

RECEIVED: 07/05/2024



APPENDIX 4-8

DECOMMISSIONING PLAN

RECEIVED: 07/05/2024

Decommissioning Plan

Seskin Wind Farm, Co.
Carlow - EIAR



RECEIVED: 07/05/2024



DOCUMENT DETAILS

Client: **EDF Renewables Ireland Ltd**

Project Title: **Seskin Wind Farm, Co. Carlow - EIAR**

Project Number: **220246**

Document Title: **Decommissioning Plan**

Document File Name: **Decommissioning Plan F – 2024.05.03 - 220246**

Prepared By: **MKO
Tuam Road
Galway
Ireland
H91 VW84**



Rev	Status	Date	Author(s)	Approved By
01	Draft	22/03/2024	CJ	EC
02	Draft	18/04/2024	CJ	EC
03	Draft	24/04/20224	CJ	EC
04	Final	03/05/2024	CJ/EC	SC

Table of Contents

RECEIVED: 07/05/2024

1.	INTRODUCTION	1
1.1	Scope of the Decommissioning Plan	1
2.	PROPOSED PROJECT SITE AND DETAILS	3
2.1	Site Location and Description	3
2.2	Description of the Development	3
2.3	Targets and Objectives	8
2.4	Decommissioning Methodologies Overview	8
2.4.1	Introduction	8
2.4.2	Decommissioning Methodology	8
2.4.2.1	Wind Turbines and Met Mast	9
2.4.2.2	Turbine and Met Mast Foundations	9
2.4.2.3	Internal Underground Cabling	10
2.4.2.4	Transport Route Accommodation Works	10
3.	ENVIRONMENTAL MANAGEMENT	13
3.1	Site Drainage	13
3.2	Refuelling; Fuel and Hazardous Materials Storage	13
3.3	Dust Control	14
3.4	Noise Control	14
3.5	Invasive Species Management	15
3.6	Traffic Management	15
3.7	Waste Management	15
3.7.1	Legislation	15
3.7.2	Waste Management Hierarchy	16
3.7.3	Waste Arising from Decommissioning	16
3.7.3.1	Reuse	17
3.7.3.2	Recycling	17
3.7.3.3	Implementation	17
3.7.3.4	Waste Management Plan Conclusion	18
3.8	Environmental Management Implementation	18
3.8.1	Roles and Responsibilities	18
4.	HEALTH AND SAFETY	19
5.	EMERGENCY RESPONSE PLAN	21
5.1	Emergency Response Procedure	21
5.1.1	Roles and Responsibilities	21
5.1.2	Initial Steps	22
5.1.3	Site evacuation/Fire Drill	23
5.1.4	Spill Control Measures	23
5.2	Contact the Emergency Services	24
5.3	Procedure for Personnel Tracking	25
5.4	Induction Checklist	25
6.	PROGRAMME OF WORKS	27
6.1	Decommissioning Schedule	27
7.	MITIGATION PROPOSALS	28
8.	MONITORING PROPOSALS	34
9.	COMPLIANCE AND REVIEW	36
9.1	Site Inspections and Environmental Audits	36
9.2	Auditing	36
9.3	Environmental Compliance	36
9.4	Corrective Action Procedure	37

9.5	Decommissioning Plan Review	37
-----	-----------------------------------	----

TABLE OF TABLES

<i>Table 3-1 Expected waste types arising during the Decommissioning Phase.....</i>	<i>16</i>
<i>Table 5-1 Hazards associated with potential emergency situations.....</i>	<i>22</i>
<i>5-2 Hazard.....</i>	<i>22</i>
<i>5-3 ERP Items to be included in Site Induction</i>	<i>25</i>
<i>Table 7-1 Mitigation Measures.....</i>	<i>29</i>
<i>Table 8-1 Schedule of Monitoring Proposals.....</i>	<i>35</i>

TABLE OF FIGURES

<i>Figure 2-1 Proposed Project Layout.....</i>	<i>5</i>
<i>Figure 2-2 Proposed Wind Farm site.....</i>	<i>6</i>
<i>Figure 2-3 Proposed Grid Connection Route Layout.....</i>	<i>7</i>
<i>Figure 2-4 Turbine Transport Route Accommodation Areas</i>	<i>12</i>
<i>Figure 5-1 Emergency Response Procedure Chain of Command.....</i>	<i>21</i>
<i>Table 5-2 Emergency Contacts.....</i>	<i>25</i>
<i>Figure 6-1 Indicative Decommissioning Schedule.....</i>	<i>27</i>

RECEIVED: 07/05/2024

1.

INTRODUCTION

This Decommissioning Plan (DP) has been prepared by MKO on behalf of EDF Renewables Ireland Ltd., to accompany an application for planning permission for the Proposed Project to both Carlow County Council (CCC) and Kilkenny County Council (KCC).

For the purposes of this EIAR:

- Where the 'Proposed Project' is referred to this encompasses the entirety of the project for the purposes of this EIA in accordance with the EIA Directive. The Proposed Project is described in detail in Chapter 4 of this EIAR.
- Where the 'Proposed Wind Farm' is referred to, this refers to turbines and associated foundations and hardstanding areas, including access roads, underground cabling, permanent meteorological mast, temporary construction compounds, carriageway strengthening works, junction accommodation works, peat and spoil management, tree felling, site drainage, operational stage signage, battery energy storage system, 38kV onsite substation, and all ancillary works and apparatus. The Proposed Wind Farm is described in detail in Chapter 4 of this EIAR.
- Where the 'Proposed Grid Connection Route' is referred to, this refers to underground 38kV cabling connecting to the existing Kilkenny 110kV substation, and all ancillary works and apparatus. The Grid Connection Route is described in detail in Chapter 4 of this EIAR.
- Where 'the site' is referred to, this relates to the primary study area for the EIAR, as delineated by the EIAR Site Boundary in green as shown on Figure 1-1.

Please see Section 1.1.1 of this EIAR for further details. A detailed description of the Proposed Project is provided in Chapter 4 of this EIAR.

Decommissioning of the Proposed Project will be scheduled to take place after the proposed 35-year lifespan of the project.

As noted in the Scottish Natural Heritage report (SNH) Research and Guidance on Restoration and Decommissioning of Onshore Wind Farms (SNH, 2013) reinstatement proposals for a wind farm are made approximately 30 years in advance, so within the lifespan of the wind farm, technological advances and preferred approaches to reinstatement are likely to change. According to the SNH guidance, it is therefore:

“best practice not to limit options too far in advance of actual decommissioning but to maintain informed flexibility until close to the end-of-life of the wind farm”.

In this regard, this DP will be reviewed and updated prior to commencement of any decommissioning works to take account of the relevant conditions of the planning permission and current health and safety standards. The DP will be agreed in writing with the Planning Authority prior to the commencement of the decommissioning phase.

This report provides the environmental management framework to be adhered to during the decommissioning phase of the Proposed Project and it incorporates the mitigating principles to ensure that the work is carried out in a way that minimises the potential for any environmental impacts to occur.

1.1

Scope of the Decommissioning Plan

This document is presented as a guidance document for the decommissioning of the Proposed Project including its connection to the national grid. The DP clearly outlines the mitigation measures and

monitoring proposals that are required to be adhered to in order to complete the works in an appropriate manner.

The report is divided into nine sections, as outlined below:

Section 1 provides a brief introduction as to the scope of the report.

Section 2 outlines the site and Proposed Project details, detailing the targets and objectives of this plan along with providing an overview of works methodologies that will be adopted throughout decommissioning.

Section 3 sets out details of the environmental controls to be implemented on site including the mechanisms for implementation. A waste management plan is also included in this section.

