

Orsted

Environmental Impact Assessment Scoping Consultation Document

Oatfield Wind Farm, Co. Clare

604569



SEPTEMBER 2023



RSK GENERAL NOTES

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CONTENTS

1	INTI	RODUC	TION	.1
	1.1	Backg	ound	. 1
	1.2	The Ap	pplicant	. 3
	1.3	Purpos	e of Scoping	. 3
	1.4	Comm	unity Engagement and Consultation	. 4
2	BAC	CKGRO	UND TO THE PROJECT	. 5
	2.1	Site Lo	cation and Description	. 5
	2.2	Desigr	ated Areas	. 7
	2.3	Likely	Biodiversity Receptors	. 8
		2.3.1	Ornithology	. 8
		2.3.2	Biodiversity (Non-avian)	. 9
	2.4	Site Se	ection	. 9
3	DES	SCRIPT	ON OF THE PROJECT 1	11
	3.1	Project	Description 1	11
		3.1.1	Preliminary Layout 1	12
		3.1.2	Turbine Delivery Route	15
		3.1.3	Grid Connection	8
	3.2	Decom	missioning2	20
4	SCC	OPE OF	THE ASSESSMENT	21
	4.1	Introdu	ction2	21
	4.2	The El	AR Team2	22
	4.3	Scope	of the EIAR2	23
		4.3.1	Purpose2	23
		4.3.2	EIAR General Structure and Chapters2	23
		4.3.3	Use of Standards and Methodologies	38
5	EIA	SCOPI	NG CONSULTEES	39
	5.1	Consu	itees	39
	5.2	Respo	nding to this Scoping Document	10

TABLES

7
7
7
8
10



FIGURES

Figure 1.1: Site location	2
Figure 1.2. Community Consultation Event Invitation – 23rd August 2023	4
Figure 2.1: Townlands and Settlements	6
Figure 3.1: Preliminary layout	13
Figure 3.2: Corine Land Use within Project Area	14
Figure 3.3: Indicative turbine delivery route	16
Figure 3.4: Proposed port options	17
Figure 3.5: Preliminary grid connection route options	19

1 INTRODUCTION

1.1 Background

Orsted Onshore Ireland Midco Limited (hereafter referred to as 'Orsted') intends to develop the Oatfield Windfarm development (hereafter referred to as 'the Project'), on a ca. 985-hectare site located in the townlands of Oatfield, Crag, Cloontra West, Derryvinnaan, Cloontra, Cloonsheerea, Mountrice, Cloghera, Drumsillagh (Merritt), Drumsillagh (Parker), Kyle and Gortacullin. The location of the proposed wind farm is in County Clare and is depicted in Figure 1.1.

The proposed Project consists of the construction and operation of up to eleven (11) wind turbines with a tip height of 179-180 metres, rotor diameter of 138-150 metres, hub height of 105-111 metres and an output rating of 6 - 6.6MW, giving an overall output capacity in the region of 60-66 MW. It also includes a permanent meteorological mast and an on-site 110 kV substation along with ancillary civil and electrical infrastructure.

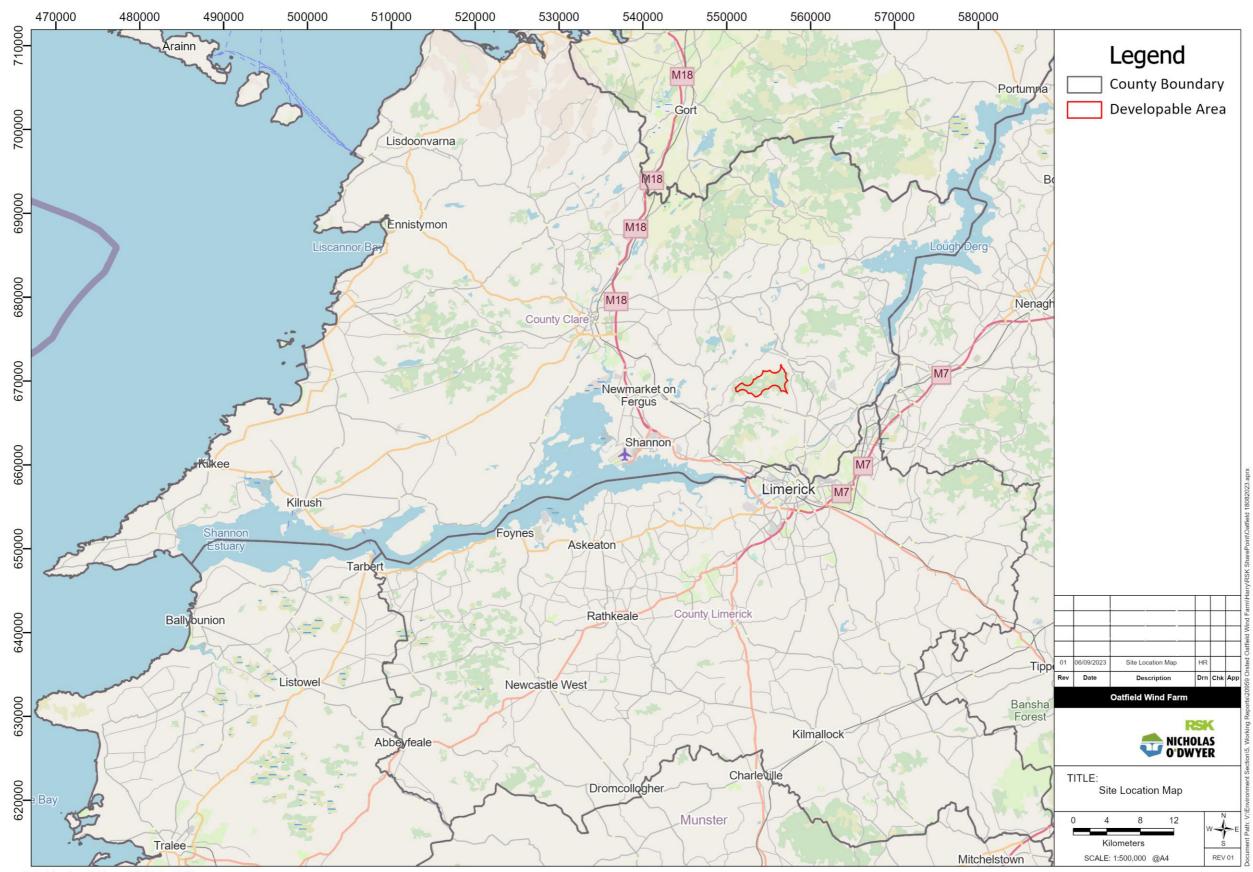
The relevant Environmental Impact Assessment (EIA) threshold for wind energy, as detailed in the Planning and Development Regulations, 2001 (as amended), Schedule 5, Part 2, Class 3(I), states:

"Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts".

Given that the proposed wind farm will exceed the above threshold, an EIA is required and Orsted must prepare an (Environmental Impact Assessment Report (EIAR)) to accompany the application for planning permission.

Orsted has appointed RSK Ireland as the Planning and Environmental Consultants, responsible for preparing the planning application and EIAR.

This report is a scoping consultation document which has been prepared for circulation amongst stakeholders. It provides information on the proposed project to enable an understanding of the potential key issues and identifies the key environmental aspects to be scoped in for a detailed assessment during the EIA process.



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Figure 1.1: Site location

Orsted EIA Scoping Consultation Document RSK Ireland Project Ref. 604569 The Project will include:

- Up to 11 turbines with a maximum blade tip height with a tip height of 179-180 metres;
- A 110 kV electrical substation to EirGrid / ESB Networks specification;
- Grid infrastructure (including underground grid connection cabling and a possible loop in substation to an existing 110kV overhead line); and
- Turbine delivery and haul routes.

A planning application will be submitted to An Bord Pleanála under section 37B of the Planning and Development Act, 2000 (as amended).

1.2 The Applicant

Orsted Onshore Ireland Midco Limited is a fully owned subsidiary of Orsted. Orsted develops, constructs, and operates offshore and onshore wind farms, solar farms, energy storage facilities, and bioenergy plants, and provides energy products to its customers.

Orsted A/S ranks 7th of the Global top 100 Most Sustainable Corporations in the World in 2022 (2022 Global 100 Press Release | Corporate Knights) and is recognised on the CDP Climate Change A-List 2022 as a global leader on climate action. In Ireland, Orsted owns and operates a portfolio of onshore wind farms with a combined capacity of more than 300 MW.

1.3 Purpose of Scoping

The purpose of scoping is to focus the EIA on the likely and relevant significant environmental effects associated with the development; to carry out consultation with stakeholders; to confirm the scope of the EIAR; and to obtain information held by stakeholders that will be relevant to the proposed project.

On the basis of the expert judgement of the assessment team, experience from similar projects, as well as additional policy, guidance and standards of relevance, each topic chapter within this report will outline both:

- Potential likely adverse effects associated with the construction and/or operation of the Project, identified for detailed consideration within the EIA Report; and
- Effects which are considered unlikely to be significant require no further assessment. Whilst these topics fall outside of the scope of assessment, they will be referred to within the EIA Report.

Consultees are invited to contribute to the EIAR by suggesting baseline data, survey techniques, sensitive receptors, and potential impacts that, in their opinion, should be considered as part of the assessment process and in the preparation of the EIAR.

1.4 Community Engagement and Consultation

Orsted is committed to creating a wind energy development that provides renewable energy at scale, is socially responsible and provides a substantial community benefit where community participation plays a central role.

The Project team are conducting extensive community engagement and consultation to capture views and provide key information to residents on an ongoing basis. A dedicated team is in place, providing a direct line of communication for residents and the wider community.

A pre-application community consultation event for the Project was held on Wednesday August 23rd August 2023. A turnout of approximately 52 people was recorded for the event.



