produced by common household electrical devices.

None of the submissions received in relation to this topic area have set out any clear and credible evidence which in any way alters the findings of the EIAR in this regard. As such, it is concluded that the information contained within the EIAR remains valid and robust.

Please refer to Chapter 5 of the EIAR for further details.

Concerns have been raised regarding the ability for wind turbine noise to affect nearby residents with Autism Spectrum Disorders (ASD). It is acknowledged that people with ASD and other neurodivergences may experience a greater noise impact than non-neurodivergent individuals, as is discussed in literature from Howell et al. (2015). However, it should also be noted that recent studies, such as that of Li et al. (2023), discussed that while a positive correlation was noted between fine Particulate Matter exposure and negative ASD symptoms (primarily due to roads and industry), no correlation between noise and negative ASD symptoms was noted. It should be noted that this study considered noise from a mixed variety of sources, including roads, rail, air, industry and wind turbines, and solely considered noise

impacts at dwellings and not workplaces and schools. Regardless, as highlighted in Section 12.4.3.1 of the EIAR, the Applicant proposes to appoint a community liaison officer who would be the first point of contact in the event that noise complaints were to occur and the mitigation strategy set out in Section 12.7.2 of the EIAR will be employed and that any complaints during the operational phase regarding wind turbine noise will be addressed promptly. Similarly, a suite of mitigation measures are provided in Section 5.10.5.2.9 to safeguard all sensitive receptors from Shadow flicker effects. Notwithstanding these mitigation measures, should shadow flicker associated with the permitted development be perceived to cause nuisance at any home, the affected homeowner is invited to engage with the Developer. The homeowner will be asked to log the date, time and duration of shadow flicker events occurring on at least five different days. The provided log will be compared with the predicted occurrence of shadow flicker at the residence, and if necessary, a field investigation will be carried out and mitigation measures will be discussed with the homeowners. If agreement can be reached with the homeowner, then it would be arranged for the required mitigation to be implemented in cooperation with the affected party as soon as practically possible and or the full costs to be borne by the wind farm operator.

Economic Effects

Some third-party submissions raise concerns in relation to the potential for adverse economic effects on the local economy associated with the Proposed Wind Farm. The concerns raised include disruptions to businesses during the construction phase, discouragement of future investments in the area and rural depopulation.

The operational phase of the Proposed Wind Farm will have no impact on the population of the area with regards to changes to trends, population density, household size or age structure. There has been no credible evidence provided that has shown a positive correlation between Wind Farms and rural depopulation. No peer reviewed studies have proved a link between wind farm sites and depopulation. A study by le Maitre *et al.* (2024) found that greater proportion of residents in proximity to wind farms had weaker preferences for wind farm development at the earlier phases of project development (i.e the planning phase) than strongly supportive respondents (who tend to be residents living near a wind farm in operation, or construction). Furthermore, wind farm neighbours generally agreed with economic arguments for wind energy, such as job creation (76 % agreement). Section 5.3.6.3 of the EIAR details the employment and economic benefits of wind energy developments in detail. Similarly, local employment during the construction and operational phases of the Proposed Wind Farm will result in a long-term, significant positive effects for locals, and local businesses due to an increase in workers in the area for the duration of construction. Notwithstanding this, the community benefit scheme to support local environmental improvements, as well as recreational, social and community amenities will have a long-term significant positive effect on local communities, making them more attractive locations to reside.

Overall, it is concluded that the socio-economic effects of the Proposed Project will have a significant, positive, long-term effect on a local, regional, and national level.

3.2.5 Impact on Property Prices

Concerns have been raised about the potential for the Proposed Wind Farm to have adverse effects on the value of properties of local residents. This issue has been thoroughly addressed in Section 5.7 of Chapter 5 of the EIAR.

As outlined in the EIAR, the only Irish study, a 2023 working paper by the Centre for Economic Research on Inclusivity and Sustainability (CERIS), suggests a potential 14.7% decrease in property values within 1km of a turbine. However, the study is based on a small sample of 225 houses and acknowledges that no significant price reductions were found beyond 1km, with any observed effects diminishing over time. Given its limited dataset and working paper status, further research is needed before drawing firm conclusion.

Extensive research in the United States provides a broader perspective. The 2009 and 2013 studies by the Lawrence Berkeley National Laboratory (LBNL) analysed thousands of home sales near wind farms and found no measurable, consistent impact on property values. A 2023 study published in Energy Policy reported temporary value decreases post-announcement but found these effects faded once the wind farms became operational.

In the UK, studies commissioned by RenewableUK (2014) and Climate Exchange (2016) concluded that wind farms do not have a consistent negative impact on property prices. Instead, county-wide market trends drive local house prices rather than the presence of wind farms.

Overall, the existing body of research, particularly large-scale, peer-reviewed studies, does not support claims that wind farms significantly devalue nearby properties in the long term. While localized impacts may occur in specific cases, the evidence suggests these effects are not widespread or long-lasting, with house prices instead reacting negatively to the expectation of likely impacts and construction, but these prices recover during the operational phase.

Furthermore, the placement of wind turbines near residential dwellings is not a new occurrence. The project design fully complies with the recommendations outlined in best practice guidance for wind energy developments in Ireland, specifically meeting the 4x tip height setback distance for the protection of residential visual amenity as set out in the draft Guidelines.

Please refer to Section 5.7 of Chapter 5 of the EIAR for further details.

3.2.6 Landowner Consents

Some observations received suggest that the Applicant has not included requisite letters of consent in respect of the extent of the planning application site. It is also suggested that a landowner consent map should be included to ensure there is consent on all sections of land.

The Commission should note that the Applicant is satisfied that they have presented the necessary legal consent to make the subject planning application. The Board will also note Section 31(13) of the Planning and Development Act 2000 (as amended) which states the following:

> *'A person shall not be entitled solely by reason of a permission under this section to carry out any development.'*

The inference of this provision of the legislation is that a grant of planning permission does not facilitate a developer undertaking works on land outside their ownership based solely on a grant of planning permission. The planning application process is not the forum in which to resolve conflicts pertaining to land ownership, that is a civil matter in respect of which ample recourse is available to relevant parties, should it be necessary.

3.2.7 Cumulative Impact Assessment

A number of Third-Party Submissions raise concern of the impact of the Proposed Wind Farm when assessed cumulatively with the permitted and proposed wind farms in the area.

The methodology of the cumulative impact assessment is detailed in Section 2.8 of the EIAR. The cumulative impact assessment was carried out in accordance with the EIA Directive as amended by Directive 2014/52/EU ('EIA Directive') and associated guidance documents. To gather a comprehensive view of cumulative impacts on these environmental considerations and to inform the EIA process being undertaken by the consenting authority, each relevant chapter within the EIAR includes a cumulative impact assessment where appropriate. The potential for cumulative impacts arising from other plans and/or projects has therefore been fully considered within the EIAR.

Assessment material for this cumulative impact assessment was compiled on the relevant projects within the vicinity of the Proposed Project. The material was gathered through a search of relevant online Planning Registers and EIA portal, reviews of relevant EIAR (or historical EIS) documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts.

It must be clarified that all impact assessment chapters of the EIAR, namely Chapters 5 to 15, have assessed the potential for cumulative effects between the Proposed Project and other existing, permitted and/or proposed wind farms (within the relevant cumulative study area).

Overall, the Proposed Project has been designed to avoid and mitigate impacts on the environment and a suite of mitigation measures is set out within the EIAR. The mitigation measures set out in the EIAR will ensure that significant cumulative effects do not arise during the construction, operational or decommissioning phases of the Proposed Project.

One observer suggests that the cumulative impact of a quarry at Loughmanagh, Pl. Ref. 2460013 has not been taken into consideration in the EIAR. This planning application can be found in *Appendix 2-3: Projects Considered in the EIA Cumulative Assessment* in the EIAR. This is a long list of all applications considered by each of the different disciplines in their cumulative impact assessment. While not an extensive list, this quarry has been taken into consideration in Section 10.3.5, Section 12.6.4.2, Section 15.1.13.7. This quarry has also been discussed in Section 2.3.7 of this RFI document. .

3.2.8 Insufficient/Inaccurate Information provided in the EIAR

A submission relates to omissions within the site design, EIAR and Planning Application. These have been addressed below:

While the turbine model has not been specified, the turbine dimensions have been stated and assessed within the EIAR. Specifically, the turbine model to be installed on the Proposed Wind Farm will have an overall turbine tip height of 180 metres; blade rotor diameter of 162 metres and hub height of 99 metres. As clarified within Chapter 4 Section 4.3.1.1.2 of the EIAR, the assessment of the development footprint of the Proposed Wind Farm, within this EIAR, is based on the maximum potential footprint for all of the infrastructural elements. This precautionary approach is taken as the assessment of the maximum development footprint will, in the absence of mitigation measures, give rise to the greatest potential for significant effects. Should the development footprint be less than the maximum, the potential for significant effects will also be reduced. Reference to a serrated trailing blade edge is made in Chapter 12 Noise and Vibration, with the candidate turbine assessed having serrated trailing edge blades. Such blade edges are a common feature of modern wind turbines, which serve to reduce aerodynamic noise.

An observation states a discrepancy in Chapter 18 regarding weekend construction hours. It should be clarified that weekend construction hours will be limited to 7am to 3pm on Saturday.

An observation is similarly made stating that the recommended distance between turbines, are not appropriate within the Proposed Wind Farm and concerns are made about wake effects as a result. It must be emphasised that the design of the Proposed Wind Farm has been an informed and collaborative process from the outset, involving the designers, developers, engineers, landowners, environmental, hydrological and geotechnical, archaeological specialists and traffic consultants. The aim being to reduce potential for environmental effects while designing a project capable of being constructed and viable. As stated in Chapter 4, Section 4.3.1.1 of the EIAR, the proposed wind turbine layout has been optimised using wind farm design software (WindPro) to maximise the energy yield from the Proposed Wind Farm, while maintaining sufficient distances between the proposed turbines to ensure turbulence and wake effects do not compromise turbine performance. The Environmental Impact Assessment process has similarly aided in the appropriate siting of turbines in order to minimise any possibility of negative environmental effects.

An observation is made in a third-party submission that the blades of Turbine 5 have an overhang onto the existing roadway. Turbine 5 is 285m away from the nearest local road (L-64741). This is compliant with the Wind Energy Development Guidelines. It is presumed the road referenced in the submission is the site access track 25m east of T05, which is not a public roadway and therefore does not adhere to the same recommendations as public roadways.

While an observation has raised the omission of Woodview Crescent housing estate and other dwellings and building from maps, these dwellings have been fully considered in the EIAR. The alleged omission of this estate is solely due to Discovery Series background mapping not showcasing these dwellings/buildings. This is not representative of an omission of data on the Applicant's side and these maps did not specifically seek to clarify sensitive receptors. . MKO wish to point this observer to Figure 5-3 of the EIAR and Figure 12-2 of the EIAR to see the receptors assessed within 1.63 km and 2 km of the Proposed Turbines respectively, which clearly includes the Woodview Crescent housing estate, as well as all other buildings in the surrounding area.

3.2.9 Agricultural Impact

A number of Third-Party Observers have raised concerns in relation to the impact of the Proposed Wind Farm on agriculture, including effects on livestock, arable farming land and conditions.

Reference is made to a 2023 publication relating to the impact of noise and vibration from turbines on cattle. This paper, "The Importance of Noise Hygiene in Dairy Cattle Farming – A Review" (Dimov, D., Penev, T., Marinov, I., 2023), relates specifically to noises within milking parlours, rather than wind turbines. Specifically considering wind farms, there is no scientific literature demonstrating significant effects of wind farms on cattle, as presented by the EU Reference Centre for Animal Welfare (Ruminants and Equines)[1]. Please also see Section 3.5 of **Appendix 3 'TNEI Responses'** for a comprehensive response to third party submissions relating to the noise effects of the Proposed Project on livestock.

Concerns have been raised relating to turbines impacting temperature regimes and impacting agriculture. Turbine wake effects describe the phenomenon in which downstream of moving wind turbines a region of slower wind speeds and increased turbulence is created. The literature notes that, while micrometeorological effects of wind turbines have been assessed globally, there is little evidence of measured effects on biotic or abiotic receptors such as temperature or agriculture. There is a distinct lack of research in this area relating to areas in Europe including the UK and Ireland[2]. No body of work has been published which would link the turbine wake effect to having an impact on downstream lands, agriculture, livestock or local temperature variations.

A number of observers make reference to the Gurranbawn area, expressing concerns that the water table may be altered, impacting reclaimed agricultural land in this area. Section 9.5.2.4 of Chapter 9 of the EIAR provides a detailed assessment of the impacts to groundwater as a result of the Proposed Project as a result of excavations. Due to the prevailing geology at the Site, the local and temporary nature of the proposed works, the residual effects of the Proposed Wind Farm on groundwater levels will be Not Significant.