Section 4 outlines the general Health and Safety measures that will be implemented on site during the decommissioning phase.

Section 5 outlines the Emergency Response Procedure to be adopted in the event of an emergency in terms of site health and safety and environmental protection.

Section 6 sets out a programme for the timing of the works.

Section 7 consists of a summary table of all mitigation measures to be adhered to during the operational and decommissioning-phases.

Section 8 consists of a summary table of all monitoring requirements for the operational and decommissioning-phases.

Section 9 outlines the proposals for reviewing compliance with the provisions of this report.

2.

PROPOSED PROJECT SITE AND DETAILS

2.1

Site Location and Description

The Proposed Project comprises 7 no. wind turbines and associated infrastructure, in the townlands of Seskinrea and Ridge, and adjacent townlands, in Co. Carlow, and a 38kV on-site substation, battery energy storage system and associated works, including underground 38kV cabling to connect to the national grid at Kilkenny 110kV substation, in the townland of Scart near Kilkenny, Co. Kilkenny. Current land-use on the Proposed Wind Farm comprises coniferous forestry and agriculture. Current land-use along the Proposed Grid Connection Route comprises of public road corridor, public open space, pastures, coniferous forestry and land principally used by agriculture with significant areas of natural vegetation.

The Proposed Wind Farm is located approximately 3.1 km northwest of the village of Oldleighlin, Co. Carlow, 5km northwest of Leighlinbridge, Co. Carlow, and 9.9 kilometres southeast of Castlecomer, Co. Kilkenny. It is proposed to access the Proposed Wind Farm via upgrades to an existing agricultural entrance off the L3037 Local Road along the western boundary of the Proposed Wind Farm site. The Proposed Project is served by a number of existing public, forestry and agricultural roads and tracks.

The Proposed Grid Connection Route is an underground cabling route to Kilkenny, measuring approximately 20.1 km in length, and is primarily located within the public road corridor. The onsite 38kV substation and grid connection cabling will remain in place will form a permanent part of the national electricity grid. The battery energy storage system will remain in place. An application to KCC will be made in relation to the components of the grid connection which fall with Co. Kilkenny and this application will be made in conjunction with the application to CCC which relates to all proposed infrastructure that is located within Co. Carlow.

2.2

Description of the Development

This section describes the Proposed Wind Farm and the Proposed Grid Connection Route, collectively referred to as the Proposed Project. A full description of the Proposed Project is included in Chapter 4 of this EIAR: Description of the Proposed Project.

The Proposed Wind Farm comprises the construction of 7 No. wind turbines and all associated works. The proposed turbines will have a maximum blade tip height of 180 metres, above the top of the foundation.

The proposed turbines installed on the site will have the following dimensions:

- Total tip height range of 179.5m – 180m,
- Rotor diameter range of 149m – 155m,
- Hub height range of 102.5m to 105m,

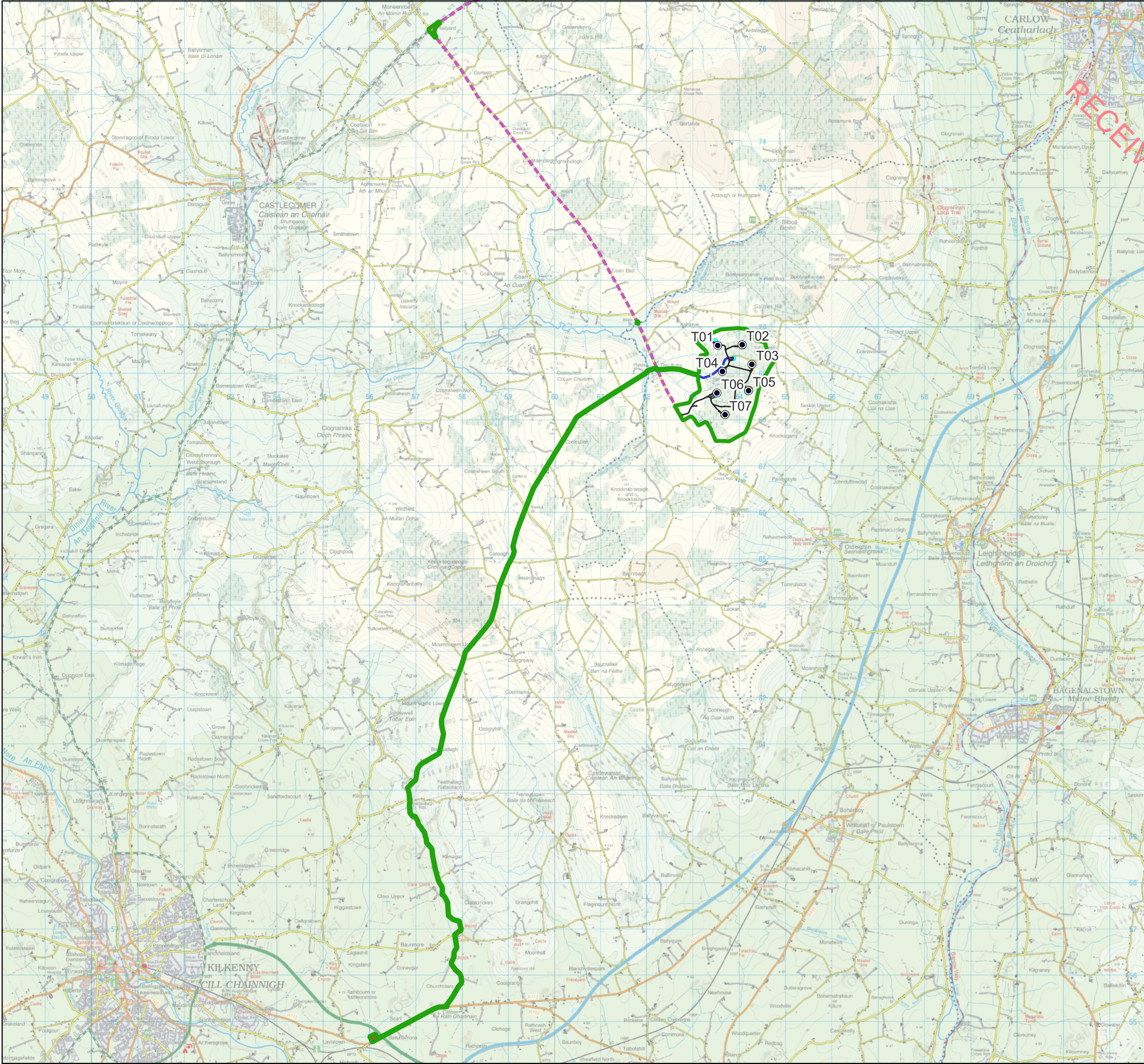
The overall layout of the Proposed Project is shown on Figure 1. This drawing shows the proposed locations of the wind turbines, electricity substation, grid connection route, peat and spoil management areas, construction compounds, internal roads layout, the turbine delivery route link road and the main site entrance.

A drawing focusing on Proposed Wind Farm site is shown on Figure 2 and a drawing focusing on the Proposed Grid Connection Route is shown on Figure 3. Detailed site layout drawings of the Proposed Project are included in Appendix 4-1 to this EIAR. The full description of the Proposed Project, is detailed in Chapter 4 of this EIAR.

The planning application is seeking a ten-year permission and 35-year operational life from the date of commissioning of the Proposed Project. As construction is completed, elements of the project that have been developed as a temporary facilitator will either be removed, restored to its original condition or will naturally revegetate. These include the 2 no. temporary construction compounds and the peat and spoil repository areas. These infrastructural elements are therefore not included in this decommissioning plan.