Figure 1.2. Community Consultation Event Invitation – 23rd August 2023

Feedback from attendees at the community event was recorded for consideration in the Project's development. Queries raised related to landscape and visual impacts, noise related to construction works and impacts on ecology. A project website (<u>https://orsted.ie/renewable-energy-solutions/oatfield</u>) has been set up for the public to access information about the Project. The website will be updated with information as it becomes available during the environmental and planning permission process.

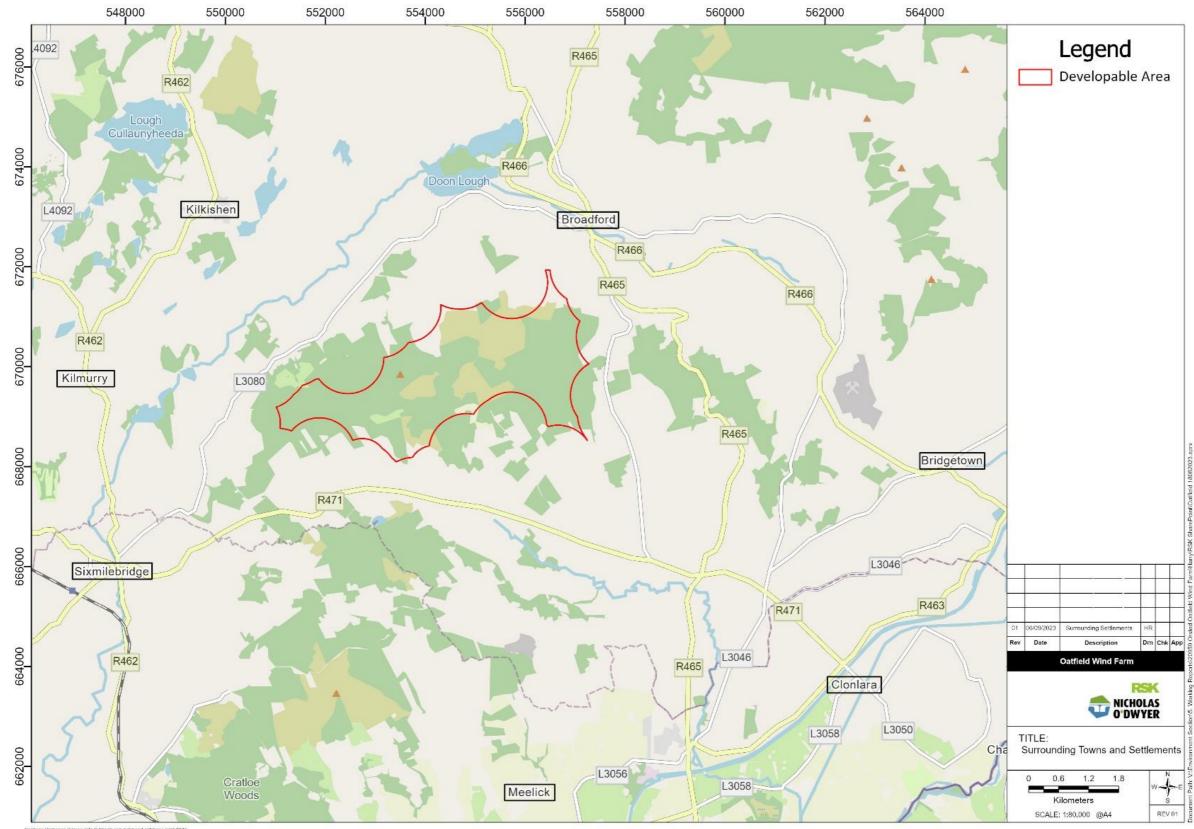
2 BACKGROUND TO THE PROJECT

2.1 Site Location and Description

The Oatfield site is situated in the townlands of Oatfield, Crag, Cloontra West, Derryvinnaan, Cloontra, Cloonsheerea, Mountrice, Cloghera, Drumsillagh (Merritt), Drumsillagh (Parker), Kyle and Gortacullin. It is located approximately 14km North-east of Shannon, Co. Clare. Approx. centre point of the site in ITM: (X) 2183706 (Y) 3890037. The buildable area measures approx. 985 hectares.

The Project site is in an upland setting dominated by commercial coniferous plantation forestry, blanket bog, wet heath and rough/wet grassland. There is also agricultural land bounded by hedgerows, and conifer plantations. An area of broadleaf forestry is located at the North-west of the site. The predominant habitat on site is conifer forestry. Agricultural land is present throughout the site but are absent from large areas to the North-east of the site, with marginal grazing land predominant in these regions. There are sections of shrubby, broadleaf woodland to the North-west of the site. The site is hydrologically connected to the Blackwater River, approx. 6km downstream.

The R471 is located South of the site, running east to west, connecting Clonlara to Sixmilebridge. The R469 provides a link to the M18, M7 and M20 motorways. The Cloontra local road traverses the centre of the site from Crag to Derryvinnaan townlands. The buildable area is set back approx. 720m from residential dwellings. There are no recorded monuments within the site boundary (**Figure 2.1**).



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Figure 2.1: Townlands and Settlements

2.2 Designated Areas

There are designated European sites and national heritage sites within 15km of the Project site. Key ecological sensitivities of the study area and surrounds are listed in **Table 2-1 to Table 2-4.**

Site Name	Distance From Site Boundary (km)
Lower River Shannon SAC	0.4
Danes Hole, Poulnalecka SAC	2.1
Glenomra Wood SAC	2.2
Ratty River Cave SAC	2.2
Slieve Bernagh Bog SAC	4.1
Lough Gash Turlough SAC	4.2
Kilkishen House SAC	5.2
Poulnagordon Cave (Quin) SAC	9.8
Askeaton Fen Complex SAC	9.9
Curraghchase Woods SAC	11.1
Old Domestic Building (Keevagh) SAC	12.1
Newhall and Edenvale Complex SAC	12.7
Newgrove House SAC	13.4
Knockanira House SAC	14.4
Clare Glen SAC	14.6

Table 2-1: Special Areas of Conservation (SACs)

Table 2-2: Special Protection Areas (SPAs)

Site Name	Distance From Site Boundary (km)
River Shannon and River Fergus Estuaries SPA	2.1
Slieve Aughty Mountains SPA	11.9
Lough Derg (Shannon) SPA	12.3
Slievefelim to Silvermines Mountains SPA	14.8

Table 2-3: National Heritage Areas (NHAs)

Site Name	Distance From Site Boundary (km)
Gortacullin Bog NHA	0.01
Woodcock Hill Bog NHA	1.3
Doon Lough NHA	1.7
Cloonloum More Bog NHA	5.8
Loughanilloon Bog NHA	10.3
Ayle Lower Bog NHA	11.6

Table 2-4: Proposed National Heritage Areas (pNHAs)

Site Name	Distance From Site Boundary (km)
Knockalisheen Marsh	0.4
Garrannon Wood	1.7
Fergus Estuary and Inner Shannon, North Shore	1.9
Castle Lake	2
Glenomra Wood	2.2
Danes Hole, Poulnalecka	2.4
Cloonlara House	2.7
Rosroe Lough	3.5
Fin Lough (Clare)	3.9
Inner Shannon Estuary South Shore	4
Lough Gash Turlough	4.2
Ballycar Lough	4.2
Castleconnell (Domestic Dwelling, Occupied)	5.5
Lough Cullaunyheeda	5.6
Dromoland Lough	7.3
Dromore & Bleach Loughs	8.0
Loughmore Common Turlough	8.8
Poulnagordon Cave (Quin)	9.8
Curraghchase Woods	11.1
Fort Fergus (Ballynacally)	12
Old Domestic Building (Keevagh)	12.1
Lough Derg	12.2
Lough O'Grady	12.4
Newhall And Edenvale Complex	12.7
Paradise House (Ballynacally)	14.1
Clare Glen	14.6
Cahircalla Wood	15

The potential for the Project to have any adverse effects on designated sites will be assessed as part of the EIA process. An Appropriate Assessment Screening and a Natura Impact Statement, if required, will also be prepared in line with the requirements of the EU Habitats and Birds Directives.

2.3 Likely Biodiversity Receptors

Consultation responses and preliminary survey results have identified the following ecological features as comprising potential or likely Biodiversity receptors of significance for consideration within assessment of impacts:

2.3.1 Ornithology

The avian species identified within the Project's zone of influence is summarised below:

• Breeding Hen Harrier (within 2km of the development site);

- Breeding kestrel (within 2km of the development site);
- Possible breeding red grouse (within 1km of the development site);
- Probable breeding woodcock (within 0.5km of the development site); and
- Breeding peregrine (within 2km of the development site).

It should be noted that the species identified above are breeding within the Project's zone of influence, but not within the Project site itself.

2.3.2 Biodiversity (Non-avian)

Flora and fauna of potential conservation concern were also identified either inside the proposed site or within the zone of influence.

- Habitats: wet grassland, wet heath, broadleaved woodland, hedgerows and treelines;
- Marsh fritillary (surveys to be undertaken in September 2023);
- Bats: notably lesser horseshoe bats foraging and commuting within/adjacent to the development site, also other species;
- Non-volant mammal species (potential presence of otter, red squirrel and pine marten within/adjacent to the development site); and
- Reptiles/amphibians (potentially present within the development site).

2.4 Site Selection

There are several factors that must be considered when selecting a site for a wind energy development to achieve an economically viable project. In combination with policy and environmental considerations, the matters to be considered include the wind resource available at the site, access to the national electricity grid, available land, environmental constraints and population density.

The site selection exercise generally entails the application of key criteria listed in Table 2-5 below to determine the most viable site for further testing and development. The site selection process for the Oatfield wind farm project will be reported in the EIAR.