Concerns were raised relating to the use of heavy machinery during the construction phase, which may lead to soil erosion and compaction. A range of Mitigation Measures are provided in Section 8.5 of the EIAR which will prevent both soil erosion and compaction during the Construction and Operation Phases of the Proposed Project. These include the utilisation of brash/bog mats to support vehicles and avoiding the formation of rutted areas during construction. The upper vegetative layer of excavated peat will be stored with the vegetative part of the sod facing upright to encourage plant growth and reduce soil erosion, and re-seeding of vegetation will also occur at peat repository areas.

3.2.10 Impact on Material Assets

Some observations raise concerns about the impact of the Proposed Wind Farm on Material Assets, including broadband, air traffic control and emergency service communications.

It should be highlighted that telecommunications operator consultation have been carried out, as detailed in Chapter 15 of the EIAR, and that there will be no significant impacts on broadband or communications assets as a result of the Proposed Project due to mitigation by good design principles followed. Some observations highlight the response rate from telecommunications operators. While multiple operators have not responded to MKO as of present, in the event of interference occurring to telecommunications owned by any operators, the Guidelines acknowledge that 'electromagnetic interference can be overcome' by the use of divertor to relay links out of line with the wind farm. While not anticipated or expected, the Applicant commits to consulting with the relevant bodies in the event that the Proposed Wind Farm impacts telecommunications or broadcast signals.

3.2.11 Proposed Project Design

A number of Third-Party observations have stated that the Proposed Wind Farm will not provide sufficient energy due to wake effects, wind take, turbine shutdowns and inappropriate substation positioning. It should be highlighted that as discussed in Chapter 4 of the EIAR, the proposed wind turbine layout has been optimised using industry standard wind farm design software to maximise the energy yield from the Proposed Wind Farm, while maintaining sufficient distances between the proposed turbines to ensure turbulence and wake effects do not compromise turbine performance. It should also be noted that the Proposed Wind Farm design has been informed through a comprehensive environmental impact assessment, inclusive of desk studies, field surveys and site investigations to ensure that the Proposed Wind Farm layout maximises it's energy yield whilst also ensuring that no significant environmental effects will arise.

3.2.12 Climate

Some observations raise scepticism over the ability for the Proposed Wind Farm to offset greenhouse gases, compliance with climate policy, need for the prioritisation of offshore renewable energy developments. It must be clarified that the carbon calculations do include the greenhouse gas emissions associated with the construction of the overall Proposed Project including the Propsoed Wind Farm and that these activities will not lead to the Proposed Project being unable to offset carbon emissions. As outlined in Section 11.5.3.2, The 134,051 tonnes of CO_2 that will be lost to the atmosphere due to changes in soil and ground conditions and due to the construction and operation of the Proposed Project will be offset by the Proposed Project in approximately 22 months of operation, or 4.6% of the Proposed Projects expected lifespan. The remaining 95.4% of the Proposed Projects lifespan will generate clean, emissions-free energy to the Irish grid.

It should be stated that the Applicant has considered the potential for an offshore wind energy development, however, given the significant challenges facing the offshore renewables industry, and the allocation of all Phase 1 offshore wind farms at the time the Proposed Project was being considered, this was not considered a viable option. While some observations claim that onshore wind energy development should not be considered, a variety of renewable energy technologies need to be employed in order to tackle the climate crisis and provide energy security in Ireland, inclusive of offshore and onshore wind energy developments, solar farms, biogas and hydroelectrical developments. This is well supported in national and international climate policy.

Regarding the Proposed Project not being compliant with Climate Policy, Chapter 2 '*Background to the Proposed Project'* and Chapter 11 '*Climate'* of the EIAR thoroughly detail how the Proposed Project will contribute to both national and international climate policies.

3.2.13 Cultural Heritage

A number of third party submissions raise the issue of the proximity of Clonbern graveyard to the proposed wind farm and the potential negative effect of the Proposed Project on the heritage of this site. Concerns are also raised about the potential effects to the heritage of the bogland in which the Proposed Wind Farm will be located and the heritage of the surrounding area.

Response:

Chapter 13 of the EIAR which deals with archaeological, architectural and cultural heritage comprehensively assesses the potential direct and indirect effects of the Proposed Project on both the recorded and unrecorded archaeological and cultural heritage resource. As outlined in the EIAR, the assessment was based on both a desktop review of the available cultural heritage and archaeological data and a field inspection of the proposed Wind Farm Site and wider landscape setting. The assessment of effects on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Chapter 12 of the EIAR, and also photomontage / wireline technology from specific cultural heritage assets or other relevant viewpoints. The assessment was carried out with reference to the Galway County Development Plan (GCDP) 2022-2028 and the relevant policies and objectives therein which pertain to archaeology, built and architectural heritage including the Record of Protected Structures (RPS).

Clonbern Graveyard and the monuments therein was included in the assessment in Section 13.3.3.4 Recorded Monuments within 5km of the nearest proposed turbine, and Section 13.3.3.9 Protected Structures within 5km of the nearest proposed turbine. Clonbern Graveyard contains two recorded monuments GA031-016---- and GA031-016001-, Church and Graveyard and two Protected Structures, RPS Ref. 40 Dennis Mausoleum and RPS Ref. 41 Clonbern Old Graveyard, as listed in the GCDP RPS. The monuments and Protected Structures were visited as part of the assessment. As discussed in Chapter 13, the recorded monuments and Protected Structures are located over 900m to the east of the nearest proposed turbine, T5. In this regard no direct effects to the recorded monuments or Protected Structures was identified in the assessment as they are physically separated from the Proposed Project infrastructure.

An assessment of potential visual effects to the recorded monuments and Protected Structures at Clonbern Graveyard was also undertaken in Chapter 13 (Sections 13.4.4.3 and 13.4.4.5, respectively). A Significant theoretical visual effect was concluded for the wider setting in which both the recorded monuments and Protected Structures at Clonbern Graveyard are located. This was based on the distance of the structures from the proposed turbines and the number of turbines that will theoretically be visible from same. In this case, based on the Zone of Theoretical Visibility (ZTV), 9-11 turbines will theoretically be visible from Clonbern Graveyard, with the nearest of these just over 900m to the west. It was noted, however, that the immediate setting of both the recorded monuments and the Protected Structures will not be affected given that there is a physical set back between same and the proposed turbines. Furthermore it was noted that the potential visual effect identified may in reality be ameliorated by natural screening, buildings and vegetation thereby reducing the effects.

A photomontage produced from Clonbern Graveyard as part of the LVIA response (**Section 3.2.18**) to the RFI demonstrates visibility of all 11 proposed turbines from this location. As per the assessment of visual effects determined in Chapter 13 of the EIAR, the immediate setting of the monuments and Protected Structures at Clonbern Graveyard will not be affected given the separation/set back between the latter and the proposed turbines. The impact assessment of this photomontage as carried out from a landscape and visual perspective also notes that the proposed turbines do not impact on the Protected Structures' integrity or immediate setting. While the magnitude of change as a result of the proposed turbines is acknowledged as Substantial, the significance of the effect is considered to be Moderate-Significant from a landscape and visual perspective. A Moderate residual effect is concluded when mitigating factors such as the set-back distance between the Protected Structures and the proposed turbines and intervening fields and treeline are considered. From a Cultural Heritage perspective and as outlined in Chapter 13 of the EIAR and in this document, the Significant effect to the wider setting of the recorded monuments and Protected Structures at Clonbern Graveyard will be mitigated by the set back from the proposed turbines and intervening screening and vegetation which is in accordance with the LVIA assessment.

Regarding potential effects to the cultural heritage of the boglands within which the Proposed Wind Farm is located a comprehensive assessment of such effects on the Cultural Heritage resource was carried out in Chapter 13. The assessment included a walk-over survey of the Proposed Wind Farm Site and desk-based research. As detailed above, one recorded monument, GA030-073---- Enclosure, is

located within the Proposed Wind Farm Site. No direct effects to this monument were identified in the assessment, however, mitigation in the form of a 20m buffer zone was proposed in order to ensure that no accidental damage to the enclosure occurs.

Potential direct effects to as yet undiscovered archaeological or cultural heritage sites was also assessed in Chapter 13. The assessment acknowledged the potential for the presence of sub-surface archaeological features or deposits within the Proposed Wind Farm Site given the largely peatland and greenfield nature of same. Mitigation measures to ameliorate any potential direct effects to sub-surface archaeology or previously unrecorded sites were proposed in Chapter 13 and include pre-development archaeological testing of the proposed wind farm infrastructure and monitoring of all ground works at the construction stage of the Proposed Wind Farm, under licence from the National Monuments Service. These mitigation measures are considered appropriate to enable the detection, recording and preservation by record of any sub-surface archaeological finds, features or deposits which may exist within the Proposed Wind Farm Site.

Furthermore, with regard to the assessment of potential visual effects in the wider landscape, Table 13-1 of the EIAR (**Table 3-5** below) lists the Cultural Heritage Assets considered and the distance of same from the proposed turbines according to their sensitivity as follows:

Table 3-5: Cultural Heritage Assets (as shown inn Table 13-1 of the EIAR)

Cultural Heritage Asset	**Distance Considered from the Proposed Turbines**
UNESCO World Heritage Sites (including tentative sites)	20km
National Monuments (State Ownership and Preservation Order Sites)	10km
Sites and Monuments and Recorded Monuments, RPS	5km
NIAH structures	5km
Undesignated sites, if relevant	500m

In this regard both the archaeological and cultural heritage of the Proposed Wind Farm Site and that of the wider landscape as shown by the distances listed in Table 13-1 of the EIAR was taken into consideration in the assessment.

Indirect (visual) effects on all archaeological and cultural heritage assets both within the proposed Wind Farm Site and within the wider surrounding landscape of 20km for UNESCO WHS and those on the Tentative List, 10km for National Monuments in State Care and those subject to a Preservation Order, and 5km for recorded monuments, Protected Structures and NIAH structures and historic gardens was assessed. No potential visual effects to UNESCO WHS or those on the Tentative List was identified and no significant potential visual effects to National Monuments or those subject to a Preservation Order in the wider landscape of 10km was identified. The overall significance of effects on the setting of recorded monuments ranges from Imperceptible to Significant and is based on the distance to the nearest turbine and the number of turbines theoretically visible from each asset. A potential Significant effect to the wider setting of recorded monuments within 5km of the nearest proposed turbine was only determined for 6 out of 171 monuments (3.5%) and in reality may be less significant due to natural screening, boundaries, buildings and vegetation. Furthermore, some monuments may not be readily visible in the landscape which further ameliorates potential effects on setting. Additionally, many of these monuments are located on private land which are not formally accessible to the public.

No Protected Structures subject to statutory protection are located within the Proposed Wind Farm Site. A total of 6 no. protected structures are located within 5km of the nearest proposed turbine. The overall significance of effects on the wider setting of Protected Structures within 5km will range from Moderate to Significant. In reality, however, the effect will be less severe since the ZTV model does not take natural screening and buildings into consideration which will alleviate if not remove the effect on setting in some circumstances. Potential visual effects to the wider setting of the Protected Structures in Clonbern Graveyard is discussed above.

No NIAH structures are located within the Proposed Wind Farm Site. Five structures listed in the NIAH are located within 5km of the nearest proposed turbine, many of which are also listed in the RPS. Three historic gardens are located within 5km of the nearest proposed turbine. Some of these are associated with the NIAH structures listed in Table 13 7 of Chapter 13, while others may have no surviving associated structures. Similarly, in some instances there may be no surviving garden features. The overall significance of effects on the wider setting of such structures and gardens will range from Not Significant to Significant. In reality the effect will be less severe since the ZTV model does not take natural screening and buildings into consideration which will alleviate if not remove the effect on setting altogether.

Conclusion

Taking into account the above and the assessment of potential effects, both direct and indirect, on the Cultural Heritage of the Proposed Wind Farm and its surrounds as presented in Chapter 13 of the EIAR, it is considered that a comprehensive assessment has been undertaken. The mitigation measures proposed are regarded as appropriate and have been reiterated by the DAU submission which requires all mitigation measures set out in Chapter 13 to be implemented in addition to a number of other requirements discussed above. One such requirement was a geophysical survey at T2 to the west of GA030-073---- Enclosure which has been undertaken and which did not lead to the discovery of any additional sub-surface elements of the recorded monument which would necessitate a larger buffer zone. Mitigation measures are not possible to propose to ameliorate potential visual effects on the setting of recorded monuments and Protected Structures where identified, such as at Clonbern Graveyard. It is considered, however, that the physical set back of the proposed turbines from the graveyard and monuments/protected structures therein in addition to existing screening will ameliorate such effects.