All access roads and hardstanding areas forming part of a site roadway network will be left in situ for future use by landowners and for ongoing forestry operations. It is intended that all above ground components and underground site cabling (ducting left in-situ) will be removed from the site as part of the decommissioning of the Proposed Wind Farm. The following elements are included in the decommissioning phase:

- Wind turbines dismantling and removal off site;
- Underground cabling removal (ducting and direct buried cables will be left in-situ);
- Turbine foundation backfilling following dismantling and removal of wind turbines (any excavated material, will be re-instated / foundations that protrude above ground level will be backfilled with soil -underground reinforced concrete remaining in-situ)
- Transport Route Accommodation Works.



Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- Proposed Turbine Foundations
- Proposed Turbine Hardstands
- Proposed Upgrades to Existing Roads
- Proposed New Roads
- Proposed Met Mast
- Proposed Grid Connection Route
- Proposed Onsite 38kV Substation and Battery Storage Compound
- Proposed Junction Accomodation Areas
- Proposed Peat Repository Areas
- Proposed Spoil Repository Areas
- Proposed Temporary Construction Compounds
- Proposed Turbine Delivery Route
- Kilkenny 110kV Substation

Ordnance Survey Ireland Licence No. AR 0021821© Ordnance Survey Ireland/Government of Ireland

Drawing Title

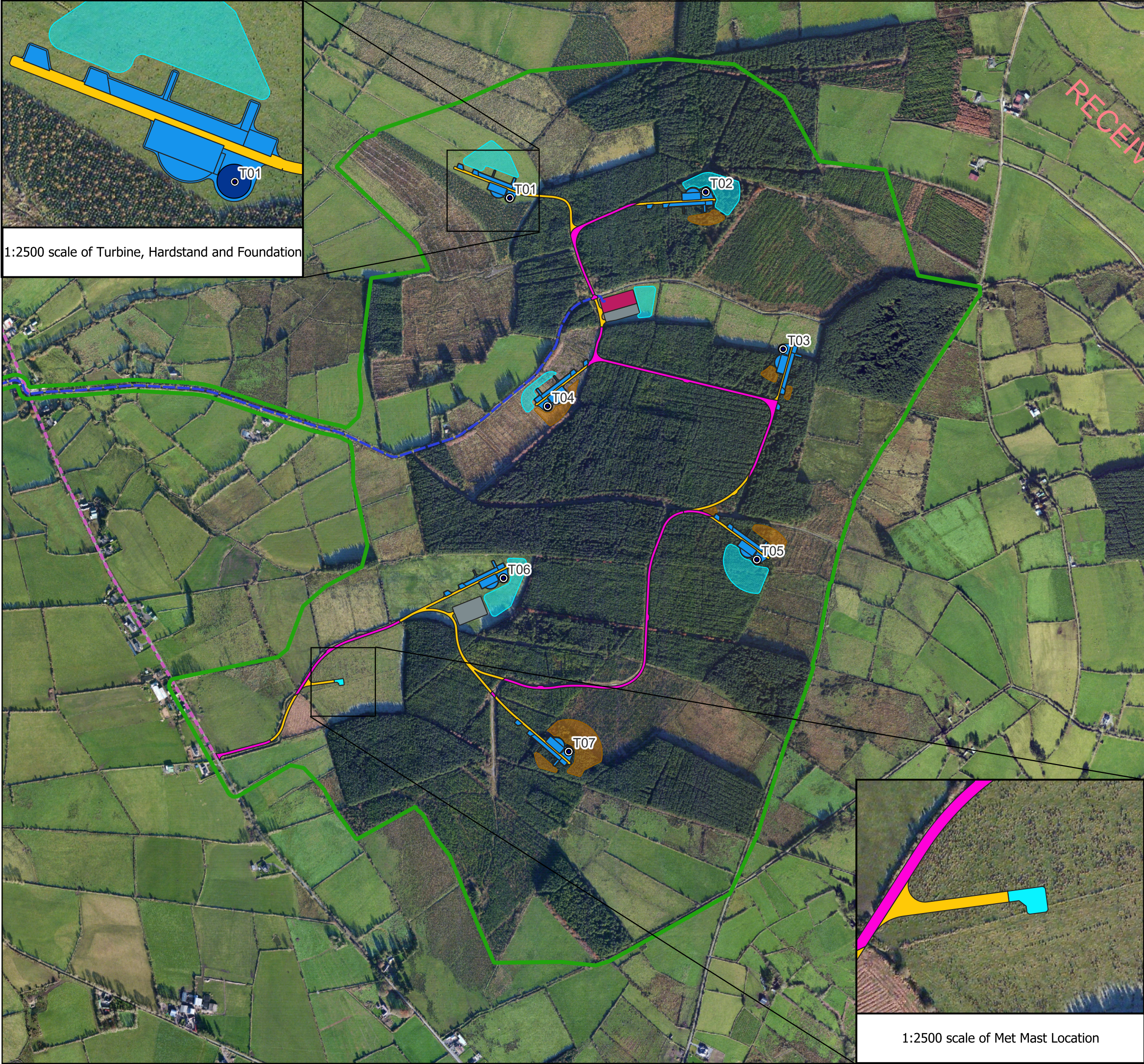
Proposed Project Layout

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By	BT	Checked By	EC
Project No.	220246	Drawing No.	Figure 2-1
Scale	1:80,000	Date	2024-04-29

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



1:2500 scale of Turbine, Hardstand and Foundation

1:2500 scale of Met Mast Location

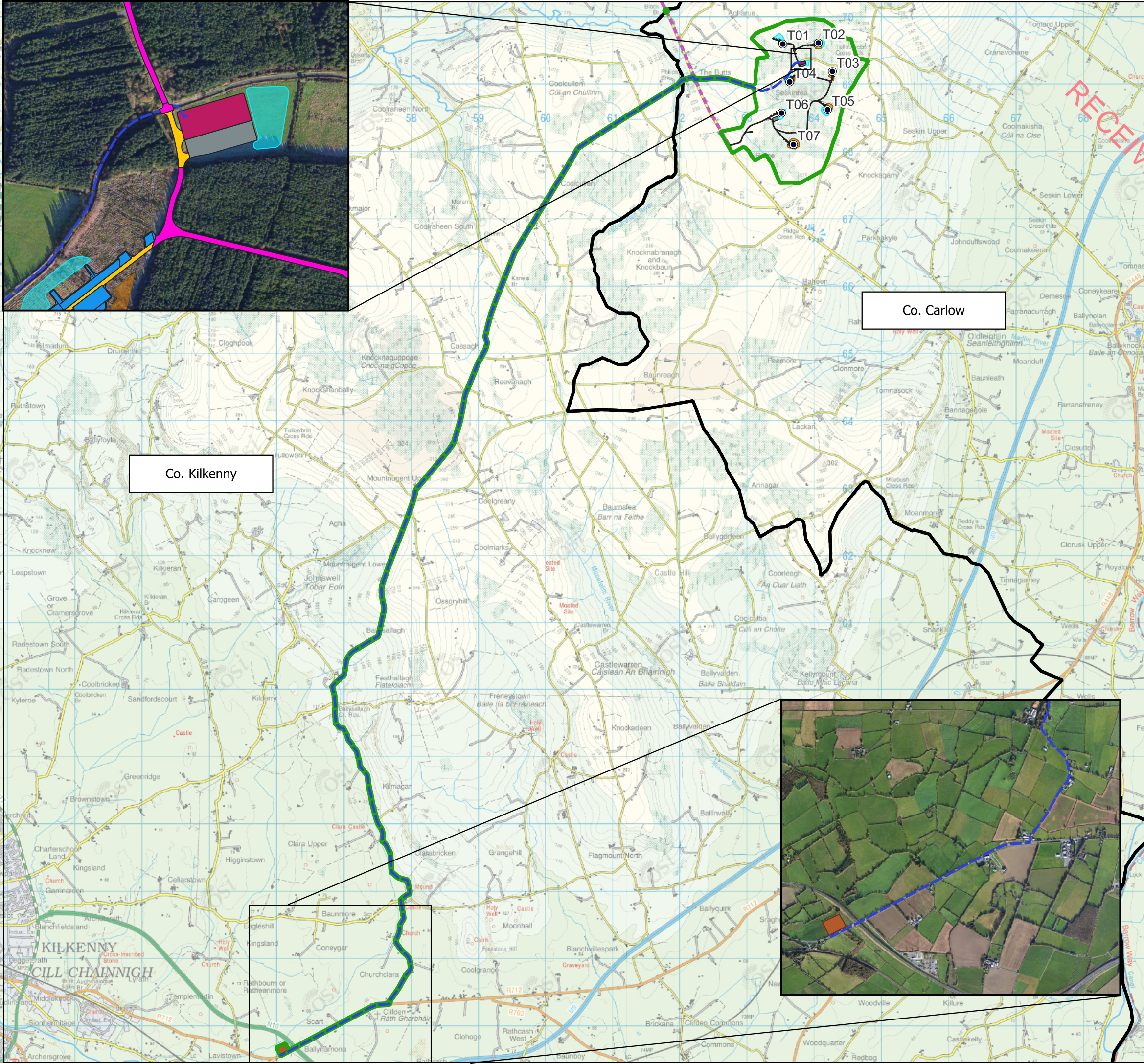
Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- Proposed Turbine Foundation
- Proposed Turbine Hardstands
- Proposed New Roads
- Proposed Upgrades to Existing Roads
- Proposed Met Mast
- Proposed Grid Connection Route
- Proposed Onsite 38kV Substation and Battery Storage Compound
- Proposed Junction Accomodation Areas
- Proposed Peat Repository Areas
- Proposed Spoil Repository Areas
- Proposed Temporary Construction Compounds
- Proposed Turbine Delivery Route