Table 2-5: Site selection criteria

Criteria	Description	
Planning policy	Review of the relevant County planning policy documents, including the Wind/Renewable Energy Strategy.	
Planning history	Planning history of the site and other wind farm projects in the vicinity and wider area.	
Desktop studies	Desk study of potential constraints, such as national/international designations, priority habitats and bird species of concern; protected and scenic views; landscape designations, archaeological and cultural heritage, aquatic environment etc.	
Site visits	To determine:	
	Proximity of dwellings and other properties	
	 General landscape character, visibility from scenic routes or protected views 	
	 Identification of any other potential constraints such as waterbodies, overhead lines, telecoms masts, forested areas, etc 	
	 Confirmation of the potential presence/absence of sensitive habitats and protected species 	
	Assessment of potential turbine transport routes	
Constraints mapping	Review of site properties and potential constraints identified through desktop studies and site visits to determine the potential available area for development.	
Turbine layouts	Testing turbine layouts within the potential developable area to optimise energy capture from wind.	
Grid connection feasibility	Assessment of potential grid connection routes.	
Turbine delivery route	Assessment of potential turbine delivery routes.	

3 DESCRIPTION OF THE PROJECT

3.1 Project Description

The proposed wind farm project includes the preparation, project management and submission of a fully compliant EIAR, planning application and supporting documents for a Strategic Infrastructure Development (SID) application to An Bord Pleanála. The EIAR will encompass the project and associated infrastructure which includes but is not limited to the following;

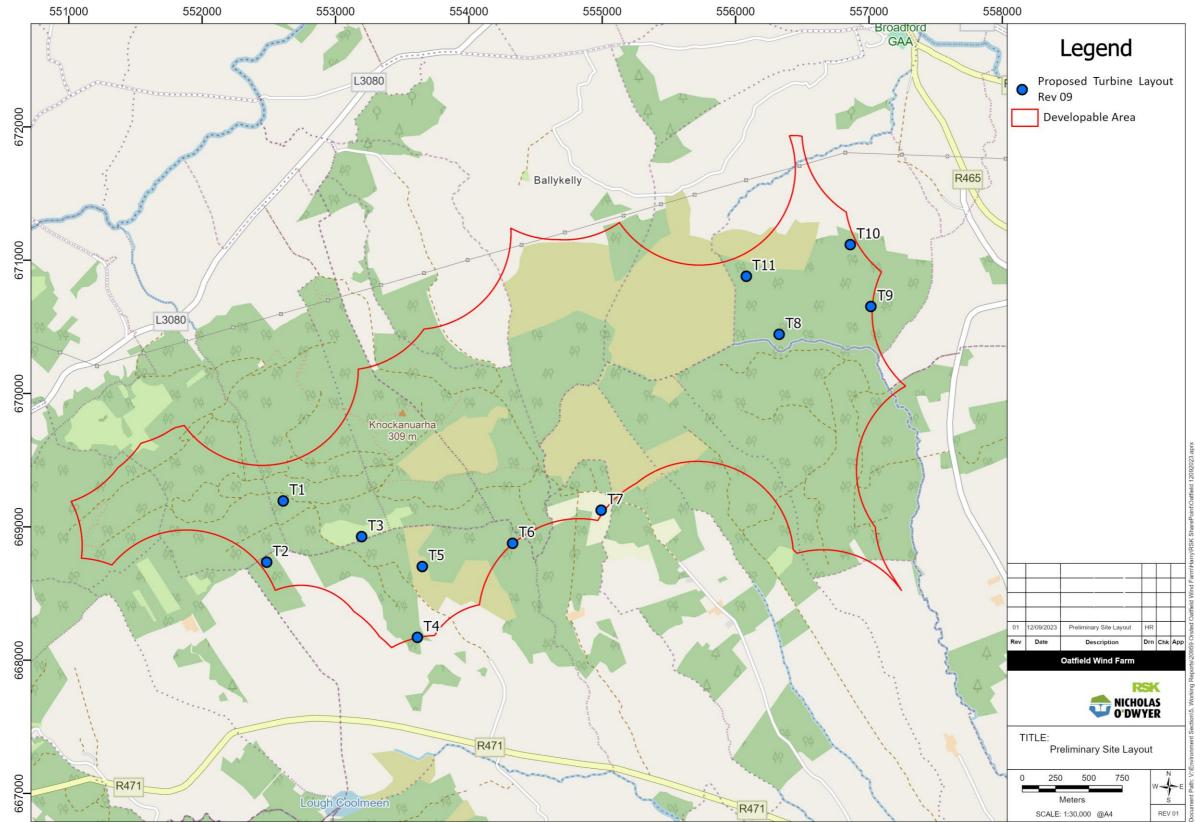
- Up to 11 wind turbines with a blade tip height of 179 -180m, turbine foundations and crane pad hardstanding areas;
- Site access tracks and watercourse crossings;
- Drainage infrastructure and potential flood mitigation;
- Borrow pits and spoil deposition areas;
- Clear-felling and forestry operations;
- A 110kv electrical substation to EirGrid and electricity supply board's specification to include control building with welfare facilities, wastewater holding tank, water connection, car parking, security fencing and lighting;
- All associated underground electrical and communications cabling connecting the turbines to the proposed electrical substation;
- At least one temporary construction compound;
- A permanent meteorological mast (approx. 100-105m in height, guyed or lattice tower to be considered);
- Temporary improvements and modifications to public roads to facilitate delivery of abnormal loads;
- Grid infrastructure (including underground grid connection cabling and a possible loop in substation to an existing 110kV overhead line).
- Construction haul route and turbine delivery route; and
- All associated site works and ancillary development including signage.

At this preliminary stage the proposed turbines will be the typical three-bladed, horizontal axis type. The potential installed capacities for the wind turbines will be proposed as part of the design process. Within the planning permission granted, certain details of the wind turbines will be determined at detailed design, and subject to a competitive tender, will be decided by the turbine manufacturer on award of the contract.

3.1.1 Preliminary Layout

The preliminary layout plan showing turbine positions is shown in **Figure 3.1**. Apart from the 11 turbines, the route of the internal access tracks and configuration of the wind farm site entrance, turbine delivery route and temporary compound along with construction methodologies for the wind farm site will be determined as part of the design and EIA process. Provision will be made in the design of the internal access tracks for replacement of turbine components during the operational lifetime in the event it is required. The project team will identify areas of high biodiversity and other constraints, and areas for mitigation and enhancement.

In terms of land use, forestry takes up the largest area as the Project site is in an upland setting dominated by commercial coniferous plantation forestry, blanket bog, wet heath and rough/wet grassland. The Land Use within the Project site is shown in **Figure 3.2**.



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Figure 3.1: Preliminary layout

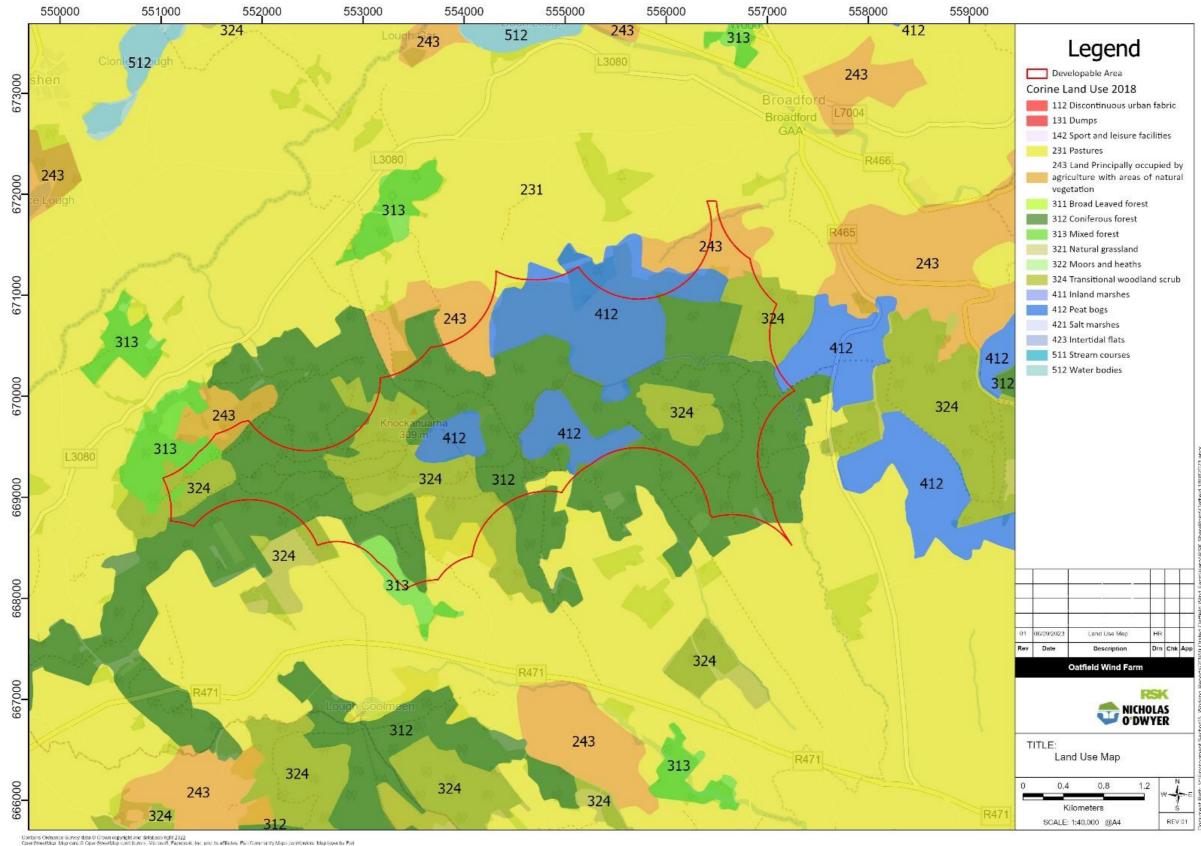


Figure 3.2: Corine Land Use within Project Area

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3.1.2 Turbine Delivery Route