3.2.14 Hydrology / Hydrogeology

Some observations raise concerns regarding the hydrology / hydrogeology of the area, and the potential negative impact that the Proposed Wind Farm may have. A comprehensive response to these submissions is provided in **Appendix 6** ***'Hydro- Environmental Services Response'.***

3.2.15 Bats

Concern is raised in multiple observations on the impact of the Proposed Wind Farm on bats. Chapter 6 of the EIAR describes the surveys and comprehensive assessment undertaken to assess the potential effects of the Proposed Wind farm on bats. These observations have been grouped and assessed under multiple themes below:

- Omission of hardwood tree inspections along the L-22321 local road
- TDR Road Works
- Trees located to north of T4 and to the east of T5 have not been surveyed for roosts as they aren't within site boundary. This is an oversight as they are likely to contain roosts.
- Impact of vehicles using the passing bay has not been assessed as part of the AA
- Passing bay has not been surveyed in regards to roosts.

- Felling of hardwoods to accommodate roads at T9 and T8 will potentially disrupt roosts
- Proposal to replant 2.14 ha of woodland to offset habitat loss is being planted too close to T8 and T9
- Assessment of stone building near T9 as having low roost potential should be verified
- Section 4.6 states that there were no bat roosts identified within the footprint of the proposed project, however there were 80,651 bat passes indicating roost potential
- Bat survey was carried out too early in the year (8th April 2024), bats may not have come out of hibernation
- Cumulative effect of windfarm and neighbouring proposed quarry at Lomaunaghbaun on bats, specifically the Horseshoe bat
- Concern over fatal effect of barotrauma
- Red flashing beacon lights from turbines, can cause problems for bats such as delaying or preventing emergence from roosts, abandoning or becoming entombed in roosts, affects on feeding behaviour of bats away from roosts, affects on commuting and foraging routes
- Removal of 1,206m of hedgerow for the project will negatively impact, as bats rely on linear features for navigation

Omission of hardwood tree inspections along the L-22321 local road

Concern was raised over the omission of assessment of hardwood trees along the L-22321 local road and presence of 'many bat roosts'.

Three passing bays are proposed along the L-22321 local road. This section of the L-22321 was excluded from the initial Bat Survey Report (Appendix 6-2) and EIAR following a desk-based assessment and preliminary site walkover, which indicated limited suitability for roosting bats due to the absence of significant Potential Roost Features (PRFs) and the predominance of younger or structurally simple trees. In addition, the proposed works along this section were anticipated to be minor, involving only limited trimming of overhanging branches rather than tree removal. Based on this preliminary assessment, survey effort was focused on areas with higher roost potential and within the Proposed Project footprint.

However, to address this omission, a detailed ground-level tree assessment was carried out on 1st September 2025 along the extent of the proposed works associated with the L-22321. No linear habitat removal will be required to facilitate the construction of the Passing Bays. Passing Bays 2 and 3 are largely located on areas of grassy verge and recolonising bare ground, while Passing Bay 1 will require the removal of a single small willow tree (see **Plates 3-1 to 3-3**). This willow tree does not support features suitable for roosting bats, and its removal is not considered significant in the context of available commuting or foraging habitat in the surrounding landscape. Accordingly, no significant effects on bats are anticipated as a result of the proposed works.

Trees along the wider route comprise semi-mature/mature ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), and hawthorn (*Crataegus monogyna*) lining both sides of the road, with some upper limbs extending over the carriageway.

Of all trees assessed along this route, only one ash tree contained a PRF (butt rot at the base of the trunk; see **Plate 3-4 & Plate 3-5**). No evidence of bat roosts was identified in this tree or any others during the inspection. All remaining trees were assessed as having no suitability (*None*) for roosting bats. Minor trimming of overhanging branches will be required to facilitate HGV access to the proposed borrow pit; overhanging limbs were inspected during the survey and no PRFs were identified. A representative selection of the assessed trees is shown in **Plates 3-6 to 3-9**.

The ash tree with the PRF, along with all other trees, will be retained as part of the proposed works. Given the absence of confirmed roosts, roosting features and the limited trimming proposed, no

significant effects on bats are anticipated. Additionally, these areas will remain suitable for local commuting and foraging bat populations.

The findings confirm that the Bat Survey Report and EIAR remain valid. No amendments are required to the main conclusions.

Plate 3-1: Passing Bay 1 - Isolated willow tree and grassy verge designated for removal

Plate 3-2: Passing Bay 2 - Recolonising bare ground (right) to be used.

Plate 3-3: Passing Bay 3 - Grassy verge and recolonising bare ground (right)

Plate 3-4: East aspect of ash tree with butt rot assessed as PRF-I. No evidence of roosting bats identified

Plate 3-5: West aspect of the same PRF-I ash tree

Plate 3-6: Ash treelines on either side of the L-22321

Plate 3-7: Overhanging limb of an ash tree. No PRF identified

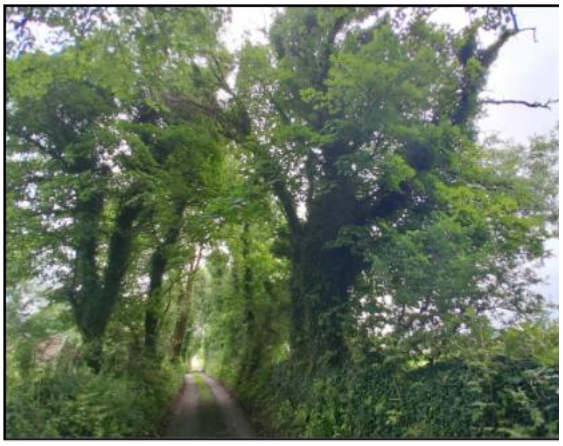


Plate 3-8: Sycamore trees assessed as having no roosting suitability

Plate 3-1: Hawthorn trees along L-22321. No roosting potential

TDR Road Works

Concern was raised in Section 5.6 over the temporary widening of L-6466 local road due to presence of mature hardwood trees and evidence of bat population roosting in trees that will be affected by the proposed works (according to 'local knowledge'). As highlighted in Section 3.1.8 above, the L-6466 local road will no longer be traversed on the Turbine Delivery Route.

Roost Assessments outside of Red Line Boundary

One submission states that – "*the applicant does not acknowledge or assess prominent Bat roosting sites outside of the development red line, but within dangerously close proximity to Turbines 4 and 5 see fig 1. The roost may be outside of the development red line but they are high density launch sites where whole colonies of bats could collide with the turbines. If there are roost sites outside of the development boundary but where populations will be affected by the development then the roost sites should be identified in the NIS and EIAR.*"

As described in the dedicated Bat Report submitted as Appendix 6-2 to the EIAR, the bat survey methodology and assessment followed the most recent recognised industry best practice i.e. Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation (NatureScot 2021). Therefore, a

comprehensive assessment was achieved and the potential for collision risk to local bat species was fully assessed in accordance with best practice guidance.

As detailed in Section 6.1 and 6.2 of the Bat Report, an adaptive mitigation and monitoring plan, including bat buffers, blade feathering, confirmatory pre-construction tree surveys, habitat replacement through woodland and linear habitat replanting and 3 years post-construction monitoring, has been devised for the Proposed Project in line with NatureScot guidance to safeguard bats. This adaptive monitoring plan will assess potential changes in bat activity post-construction and can be adjusted as deemed necessary to ensure bats are safeguarded accordingly. Provided the Proposed Project is constructed and operated in line with the proposed mitigation and monitoring plan, no residual significant effects on bats is anticipated as a result of the Proposed Project.

Regardless, additional ground-level surveys were undertaken in 2025 to address this observation, covering the trees to the north of T4 and east of T5. This area comprises a mixed treeline of rowan, pine, oak, hazel, willow, ash, alder, and beech. No PRFs were identified within these trees, and a dead ash plantation located immediately behind the treeline was also inspected and found to offer no roosting potential.

These additional surveys confirm that the trees north of T4 and east of T5 have been fully assessed and present negligible suitability for roosting bats. While local observations suggest the presence of bats in mature hardwood trees near the passing bay, no confirmed roosts were identified. Importantly, trees within the site boundary are predominantly coniferous, generally offering suboptimal roosting potential. Accessible trees with Potential Roosting Features (PRFs) underwent endoscope inspections with no evidence of roosting bats found.

Regarding comments made on the NIS, Lesser Horseshoe Bats were not recorded within the Site. Similarly, no suitable roosting habitat was present and there are no nearby SAC's which are designated Lesser Horseshoe Bat roosts. As such, it was not deemed necessary to assess this in the NIS.

Trees located north of T4 and east of T5

Concerns were raised regarding the lack of assessment of trees outside the Proposed Project boundary, particularly related to areas to the north of T4 and east of T5, as they 'are likely to contain roosts'.

As outlined in Section 2.2.1 above, a comprehensive assessment of the site was undertaken in accordance with best practice guidance and no bat roosts were identified within the site during the survey effort.

While the submission suggests the potential presence of roosts in the wider area, it is important to note that no confirmed roosts have been presented, and the statements appear to be speculative. However, to address the concern directly, an additional ground-level survey, including the use of endoscope for accessible features, was conducted in September 2025 to assess these areas. These surveys covered the trees to the north of T4 and east of T5, which comprise mixed treeline and bog woodland including rowan, pine, oak, hazel, willow, ash, alder, and beech. No Potential Roost Features (PRFs) were identified within these trees. A dead ash plantation located immediately behind the treeline north of T4 was also inspected and found to offer no roosting potential. Furthermore, the trees and woodland outside the site boundary will not be removed as part of the Proposed Project; therefore, no loss of potential roosting habitat is anticipated.

The additional survey carried out in September 2025 confirmed that the trees in question have been assessed and present negligible suitability for roosting bats. While local observations suggest bat activity in mature hardwood trees, no confirmed roosts were identified. It is also worth noting that trees within the site boundary are predominantly coniferous and generally offer suboptimal roosting potential. While it is acknowledged that the wider area offers potential suitable roosting conditions, mitigation measures have been incorporated in accordance with best practice guidance, and no significant impacts are anticipated.

MKO considers the proposed mitigation and monitoring plan outlined in Sections 6.1 and 6.2 of Appendix 6-2 of the EIAR to be appropriate and in line with best practice guidance to ensure no significant impacts on local bat populations occurs during the construction and operational phases. No significant effects in relation to loss of roosting habitat or bat mortality are anticipated as a result of the Proposed Project.

Passing Bay Assessment

A submission was received regarding the potential impact of vehicles using the passing bay and that this has not been assessed as part of the EIAR or AA. Additionally, a query was raised on the passing bays not having been surveyed with regards to roosts. These have been addressed in the Further Information response under Biodiversity Item 11 and have been summarised below.

With regard to the AA, there is no requirement to assess the passing bays in this context. The nearest designated site for lesser horseshoe bat (LHB) is the Lough Corrib SAC, with the designated LHB roost located approximately 43 km west of the Proposed Project. No LHB activity was recorded within the site during the 2022 and 2025 surveys, and the site is situated outside the current known range for LHB as reported in the most recent Article 17 assessments. Therefore, no significant effects on LHB are anticipated.

In relation to the three passing bays proposed along the L-22321 local road, these were visited and assessed on 1st September 2025. These areas were initially excluded from the Bat Survey Report (Appendix 6-2) and EIAR following a desk-based assessment and preliminary site walkover, which indicated limited suitability for roosting bats due to the absence of significant Potential Roost Features (PRFs) and the predominance of younger or structurally simple trees. The anticipated works were minor, involving limited trimming of overhanging branches rather than tree removal, and survey effort was focused on areas with higher roost potential within the development footprint.

To address the omission, a detailed ground-level tree assessment was carried out along the extent of the proposed works area. No linear habitat removal will be required to facilitate the construction of the passing bays. Passing Bays 2 and 3 are located on grassy verge and recolonising bare ground, while Passing Bay 1 will require the removal of a single small willow tree. This tree does not support features suitable for roosting bats, and its removal is not considered ecologically significant.

Trees along the wider route include semi-mature/mature ash, sycamore, and hawthorn lining both sides of the road. Of all trees assessed, only one ash tree contained a PRF (butt rot at the base of the trunk). No evidence of bat roosts was identified in this or any other tree during the inspection. All remaining trees were assessed as having no suitability for roosting bats. Minor trimming of overhanging branches will be required to facilitate HGV access to the proposed borrow pit; these limbs were inspected and no PRFs were identified.

Importantly, the ash tree with the PRF, along with all other trees, will be retained. Given the absence of confirmed roosts, the limited trimming proposed, and the retention of existing habitat features, no significant effects on bats are anticipated. These areas will remain suitable for local commuting and foraging bat populations.

The findings confirm that the Bat Survey Report and EIAR remain valid and robust. No roosts were identified and no amendments to the main conclusions are required.