Ordnance Survey Ireland Licence No. AR 0021821© Ordnance Survey Ireland/Government of Ireland

Drawing Title	
Proposed Wind Farm Layout	
Project Title	
Seskin Wind Farm, Co. Carlow	
Drawn By	Checked By
BT	EC
Project No.	Drawing No.
220246	Figure 2-2
Scale	Date
1:10,000	2024-04-29

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



Map Legend

- County Boundaries
- EIAR Site Boundary
- Proposed Grid Connection Route
- Proposed Onsite 38kV Substation and Battery Storage Compound
- Proposed Temporary Construction Compounds
- Kilkenny 110kV Substation



Ordnance Survey Ireland Licence No. AR 0021821© Ordnance Survey Ireland/Government of Ireland

Drawing Title
Proposed Grid Connection

Project Title
Seskin Wind Farm, Co. Carlow

Drawn By CJ	Checked By EC
Project No. 220246	Drawing No. Figure 2-3
Scale 1:55,000	Date 2024-05-02



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

2.3

Targets and Objectives

The decommissioning phase works will be completed to the approved standards at the time of decommissioning, which include specified materials, standards, specifications and codes of practice. This DP has considered environmental issues, and this is enhanced by the works proposed as part of decommissioning.

The key site targets are as follows:

- Ensure decommissioning works and activities are completed in accordance with mitigation and best practice approach presented in the accompanying Environmental Impact Assessment Report (EIAR) and associated planning documentation.
- Ensure decommissioning works and activities have an imperceptible impact/disturbance to local landowners and the local community.
- Ensure decommissioning works and activities have an imperceptible impact on the natural environment.
- Adopt a sustainable approach to decommissioning; and,
- Provide adequate environmental training and awareness (to the approved standards at the time of decommissioning) for all project personnel.

The key site objectives are as follows:

- Using recycled materials if possible, e.g. soil and overburden material for backfilling and reinstatement.
- Ensure sustainable sources for materials supply where possible.
- Avoidance of any pollution incident or near miss as a result of working around or close to existing watercourses and have emergency measures in place.
- Avoidance of vandalism.
- Keeping all watercourses free from obstruction and debris.
- Correct implementation of the sustainable drainage system (SuDS) drainage design principles.
- Keep impact of decommissioning works to a minimum on the local environment, watercourses, and wildlife.
- Correct fuel storage and refuelling procedures to be followed.
- Good waste management and housekeeping to be implemented.
- Air and noise pollution prevention to be implemented.
- Monitoring of the works and any adverse effects that it may have on the environment.

2.4

Decommissioning Methodologies Overview

2.4.1

Introduction

An experienced main contractor will be appointed to undertake the decommissioning of the Proposed Project. The main contractors will comply with any Operation and Environmental Management Plan implemented during operation and the DP prepared for the decommissioning phase, and any revisions made to those documents throughout the phases in which they were adopted. An overview of the anticipated decommissioning methodologies is provided below.

2.4.2

Decommissioning Methodology

As construction will be completed, elements of the Proposed Project that will be developed as a temporary facilitator will either be removed, restored to its original condition or will naturally

revegetate; these include the temporary construction compounds. All access roads and hardstanding areas forming part of a site roadway network will be required by the ongoing farming and forestry operations, and therefore will be left in situ for future use.

It is intended that the decommissioning process will remove all the remaining elements i.e., above ground components and underground cabling (ducting remaining underground) from the Proposed Wind Farm and reinstate areas where infrastructure is removed. The following elements will be decommissioned:

- Wind turbines and Met Mast: dismantling and removal off site;
- Turbine and Met Mast foundation: Turbine and met mast foundation backfilling following dismantling and removal of wind turbines (any excavated material will be re-instated / foundations that protrude above ground level will be backfilled with soil - underground reinforced concrete remaining in-situ);
- Underground cabling: removal (ducting remaining)
- Transport Route Accommodating Works.

2.4.2.1 Wind Turbines and Met Mast

Prior to any works being undertaken on wind turbines or the met mast, they will be disconnected from the grid by the site operator in conjunction with ESB Networks and EirGrid. The dismantling and removal of wind turbines and met mast of this scale is a specialist operation which will be undertaken by the turbine supplier or competent subcontractor. Turbine dismantling will be undertaken in reverse order to the methodology employed during their construction. Cranes will be brought back to the Proposed Wind Farm site utilising the hardstand areas that will be present after the construction phase. The dismantling of turbines and met mast will be bound by the same safety considerations as will be the case during construction in terms of weather conditions where works will not be undertaken during adverse weather conditions and in particular not during high winds.

The turbines will be removed from site in a similar manner to how they will be transported to the site originally in extended articulated trucks. The details of transport to and from the site are assessed in Chapter 15.1 of the EIAR, which accompanies this application.

The transport of disassembled turbines from the site will be undertaken in accordance with a Transport Management Plan (TMP). The TMP will be issued to and agreed with the planning authority at that time as part of a permit application for the delivery of abnormal loads using the local roads under the Road Traffic (Special Permits for Particular Vehicles) Regulations 2007. The TMP will provide for all necessary safety measures, including a convoy and Garda escort as required, off-peak turning/reversing movements and any necessary safety controls. The disassembled turbine materials will then be separated and transferred to a suitable recycling or recovery facility.

2.4.2.2 Turbine and Met Mast Foundations

On the dismantling of turbines and met mast, it is not intended to remove the concrete foundations from the ground. It is considered that its removal will be the least preferred options in terms of having potential effects on the environment. Therefore, the foundations of the 7 No. turbines and met mast will be backfilled and covered with soil material. If there is usable soil or overburden material on the Proposed Wind Farm site after construction, this material will be used. Alternatively, where material is not readily available on-site, soil will be sourced locally and imported to the site on heavy good vehicles (HGVs). The imported soil will be spread and graded over the foundation using a tracked excavator and revegetation enhanced by spreading of an appropriate seed mix to assist in revegetation and accelerate the resumption of the natural drainage management that will have existed prior to any construction.