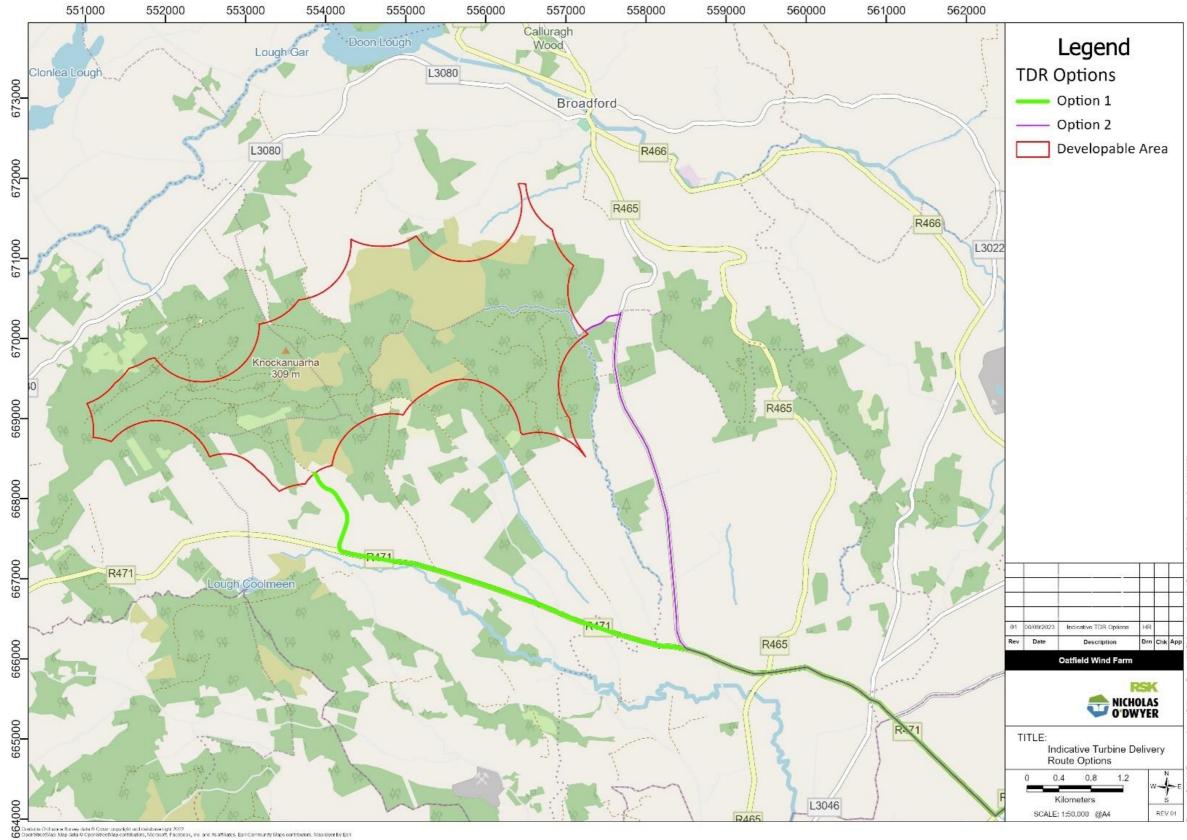
A study is underway to examine the feasibility of routes for delivery of turbine components. The TDR options are not yet finalised, as these are being determined through environmental and engineering assessments for suitability.

The last section of the TDR leading into the site is shown in **Figure 3.3.** The wind turbines are envisaged to be located on two ends of the Project site, with third party lands in between. Therefore, two entrance options to the site have been proposed (as can be seen in **Figure 3.3**).

The port options being considered are the Galway port in County Galway and the Foynes Port in County Limerick, see **Figure 3.4**.

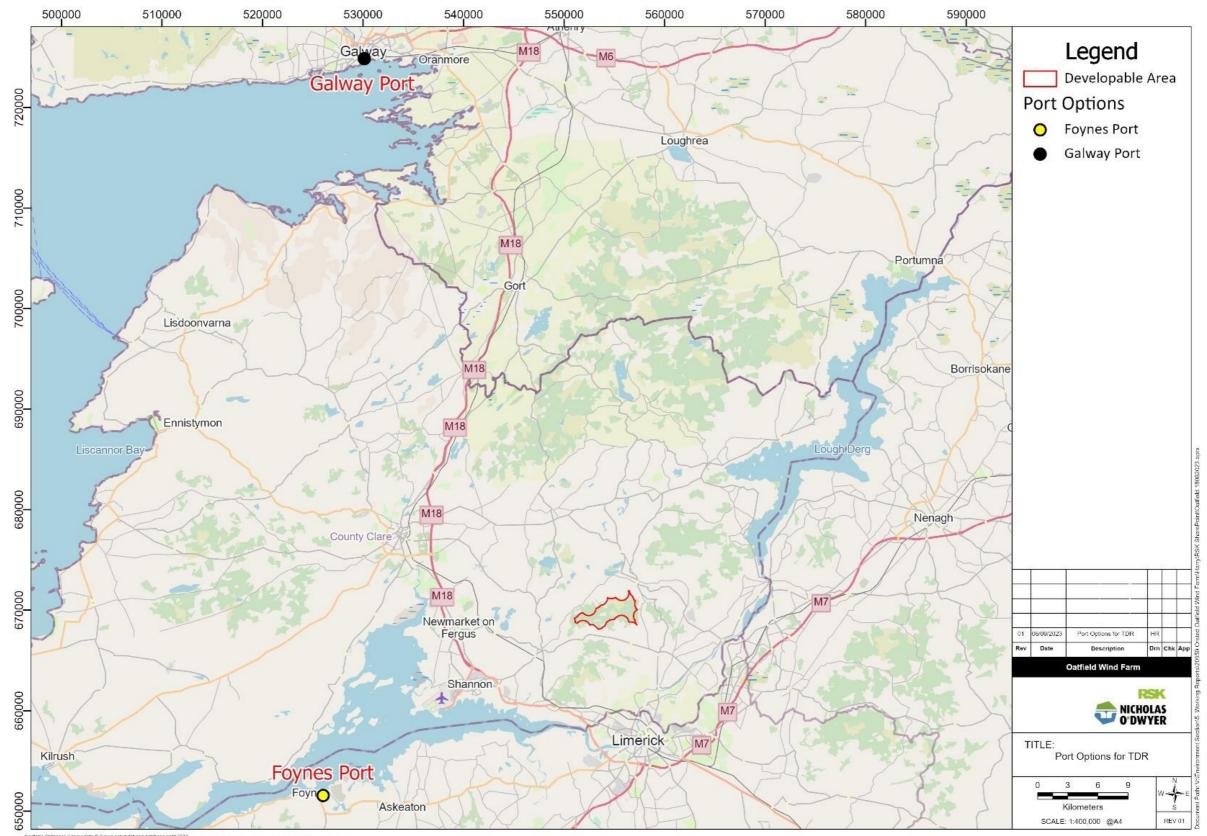
The access to the site in the case of the Foynes port will likely be via the N69 National Secondary Road, M7 motorway, will be from the South, via the M7 motorway, and the R494, R463 and R471 regional roads.

The access to the site in the case of the Galway port will likely be via the N6 National Secondary Road, M6 motorway, M18 motorway, N18 National Road, M7 motorway, and the R494, R463 and R471 regional roads.



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Figure 3.3: Indicative turbine delivery route



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Figure 3.4: Proposed port options

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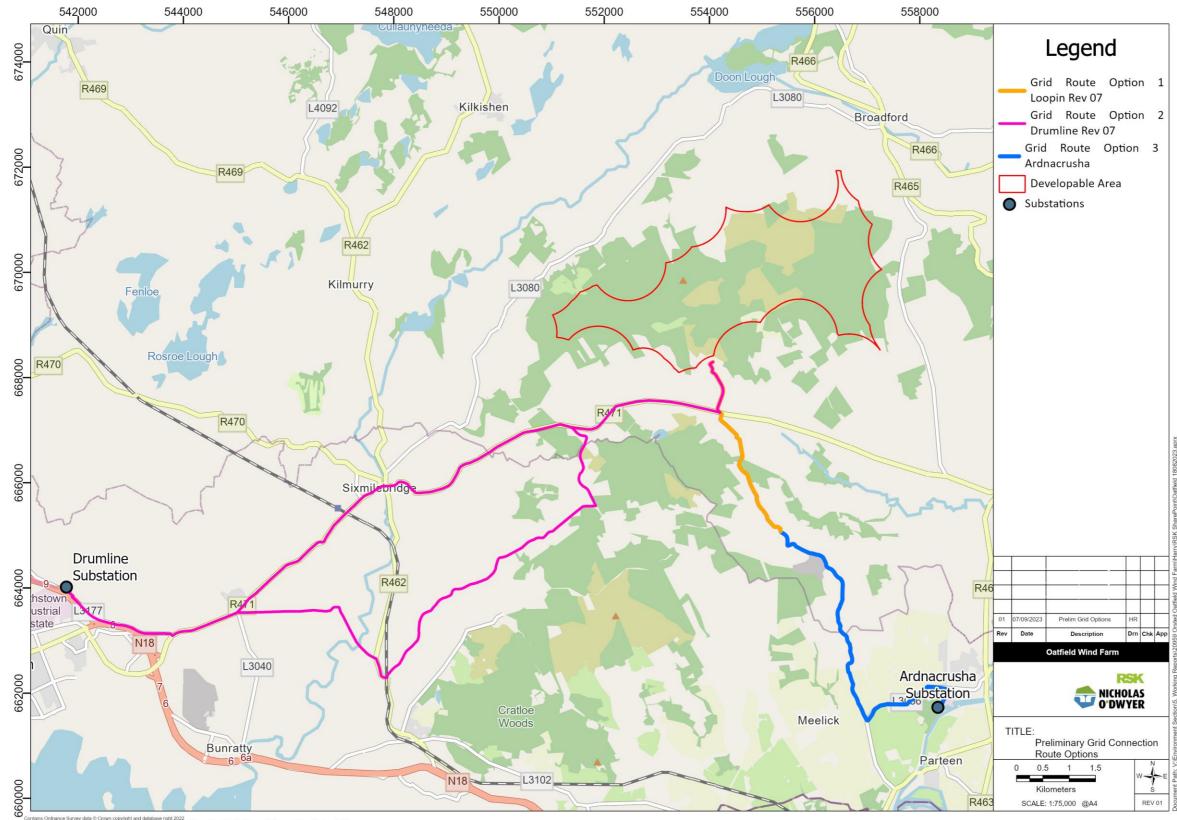
3.1.3 Grid Connection

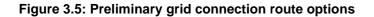
There are three options being considered to connect the project to the national electricity grid. However, other connection options may be considered depending on engagement and feedback from ESB Networks and/or EirGrid.