Felling, replanting and structure assessment – T8 and T9

Submissions relating to turbines T8 and T9 stated the following:

- Felling of hardwoods to accommodate roads at T9 and T8 will potentially disrupt roosts.

- Proposal to replant 2.14 ha of woodland to offset habitat loss is being planted too close to T8 and T9.
- Stone building near T9 assessed as having low roost potential should be verified.

Regarding the felling of potential hardwoods for roads at T8 and T9, no roosts were identified within these areas during the surveys, and as outlined in the Bat Report, *none of the trees proposed for removal to facilitate turbine infrastructure were found to have potential to host roosting bats*. The potential for tree roosts has been carefully considered in line with best practice guidance. Proposed roads associated with T8 and T9 are located predominantly within improved agricultural grassland, cutover bog and conifer plantation habitats and loss of hardwoods containing suitable Potential Roost Features (PRFs) is not anticipated.

While no trees designated for felling were found to contain PRFs during the surveys, as tree condition can change over time, applying a precautionary approach, a pre-construction survey will be carried out prior to any felling or trimming works, as outlined in Appendix 6-2, Section 6.1.4 of the Bat Report. The recommendation for a pre-construction survey does not present a lacuna in the survey assessment but is fully in line with industry best practice. The pre-construction survey will ensure that any changes in tree condition over time are identified and addressed and that appropriate mitigation can be implemented if required.

The proposed replanting of 2.14 ha of woodland is designed to ensure there is no net loss of commuting and foraging habitat within the site. The location of the replanting areas has been selected to maintain and enhance habitat connectivity across the site, while also ensuring that buffer distances between turbines and habitat edges are maintained, in accordance with NatureScot (2021) guidance. The woodland replanting area is not expected to increase collision risk or interfere with turbine operation as it is entirely outside the recommended bat buffer which avoids creating high-risk flight paths near turbine blades.

The stone ruin located approximately 265 m from T9 was assessed in Section 4.3.2 of the Bat Report. The structure was evaluated as having *Low* roosting potential, based on its physical condition and lack of suitability for supporting regular or large-scale bat use. While features such as chimneys and ivy cover may offer occasional shelter for individual bats, the structure lacks the suitable features and stable microclimatic conditions typically required for maternity or hibernation roosts (Collins, 2016).

A daytime inspection in 2022 found no evidence of bat roosts, and a dusk emergence survey conducted under suitable weather conditions recorded no bat emergence from the structure. This dual-method approach is consistent with best practice and provides a robust basis for the low suitability classification. Additionally, the structures is being retained and avoided as part of the Proposed Project and no potential for residual impact is anticipated.

In summary, the assessment and mitigation measures proposed for the project are in line with current best practice and relevant guidance. The precautionary approach adopted, including pre-construction surveys, habitat enhancement through replanting, bat buffers and post-construction monitoring ensures that no significant effects on bat populations are anticipated as a result of the proposed works near T8 and T9.

No bat roosts identified and 80,651 bat passes

The following submission was received in relation to bat roosts: *In section 4.6 it is stated: ''no bat roosts were identified within the footprint of the Proposed Project.'' The above statement is incorrect. There were 80,651 bat passes as one indication of the roost potential.*

It is important to clarify that bat activity levels, including large numbers of bat passes, do not necessarily indicate the presence of roosts. Bat passes are indicative of activity such as commuting and foraging but do not confirm roosting behaviour. As per Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023), roost identification requires targeted emergence/re-entry surveys or physical

inspection of Potential Roost Features (PRFs). The statement is in fact true that no roosts were identified within the site footprint or associated search buffers during the comprehensive surveys undertaken in 2022 and 2025.

The site itself was assessed as containing limited PRFs and largely unsuitable roosting habitat, particularly due to the dominance of coniferous plantation and open habitats such as agricultural grasslands and cutover bog. The bat activity recorded is more likely associated with commuting and foraging behaviour from roosts located in the wider landscape.

A breakdown of detector data supports this interpretation:

- Detectors D3, D4, D5, D6, D7, and D8 recorded higher activity levels in spring, particularly near linear features such as hedgerows, treelines, and woodland edges. These features are known to facilitate commuting and foraging.
- Detector D3, located near a firebreak and stream within mature conifer plantation, recorded consistently high activity, especially from common and soprano pipistrelles and Leisler's bat. These features likely serve as commuting corridors rather than roost sites.
- Detector D4, adjacent to immature oak-ash woodland, showed high spring activity dominated by soprano pipistrelles, but significantly reduced activity in summer and autumn. Manual transect surveys confirmed commuting and foraging use of the woodland edge, not roosting.
- Detector D5, situated at a hedgerow boundary, recorded peak activity in summer, again dominated by pipistrelle species. Hedgerows are well-documented for their role in bat navigation and foraging.
- Detector D6, on the edge of cutover bog and conifer plantation, showed spring peaks with reduced activity in later seasons. The presence of a bog drain likely contributes to its use as a commuting/foraging route.
- In contrast, Detectors D1, D2, D9, D10, and D11, located in open and unsheltered habitats, recorded consistently low activity across all seasons, further supporting the conclusion that bat activity is concentrated along linear and edge habitats rather than within the core of the site.

In summary, while bat activity across the site is notable, it is consistent with commuting and foraging behaviour and does not indicate the presence of roosts within the development footprint. The survey methodology and interpretation align with current best practice guidance, and the site's habitat characteristics do not support significant roosting potential.

Bat Survey Effort – 8th April

A submission was received stating that a bat survey was carried out too early in the year (8th April 2024), bats may not have come out of hibernation.

The above referred survey is in relation to the bat habitat appraisal (BHA) and preliminary roost assessment (PRA) associated with the turbine delivery route (TDR) and other ancillary infrastructure.

Best practice guidance, as outlined in Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023), states that BHAs and PRAs, including ground-level tree assessments, can be undertaken at any time of year. These surveys are designed to identify Potential Roost Features (PRFs) and assess the suitability of trees for roosting bats, rather than to confirm the presence of bats through direct observation.

The aim of the April 2024 survey was to assess trees along the TDR for roosting potential, specifically focusing on identifying PRFs. This type of assessment does not rely on bat activity levels, which can vary seasonally, but rather on physical features of the trees that may support roosting. Therefore, the timing of the survey does not compromise its validity or reliability.

It is acknowledged that bat activity may be lower in early spring due to hibernation patterns. However, this is primarily relevant to activity-based surveys such as dusk emergence or acoustic monitoring, which were not the focus of this assessment. The April survey was appropriately timed and methodologically sound for its intended purpose. As detailed in Appendix 6-2, Bat Report, all surveys were carried out at the appropriate time of year, in line with best practice guidance.

Cumulative effect of windfarm and Lomaunaghbaun quarry on bats, specifically the Horseshoe bat

Surveys undertaken in 2022 at the wind farm site did not record any lesser horseshoe bat (LHB) activity across any season at any detector location. While it is acknowledged that LHB have been recorded within the wider area, these records are not associated with any designated sites and do not indicate regular or significant use of the Proposed Project area by this species. The habitat within the wind farm site does not present significant suitability or connectivity for LHB, which typically favour sheltered woodland, well connected linear habitat features, old buildings, and underground roosting sites with strong connectivity to high-quality foraging habitats.

Regarding the neighbouring proposed quarry site at Lomaunaghbaun, a single LHB bat pass was recorded over a two-week period in August 2022. This isolated record is not considered ecologically significant and does not indicate regular use of the area by LHB. Both the proposed wind farm and quarry sites are located outside the current known range of LHB, as defined by the most recent Article 17 reporting (NPWS, 2019). While occasional records may occur outside the core range, these are typically transient and do not reflect established populations or critical habitat use.

Furthermore, LHB are considered a low collision-risk species due to their flight behaviour, which is typically low to the ground and within enclosed habitats such as woodland and hedgerows. The Proposed Project has been designed to ensure there is no net loss of available linear or woodland habitat features. As such, no net loss of habitat connectivity is anticipated, and the ecological integrity of the wider landscape for LHB will be maintained.

In conclusion, based on current data and best practice survey methodologies, no significant cumulative impact on LHB is anticipated as a result of the Proposed Project. There are no designated LHB roosts within the zone of influence, the site is outside the current known range for LHB, the site does not support significant suitable roosting or foraging habitat for LHB, and an adaptive mitigation and monitoring plan is in place to ensure protection of local bat populations more broadly.

Barotrauma and Collision Risk

Concerns were raised that barotrauma from turbines risks bat mortality.

As described in the dedicated Bat Report submitted as Appendix 6-2 to the EIAR, the bat survey methodology and assessment followed the most recent recognised industry best practice i.e. Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation (NatureScot 2021). Therefore, the risk to bats was fully assessed in accordance with best practice guidance.

An adaptive mitigation and monitoring plan, including bat buffers, blade feathering and 3 years post-construction monitoring, has been devised (Appendix 6-2, Bat Report) for the Proposed Project in line with NatureScot guidance to safeguard bats. This adaptive monitoring plan will assess potential changes in bat activity post-construction and can be adjusted as deemed necessary to ensure bats are safeguarded accordingly. MKO considers the proposed mitigation and monitoring plan outlined in Sections 6.1 and 6.2 of Appendix 6-2 of the EIAR to be appropriate and in line with best practice guidance to ensure no significant impacts on local bat populations occurs during the operational phase. Provided the Proposed Project is operated in line with the proposed mitigation and monitoring plan, no residual significant effects on bats is anticipated as a result of barotrauma.

Turbine Aviation Lighting

A submission was received in relation to red flashing beacon lights from turbines and potential impacts on bats.

While no bat roosts were identified within the site during the 2022 and additional 2025 surveys, appropriate bat buffers have been applied to all turbine locations, in line with best practice guidance, to limit connectivity and reduce the likelihood of roosting, commuting and foraging in close proximity to turbines. The site itself will remain largely unlit, with only task-specific lighting required at the proposed substation. As detailed in Section 6.1.2 of the Bat Report, where lighting is necessary, it will be designed in accordance with the Institute of Lighting Professionals Guidance Note 08/23: Bats and Artificial Lighting at Night (ILP, 2023), which outlines best practice for minimising impacts on bats.

Regarding aviation lighting, it is noted that illumination of turbines will be limited to what is required for safety compliance. Lesser horseshoe bats and other species typically fly low and within enclosed habitats, making them less susceptible to potential collision risk associated with turbine lighting.

Surveys undertaken in 2022 at the wind farm site did not record any lesser horseshoe bat (LHB) activity across any season at any detector location. While it is acknowledged that LHB have been recorded within the wider area, these records are not associated with any designated sites and do not indicate regular or significant use of the Proposed Project area by this species. The habitat within the wind farm site does not present significant suitability or connectivity for LHB, which typically favour sheltered woodland, well connected linear habitat features, underground roosting sites with strong connectivity to high-quality foraging habitats.

Nonetheless, a comprehensive and site-specific mitigation and monitoring programme will be implemented for a minimum of three years post-construction, as outlined in Section 6.1. Should monitoring identify any unforeseen impacts on bats, targeted mitigation measures will be introduced to avoid or reduce such effects.

In summary, the proposed lighting strategy has been carefully designed to avoid significant impacts on bats, and is supported by current best practice guidance and ecological evidence. No significant effects are anticipated as a result of aviation lighting, and adaptive management will ensure that any potential emerging risks are effectively addressed.

Removal of Linear Habitat Features – Hedgerows

Concerns were raised over the removal and replacement of linear habitat features within the site.

The Proposed Project is predominantly located within agricultural grassland, cutover bog, conifer plantation, and small sections of broadleaved/bog woodland. Cutover bog and open grassland areas generally provide relatively poor-quality commuting and foraging habitat for bats. Overall, linear landscape features such as hedgerows, trees, woodland edge habitats and drains will be largely retained or avoided. These linear features are recognised as important for bat navigation and foraging, and their protection and reinstatement have been carefully considered in the project design.

Approximately 1,155 metres of hedgerow and treeline habitat will be removed to facilitate bat buffers, new access roads, turbine delivery routes, and ancillary works. The overall mitigation strategy ensures that any hedgerow loss will be offset by replanting within the site using native species appropriate to the local landscape.

Additionally, the Biodiversity Management and Enhancement Plan (BMEP), presented in Chapter 6, Appendix 6-6 of the EIAR, outlines detailed mitigation measures to address habitat loss. The replanting design ensures that habitat connectivity is maintained and enhanced across the site. In total, approximately 1,875 linear metres of hedgerow and treeline habitat are proposed to be created, resulting in a net gain of approximately 720m in linear habitat features. These new features will be

designed to re-establish connectivity and enhance commuting and foraging opportunities for bats. Although hedgerow removal will result in a short-term impact, connectivity is expected to be re-established within 2–5 years as the new plantings mature. No permanent loss or damage to commuting or foraging habitats is anticipated as a result of turbine delivery or cable routes.