2.4.2.3 Internal Underground Cabling

The underground cabling within the Proposed Wind Farm site, connecting the turbines to the onsite 38kV substation, will be pulled from the cable duct using a mechanical winch which will extract the cable and re-roll it on to a cable drum. This will be undertaken at each of the pull pits along the cable. The ground above original pulling pits will be excavated using a mechanical excavator and will be fully re-instated once the cables are removed.

The cable ducting will be left in-situ as it is considered the most environmentally prudent option, avoiding unnecessary excavation and soil disturbance for an underground element that is not visible with no environmental impact associated with leaving the ducting in-situ.

The onsite 38kV substation and Proposed Grid Connection Route cabling will remain in place as it will be under the ownership of the ESB and will form a permanent part of the national electricity grid. The battery energy storage system will remain in place.

2.4.2.4 Transport Route Accommodation Works

During the construction of the Proposed Project, a number of road and junction improvements and temporary works will be completed to provide access to the site during turbine component delivery (refer to Chapter 15.1 of the EIAR). These accommodation areas will be re-used during decommissioning and turbine component removal. The locations of the accommodation areas are shown in Figure 2-2.

Location 1 – Port of Waterford to the M9

The preliminary swept path analysis was undertaken for the section of the turbine delivery route in Waterford city between Waterford Harbour and the M9 motorway. These locations are as follows:

- Exit at the Port of Waterford
- N29/R711 roundabout
- N29/N25 roundabout
- N25/R680 roundabout
- N25/N9 roundabout
- N9/M9 roundabout

A swept path analysis was undertaken using Autotrack for the blade and tower transporter vehicles, and while minor temporary alterations will be required to the existing streetscape, roundabout island, traffic lights and street furniture during the delivery of the large plant, the assessment indicates that the large turbine delivery vehicles will be accommodated at these locations.

Location 2 – M9 Junction 3 left slip / N78 Roundabout

The preliminary swept path analysis indicates that minor temporary alterations will be required to the existing streetscape and roundabout island during the delivery of the abnormally sized loads.

Location 3 - N78/R418 Roundabout

The preliminary swept path analysis indicates that minor temporary alterations will be required to the existing streetscape, roadside vegetation and roundabout island during the delivery of the abnormally sized loads.

Location 4 – N78 Splitter Island

The preliminary swept path analysis indicates that minor temporary alterations will be required to the existing streetscape during the delivery of the abnormally sized loads.

Location 5 – N78 Right Bend in Crettyard

The preliminary swept path analysis indicates that minor temporary alterations will be required to the existing streetscape, and roadside vegetation during the delivery of the abnormally sized loads.

Location 6 – N78/ L1834 Junction

The preliminary swept path analysis indicates that a temporary one-way road is required in the field east of the N78/L1834 junction in order to accommodate wind turbine vehicles in the townland of Cloneen. It is noted that the standard road markings and visibility splays are not required at the access off the N78, or the exit onto the L1834, as the temporary access road will only be used for the transportation of abnormally sized loads, which will be delivered with a Garda escort and transient traffic management vehicles operated by the haulage company. This road will not be available for any other traffic and will be closed off and opened only for the delivery of the abnormally sized loads.

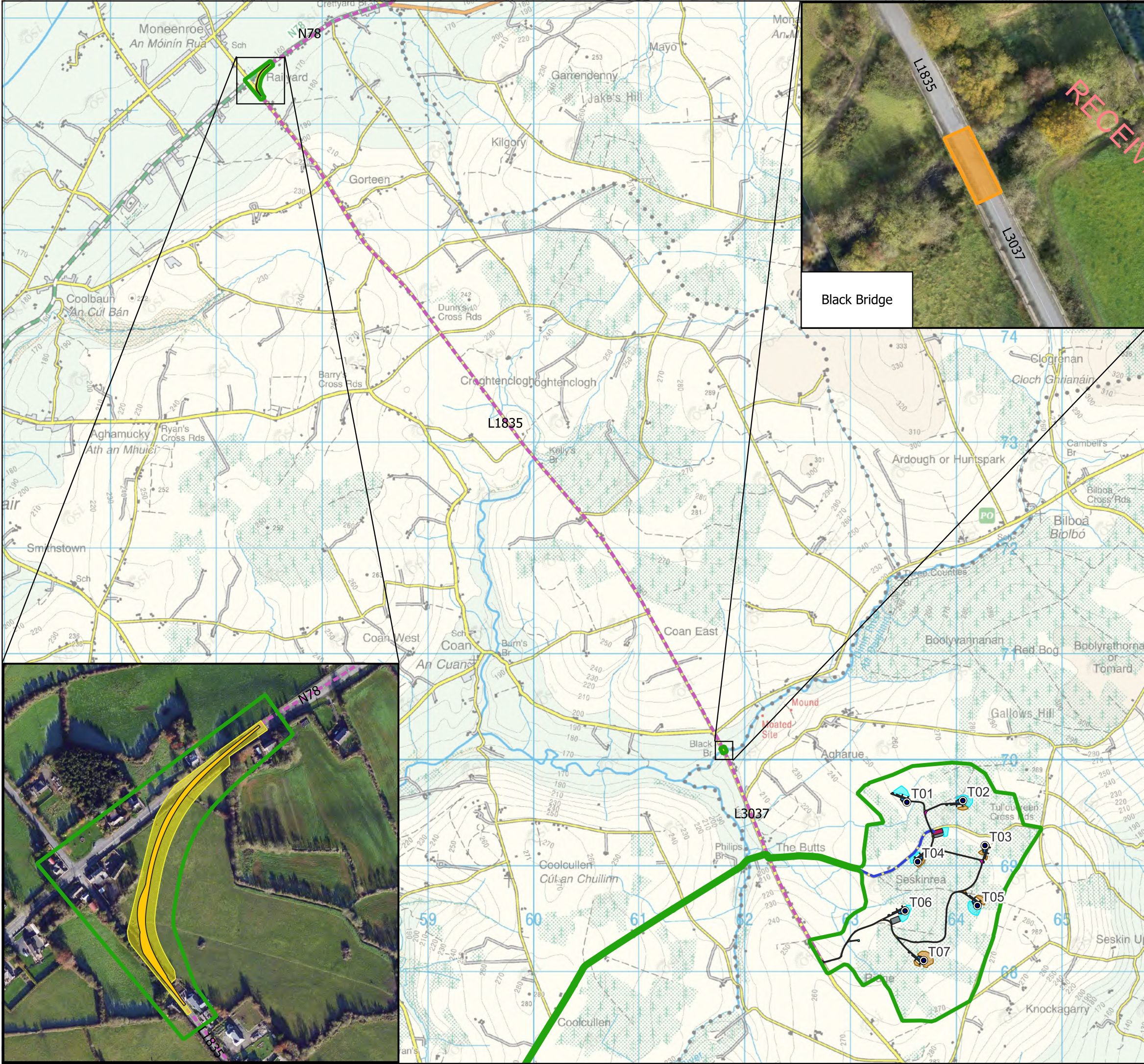
Upon the completion of the construction phase, the temporary road will be covered with a layer of topsoil and reseeded and will only be used again in the unlikely event that an oversized delivery was required for wind turbine maintenance purposes. The boundary of this field and the public road corridor, at either end of the temporary road will be reinstated to its current condition.