The three proposed options being considered in current environmental and engineering assessments are:

- An underground cable (UGC) loop-in to an existing 110kV overhead line;
- A 110 kV UGC to Drumline substation; and
- A 110 kV UGC to Ardnacrusha substation

The Preliminary grid connection route options are shown in Figure 3.5.





3.2 Decommissioning

The proposed turbines will have a design lifetime of approximately 35 years. In certain circumstances, the operator may wish to replace turbines prior to the end of the design lifetime. Such a decision would be made following assessment by the operator and turbine supplier, in consultation with the local authority.

In the decommissioning phase, cranes would be used to disassemble each turbine section and remove them from the site. The upper sections of the foundations projecting above ground will be removed, and the remainder of the foundations will be covered by soils typical of the surrounding environment and then reseeded or left to re-vegetate according to ecological requirements. Underground cables will be cut back at the turbine termination points and will either be de-energised and either recycled or, left buried in situ. It is proposed that site access tracks would remain to allow access through the site either for further alternative development of the site and/or for amenity purposes, as considered appropriate at the time. Materials will be recycled where practicable or disposed of in accordance with current waste legislation and best practice guidelines.

The substation will be disassembled, and this includes the removal of the steel, transformers, switches, conductors, and other materials that could be reconditioned and reused or sold as scrap.

As with construction, decommissioning works could result in potential significant impacts on identified sensitive receptors. The potential impacts of decommissioning will be assessed in the EIAR.

The land on which the turbines will be located is used for peat harvesting and some livestock grazing. Following development, the hardstands and crane pads will be grassed over, and the upgraded and the internal access tracks will remain in situ.

4 SCOPE OF THE ASSESSMENT

4.1 Introduction

In the case of the Oatfield wind farm project, the final proposals presented in the planning application will have gone through multiple iterations during preparation of the EIAR including the positioning of turbines, the route of the internal access tracks, location of the substation, and the temporary construction compound. The purpose of this is to minimise by design the potential for adverse effect the development would have on the environment.

In designing the project, conducting assessments, and preparing the EIAR, the RSK team will follow policy and guidance contained in the following documents (and any updates which may be forthcoming):

- Clare County Development Plan (CDP) (2017- 2023) and associated documents including the Wind Energy Strategy (WES) for Clare County Development 2017 – 2023: Volume 5;
- County Clare Biodiversity Action Plan 2017 2023;
- Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EPA, May 2022);
- Advice Notes on Current Practice in the Preparation of Environmental Impact Statements" (EPA, 2003);
- Advice Notes for Preparing Environmental Impact Statements Draft (EPA, September 2015);
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government, August 2018);
- European Commission Guidance on the preparation of the EIA Report (Directive 2011/92/EU as amended by 2014/52/EU) (European Commission, 2017) and
- Department of Housing, Local Government and Heritage's Wind Energy Development Guidelines for Planning Authorities (2006), with due consideration for the Department's Draft Revised Wind Energy Development Guidelines (December 2019).
- Department of the Environment, Heritage and Local Government, 2009. *Appropriate Assessment of Plans and Projects in Ireland*. National Parks and Wildlife Service, DAHG, Dublin, Ireland.
- European Commission (2002). Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Luxembourg.

4.2 The EIAR Team

RSK Ireland and associated RSK Group companies have been commissioned to undertake the requisite surveys and consultations and prepare the EIAR. The project team is composed of experienced and competent specialists from companies within the RSK Group in Ireland and the UK, along with associated specialist subconsultants as listed in **Table 4-1**.

Table 4-1: EIAR Team

EIAR Chapter	Responsible Team
Chapter 1: Introduction & Background to the Project	Nicholas O'Dwyer Ltd
Chapter 2: EIAR methodology and Relative Guidelines	Nicholas O'Dwyer Ltd
Chapter 3: EIAR Scoping and Consultations	Nicholas O'Dwyer Ltd
Chapter 4: Project Need & Alternatives Considered	Nicholas O'Dwyer Ltd
Chapter 5: Project Description	Nicholas O'Dwyer Ltd
Chapter 6: Population & Human Health	Nicholas O'Dwyer Ltd
Chapter 7: Biodiversity (*Terrestrial & Aquatic ecology, bats)	Surveys: RSK Inis Chapter: RSK Biocensus
Chapter 8: Birds	Surveys: RSK Inis Chapter: RSK Biocensus
Chapter 9: Hydrology & Hydrogeology	RSK Ireland
Chapter 10: Land, Soils, Geology	RSK Ireland
Chapter 11: Material Assets (Waste Management, Telecoms & Aviation)	Nicholas O'Dwyer Ltd / Ai Bridges
Chapter 12: Shadow Flicker	ADAS Ltd
Chapter 13: Noise & Vibration	RSK Ireland / RSK Acoustics
Chapter 14: Landscape & Visual	MacroWorks
Chapter 15: Archaeology & Cultural Heritage	ADAS Ltd
Chapter 16: Traffic and Transport / Major Accidents and Disasters	Nicholas O'Dwyer Ltd / Pinnacle Engineering
Chapter 17: Air Quality	RSK Environment
Chapter 18: Climate	RSK Environment
Chapter 19: Impact Interactions & Cumulative Effects	Nicholas O'Dwyer Ltd
Chapter 20: Schedule of Mitigation Measures	Nicholas O'Dwyer Ltd

4.3 Scope of the EIAR

4.3.1 Purpose

The purpose of the EIAR will be to document the current condition of the environment in the vicinity of the project site, and through desk studies, field work, modelling and analysis, to quantify insofar as reasonable and possible, or qualify, the likely adverse effects, if any, of the project on the environment. The assessment process will include highlighting areas where mitigation measures may be necessary to address potential significant adverse effects identified by incorporating them into the design, or limiting their effects to within acceptable levels, in accordance with established standards and guidelines. In addition, the project team will consider environmental enhancements where significant adverse effects cannot be avoided or reduced.

The objective of the EIA and design process is to facilitate the best environmental design that achieves the objectives of development (i.e., to produce renewable electricity) and to ensure that the development can be sustainably accommodated into the surrounding environment.

4.3.2 EIAR General Structure and Chapters

The information to be contained in an EIAR is specified in Schedule 6 of the Planning and Development Regulations, 2001 (as amended) and in the updated EIA Directive 2014/52/EU which is reflected in the EPA Guidance of 2022 The EIAR for Oatfield wind farm Project will be presented in accordance with EPA guidance (EPA 2022) and will describe the existing environment, the likely significant effects of the project, proposed mitigation measures, and residual effects under the chapter headings listed in **Table 4-1**.

The EIAR will be presented in four volumes. Volume I will be a Non-Technical Summary, which is a summarised, non-technical version of the EIAR document. Volume II will contain the chapters tabled above in Table 4.1, presented in two parts. Volume III will contain Technical Appendices related to each chapter as relevant, and Volume IV will present figures and visualisations in an A3 volume.

Details of the extent and scope of each of the key chapters in the EIAR are presented below. The table of contents of the EIAR will generally follow the outline presented.

4.3.2.1 Volume I. Non-Technical Summary

The purpose of the Non-Technical Summary is to provide a description of the EIA process and its findings that can be easily understood by the public, using non-technical terms. This document will provide information on the site and surrounding area, the project, the main elements of the project, and for each environmental factor covered in the EIAR, a description of what was assessed, the effects and the proposed mitigation.

4.3.2.2 Volume II. Part 1. Background & Introduction to the Project

Chapter 1. Introduction

This chapter of the EIAR will provide details on the following:

- Project overview;
- The applicant;
- The competent authority;
- Legislative context, purpose and scope of the EIAR;
- Format of the EIAR; and
- Where the EIAR can be viewed/purchased.

Chapter 2. EIA Methodology

This chapter of the EIAR will describe;

- The EIAR project team;
- The EIAR process;
- An overview of the methodologies employed, principles applied in conducting the baseline surveys, determining the significance of impacts; and prescribing mitigation measures; and
- Difficulties encountered.

Chapter 3. Scoping and Consultations

This chapter will record the EIAR scoping and consultation process, including a summary of the information or observations received from the consultees listed in Section 5 of this Document. It will also provide a report of community engagement activities to be undertaken for the EIAR and planning application.

Chapter 4. Project Need & Alternatives Considered

This chapter will present the main policy drivers for wind and renewable energy development in the context of EU and government targets and national policy on climate action, and reduction of greenhouse gas emissions. A detailed policy review will be provided in a supporting statement which will accompany the planning application.

It will present an overview of the alternatives considered in the selection of the main elements of the project (i.e., location, technologies, designs, layouts, processes, methods), and the environmental effects thereof. It will describe the options considered for the design of the project (wind farm site, grid connection, and turbine delivery route), how it evolved and how constraints and opportunities, and information and feedback obtained from the EIAR scoping consultations contributed to the final project design.

Chapter 5. Project Description

This chapter of the EIAR will provide a detailed description of all components of project at each phase of the project, including construction, operation, and decommissioning. It will include information such as:

- The proposed layout;
- Access and transportation;
- Site preparation works;

- Waste management
- Site drainage;
- Electrical infrastructure including cable installation;
- Temporary site facilities;
- Turbine foundation and associated hardstands;
- Turbine delivery and installation;
- Commissioning of the turbines;
- Grid connection
- Site restoration;
- Environmental mitigation and enhancements; and
- Community benefit proposals.