No trees with PRFs were identified within the bat buffers. However, the condition of trees can change over time and bats are mobile species that can move regularly between tree roosts. Therefore, confirmatory pre-construction tree surveys (as outlined in Appendix 6-2, Section 6.1.4, Bat Report) will be carried out where any tree proposed for removal which has potential suitable features for roosting will be assessed by a suitably licenced Ecologist.

Given the proposed replanting plan, the extensive areas of habitat that will remain undisturbed, confirmatory pre-construction tree surveys and the avoidance of key faunal habitats such as natural woodlands and watercourses, no significant effects on bat commuting, foraging or roosting habitat are anticipated. The mitigation measures, including replanting and enhancement of linear features, provide a robust and ecologically sound approach to addressing potential impacts.

3.2.16 Ornithology

Survey Methodologies

Concerns were raised that the survey methodologies used are outdated as outlined below:

> ***"Bird survey methodologies used for this EIAR are based on SNH (NatureScot, 2017) guidelines in addition to O'Brien & Smith (in Gilbert et al. 1998) for breeding bird surveys, both of which are out of date. The most up-to-date Bird Survey Guidelines for assessing ecological impacts (2023) which includes technologies which have been in use for ornithological surveys for ten years or more, should be used"***

The methodology outlined in this submission is not specifically designed to survey a wind farm and a project of this scale and complexity. SNH (2017) survey guidelines are specifically designed with wind farms in mind and allows for the collection of a robust dataset which can be relied upon for an impact assessment. These methodologies are industry best practices for surveying at proposed wind farm sites. Furthermore, the Bird Survey Guidelines for Assessing Ecological Impacts (2023) methodologies do not include for the collection of the information (data) necessary to undertake a robust impact assessment of a wind farm site. For example, they do not include flight activity surveys for collision risk analysis, or surveys of the hinterland to assess the impacts on species in the wider area, both of which are recommended in NatureScot guidance (SNH, 2017) and have been completed as part of the comprehensive suite of surveys undertaken at the Wind Farm Site.

As outlined in the EIAR as lodged, a comprehensive suite of bird surveys has been undertaken at the Wind Farm Site from October 2017 to March 2020 and October 2022 to September 2023. Results are derived from a continuous 2.5 years of surveying undertaken at the Wind Farm Site and hinterland, with an additional year of surveys during the 2022/2023 non-breeding season and the 2023 breeding season. All surveys were conducted in line with NatureScot guidance (SNH, 2017). The survey period exceeds the typically recommended two years of surveys outlined in NatureScot guidance (SNH, 2017). These are the results that inform the impact assessment in the EIAR. As such, the surveys that were undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors.

Nocturnal Surveys

Concerns were raised that nocturnal surveys were not completed for both owl species and nocturnal migrants such as whooper swan and Greenland white-fronted goose and associated potential for

underestimating the collision risk. Additional concerns were raised over the lack of thermal imaging and passive audio recording surveys to give an indication of nocturnal activity at the Wind Farm Site.

An assessment of the potential effects of the Proposed Project on night-migrating birds was undertaken through the approach taken in undertaking the collision risk analysis and the robust survey approach. As outlined in the EIAR as lodged, the nocturnal activity of birds recorded at the Wind Farm Site has been accounted for within the collision risk model (i.e. within the model water bird species are presumed to be active for 25% of the night). Additionally, vantage point surveys were conducted during periods of low light (i.e. one hour after sunset or one hour before sunrise). It is also acknowledged that some waterbirds commute between feeding and roosting locations during periods of low light, typically before sunrise or after sunset. However, the survey scope that was undertaken at the proposed wind farm site included the low light periods before sunrise or after sunset during the migratory/wintering season surveys.

It is noted in Appendix 7-2 of the EIAR, that winter vantage point surveys finished/started the hour after/before sunset/sunrise during the migratory/wintering period of September to April. The core period for Greenland white-fronted goose[1] and whooper swan[2] in Ireland is October to May. These surveys were specifically designed to overlap with these previously mentioned periods of low light to ensure that commuting flights of waterbirds including Greenland white-fronted goose and whooper swan would be recorded. This survey approach is in line with best practice and follows the recommendation of NatureScot (2017). NatureScot (SNH, 2017) states in Table 1.3 that vantage point surveys targeting swans and geese should be undertaken "*between and including dawn and dusk*". Throughout these migratory/winter vantage point surveys, no regularly used commuting corridor or migratory route was identified that crossed the wind farm site. Additionally, other survey types were conducted at the Wind Farm Site which finished an hour after sunset (i.e., hen harrier roost surveys and connectivity vantage point surveys). However, no regularly used commuting corridor or migratory route was identified for whooper swan or Greenland white-fronted goose during these surveys.

As previously stated, an assessment of the potential effects of the Proposed Project on night-migrating birds was undertaken through the robust survey approach and through the approach taken in undertaking the collision risk analysis. Nocturnal flights have been taken into account and included in the calculation of collision risk. As is noted in Section 2.4 of Appendix 7-6 of the EIAR, it is assumed that swans and waders were active for 25% of the night as well as the daylight hours as per NatureScot guidance to account for the potential for nocturnal flight activity[3]. Notwithstanding this, the analysis did not predict significant levels of collision risk for whooper swan. Please refer to Section 7.6.2 of the EIAR for further detailed discussion.

Specific owl surveys were not undertaken, however long-eared owl were observed during the surveys undertaken which overlap with the periods when owls are active (dawn and dusk). Long-eared owl are a widespread, Green-Listed species which is not of conservation concern. As such, the potential for direct habitat loss, disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Project will have a significant population-level effect on this species.

Furthermore, a comprehensive suite of commencement/pre-construction and operational phase monitoring is proposed in Appendix 7-7. The proposed monitoring programme was not proposed in response to any identified significant effect but rather as a best practice measure (SNH, 2009). The monitoring is comprehensive and considered entirely adequate in this regard. The monitoring results will be reported to the Planning Authority following each monitoring year and will include information on the rate of occurrence of receptors and the number of collisions. This will inform recommendations that may include additional mitigation or adaptation if required.

Age of data

Submissions outlined the age of the data being a limitation of the impact assessment. The following text outlines the concerns:

> ***"CIEEM (2019) recommends using data no greater than three years old unless justifications can be provided. Most of the data presented relates to dates between October 2017 and March 2020, and October 2022 to September 2023 and is therefore out of date. The age of data is a consideration as older data may no longer be representative of the baseline conditions at a site. This data is neither useful nor robust."***

The data presented in the EIAR as lodged is entirely adequate based on the most recent data (October 2022 to September 2023) showing that there were no significant changes to the baseline conditions at the site since the previous survey period (October 2017 to March 2020). The CIEEM (2019) Advice Note states it is difficult to set a specific timeframe over which reports or survey data should be considered valid, as this will vary in different circumstances. The likelihood of surveys needing to be updated increases with time and is greater for mobile species or in circumstances where the habitat or its management has changed significantly since the surveys were undertaken. CIEEM advises that after 3 years "*…most, if not all, of the surveys are likely to need to be updated (subject to an assessment by a professional ecologist, as described above)*." However, factors to be considered when evaluating the validity of data include whether there has been significant changes to the habitats present (and/or the ecological conditions/functions/ecosystem functioning, upon which they are dependent) since the surveys were undertaken, including through changes to the site. The most recent data (October 2022 to September 2023) shows that there were no significant changes in the baseline conditions or bird assemblages at the site, this allows for a robust impact assessment to be undertaken using the full suite of surveys conducted at the site.

As outlined in Section 7.2.6.2 of the EIAR as lodged, the dominant habitat type within the Wind Farm Site has been, and continues to be, cutover bog and commercial forestry since bird surveys commenced in October 2017 until September 2023. This consistency in habitat type on site means that the distribution and abundance of bird species would not have significantly changed since surveys began in October 2017, which is corroborated by the data collected at the site to date. In addition, it should be noted that recognised standard guidance for wind farm bird surveys published by NatureScot states that data should be *"……collected within the last 5 years or within 3 years if the populations of key species are known to be changing rapidly*" (NatureScot, 2017). Therefore, following professional judgement and guidance, and the baseline conditions at the site have not altered, using all of the data collected to inform the impact assessment is acceptable. Furthermore, surveys continued at the Wind Farm Site from October 2023 to September 2024 with no significant deviations from the baseline bird assemblages as outlined in the EIAR as lodged were identified on the site during this survey period.

Gap in Viewshed

Submissions outlined concerns regarding the vantage point coverage of the site, including gaps in the viewshed. The relevant text below illustrates their position:

> ***"The 2 vantage points used did not offer a full view of the site. VP1 is located towards the north of the site on a local road. It is not possible to view the full site, grid connection or borrow pit from this vantage point due to local topography and forestry obscuring the views. VP2 is located in the vicinity of Turbine 11. Again, given the slope of raised bog on one side, and forestry and sloping topography on the other, it is not possible to view the entire 353ha site."***

A comprehensive suite of surveys were conducted at the site between October 2017 and September 2023, this suite of surveys provides robust coverage of the site in its entirety. Vantage point surveys alone were not relied upon to achieve this coverage, any gaps in the viewsheds of vantage point surveys were covered during other survey types at the site (e.g. breeding walkover surveys).

The vantage point survey are designed to monitor flight activity within 500m of the proposed turbine layout to inform a collision risk model, they therefore are not required to cover the entirety of the grid connection route or the borrow pit. These areas were covered during other survey types, including the multidisciplinary walkover surveys. Additionally, the vantage point surveys are not required to view the entire 353ha site to ground level, but rather to view the collision risk area for birds, i.e. the height at which the rotors are located. The viewshed analysis for the vantage point survey was therefore run at the minimum swept height of the rotor blade, 18m. It is acknowledged in Section 7.2.6.2 of the EIAR as lodged, that there is a small gap in the viewshed, around T4. As outlined in the limitations section of the EIAR, and reiterated here, the Band Model (band *et al.*, 2007) can account for gaps in the viewshed, particularly where the flight activity is not predicted to be significantly different within the gap compared to other areas of the viewshed. This is the case at Clonberne, the habitat around T4 is similar to those in the surrounding area, within the viewshed. Furthermore, the viewshed analysis represented the minimum swept height of the turbine, 18m, birds flying at heights greater than this may be visible from the vantage point survey locations.

Wake Affect

Concerns were raised regarding the wake effect of turbines and the potential impact on the local birds. The conclusion of the concerns on wake effects is quoted below:

> ***"The wake effect of wind turbines has the potential to impact the health of animals and birds through various mechanisms, including altered wind patterns, stress and changes in habitat. While research in this area is still developing, existing studies suggest that these effects could be significant, particularly for species that rely on stable wind conditions for migration, foraging, and nesting. As wind energy continues to expand, it is crucial to incorporate wildlife health considerations into the design and management of wind farms to ensure that the benefits of renewable energy are achieved without compromising the health of wildlife populations."***

Wake effects in relation to birds has been discussed in Biodiversity Further Information Item Number 5 above. In summary, wake affect has the potential to cause collision risk and barrier effect. As outlined in the EIAR as lodged, the effect significance for all Key Ornithological Receptors is classed as no greater than *Low* (Percival, 2003) or a short-term slight negative effect (EPA, 2022) and is **Not Significant** for collision risk or barrier effect.

Collision Risk

Concerns were raised as to the likely number of bird collisions that could result if the Proposed Project were to receive a successful grant of planning permission.

As outlined in Appendix 7-6 of the EIAR a detailed collision risk assessment was undertaken to industry best practice. The collision risk assessment identified the potential for collisions to occur but that these collisions would be rare events. The rate of collisions is then put in the context of the population that is likely to be impacted. As outlined in Section 7.6.2, no significant population-level collision risk effects were predicted.

Notwithstanding this, a comprehensive suite of commencement/pre-construction and operational phase monitoring is proposed in Appendix 7-7. The proposed monitoring programme was not proposed in response to any identified significant effect but rather as a best practice measure (SNH, 2009). The monitoring is comprehensive and considered entirely adequate in this regard. The monitoring results will be reported to the Planning Authority following each monitoring year and will include information on the rate of occurrence of receptors and the number of collisions. This will inform recommendations that may include additional mitigation or adaptation if required.

Species Specific Concerns

Hen Harrier

Several submissions raised concern in relation to impacts on hen harrier including a lack of mitigation measures and collision risk.

As outlined in Section 7.6.2.2 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a low rate of occurrence locally. For example, in the two winters the birds were recorded, there were only ten observations in 144 hours of vantage point surveys. This significantly limited the potential for ecologically significant impacts to result, including collision risk. Please see Section 7.6.2.2 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Curlew

Several submissions raised concern in relation to impacts on curlew including a lack of mitigation measures and insufficient buffer zones.