This accommodation area is shown in Figure 2-4. The temporary link road along the N78/L1834 junction is part of the planning application being made to the Kilkenny County Council and is assessed as part of this EIAR

Location 7 – Black Bridge on the L1835/L3037

A preliminary structural assessment on the Black Bridge, located on the L1835 and L3037, has been conducted by Jennings O'Donovan & Partners Limited which is included as Appendix 4-5 of this EIAR, 'Bridge Crossing Structural Assessment Report'. The findings of the report indicate that there will be permanent carriageway strengthening works required at the Black Bridge, which crosses the River Dinn at the Kilkenny and Carlow County boundary on L1835 and L3037. The upgrade works include for provision of a new reinforcing concrete slab on the existing black bridge stone arch, and road surface dressing, all of which are shown in Figure 4-26, and further detailed in Section 4.7.9 below.

The carriageway strengthening works on the Black Bridge forms part of the planning application being made to Carlow County Council and Kilkenny County Council and is assessed as part of this EIAR.



Map Legend

- EIAR Site Boundary
- Proposed Turbine Layout
- Proposed Turbine Delivery Route
- Proposed New Road (N78/L1835 Temporary Link Road)
- Proposed Temporary Link Road Works Area
- Proposed Upgrades to Black Bridge



Ordnance Survey Ireland Licence No. AR 0021821© Ordnance Survey Ireland/Government of Ireland

Drawing Title
Turbine Transport Route Accommodation Areas

Project Title
Seskin Wind Farm, Co. Carlow

Drawn By CJ	Checked By EC
----------------	------------------

Project No. 220246	Drawing No. Figure 2-4
-----------------------	---------------------------

Scale 1:35,000	Date 2024-04-18
-------------------	--------------------



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

3.

ENVIRONMENTAL MANAGEMENT

The following sections give an overview of the drainage, dust and noise control measures, a waste management plan for the Proposed Project site and the implementation of the environmental management procedures for the site.

3.1

Site Drainage

The site drainage features for the Proposed Project site during its construction and operation are outlined in the EIAR which accompany this application. As this DP is a working document and is presented as an Appendix to the EIAR, the drainage measures are not included in this document. When the final plan is prepared prior to decommissioning and presented as a standalone document, all drainage measures will be included in that document as required. The drainage proposals will be developed further prior to the commencement of decommissioning if deemed necessary. However, it should be noted that by the time decommissioning is undertaken after the planned 35-year lifespan of the Proposed Wind Farm, the areas within the site will have revegetated resulting in a resumption of the natural drainage management that will have existed prior to any construction. It is not anticipated that the decommissioning phase will interrupt this restored drainage regime in any way with the works proposed. As a minimum measure, areas where freshly placed soil material as part of turbine foundation reinstatement will be surrounded by silt fencing if deemed necessary until the area has naturally revegetated.

3.2

Refuelling; Fuel and Hazardous Materials Storage

Wherever possible, vehicles will be refuelled off-site, particularly for regular road-going vehicles. On-site refuelling of machinery will be carried out at designated refuelling areas at various locations throughout the Proposed Wind Farm site. Heavy plant and machinery will be refuelled on-site by a fuel truck that will come to the Proposed Project site as required on a scheduled and organised basis. Other refuelling will be carried out using mobile double skinned fuel bowser. The fuel bowser will be parked on a level area on-site when not in use. All refuelling will be carried out outside designated watercourse buffer zones.

The following mitigation measures are proposed to avoid release of hydrocarbons at the site:

- All plant and machinery will be equipped with fuel absorbent material and pads to deal with any event of accidental spillage.
- Only designated trained and competent operatives will be authorised to refuel plant on site. Mobile measures such as drip trays, spill kits and fuel absorbent mats will be available if necessary, during all refuelling operations.
- Road-going vehicles will be refuelled off site wherever possible;
- Fuels volumes stored on site should be minimised.
- Any fuel storage areas will be bunded appropriately for the fuel storage volume for the time period of the construction and fitted with a storm drainage system and an appropriate oil interceptor;
- Oils or fuels stored in turbines will be drained and disposed of off-site by a licenced waste contractor, to prevent leakage to groundwater or surface water;
- The plant used will be regularly inspected for leaks and fitness for purpose;
- An emergency plan for the construction phase to deal with accidental spillages will be developed (refer to Section 5 of this DP) Spill kits will be available to deal with and accidental spillage in and outside the refuelling area.

- A programme for the regular inspection of plant and equipment for leaks and fitness for purpose will be developed at the outset of the decommissioning phase.

3.3

Dust Control

Dust can be generated from on-site activities during decommissioning such as backfilling of foundations and travelling on site roads during prolonged periods of dry weather. The extent of dust generation will depend on the type of activity undertaken, the location, the nature of the dust, i.e. soil, and the weather. In addition, dust dispersion is influenced by external factors such as wind speed and direction and/or, periods of dry weather. Proposed Project site traffic movements also have the potential to generate dust as they travel along the haul route. If necessary, haul roads and other areas of hardstanding will be damped down by water spray or water misting to prevent the generation of dust.

Proposed measures, which are the same as those proposed for the construction phase, to control dust include:

- Any site roads with the potential to give rise to dust will be regularly watered, as appropriate, during dry and/or windy conditions;
- The designated public roads outside the Proposed Project site and along the main transport routes to the Proposed Wind Farm site will be regularly inspected by the ECoW for cleanliness, and cleaned as necessary;
- Material handling systems and material storage areas will be designed and laid out to minimise exposure to wind;
- Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods;
- Water misting or bowsers will operate on-site as required to mitigate dust in dry weather conditions;
- The transport of soils or other material, which has significant potential to generate dust, will be undertaken in tarpaulin-covered vehicles where necessary;
- All construction related traffic will have speed restrictions on un-surfaced roads to 15 kph;
- Daily inspection of construction sites to examine dust measures and their effectiveness.
- When necessary, sections of the haul route will be swept using a truck mounted vacuum sweeper; and,
- All vehicles leaving the construction areas of the Proposed Wind Farm will pass through a wheel washing area prior to entering the local road network.

3.4

Noise Control

The operation of plant and machinery, including site vehicles, is a source of potential impact that will require mitigation at all locations within the Proposed Wind Farm site.. Proposed measures to control noise include:

- Keep local residents informed of the proposed working schedule, where appropriate, including the times and duration of any abnormally noisy activity that may cause concern;
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and be subject to programmed maintenance;
- Select inherently quiet plant where appropriate - all major compressors will be 'sound reduced' models fitted with properly lined and sealed acoustic covers, which will be kept closed whenever the machines are in use;
- All ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers;

- Machines will be shut down between work periods (or when not in use) or throttled down to a minimum;
- Regularly maintain all equipment used on site, including maintenance related to noise emissions;
- Vehicles will be loaded carefully to ensure minimal drop heights so as to minimise noise during this operation; and
- All ancillary plant such as generators and pumps will be positioned so as to cause minimum noise disturbance and if necessary, temporary acoustic screens or enclosures will be provided.
- At any location within 30m of a residential receptor, where directional drilling activities are required for the Proposed Grid Connection Route, the installation of temporary boarding alongside the drilling rig or 'acoustic blanket panels' hanging from heras fencing (or similar) may be used to mitigate noise emissions.

3.5 Invasive Species Management

Any soil material that will be imported to site as part of the foundation reinstatement will be free of any invasive species (listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011)). The site manager will take steps to ensure the sourcing of suitably clean soil material and verify the quality of the material by having it inspected prior to bringing it to site by a suitably qualified ecologist. Prior to decommissioning, a suitably qualified ecologist will complete an invasive species survey of the Proposed Project site (including along the transport route) to identify invasive species where any minor excavation will be required. If present in these areas, the ecologist will propose suitable management measures.