The control measures that will be implemented to manage the risk of soil and water pollution, emissions of dust and noise, managing waste and traffic impacts during construction will be described. A Construction and Environmental Management Plan (CEMP) will be prepared and presented as an Appendix to the EIAR. The CEMP will include:

- A detailed description of the works;
- The proposed management and reporting structure, including roles and responsibilities;
- A communications plan;
- Construction method statements;
- Construction programme and phasing;
- Site environmental policy;
- Environmental management schedule;
- Environmental monitoring, auditing and inspection schedule; and
- Construction-related complaints log.

The CEMP will include as appendices separate plans relating to Surface Water Management, Spoil Management, Waste Management, Surface water quality monitoring and an Emergency Response Plan.

4.3.2.3 Volume II. Part 2. EIAR factors

Chapter 6. Population and Human Health

The assessment of the potential effects of the project on the population and human health of the receiving community will be assessed by way of a desk study of data sourced from the Central Statistics Office, the County Development Plan, Fáilte Ireland and other literature pertinent to the area.

A desktop study and field work has been undertaken to identify all dwellings within 2 km of the project area, including their occupancy status and any current

planning permission applications or new dwellings which have been granted planning permission but not yet constructed.

Aspects to be addressed in this chapter include:

- Characteristics and health of the population;
- Employment and economic activity;
- Community benefit;
- Land-use;
- Community facilities and amenity;
- Tourism;
- Public perception of wind farms;
- Health impacts of wind farms;
- Health and safety;
- Vulnerability to accidents and natural disasters;
- Noise
- Shadow flicker; and
- Residential amenity.

The potential for shadow flicker arising from the project will be predicted and assessed using specialist computer software programmes specifically developed for the wind energy industry. Shadow flicker results for the project will be assessed against the applicable guidelines.

Potential impacts from the project relate primarily to the construction stage including noise, dust, and traffic disruption. These would be short-term temporary impacts that will be managed as set out in an outline Construction Environmental Management Plan for the project which will be provided with the EIAR. There will be short-term beneficial impacts through the creation of economic opportunities and jobs during the construction stage. During the operation stage, there is potential for noise and shadow flicker effects. These will be assessed in the EIAR, and appropriate mitigation applied.

Chapter 7. Biodiversity

The potential effects of the project encompassing the wind farm site, grid connection route options and the turbine delivery route on biodiversity will be presented in this chapter in the EIAR.

The presence of Annex I (Habitats Directive) habitats, if any, will be recorded, and their condition assessed. Comment will be made on the significance of species recorded such as Irish Red Data Book status or presence of flora protected under the Irish Flora Protection Order (1999). Biodiversity receptors will be undertaken in reference to current best practice guidance; notably NRA guidance (*Guidelines for Assessment of Ecological Impacts of National Road Schemes*, 2009) and predicting the effects of wind farms on birds in the UK: the development of an objective assessment method (Percival, 2007).

Aspects to be addressed in these chapters include designated areas; flora in the existing environment, including habitat mapping; fauna in the existing environment, including bats, other terrestrial and aquatic species; invasive alien species; and mitigation and enhancements.

The scope will include:

- Desk study of information obtained from National Parks and Wildlife Service (NPWS); National Biodiversity Data Centre website (NBDC); Environmental Protection Agency website (EPA); Inland Fisheries Ireland (IFI); Birdwatch Ireland website (BWI); Bat Conservation Ireland (BCI) and Butterfly Ireland website.
- Field surveys: the following field surveys have been, or will be undertaken;
 - Habitat survey;
 - Marsh fritillary survey;
 - Multi-season bat surveys (including Potential Roost Assessments, emergence/re-entry surveys of potential roosts, activity transect surveys, and automated static detector surveys);
 - Non-volant mammal surveys (comprising walkover surveys and camera trap deployment, including detailed consideration of badger and otter); and
 - Amphibians and reptile surveys.
- Description and mapping of the habitats over the full extent of the site in accordance with the Heritage Council's 'Standard Methodology for Habitat Survey and Mapping in Ireland' (Fossitt, 2000);
- Identification of terrestrial floral and faunal species on the site;
- Identification and evaluation of any other features of ecological interest; and
- Assessment of effects and identification of mitigation measures.

In addition, consultation responses have been requested and received from NPWS, Development Applications Unit (DAU) and Inland Fisheries Ireland (IFL). These will be included and addressed where necessary within the Chapters.

Impacts on flora and fauna will be assessed in terms of the construction, operational and decommissioning phase of the project, including potential cumulative effects with other projects. Potential impacts of the wind farm on biodiversity include loss of habitat in the footprint of the development; damage to habitats during construction and impacts on water dependent habitats as a result of changes to drainage in the site.

Chapter 8. Birds (Ornithology)

The potential effects of the project encompassing the wind farm site, grid connection route options and the turbine delivery route on birds will be presented in the EIAR in this chapter.

The scope will include:

- Desk study of information obtained from National Parks and Wildlife Service (NPWS); National Biodiversity Data Centre website (NBDC); Environmental Protection Agency website (EPA); and Birdwatch Ireland website (BWI).
- Field surveys; the following surveys have been, or will be undertaken;
 - Vantage Point surveys during the breeding and non-breeding seasons;
 - Countryside Bird Survey (CBS) transect surveys during the breeding season;
 - Transect surveys during the non-breeding season;
 - Breeding and non-breeding (i.e., winter roosting) hen harrier surveys;
 - Breeding barn owl surveys;
 - Breeding kestrel surveys;
 - Breeding merlin surveys;
 - Breeding peregrine surveys;
 - Breeding kingfisher surveys;
 - Breeding woodcock surveys;
 - Breeding upland wader surveys;
 - Breeding dipper and grey wagtail surveys;
 - Red grouse surveys; and
 - o Irish Wetland Bird Surveys (I-WeBS) for wintering waterbirds.
- Assessment of effects and identification of mitigation measures.

Impacts on birds, will be assessed in terms of the construction, operational and decommissioning phase of the project, including potential cumulative effects with other projects.

Chapter 9. Hydrology & Hydrogeology

The Hydrology & Hydrogeology chapter of the EIAR will focus on the surface water and groundwater environment of the project. The scope for this chapter will include:

- Desk study of available information and existing reports on the whole project area including geological maps, field sheets data etc. using datasets from OPW, EPA and GSI.
- Inspection and mapping of all relevant hydrological features, such as existing drainage ditches, streams and springs;
- A walkover survey of the site to identify features with respect to Hydrology;

- Field hydrochemistry monitoring within surface water features across the site to determine likely sources of flow and a baseline representation of water quality;
- Measurement of slope inclination and mapping of significant hydrological features; and
- Confirmation of site catchments and drainage regime, and any hydrological buffers to be implemented.

Proposed mitigation measures will include proposals for sediment control during construction and the integration of SUDs into the project design to reduce or eliminate potential impacts on surface and groundwater quality.

Reference will be made to the following guidance documents:

- Requirements on Protection of Fisheries During Construction Works in and Adjacent to Waters (Inland Fisheries Ireland, 2016).
- Good Practice During Wind Farm Construction (NatureScot, 2019).
- GPP1 General Guide to Preventing Pollution (UK Guidance Note, 2020).
- GPP5 Works or Maintenance in or Near Water (UK Guidance Note, 2017).
- Guidance on Control of Water Pollution from Linear Construction Projects (Construction Industry Research and Information Association (CIRIA) Report No. C648, 2006).
- Control of Water Pollution from Construction Sites Guidance for Consultants and Contractors. (CIRIA C532., 2001).

Chapter 10. Land, Soils & Geology

The scope of works for the Land, Soils and Geology chapter will include:

- A desk study review of published data (where available) on bedrock and surficial geology, land cover, and aerial photographs and topographical data for the wind farm site, etc., such as EIARs for other developments in the area, aerial photographs, etc., using datasets from OPW, EPA and GSI.
- A walkover survey of the site to identify features with respect to geology such as geomorphological features, relict failures, rock exposures, wet ground, general soil/rock types, and identification of potential borrow pits and excavated spoil storage areas, etc.
- Surveys and site investigations, as required, to determine the nature of the bedrock and surficial geology and its suitability for construction of the infrastructure required for the project.
- The data gathered from surveys and site investigations will be used to inform the final location of all turbines and associated infrastructure.

An earthworks balance calculation will be prepared for the overall development to assess where excavated material can be beneficially re-used. In addition, an assessment of the volumes of raw material will be made which will in turn be used to determine the number and size of borrow pits required (if any) or the amount of material required to be imported to the site.

Impacts on land, soils and geology will be assessed in terms of the construction, operational and decommissioning phases of the project. Potential cumulative impacts with other projects will also be assessed.

The following documents will be consulted:

- Creighton, R. et al. (2006) Landslides of Ireland;
- Gharedaghloo, B. (2018) Characterizing the transport of hydrocarbon contaminants in peat soils and peatlands;
- Institute of Geologists of Ireland (IGI) (2002) Geology in Environmental Impact Statements – A Guide;
- IGI (2013) Guidelines for the Preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements;
- National Parks and Wildlife Services (NPWS) (2015) National Peatlands Strategy;
- NPWS (2017) Best practice in raised bog restoration in Ireland;
- Scottish Forestry Commission (2006) "Guidelines for the Risk Management of Peat Slips on the Construction of Low Volume / Low Cost Roads Over Peat"; and
- Scottish Government (2017) Peat Landslide Hazard and Risk Assessment: Best Practice Guide for Proposed Electricity Generation Developments.

Chapter 11. Material Assets

This chapter will address Waste Management, Utilities, and Telecoms & Aviation factors for the EIAR.

Waste management

The EIAR chapter on Material Assets will present an evaluation of the possible effects that the project could have on waste management. The proposed study will consider the following aspects:

- Legislative context: a review of applicable policy and legislation which creates the legal framework for resource and waste management in Ireland;
- Description of the typical waste materials that will be generated during the construction, operational and decommissioning phases; and
- Identification of mitigation measures to prevent waste generation and promote management of waste in accordance with the waste hierarchy, and to include the potential treatment of any relevant material as a by-product in accordance with the objectives of the Circular Economy

<u>Utilities</u>

The utilities section will assess the potential for impacts to electricity, power, water infrastructure and waste services in the vicinity of the Project, and along the turbine delivery route and grid connection route.