As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023. In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment. As outlined in Section 7.5.1.8 of the EIAR, curlew where only observed at, or within 500m of, the Wind Farm Site on six occasions. Given the Wind Farm Site is little visited by this species in either the winter or breeding seasons, the Wind Farm Site is of no ecological importance to this species. This therefore limits the potential for significant impacts on this species to occur from the Proposed Project.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Little Egret

Several submissions raised concern in relation to impacts on little egret including collision risk.

As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry

best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023. In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment. As outlined in Section 7.5.1.4 of the EIAR, little egret where only observed at, or within 500m of, the Wind Farm Site on four occasions. Given the Wind Farm Site is little visited by this species in either the winter or breeding seasons, the Wind Farm Site is of no ecological importance to this species. This therefore limits the potential for significant impacts on this species to occur from the Proposed Project.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Merlin

Several submissions raised concern in relation to impacts on merlin including a lack of mitigation measures and collision risk.

As outlined in Section 7.6.2.3 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a low rate of occurrence locally. For example, during the vantage point surveys there were 19 observations, 18 of which were on the same date. This significantly limited the potential for ecologically significant impacts to result, including collision risk. Please see Section 7.6.2.3 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Peregrine

Several submissions raised concern in relation to impacts on peregrine including a lack of mitigation measures and collision risk.

As outlined in Section 7.6.2.4 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a low rate of occurrence locally. For example, during the vantage point surveys there were only nine observations during 504 hours

of surveys. This significantly limited the potential for ecologically significant impacts to result, including collision risk. Please see Section 7.6.2.4 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Golden Plover

Several submissions raised concern in relation to impacts on golden plover including a lack of mitigation measures and collision risk.

As outlined in Section 7.6.2.1 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a regularly occurring wintering population of golden plover in the vicinity of the Proposed Project. However, there is nothing unique about the onsite habitats, therefore if habitat loss were to occur it would not result in the loss of a scarce resource locally. This limited the potential ecologically significant impacts to result. Please see Section 7.6.2.1 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Kestrel

Several submissions raised concern in relation to impacts on kestrel including a lack of mitigation measures and loss of breeding habitat.

As outlined in Section 7.6.2.6 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a maximum of one kestrel breeding territory within or partially within the Proposed Project. Please see Confidential Appendix 7-5, Figure 7.5.7 for locations of the breeding territory. However, there is nothing unique about the onsite habitats, therefore if habitat loss were to occur it would not result in the loss of a scarce resource locally. This limited the potential ecologically

significant impacts to result. Please see Section 7.6.2.6 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Lapwing

Several submissions raised concern in relation to impacts on lapwing including a lack of mitigation measures and collision risk.

As outlined in Section 7.6.2.7 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a low rate of occurrence locally. For example, during the vantage point surveys there were only 17 observations during 288 hours of surveys during the winter season when lapwing are present. This significantly limited the potential for ecologically significant impacts to result, including collision risk. Please see Section 7.6.2.7 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Red Grouse

Several submissions raised concern in relation to impacts on red grouse including mitigation measures.

As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023. In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment. As outlined in Section 7.5.1.11 of the EIAR, red grouse where only observed at, or within 500m of, the Wind Farm Site on three occasions. Given the Site is little visited by this species in either the winter or breeding seasons and that were no observations between October 2022 and September 2023, the Wind Farm Site is of no ecological importance to this species. This therefore limits the potential for significant impacts on this species to occur from the Proposed Project.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Snipe

Several submissions raised concern in relation to impacts on snipe including a lack of mitigation measures and habitat loss.

As outlined in Section 7.6.2.8 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a regularly occurring resident population of snipe in the vicinity of the Proposed Project. However, there is nothing unique about the onsite habitats, therefore if habitat loss were to occur it would not result in the loss of a scarce resource locally. This limited the potential ecologically significant impacts to result. Please see Section 7.6.2.8 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Woodcock

Several submissions raised concern in relation to impacts on woodcock including a lack of mitigation measures and displacement effects.

As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023. In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment. As outlined in Section 7.5.1.13 of the EIAR, woodcock were not recorded at the Wind Farm Site during the breeding season, and only occasionally during the winter season. Given the Site is little visited by this species in either the winter or breeding seasons, the Wind Farm Site is of no ecological importance to this species. This therefore limits the potential for significant impacts on this species to occur from the Proposed Project.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Buzzard

Several submissions raised concern in relation to impacts on buzzard including habitat fragmentation and collision risk.

As outlined in Section 7.6.2.9 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of

the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.

- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a resident population of buzzard at the Wind Farm Site, with a probable breeding territory identified. However, there is nothing unique about the onsite habitats, therefore if habitat loss were to occur it would not result in the loss of a scarce resource locally. This limited the potential ecologically significant impacts to result. Please see Section 7.6.2.9 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Sparrowhawk

Several submissions raised concern in relation to impacts on sparrowhawk including a lack of mitigation measures and collision risk.

As outlined in Section 7.6.2.10 of the EIAR, no significant effects of collision risk, habitat loss, disturbance or displacement are predicted for this species. The rationale for this statement was as follows:

- As outlined in Section 7.2.6.1 of the EIAR, the surveys undertaken provide the information necessary to allow a complete, comprehensive and robust assessment of the potential impacts of the Proposed Project on avian receptors. A comprehensive suite of bird surveys was undertaken, in line with industry best practice (NatureScot, 2017), for the Proposed Project from October 2017 to March 2020 and from October 2022 to September 2023.
- In undertaking a comprehensive suite of surveys confidence can be placed in the accuracy of the resulting data that informs the impact assessment.
- The results of the surveys identified a resident population of sparrowhawk at the Wind Farm Site, with a confirmed breeding territory identified in 2019 and 2023. However, there is nothing unique about the onsite habitats, therefore if habitat loss were to occur it would not result in the loss of a scarce resource locally. This limited the potential ecologically significant impacts to result. Please see Section 7.6.2.10 of the EIAR for further detailed discussion.

In summary, the information provided in this EIAR chapter accurately and comprehensively describes the baseline environment and provides an informed prediction of the likely impacts of the Proposed Project. In the present case, no significant effects.

Passerine Species

Several submissions raised concern in relation to impacts on passerine species including habitat loss and displacement.

As outlined in Section 7.5.1.17 of the EIAR, the BoCCI Red-Listed passerines observation at the Wind Farm Site were grey wagtail, meadow pipit, redwing and swift. These populations were assessed to be of no greater than local importance (lower value). As per NRA (2009) criteria, receptors of Local Importance (Lower Value) do not typically require details impact assessment consideration. Furthermore, as outlined in Section 7.5.2 of the EIAR, NatureScot guidance concludes that it is generally considered that there are no significant impacts on passerine species from wind farm developments

due to their ecology and large (relative) populations. As such, the potential for direct habitat loss, disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Project will have a significant population-level effect on passerine species.

Other Species

Several submissions raised concern in relation to impacts on other species which were not discussed within the EIAR, including Greenland white-fronted goose and barn owl. These species were not observed during the comprehensive suite of surveys conducted at the Wind Farm Site from October 2017 to March 2020 and from October 2022 to September 2023. Given that these species were not observed during the 4.5 years of surveys, it can be concluded that the site is unlikely to be of ecological importance to these species. As such, the potential for direct habitat loss, disturbance/displacement and collision risk are limited and there is no evidence to suggest that the Proposed Project will have a significant population-level effect on these species.

3.2.17 Terrestrial Ecology

A number of Third-Party submissions were made in relation to biodiversity, the European Union Habitats Directive, and general ecology related matters. The content of these submissions was mainly focused on the protection of the habitats within and adjacent to the Proposed Wind Farm site, in particular the local bogs, the potential impacts on local wildlife, and concerns over deficiencies in the Natura Impact Statement (NIS). These observations are addressed below.

Impacts to Annex I Habitats and Flora

A number of submissions were made in relation to the potential for the loss of Annex I *Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]* within the Proposed Project site. One area of *Molinia* meadow was identified within the Proposed Project site, as shown in Figure 6-7 of the EIAR. As outlined in Section 6.7.2.1.4 of the EIAR, there will be a loss of approximately 0.22ha of this habitat to facilitate the construction of an access road. It should be noted that the area of habitat to be lost is very small is size and is located along a field boundary at the very edge of this habitat. The loss of a very small area of this habitat has been fully considered in Section 6.7.2.1.4 of the EIAR and a range of mitigation measures are outlined in order to mitigate for the loss of the small area of this habitat. As part of the mitigation a Biodiversity Management and Enhancement Plan (BMEP) has been prepared and is included as Appendix 6-6 of the EIAR. The BMEP outlines a number of measures to be implemented to enhance the area of *Molinia* meadow that will not be lost to the Proposed Project. These measures include grazing at low stocking levels outside of the main flowering period, cutting for hay where appropriate, no application of fertiliser or creation of additional drainage features, and a monitoring regime. Following the implementation of these measures no significant residual effects on this habitat are anticipated. There are no other areas of *Molinia* meadow within or adjacent to the footprint of the Proposed Project. In addition, there will be no loss of any other habitats listed under Annex I of the EU Habitats Directive as a result of the Proposed Project. The Annex I habitat *Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]* was also identified along the western boundary of the site. This Annex I habitat is not located within the footprint of the Proposed Project, and any potential pathways for effects on this habitat as a result of water quality deterioration during construction and operation are fully addressed in Sections 6.7.2.1.1 and 6.7.3.1.1, respectively. While areas of bog woodland were recorded within the Proposed Project site, this woodland was not found to conform to the Annex I habitat 'Bog woodland'. Additionally, no rare or protected flora protected under the Flora Protection Order (2022) were found to be present within the site.

A number of submissions were made in relation to the potential spread of invasive species as a result of the Proposed Project. Due to the identified presence of Rhododendron (*Rhododendron ponticum*) and cherry laurel (*Prunus laurocerasus*) within the site, a site-specific Invasive Species Management Plan (ISMP) was prepared for the Proposed Project site and submitted alongside the EIAR as Appendix 6-4,

and summarised in Section 6.7.2.3 of the EIAR. This ISMP provides a detailed management strategy for these invasive species within the site in order to prevent their spread during the construction of the Proposed Project. No other invasive species were identified within the Proposed Project site during the site surveys, however it should be noted that prior to the commencement of any works, a pre-commencement invasive species survey will be undertaken by a fully qualified ecologist to determine the locations and extent of invasive species within and immediately adjacent to the footprint of the Proposed Project footprint, as outlined in Section 3.3.1 of the ISMP.

Peatlands

A number of submissions expressed concerns over the proposed placement of wind turbines within bog habitats, and the potential effects of this on carbon storage, habitat loss, hydrological regimes and peat slippage. It should be noted that mitigation by design has been implemented in order to remove all turbines and infrastructure from within 40m of uncut, undrained raised bog. As such there will be no loss of uncut raised bog as a result of the Proposed Project. Due to the historical, and continued, turbary activity within the site, the peatland habitats on which the proposed infrastructure is sited are highly cutover, comprising bare peat across large areas. As a result these habitats do not conform to any habitats listed under Annex I of the European Habitats Directive.

In relation to third party submissions received relating to wind farms affecting future restoration ability of peatland habitats this has been addressed in the response to the submission made by An Taisce in **Section 3.1.7** of this RFI and is not repeated here.

A number of submissions also highlighted the location of Turbine 11 within an area mapped as Article 17 Active raised bog [7110]. While this area is mapped on the NPWS Article 17 database[1] as the Annex I habitat 'Active raised bog', the habitat at this location was identified as bare peat during the site visits undertaken by MKO. As described in Table 6-20 of the EIAR, Turbine 11 is entirely within cutover bog habitat dominated by bare peat, which no longer meets the criteria to be classified as Degraded raised bog still capable of regeneration (NPWS, 2019[2]). As outlined in the paragraph above and in the EIAR, there will be no loss or fragmentation of areas of uncut raised bog. Additionally, as part of the Proposed Project, an area of 11.6ha of drained but uncut raised bog has been identified for habitat enhancement through drain blocking in order to promote wetland vegetation. Full details of this have been outlined within the BMEP, included as Appendix 6-6 of the EIAR.

Several submissions highlighted presence of Kilmurry bog, an uncut raised bog, to the north of the location of proposed T3. As mentioned above, mitigation by design has been implemented in order to remove all infrastructure from within 40m of uncut, undrained raised bog. Turbine 3 is located within a Conifer plantation (WD4; Fossitt, 2000) planted upon underlying peat and is therefore located within an area that has already been subject to significant drainage due to the forestry practices in place. The access track to T3 also avoids traversing through Kilmurry bog by instead accessing the turbine location via an existing farm track and conifer plantation to the east and agricultural fields to the south. As outlined in Section 9.3.4.1 of Chapter 9: Hydrology and Hydrogeology of the EIAR, turbine location T3 is located within 'heavily drained' forestry which drains towards 'Stream A' (the Levally stream) via various man-made bog drains and forestry and field drainage networks. Section 9.3.15.1 highlights that groundwater flow in the north of the site also closely mimics local topography which is sloping steadily to the south towards Stream A. As such, there will be no significant effects on Kilmurry bog as a result of water quality deterioration or drainage as a result of the construction of T3, and therefore no effects in terms of habitat quality.