3.6 Traffic Management

A TMP will be prepared in advance of any decommissioning works. The removal of turbines from the Proposed Wind Farm site will be undertaken by a specialist haulier. The traffic management arrangements although similar to those that will be implemented for turbine delivery as outlined in the EIAR will be agreed in advance of decommissioning with both CCC and KCC.

The TMP for the decommissioning phase will also include provision for the removal of underground cables from the underground ducts. This will be done by opening the joint bays, along the public road.

3.7 Waste Management

This section of the DP provides a Waste Management Plan (WMP) which outlines the best practice procedures during the decommissioning of the Proposed Project. The WMP outlines the methods of waste prevention and minimisation by recycling, recovery and reuse at each stage of decommissioning. Disposal of waste will be a last resort.

3.7.1 Legislation

The Waste Management Act 1996 and its subsequent amendments provide for measures to improve performance in relation to waste management, recycling and recovery. The Act also provides a regulatory framework for meeting higher environmental standards set out by other national and EU legislation.

The Act requires that any waste related activity has to have all necessary licenses and authorisations. It will be the duty of the Waste Manager on the Proposed Project site to ensure that all contractors hired to remove waste from the site have valid Waste Collection Permits. It will then be necessary to ensure that the waste is delivered to a licensed or permitted waste facility. The hired waste contractors and

subsequent receiving facilities must adhere to the conditions set out in their respective permits and authorisations. Waste removal-related traffic volumes during the decommissioning phase, will be less than those anticipated and assessed for the construction phase.

The Department of the Environment provides a document entitled, ‘*Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects*’ (2021). It is important to emphasise that no demolition will take place at this site, however, this document was referred to throughout the process of completing this WMP.

3.7.2 Waste Management Hierarchy

The waste management hierarchy sets out the most efficient way of managing waste in the following order:

Prevention and Minimisation:

The primary aim of the WMP will be to prevent and thereby reduce the amount of waste generated at each stage of the project.

Reuse of Waste:

Reusing as much of the waste generated onsite as possible will reduce the quantities of waste that will have to be transported off-site to recovery facilities or landfill.

Recycling of Waste:

There are several established markets available for the beneficial use of Construction and Demolition waste such as, for example, using waste concrete as fill for new roads.

At all times during the implementation of the WMP, disposal of waste to landfill will be considered only as a last resort.

3.7.3 Waste Arising from Decommissioning

The relevant components will be removed from site for re-use, recycling or waste disposal. Any structural elements that are not suitable for recycling will be disposed of in an appropriate manner. All lubrication fluids will be drained down and put aside for appropriate collection, storage, transport and disposal. Any materials which cannot be re-used or recycled will be disposed of by an appropriately licenced contractor.

The waste types arising from the decommissioning of the Proposed Project are outlined in Table 3-1 below.

Table 3-1 Expected waste types arising during the Decommissioning Phase

Material Type	Example	EW Code
Cables	Electrical wiring	17 04 11
Metals	Copper, aluminium, lead and iron	17 04 07
Fibreglass	Turbine blade component	10 11 03
Hydrocarbons	Oils and lubricants drained from the turbines	13 01 01,13 02 04

3.7.3.1 Reuse

Many wind farm materials can be reused several times before they have to be disposed of:

- Electrical wiring can be reused on similar wind energy projects
- Elements of the turbine components can be reused but this will be determined by the condition that they are in.

3.7.3.2 Recycling

If a certain type of material cannot be reused onsite, then recycling is the most suitable option. The opportunity for recycling during decommissioning will be limited and restricted to components of the wind turbines.

All waste that is produced during the decommissioning phase including dry recyclables will be deposited in the on-site skip initially and sent for subsequent segregation at a remote facility. The anticipated volume of all waste material to be generated at the EDF Seskin Wind Farm development is low which provides the justification for adopting this method of waste management.

3.7.3.3 Implementation

3.7.3.3.1 Roles and Responsibilities

Prior to the commencement of the decommissioning, a Decommissioning Waste Manager will be appointed by the Contractor. The Decommissioning Waste Manager will oversee the implementation of the objectives of the plan, ensuring that all hired waste contractors have the necessary authorisations and that the waste management hierarchy is adhered to. The person nominated will have sufficient authority so that they can ensure everyone working on the decommissioning adheres to the management plan.

3.7.3.3.2 Training

It is important for the Decommissioning Waste Manager to communicate effectively with colleagues in relation to the aims and objectives of the waste management plan. All employees working onsite during the decommissioning phase of the project will be trained in materials management and thereby, will be able to:

- Distinguish reusable materials from those suitable for recycling.
- Ensure maximum segregation at source.
- Co-operate with site manager on the best locations for stockpiling reusable materials.
- Separate materials for recovery; and
- Identify and liaise with waste contractors and waste facility operators.

3.7.3.3.3 Record Keeping

The WMP will provide systems that will enable all arisings, movements and treatments of decommissioning waste to be recorded. This system will enable the contractor to measure and record the quantity of waste being generated. It will highlight the areas from which most waste occurs and allows the measurement of arisings against performance targets. The WMP can then be adapted with changes that are seen through record keeping.

The fully licensed waste contractor employed to remove waste from the site will be required to provide documented records for all waste dispatches leaving the site. Each record will contain the following:

- Consignment Reference Number
- Material Type(s) and EWC Code(s)
- Company Name and Address of Site of Origin
- Trade Name and Collection Permit Ref. of Waste Carrier
- Trade Name and Licence Ref. of Destination Facility
- Date and Time of Waste Dispatch
- Registration no. of Waste Carrier vehicle
- Weight of Material
- Signature of Confirmation of Dispatch detail
- Date and Time of Waste Arrival at Destination
- Site Address of Destination Facility

RECEIVED: 07/05/2024

3.7.3.4 Waste Management Plan Conclusion

The WMP will be properly adhered to by all staff involved in the project and will be outlined within the induction process for all site personnel. The waste hierarchy will be employed when designing the plan to ensure that the least possible amount of waste is produced during decommissioning. Reuse of certain types of construction wastes will cut down on the cost and requirement of raw materials therefore further minimising waste levels.

This WMP has been prepared to outline the main objectives that are to be adhered to.

3.8 Environmental Management Implementation

3.8.1 Roles and Responsibilities

A Contractor will be appointed to undertake the decommissioning activities. The site manager and/or Environmental Clerk of Works (ECoW) will be key members of the Contractor's team and are the points of contact relating to decommissioning-related environmental issues.

In general, the ECoW will maintain responsibility for monitoring the decommissioning works and contractors/sub-contractors from an environmental perspective. The ECoW will act as the regulatory interface on environmental matters. The site manager will be responsible for reporting to and liaising with the local authority and other statutory bodies as required.

The site manager in consultation with the ECoW will be responsible for employing the services of a suitably qualified ecologist and any other suitably qualified professionals (e.g., geotechnical engineer, hydrologist etc.) as required throughout the decommissioning works.

4.

HEALTH AND SAFETY

Decommissioning of the Proposed Project will necessitate the presence of a construction site and travel on the local public road network to and from the site. Construction sites and the machinery used on them pose a potential health and safety hazard to construction workers if site rules are not properly implemented.

The Proposed Wind Farm will be decommissioned in accordance with all relevant Health and Safety Legislation, including:

- Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005);
- Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2016 (S.I. No. 36 of 2016);
- S.I. No. 528/2021 - Safety, Health and Welfare at Work (Construction) (Amendment) Regulations 2021 and
- Safety, Health and Welfare at Work (Work at Height) Regulations 2006 (S.I. No. 318 of 2006).