Telecommunications & Aviation

The EIAR chapter on Material Assets will present an evaluation of the possible effects that the project could have on aviation and existing telecommunications networks. The proposed study for this aspect will include:

- Consultation with stakeholders including the Irish Aviation Authority, Department of Defence, Commission for Energy Regulation, Shannon Airport, Cork Airport, Galway Airport, Sligo Airport, Ireland Knock West Airport, and emergency services;
- Consultation with telecommunications operators to gather the necessary data;
- Preparation of constraints mapping; and
- Engagement with telecommunications operators to provide feedback on initial assessment and potential impacts on the links identified.

Further specialist investigations will be carried out if the telecommunications operators identify potential impacts and arrive at a solution which would include careful site design or relocation of links as may be required.

Chapter 12. Shadow Flicker

An assessment will be undertaken to determine potential shadow flicker effects at all sensitive receptors within 10 rotor diameters of the proposed turbines. This is based upon guidance in the Wind Energy Development Planning Guidelines (2006) that at distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low.

Sensitive receptors will be identified using the house database and are expected to include all occupied and unoccupied dwellings and other buildings such as schools within the 10-rotor diameter study area. Cumulative effects (where the 10-rotor diameter study area overlaps with the 10 rotor diameter areas of any other operational, consented or planned wind farms) will also be calculated.

Chapter 13. Noise & Vibration

The Noise & Vibration chapter of the EIAR will address the noise and vibration impacts on sensitive receptors during the construction, operation and decommissioning phases. This chapter will include detailed baseline information on the existing noise environment, identify sensitive receptors and assess potential effects and mitigation measures associated with the project.

The scope of works will include:

 predictive noise modelling using background noise data gathered during baseline noise surveys; identification of any potential exceedances of the limit in relation to the relevant Irish guidance and/or derived Energy Technology Support Unit (ETSU) day and night limits as appropriate.

The preparation of noise models and prediction of noise levels at all relevant locations will follow the relevant technical guidance as contained in the "*Wind Energy Development Guidelines*" published by the Department of the Environment, Heritage, and Local Government, 2006. These guidelines are in turn based on detailed recommendations set out in the Department of Trade & Industry (UK) Energy Technology Support Unit (ETSU) publication "*The Assessment and Rating of Noise from Wind Farms*", 1996 (ETSU-R-97). The ETSU document has been used to supplement the guidance contained within the WEDG 06 publication where necessary.

In assessing the impact of noise and vibration from the construction activities, it is usual to accept that the associated works are of a temporary nature. Detailed guidance on construction noise and its control is provided by British Standard BS 5228 'Code of practice for noise and vibration control on construction and open sites' (2009, amended 2014), part 1 (noise) and part 2 (vibration).

The Institute of Acoustics (IoA) has also published a "Good Practice Guide to the Application of ETSU-R- 97 for the Assessment and Rating of Wind Turbine Noise" (2013) (IoA GPG) and Supplementary Guidance Notes, which are considered to represent best practice and will be adopted for the assessment of the proposed Oatfield windfarm Project.

Operational noise from other non-turbine components of the Development (such as an on-site substation) can be assessed with reference to general guidance on noise for commercial installations, such as for example to the EPA Guidance Note for Noise: License Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4).

Effects in relation to noise from the proposed project will be assessed in terms of the construction, operational and decommissioning phases of the project, including potential cumulative impacts with other projects.

The nature of works and distances involved in the construction of a wind farm are such that the risk of significant effects relating to ground borne vibration are very low. Accordingly, construction vibration impacts do not warrant detailed assessment. Also, vibration resulting from the operation of wind farms is imperceptible at typical separation distances. It is therefore proposed to scope out the assessment of vibration produced during the operation of the Proposed Development.

Chapter 14. Landscape & Visual Amenity

The Landscape and Visual Amenity chapter will address effects of the project on landscape character and visual amenity. This chapter will address the physical landscape, landscape character, landscape value and sensitivity, visibility of the project from selected viewpoints, residential visual amenity, and sensitive receptors.

The Landscape and Visual Impact Assessment (LVIA) will be based on the guidance from the Landscape Institute and Institute of Environmental

Management and Assessment Guidelines for Landscape and Visual Impact Assessment, Third Edition (April 2013), a review of the county level Landscape Character Assessments for County Clare, and relevant policies in the County Development Plan for County Clare. Also, an assessment of existing landscape character, and identification of sensitive visual receptors. The LVIA will accord with the Department of Housing, Planning and Local Government's Wind Energy Development Guidelines for Planning Authorities (2006) and with reference to the Department's Draft Revised Wind Energy Development Guidelines (December 2019).

Regard will also be given to the overarching Environmental Impact Assessments guidelines and advice notes set out by the EPA:

• Environmental Protection Agency (EPA) Guidelines on the Information to be contained in the Environmental Impact Assessment Reports (2022)

Other relevant LVIA and wind energy specific guidance that will be considered includes:

- NatureScot Siting and Designing Wind Farms in the Landscape (version 3a – 2017).
- NatureScot Assessing the Cumulative Impact of Onshore Wind Energy Developments (2012).
- NatureScot Visual representation of wind farms: Best Practice Guidelines (version 2.2 - 2017).

The landscape and visual impacts of the whole project during the construction, operation and decommissioning phases will be assessed. Potential cumulative impacts with other projects will also be assessed. Potential impacts arising from the development relate to visual amenity (i.e., the extent to which the wind turbines can be seen from selected viewpoints) in relation to the sensitive receptors, and landscape character (i.e., effects of the wind turbines on the fabric or structure of the landscape).

The assessment of effects will be aided and communicated with Zone of Theoretical Visibility maps and photomontages, including cumulative effects with other windfarms within 15 km.

Chapter 15. Archaeology & Cultural Heritage

This chapter will address archaeological, architectural and cultural heritage. The scope of works will include:

- Consultation with relevant stakeholders;
- Desktop review of all relevant literature and data available, including but not limited to local knowledge of the site and surrounding area, the Sites and Monuments Record (SMR), the Record of Monuments and Places (RMP), and historical mapping and documents including the Topographical Files of the National Museum of Ireland and First Edition Ordnance Survey Maps and other relevant maps and cartographic studies;
- Aerial photographs and detailed topographical data;

- Excavation bulletins;
- Clare County Development Plan & Record of Protected Structures;
- National Inventory of Architectural Heritage (NIAH);
- Field inspection/ site walkover; and
- Archaeological test trenching under licence, where required.

The assessment of potential effects of the project on the archaeology and cultural heritage resource of the project site and surrounding area, including along the proposed grid connection route options will be assessed for the construction, operation and decommissioning phases. The assessment of impacts on architectural and cultural heritage will be carried out in accordance with the Architectural Heritage Protection Guidelines for Planning Authorities (Department of Arts, Heritage and the Gaeltacht, 2011).

Potential impacts arising from the project include direct impacts on recorded archaeological monuments and previously unknown buried archaeological remains on the wind farm site; direct impacts on cultural heritage resource including historical bridges; and indirect impacts on the settings of archaeological, architectural and cultural heritage resources in the vicinity of the site and proposed grid connection route. Mitigation by avoidance will be the preferred approach.

Chapter 16. Traffic and Transport

This chapter will address Traffic & Transport for the EIAR. The traffic impact assessment will address the traffic impacts on the road network from the construction, operation and decommissioning of the proposed project. The assessment will include consideration of the supply of materials, plant and equipment, the turbine elements and the components of the sub-station. Traffic arising from the construction and operations workforce will also be addressed.

A route survey is currently underway from the port of entry to the wind farm site. Identified pinch points, especially on local roads will undergo an engineering and Auto track assessment to determine the temporary and upgrade works required to facilitate the safe transport of the turbines to the site.

All internal access tracks on the wind farm site will be assessed using Auto Track vehicle swept path analysis to ensure that they are adequate to allow for delivery of turbine components while also minimising the required land take where feasible.

The methodology for the traffic impact assessment will include a review of the traffic volumes and impacts which will be generated during construction, operation and decommissioning of the wind farm. Traffic generation by the construction workforce, by the transport of materials and equipment as well as for future maintenance-related activities will be predicted. The traffic distribution pattern on the local road network during construction will be examined and impacts determined. The potential disruption to the road network during the installation of the cables and the availability of alternative routes will be assessed, where required. Recommendations will be made to mitigate any potential traffic impacts on the road network.

The greatest potential for traffic impact from the proposed project is during the construction phase which will give rise to additional traffic on the road network.

Chapter 17. Air Quality

This chapter of the EIAR will consider the baseline of the site and surrounding area in terms of air quality. Potential impacts on air quality are anticipated to occur mainly during the construction stage and emissions from traffic for the delivery of turbine components, electrical equipment and earth materials, and the generation of dust arising from these activities.

Based on the Institute of Air Quality Management (IAQM) construction dust guidance (IAQM, 2014), the study area for sensitive human receptors for demolition, earthworks and general construction activities will be up to 350m from the Site boundary. For trackout activities, the study area will be considered up to 50m from the edge of the roads likely to be affected by trackout.

The study area for ecologically sensitive sites for demolition, earthworks and general construction activities will be up to 50m from the Site boundary. For trackout activities, the study area will be up to 50m from the edge of the roads likely to be affected by trackout.

A desk-based baseline air quality review will be carried out to establish existing air quality conditions within the study area. Information on air quality will be gathered from the monitoring stations that form a part of the National Ambient Air Quality Network managed by the Environmental Protection Agency (EPA).

The potential construction and decommissioning activities will be separately assessed and reported within the EIAR.

Dust and Particulate Matter Emissions

An assessment of the likely significant effects of construction phase dust and particulate matter at sensitive receptors will be undertaken following the IAQM's guidance note 'Assessment of dust from demolition and construction 2014', using the available information from the project team and professional judgement.