Impacts to Protected Fauna

Some third-party observations expressed concerns over the survey effort undertaken within the Site. A comprehensive range of surveys were undertaken within the Proposed Project site, as described in Section 6.4.3 of the EIAR. Multi-disciplinary ecological walkover surveys were conducted on the 28th June, 15th July and 19th of August 2019, the 5th, 24th and 25th August 2021, the 24th of January, 30th of September and 1st of October 2022, the 26th of June, 1st of September, and 23rd of November 2023 and

the 18th January 2024; dedicated badger surveys were conducted on the 28th of June and 15th of July 2019, the 23rd of November 2023 and the 18th of January 2024 within the site boundary and the 26th of June and 23rd of November 2023 along the Proposed Grid Connection route; dedicated otter surveys were conducted on the 28th of June, 15th of July and 19th of August 2019, 26th of June 2023 and the 18th of January 2024; marsh fritillary larval web surveys were conducted on the 19th of August 2019 and on the 31st of September 2022; kick sampling was undertaken within the site on the 7th of February 2024; and dedicated aquatic surveys were undertaken by Triturus Environmental Ltd. on the 18th and 19th of August 2021 and the 19th, 20th and 21st of September 2024. This survey effort is considered fully sufficient to inform the ecological baseline for the site and to undertake a robust impact assessment, which has been undertaken in Section 6.7 of the EIAR.

A number of submissions were made relating to the potential impacts of the Proposed Project on the marsh fritillary butterfly (*Euphydryas aurinia*). The potential impacts on marsh fritillary during construction have been fully addressed in Section 6.7.2.2.2 of the EIAR. No marsh fritillary were recorded within the Proposed Project site during any of the site surveys, including dedicated larval web surveys of areas of habitat identified as potentially suitable marsh fritillary habitat due to the presence of the larval foodplant devil's bit scabious (*Succisa pratensis*). The Proposed Project has been designed in order to avoid the loss of suitable supporting habitat for the species insofar as possible. However, as outlined in Section 6.7.2.2.2 of the EIAR there will be loss of a small area of habitat identified as being suitable for marsh fritillary due to the presence of devil's bit scabious (1.44ha, 9.04% of identified suitable habitat on site) to facilitate the construction of the Proposed Project. This loss is not considered to be significant at any greater than local scale and as mentioned above, while the habitat was considered suitable for the species, the species was not recorded within these areas. Additionally, pre-commencement surveys will be undertaken in order to determine if any marsh fritillary are using the site at that time, and in the event that the species is found on site, appropriate mitigation will be implemented for their protection as outlined in Table 6-28 of the EIAR. It should also be noted that the proposed enhancement of *Molinia* meadow habitat within the site, as outlined within the BMEP (Appendix 6-6 of the EIAR), will also provide enhanced habitat for both marsh fritillary and other local pollinators and invertebrates within the site.

Submissions were also received in relation to potential for impacts on other protected fauna including badger, otter, Irish stoat and pine marten. The EIAR identified the following faunal species as Key Ecological Receptors (KERs) in the context of the Proposed Project and carried out a full impact assessment and applied mitigation to avoid identified potential impacts where required: otter (Section 6.7.2.2.1 of the submitted EIAR), badger (Section 6.7.2.2.3) and bats (Section 6.7.2.2.4). The potential for direct and indirect effects on other fauna including pine marten, Irish hare, Irish stoat, common frog, common lizard and smooth newt were fully considered within the EIAR and within the response to the Further Information Request received on the 15th of May 2025. While pine marten, common frog and Irish hare were recorded within the site during the surveys undertaken by MKO and observations on the application have confirmed that Irish stoat, smooth newt and common lizard are also known to use the site, no pathways for significant effects on these species were identified in the EIAR and these species were not identified as KERs. The above species were not recorded breeding within or adjacent to the footprint of the Proposed Project. Pine marten was observed on a trail camera deployed at a ground-level burrow within an area of conifer plantation within the site, however, the species was not recorded entering or exiting the burrow and the trail camera footage showed that the burrow was in use by mice. Furthermore, the burrow lies outside of and approximately 62m from the infrastructure footprint. In relation to the above mentioned species, while there are areas of suitable habitat for these species within the site, including woodland, scrub, grassland, bog and aquatic habitats, the footprint of the Proposed Project is relatively small in the context of the site and the wider landscape and will be predominantly restricted to species-poor cutover bog, conifer plantation and agricultural grasslands as well as very small areas of woodland and semi-natural grassland loss. The areas of these habitats to be lost are very small in comparison to their overall cover within the site. Additionally, in relation to common frog and smooth newt, there are no proposed changes to river morphology and no in-stream works are required for the Proposed Project. Based on the results of the ecological surveys undertaken, which did not identify populations of these species of greater than local importance utilising the site, and the presence of other suitable habitat for these species within the Site, no potential pathway for significant impacts on populations of these species at any geographical scale are anticipated.

Some third-party observations regarded the potential for blasting and vibration at the location of the proposed borrow pit to affect birds associated with Drumbulcaun Bog pNHA, located 1.0km to the west of the borrow pit. Section 12.4.4.2 of Chapter 12: Noise and Vibration of the EIAR states in relation to blasting that, should blasting be required, the blast engineer should be able to calculate appropriate Maximum Instantaneous Charge (MIC) values that will ensure that British Standard guideline noise and vibration limits will be adhered to. This ensures no significant effects on the nearest Noise Sensitive Receptors (NSRs) to the borrow pit, which are dwellings located 200m to the south and 450m to the north. Considering the location of Drumbulcaun Bog pNHA 1.0km to the west the borrow pit, it can be inferred that there is no potential for significant effects on Drumbulcaun Bog pNHA as a result of noise and vibration. Additionally, Section 12.6.4.2 of the EIAR details a cumulative construction noise assessment with reference to the proposed Lomaunaghbaun Quarry, located west of the proposed borrow pit. This also concludes that no significant effects will occur as a result of cumulative construction noise. Notwithstanding the above, disturbance effects on fauna (inclusive of noise) has been comprehensively assessed in Chapters 6 and 7 of the EIAR.

Concerns with Regard to Deficiencies in the Natura Impact Statement

Submissions expressed concern that the NIS is not a standalone document and places an over-reliance on the assessments and conclusions of the EIAR since the Chapter 4 Description and Chapter 9 Hydrology and Hydrogeology Chapter have been appended to the NIS. The EIAR Description chapter has been appended to the NIS in order to accurately present the description of the Proposed Project for the purpose of Appropriate Assessment. When referring to the Hydrology and Hydrogeology Chapter within the NIS, the EIAR conclusions are not relied upon but rather the potential for adverse effects to European Sites via hydrological and geohydrological pathways are assessed in light of the hydrological field surveys and assessments undertaken by the relevant experts. Therefore, the relevant expert input has been included within the Natura Impact Statement (as Appendix 3) to ensure that the conclusion is beyond reasonable scientific doubt.

Concerns were raised within the submissions regarding the potential effects on turloughs in the vicinity of the Proposed Project site, particularly Levally Lough, Williamstown Turlough and Glenamaddy Turlough. Both Levally Lough SAC and Williamstown Turloughs SAC were screened-in during Stage 1 – Appropriate Assessment Screening (Section 5 of the NIS) and as such were discussed in detail through Stage 2 – Information to Inform Appropriate Assessment (Section 6 of the NIS). When considering Williamstown Turloughs SAC and its QI Turloughs [3180] in detail within Section 6.1.3 of the NIS, it was concluded that, although this SAC is partially underlain by the same groundwater body, i.e. the Clare-Corrib, as the Proposed Project, it is located to the north of the Proposed Project. According to Chapter 9 (Hydrology and Hydrogeology) of the Environmental Impact Assessment Report (EIAR) prepared for the Proposed Project, groundwater flow direction in the area of the site is to the south/south west. Therefore Williamstown Turloughs SAC is located upgradient of the Proposed Project and there is no potential for adverse effects on the QI habitat due to deterioration of water quality associated with the Proposed Project. As such, no complete source-pathway-receptor chain for adverse effects on turloughs associated with Williamstown Turloughs SAC was identified and this SAC is not assessed further in the NIS. Due to the location of Levally Lough SAC 2.0km to the southwest of the Proposed Project site, it is considered within Section 6.1.2 to be within the Likely Zone of Influence. All potential adverse effects on QIs associated with Levally Lough SAC were identified and fully mitigated within the NIS.

Glenamaddy Turlough is designated under the Lough Lurgeen Bog/Glenamaddy Turlough SAC and was screened out at Stage 1 Appropriate Assessment Screening and not brought forward to Stage 2 for further assessment, as discussed in Table 5-1 of the NIS. It is not within the Likely Zone of Influence of the Proposed Project due to the lack of any hydrological connectivity. All potential impacts on bird species are addressed in the dedicated Chapter 7: Ornithology of the EIAR, and therefore any potential impacts on bird species associated with these turloughs are also encompassed within Chapter 7.

Reference was also made within several Third-Party submissions to Gortagarraun Turlough and its omission within the NIS. Gortagarraun Turlough is not designated as an SAC and therefore is not subject to consideration within the NIS for this application. However, it is recognised that this is a groundwater-

dependent feature in close proximity to the Proposed Project site and as such was addressed in Chapter 9: Hydrology and Hydrogeology of the EIAR.

3.2.18 Aquatic Ecology

Some observations raise concerns regarding the validity of aquatic surveys, survey location selection and impact of seasonal bias, as well as "sub-optimal" conditions encountered during aquatic surveys. A comprehensive response to these submissions is provided in **Appendix 11** ***'Triturus Environmental Response'.*** The response focuses addressing concerns regarding limitations of the aquatic surveys.

3.2.19 Landscape and Visual

This section will respond to submissions from 3rd parties in relation to the Landscape and Visual impacts of the Proposed Project. The main themes of the submissions were identified as

- Visual Amenity
- Landscape Character Change
- Scale & Siting

3.2.19.1 Topic 1: Visual Amenity

There has been comments made regarding the impacts on the visual amenity from receptors within the study area. The main themes of these comments are:

- Residential Visual Amenity;
- Effects on designated scenic views;
- Visual intrusion on landmark receptors.

Residential Visual Amenity

It has been commented that the proposed turbines will 'significantly disrupt' views from residences within the study area, and that viewpoints chosen are 'misleading' and 'underrepresent' the visual impact.

The LVIA Chapter sets out to use the best practice guidance and objective LVIA tools to demonstrate the nature of effects on residential visual amenity, including

- Verified Photomontages and Photowires (18 no. photomontages and 10 no. photowires);
- A Route Screening Analysis

A comprehensive written analysis of effects on Residential Visual Amenity informed by site visits, visualisations and route screening analysis can be found in section 14.7.3.3.4 of the LVIA Chapter. The opening paragraph of this section states:

> *"During the Site selection process, early stage LVIA appraisals identified local residential receptors as the most sensitive receptors with the greatest potential to be adversely impacted by the proposed turbines with regard to visual impacts. Consequently, residential visual amenity was of key consideration during site selection and throughout the iterative design process for the Proposed Project."*

The LVIA Chapter identified local residential receptors as being the receptors with the greatest potential to be impacted by the Proposed Project. A visual impact assessment of each cluster of residences was reported with the intention of identifying the worst-case scenario for potential visual effects on residential receptors. As per best practice guidance, it is not in the remit of an LVIA to conduct an impact

assessment for every single residence, as this is not feasible and would be disproportionate, in mind of all other visual receptors (See Visual Baseline in Section 14.5 of Chapter 14) requiring assessment. Care was taken when selecting locations for viewpoint capture, where it was stated in Section 14.7.3.3.4 that *"viewpoints were strategically selected where there are relatively open views in very close proximity with limited visual screening where possible".*

In Appendix 14-3: Photomontage Assessment, the assessment of effects have accounted for nearby residential receptors and the viewpoint's proximity to the proposed turbines. Hence, viewpoints which were in close proximity to the proposed turbines were deemed to have a 'High' sensitivity, and their magnitude of changed have been reflected appropriately. It is acknowledged and reflected in the Appendix 14.3 and Section 14.7.3.3.4 of the EIAR that some of these viewpoints (and hence residential receptors) will be susceptible to 'significant' visual effects, however mitigation factors, such as visual screening throughout the area, have been highlighted where relevant.

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

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

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

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

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

There has also been concerns over night time light pollution from light beacons associated with wind turbines. As specified in the WEDGs, structures exceeding 90m in height must comply with the Irish Aviation Authority's Obstacles to Aircraft in Flight Order, 2005, (S.I. 215 of 2005).

There has been a concern over visual screening associated with ash trees, where it has been remarked that ash trees will die overtime. It should be noted that other coniferous and deciduous tree types are present within the area as stated within Chapter 6 of the EIAR, where the EIAR LVIA also describes other forms of screening such as hedgerows, topography and buildings. With regard to the siting of turbines in proximity to residential receptors and their visual amenity, the Proposed Project design process has been informed by set-back distances. The Proposed Project adheres to the recommended 500m set back distance in the WEDGs (DoEHLG, 2006) and also the 4 times tip height set-back distance set out for residential visual amenity prescribed by the draft WEDGs (DoHPLG, 2019). This has been discussed in Section 14.7.3 of the EIAR.

Designated Views

It has been commented that there will be visual impacts on GCDP protected Scenic View 42 of Glenamaddy Turlough. This protected view is described in Appendix 4 of the GCDP as the following:

> *"The focus of this view is Glenamaddy Turlough. The wooded shores that form the background are an important feature of the view."*

This view has been described as being of 'Local' significance in the GCDP. The view has been represented by Viewpoint 1 of the EIAR and has been designated as having 'High' Sensitivity in Appendix 14-3: Photomontage Assessment Table, on account of it representing the designated GCDP view. The magnitude of change was deemed to be 'Negligible' on account of the proposed turbines seen in a small horizontal extent and predominantly visually screened by the treeline. The proposed turbines were also found to not interfere with the 'focus' of this view and are seen in a small extent above and behind the wooded shores. Considering these factors, the viewpoint was found to have a 'Slight' residual visual effect. The sensitivity of this viewpoint has been acknowledged, however as seen in Viewpoint 1, the proposed turbines do not materially alter this protected view.

3.2.19.2 Visual Intrusion on Other Landmarks

Protected Structures

There have been concerns regarding the visual intrusion on the local Clonberne Graveyard and GCDP Objective PWB4, outlining the protection and preservation of burial grounds. The graveyard is sited approximately 1km from the nearest proposed turbine, and does not infringe on the objective of protecting and preserving this burial ground. As part of the Further Information Request by An Coimisiún Pleanála a photomontage has been captured from this location, and a corresponding 'Photomontage Assessment Table' has been written, see **Appendix 7 – *'Photomontage Booklet'*** of the Further Information Request response. This assessment deemed the Sensitivity of the visual receptor to be 'Medium' and the Magnitude of Change to be 'Substantial'.

The Photomontage Assessment Table considers several mitigation factors; such as that while the Clonbern Old Graveyard (RPS.42) and Dennis Mausoleum (RPS 40) are protected structures, the proposed turbines do not impact on the structures' integrity or immediate setting. Overall, a 'Moderate' residual effect was deemed to arise as a result of the Proposed Project.

Croagh Patrick

It has been commented that views of Croagh Patrick will be interrupted from the Clonberne area. As per best practice guidance, GLVIA3 states:

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

In Appendix 14.1: LVIA Methodology, Section 1.1.1 and Section 1.4.1 details that a study area of 20km was deemed to be adequate, as suggested by guidance (WEDGs, DoEHLG, 2006, p.94; Draft Revised WEDGs, DoHPLG, 2019, p.152). Croagh Patrick is located approximately 70km northwest from the Clonberne area and the Proposed Project, which falls well beyond the LVIA Study Area.

3.2.19.3 Topic 2: Landscape Character Change

It has been commented that there have been concerns regarding change to the landscape as a result of the Proposed Project.

The themes of the submission are:

- Conflict on local policies;
- Landscape Designations;

Local Policy

The GCDP sets out policy objectives related to landscape, such as LCM1, LCM2, LCM3, ad LCM4 which have been identified in Section 14.4.1.1 of the EIAR.

As addressed in Section 14.4 of the EIAR LVIA, the Proposed Project is located in LCU 5e which has been classified as Low sensitivity in *Appendix 4: Landscape Character Assessment* of the GCDP, which is defined as "*Unlikely to be adversely affected by change*". As described by the GCDP, this landscape is a "long-settled working landscape of regular stone-walled fields." Furthermore, the proposed turbines have been sited in lands designated as 'Acceptable in Principle' and 'Open to Consideration' by *Appendix 1: Renewable Energy Strategy* of the GCDP.

Comments have raised concerns over GCDP policy *PVSR 1* regarding the preservation of protected views. As stated in Section 14.4.1.1.2 of the EIAR LVIA, two protected views (G-V39 & G-V42) were identified within the study area. Protected View No. 39 was scoped out of assessment in Table 14-7 of the EIAR LVIA given the view is directed away from the proposed turbines. Photomontage Viewpoint 1 was captured at Protected View No. 42, and has been assessed in Appendix 14-3 of the EIAR LVIA. See Section 1.3.1.2 above regarding the assessment of this viewpoint.

Landscape Designations

Concerns have also been raised regarding the EIAR LVIA's presentation of the 'true' environment of the area. As stated above, the proposed turbines are sited in a 'Low' sensitivity landscape. It was identified in Section 14.4.1.1.3 of the EIAR LVIA that the Proposed Project is sited within the North Galway Complex Landscape Character Type (LCT), which is described as having agriculture, scattered forestry and associated field patterns interspersed with bogs. Again, this is described as a settled-working landscape, where the turbines themselves are sited in an area of cutover peatland. It was acknowledged in Table14-3: Indicators of Landscape Value of the EIAR that the GCDP noted sensitivities in this LCT include "*open countryside offering frequent extensive panoramic views from local high-points*". This table also noted that the area has rural aesthetic qualities, where common views are associated with historic peat extraction and commercial forestry. Section 14.7.3.1 of the EIAR LVIA and Appendix 14-2 assess the landscape effects, where the impacts on the local landscape have been considered. A 'Substantial' magnitude of change has been considered for LCU 5e regarding the Proposed Project, where the residual significance of effect on landscape character was deemed to be 'Moderate'. The character of the environment was considered relative to policy and other designations, where thorough assessment of effects on the landscape was carried out.

3.2.19.4 Topic 3: Scale & Siting

There have been concerns raised regarding the guidance followed when discussing the siting of the proposed turbines. This LVIA EIAR has followed the current industry best practice guidance, as listed in Section 1.1 above and in Section 1.3 of Appendix 14-1 of the EIAR LVIA. While following guidance from the WEDGs (2006) and Draft WEDGs (2019), the EIAR has also followed EPA (2022) guidance in the assessment of effects of the proposed turbines.

There have also been concerns regarding the siting and scale of the proposed turbines, where the turbines have been said to be unsuitable for the area. The proposed turbines have been sited in line with the WEDGs, the current industry best practice guidance. As discussed in Section 14.4.3 of the EIAR LVIA, the proposed turbines are sited in a 'Hilly and Flat Farmland' landscape, where the recommended 4 x tip height set-back has been adhered to. The proposed turbines are viewed as a coherent development, as shown in the photomontages (EIAR Volume 2: Photomontage Booklet), where the proposed turbines are sited within a relatively large uninhabited area of cutover peatland, forestry and

agricultural field systems. As stated in Section 1.3.2 above and Section 14.4.1 of the EIAR LVIA, the turbines are sited within areas designated as being 'Acceptable in Principle' and 'Open to Consideration' by the GCDP, which can be viewed in **Figure 3-1** below.

There have been related concerns regarding the proximity to local buildings and amenities. As stated, the proposed turbines adhere to the 4 x tip height set-back, where the main focus of the local amenities in question are not the views of the area. Photomontages Viewpoint 6 has been captured in to represent the local area of Clonberne, where the sensitivity of the area and magnitude of change experienced have been reflected in the assessment of effects, see Appendix 14-3 of the EIAR.

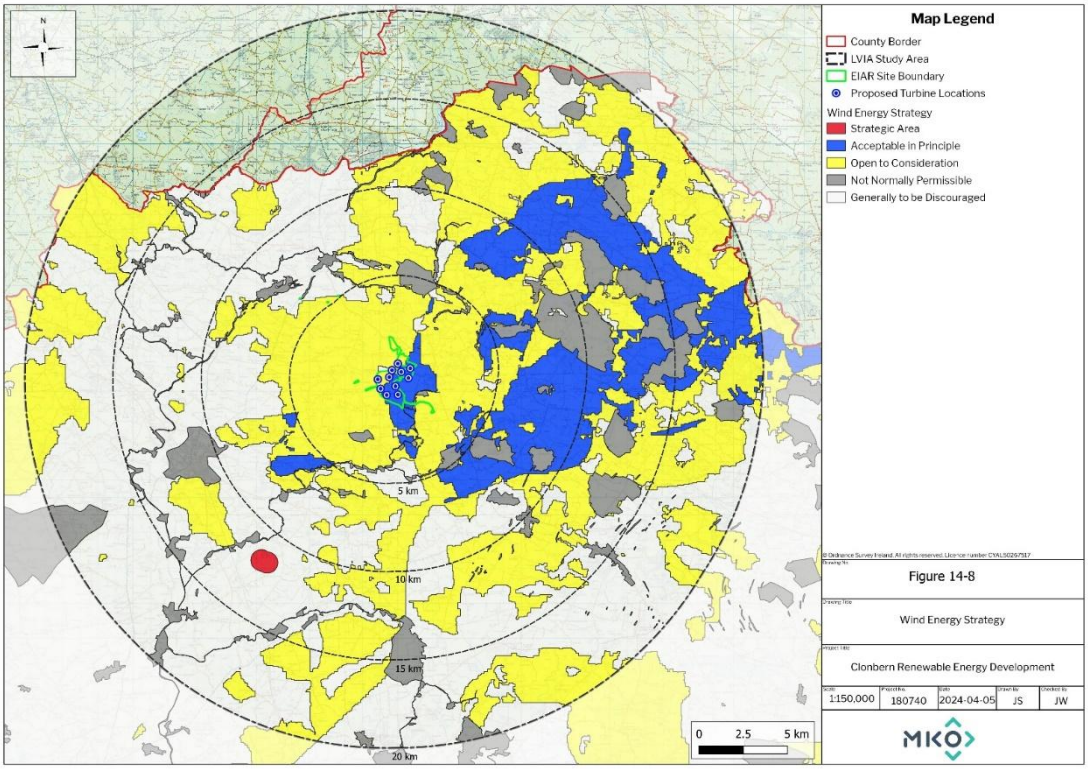


Figure 3-1: Wind Energy Strategy of the LVIA Study Area (as shown in Chapter 14 of the EIAR)

4. CONCLUSION

The information provided in this RFI Report, and the accompanying appendices constitutes a full and comprehensive response to the Request for Further Information received from An Coimisiún Pleanála on the 15th of May 2025. Responses to Statutory and Third Party submissions have also been comprehensively addressed.

The Proposed Wind Farm, if permitted, will contribute towards national wind energy target of 9GW. The importance of this with regards to the climate goals cannot be overlooked.

In summary, the Proposed Wind Farm is strongly supported by the following:

European & National Energy and planning policy, guidance and legislation, including

a) REPowerEU and Renewable Energy Directive III,

a) National Planning Framework First Revision

b) National climate and energy policy including CAP 25, with regard to the acceleration of renewable energy roll-out and greenhouse gas emissions reductions,

c) The Climate Act, which requires public bodies to carry out their functions in accordance with the national climate policies and objectives,

d) The provisions of the Wind Energy Development Guidelines, Guidelines for Planning Authorities issued in 2006, and the Draft Wind Energy Guidelines issued in 2019,

e) The National Energy Security Framework and Energy Security in Ireland to 2030 – Energy Security Package.

Regional and Local Level Policy, including:

f) The Regional Spatial and Economic Strategy,

g) The policies of the planning authority as set out in the Galway County Development Plan 2022-2028 in relation to achieving national climate and renewable energy targets and addressing climate change.

Ultimately, it is considered that this Proposed Wind Farm is in accordance with the provisions of proper planning and sustainable development and should be granted planning permission in respect of the suitability of the site and the need for renewable energy development. It is the policy of the government to rapidly accelerate the roll-out of renewable energy technology. However, if suitable sites are ruled out, such as the Proposed Wind Farm, it is unlikely that any acceleration will be seen.

To conclude the Proposed Wind farm is strongly supported by European, national, regional and local policies and guidelines aimed at achieving the transition to a low carbon and climate resilient economy, increasing renewable energy generation, and enhancing energy security. Specifically the Proposed Wind Farm will contribute to achieving the target of generating 9GW of electricity from onshore wind and 80% renewable energy share by 2030, as set out in CAP25. It is therefore respectfully requested that the Commission issue a grant of planning permission Proposed Wind Farm in accordance with the provisions of proper planning and sustainable development.