The assessment will consider the risk of potential dust and particulate matter effects from the following three sources: earthworks; general site activities; and trackout. It will take into account the nature and scale of the activities undertaken for each source and the sensitivity of the area to increases in dust and particulate matter levels to assign a level of risk. Dust risks will be described in terms of low, medium or high. Once the level of risk has been ascertained, the site-specific mitigation proportionate to the level of risk will be identified, and the significance of residual effects will be determined.

Traffic Exhaust Emissions

A screening level qualitative assessment will be undertaken with reference to the Highways England '*LA 105 of the Design Manual for Roads and Bridges (DMRB), 2019*', using professional judgement and by considering the following information, where available:

 The number and type of road traffic and site equipment likely to be generated;

- The number and proximity of sensitive receptors to the Site and along the likely routes to be used by construction vehicles; and
- The likely duration and the nature of the construction/decommissioning activities undertaken.

Impacts on air quality from the proposed Oatfield windfarm Project will be assessed in terms of the construction, operational and decommissioning phases of the project. Potential cumulative impacts with other projects will also be assessed.

Chapter 18. Climate

This chapter of the EIAR will consider the baseline of the site and surrounding area in terms of climate (including climate change). A greenhouse gas (GHG) assessment of the Project to determine the effects of GHG emissions and savings arising from the Project.

A carbon balance assessment of the project will be calculated based upon a detailed baseline description of the Project and all calculations are premised upon site-specific data, where available. Where site-specific data are not available, national/regional information will be used. Aligned with Institute of Environmental Management and Assessment (IEMA) guidance, any project that causes GHG emissions to be avoided has a beneficial effect that is significant, which justifies GHG emissions as a matter to be scoped into the assessment.

The methodology used to calculate predicted CO_2 emissions from Project is based upon the work of Nayak et al. (2008, 2010) and Smith et al. (2011), which are the basis for the latest version (V1.7.0) of the Scottish Government's Carbon Calculator Tool. This tool enables carbon losses and carbon savings to be quantified across the project lifecycle stages (construction, operation and decommissioning/site restoration), and these losses and savings are combined to establish the overall (net) carbon effect of the Proposed Development, as well as its 'carbon payback period'.

The proposed GHG assessment will be in accordance with the IEMA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance (2022), the GHG Protocol, PAS 2080:2016 Carbon Management in Infrastructure, and Royal Institute of Chartered Surveys (RICS) Whole life carbon assessment for the built environment (2017).

The assessment will also estimate the Project's net GHG impact and 'carbon balance period' (the time following the start of wind farm operation at which the GHG emissions associated with manufacture, construction and decommissioning activities are offset through GHG savings from the wind farm's operation).

The assessment will draw on site-specific information including:

- site characteristics (e.g., average temperature);
- peat type and depth (from peat survey);
- water table depth before and after construction and decommissioning;
- development proposals (turbine number and output, access tracks, borrow pits, hard standing and foundation areas etc.); and

• post-decommissioning replanting, restoration and draining proposals.

The assessment will consider the Clare County Council's declarations to reduce their emissions by 51% by 2030, as well as the Clare County Council Climate Change Adaptation Strategy (2019 - 2024) and Clare County Development Plan (2017 - 2023), which highlight the importance of renewable energy in fighting the climate crisis.

It is proposed that a climate change risk assessment, detailing the effects of future climate change on the Proposed Development (i.e., the resilience, or conversely, the vulnerability of a project to future climate changes) is scoped out of further assessment.

GHG emissions will be inevitable during the construction and decommissioning phases given the scale of the development, embodied carbon of materials and the methods available for these phases to be carried out (e.g., through the use of heavy machinery).

However, the operation of the wind farm can be viewed as achieving significant emissions savings nationally by reducing the consumption of fossil fuel generated mains electricity. These emissions savings are anticipated to significantly exceed any GHG emissions associated with the construction, maintenance or decommissioning of the wind farm and thus provide a net positive and significant impact on the global climate.

Chapter 19. Impact Interactions & Cumulative Effects

This chapter will provide a matrix and description of the potential interaction of effects between the various factors of the environment addressed in the EIAR. The matrix will highlight the occurrence of new impacts whether positive or negative, which may arise from impact interactions during all phases of the proposed wind farm development.

Each EIAR chapter will consider the cumulative impacts of the proposed project with other projects existing, proposed (in the planning system) or consented (that are in proximity to the site and surrounding area and in the wider region. Where relevant, other planned projects which are at design or pre-application consultation stage will be considered based on information that is in the public domain at the time although it is unlikely that sufficient details will be available to allow for assessment. A summary of the cumulative effects from all EIAR factors will be included in this chapter of the EIAR.

Chapter 20. Schedule of Mitigation Measures

This chapter will provide a schedule summarising all proposed mitigation measures relating to the construction, operation and decommissioning phases for the proposed Oatfield windfarm Project as set out for each environmental aspect of the EIAR. The CEMP which will be submitted with the EIAR, will incorporate the proposed mitigation measures for the construction phase.

The proposed mitigation measures will be grouped together according to their environmental field/topic and presented under the following headings:

- Construction Management;
- Drainage Design and Management;

- Soils and Geology;
- Surface Water;
- Flora and Fauna;
- Noise;
- Air Quality/Dust;
- Landscape and Visual;
- Traffic and Transport; and
- Cultural Heritage.

Presenting the mitigation proposals in this format, will provide an easy to audit list that can be reviewed and reported on during the future phases of the project.

4.3.3 Use of Standards and Methodologies

Industry-wide, best practice methodologies and standards will be used in preparation of the EIAR. The classification of effects in the EIAR will follow the definitions provided in Section 3.7 of the EPA's Guidelines on the Information to be contained in Environmental Impact Assessment Reports (May 2022). Effects will be described in terms of quality, significance, extent, probability, duration and frequency, and type as relevant. A 'Do Nothing' scenario will also be assessed in respect of each environmental topic in the EIAR. Residual effects which could arise following the application of mitigation measures will be presented, where applicable, for each environmental aspect of the EIAR.

Impacts of the project on all environmental factors will be assessed in terms of the construction, operational and decommissioning phases of the project, including potential cumulative effects with other projects.

5 EIA SCOPING CONSULTEES

The list of stakeholders that will be consulted in relation to scoping for the EIAR is presented below. The list excludes telecommunications operators which have been contacted separately as part of a Telecommunications Impact Study. Additional stakeholders may be consulted as appropriate, and the final list of consultees will be reported in the EIAR.

5.1 Consultees

- An Taisce
- Bat Conservation Ireland
- BirdWatch Ireland
- Clare County Council Archaeology Office
- Clare County Council Environment Section
- Clare County Council Heritage Office
- Clare County Council Planning Authority
- Clare County Council Roads and Transports Department
- Clare National Roads Office
- Commission for Energy Regulation
- Department of Agriculture, Food & the Marine, Environmental Coordination Unit, Climate Change & Bioenergy Policy Division
- Department of Agriculture, Food & the Marine, Forestry Division
- Department of Defence, Property Management Branch
- Department of Housing, Local Government & Heritage, Development Applications Unit (DAU)
- Dublin Airport
- EirGrid
- Environmental Protection Agency
- ESB Networks
- Fáilte Ireland
- Gas Networks Ireland
- Geological Survey Ireland
- Health and Safety Authority
- Health Service Executive, Environmental Health and Emergency Planning
- larnród Éireann
- Inland Fisheries Ireland, Northern and Western Region

- Ireland West Airport Knock
- Irish Aviation Authority
- Irish Raptor Study Group
- Irish Wildlife Trust
- Kerry Airport
- National Monuments Service
- National Parks and Wildlife Service
- National Transport Authority, Strategic Planning Section
- Office of Public Works
- Shannon Airport
- Sligo Airport
- Southern Regional Assembly
- The Arts Council
- The Heritage Council
- Teagasc Agriculture and Food Development Authority
- Transport Infrastructure Ireland, Land Use Planning Unit
- Uisce Eireann

5.2 Responding to this Scoping Document

Consultee responses to this report should be directed to Nicholas O'Dwyer Ltd (a part of RSK Group). Orsted welcomes such responses to inform the scope of EIA. Further consultation will be undertaken as necessary with each consultee as the EIA progresses.

All responses may be submitted electronically by emailing <u>aoyelami@nodwyer.com</u>.

Otherwise, responses in paper form should be sent by post to the contact details below.

Dr Ayodeji Oyelami

Unit 4E, Nutgrove Office Park, Nutgrove Ave, Dublin. D14 V3F6.

Scoping Consultation Document – Covering Letter Template

Our Project Ref. 604569

Dear Sir/Madam

Orsted have commissioned RSK Ireland as the Environmental and Planning Consultants to prepare an application for planning permission to An Bord Pleanála for a Strategic Infrastructure Development (SID). The SID is for the proposed Oatfield Wind Farm Project, located in County Clare in the townlands of Oatfield, Crag, Cloontra West, Derryvinnaan, Cloontra, Cloonsheerea, Mountrice, Cloghera, Drumsillagh (Merritt), Drumsillagh (Parker), Kyle and Gortacullin.

The site of the proposed development is located on approximately 985 hectares and comprises approximately 11 turbines, a permanent meteorological mast, an on-site 110 kV substation, along with ancillary civil and electrical infrastructure.

As part of the planning application, RSK Ireland is preparing an Environmental Impact Assessment Report (EIAR). To inform the scope of the EIAR, an EIA Scoping Consultation Report has been prepared for issue to consultees. As a valued consultee, we are writing to provide you with a copy of the EIA Scoping Consultation Document for your comments and feedback.

Additionally, we kindly request any information your agency or organisation may have that would assist us in preparing the EIAR for the proposed Project. If you can offer any information or wish to comment on the EIA Scoping Consultation Report, I would be grateful for your reply by close of business on 13th October 2023.

If you do not have any comments to make or do not have any information relevant to the proposed Project, I would be grateful if you would please indicate same in reply to this email.

Feedback or queries can be sent by email or by post to the contact details below.

Kind regards

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