The following measures below are also detailed in Chapter 18 Schedule of Monitoring and Mitigation Measures.

- A Health and Safety Plan covering all aspects of the decommissioning process will address the Health and Safety requirements in detail. This will be prepared on a preliminary basis at the procurement stage and developed further at decommissioning stage.
- All hazards will be identified, and risks assessed. Where elimination of the risk is not feasible, appropriate mitigation and/or control measures will be established. The contractor will be obliged under the decommissioning contract and current health and safety legislation to adequately provide for all hazards and risks associated with the decommissioning phase of the Proposed Project. Safepass registration cards are required for all decommissioning, delivery and security staff. Decommissioning operatives will hold a valid Construction Skills Certificate Scheme card where required. The developer is required to ensure a competent contractor is appointed to carry out the decommissioning works. The contractor will be responsible for the implementation of procedures outlined in the Safety and Health Plan. Public safety will be addressed by restricting the Proposed Wind Farm site access during construction. Fencing will be erected in areas of the Proposed Wind Farm site where uncontrolled access is not permitted.
- All staff will be made aware of and adhere to the Health & Safety Authority's 'Guidelines on the Procurement, Design and Management Requirements of the Safety, Health and Welfare at Work (Construction) (Amendment) Regulations 2021'. This will encompass the use of all necessary Personal Protective Equipment and adherence to the Site Health and Safety Plan.

The scale and scope of the project necessitates that a Project Supervisor Design Process (PSDP) and Project Supervisor Construction Stage (PSCS) are required to be appointed in accordance with the provisions of the Health & Safety Authority's 'Guidelines on the Procurement, Design and Management Requirements of the Safety, Health and Welfare at Work (Construction) Regulations 2013'.

The PSDP appointed for the decommissioning stage shall be required to perform his/her duties as prescribed in the Safety, Health and Welfare at Work (Construction) Regulations. These duties include (but are not limited to):

- Identify hazards arising from the design or from the technical, organisational, planning or time related aspects of the project;

- Where possible, eliminate the hazards or reduce the risks;
- Communicate necessary control measures, design assumptions or remaining risks to the PSCS so they can be dealt with in the Safety and Health Plan;
- Ensure that the work of designers is coordinated to ensure safety;
- Organise co-operation between designers;
- Prepare a written Safety and Health Plan;
- Prepare a safety file for the completed structure and give it to the client; and
- Notify the Authority and the client of non-compliance with any written directions issued.

The PSCS appointed for the decommissioning stage shall be required to perform his/her duties as prescribed in the Safety, Health and Welfare at Work (Construction) Regulations. These duties include (but are not limited to):

- Development of the Safety and Health Plan for the decommissioning stage with updating where required as work progresses;
- Compile and develop safety file information.
- Reporting of accidents / incidents;
- Weekly site meeting with PSCS;
- Coordinate arrangements for checking the implementation of safe working procedures. Ensure that the following are being carried out:
- Induction of all site staff including any new staff enlisted for the project from time to time;
- Toolbox talks as necessary;
- Maintenance of a file which lists personnel on-site, their name, nationality, current Safe Pass number, current Construction Skills Certification Scheme (CSCS) card (where relevant) and induction date;
- Report on site activities to include but not limited to information on accidents and incidents, disciplinary action taken and PPE compliance;
- Monitor the compliance of contractors and others and take corrective action where necessary; and
- Notify the Authority and the client of non-compliance with any written directions issued.

5.

EMERGENCY RESPONSE PLAN

An Emergency Response Plan (ERP) is presented in this section of the DP. It provides details of procedures to be adopted in the event of an emergency in terms of site health and safety and environmental protection.

5.1

Emergency Response Procedure

The site ERP includes details the response required and the responsibilities of all personnel in the event of an emergency. The ERP will require updating and submissions from the contractor/PSCS and sub-contractors as decommissioning progresses. Where sub-contractors that are contracted onsite are governed by their own emergency response procedure a bridging arrangement will be adopted to allow for inclusion of the sub-contractor's ERP within this document.

5.1.1

Roles and Responsibilities

The chain of command during an emergency response sets out who is responsible for coordinating the response. The Site Supervisor/Construction Manager will lead the emergency response which makes him/her responsible for activating and coordinating the emergency response procedure. The other site personnel who can be identified at this time who will be delegated responsibilities during the emergency response are presented in Figure 5-1. In a situation where the Site Supervisor/ Construction Manager is unavailable or incapable of coordinating the emergency response, the responsibility will be transferred to the next person in the chain of command outlined in Figure 5-1. This will be updated throughout the project.

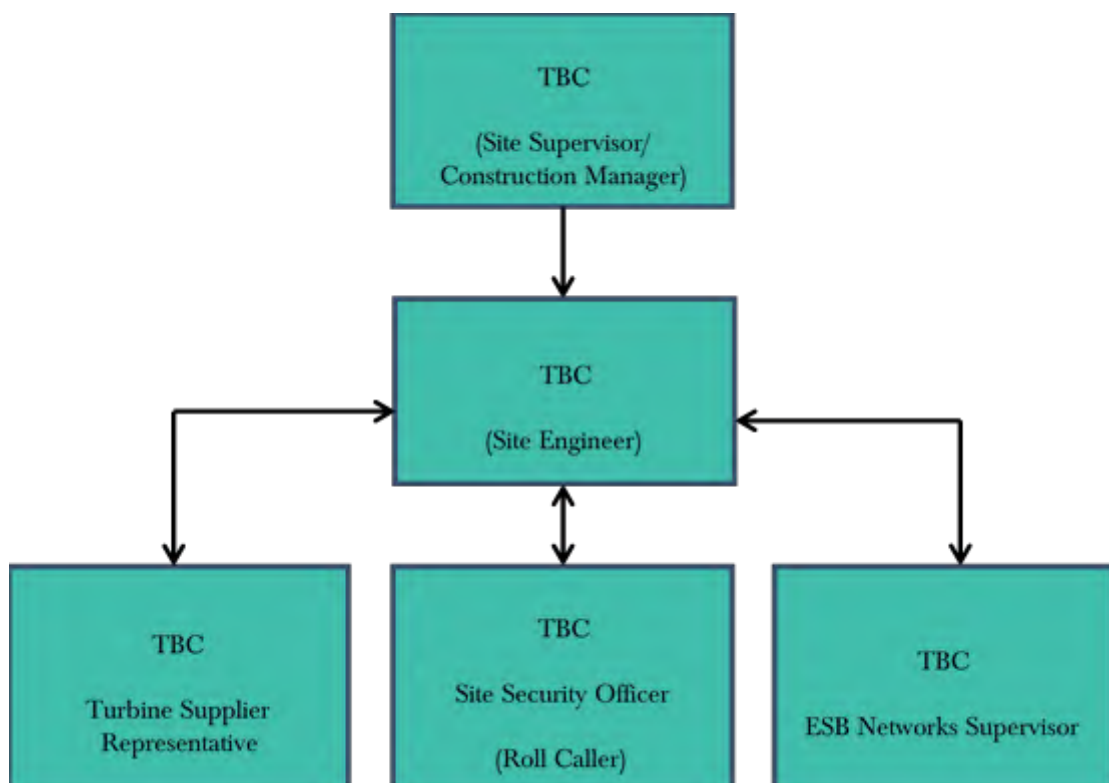


Figure 5-1 Emergency Response Procedure Chain of Command

5.1.2

Initial Steps

To establish the type and scale of potential emergencies that may occur, the following hazards have been identified as being potential situations that may require an emergency response in the event of an occurrence.

Table 5-1 Hazards associated with potential emergency situations

5-2Hazard	Emergency Situation
Construction Vehicles: Dump trucks, tractors, excavators, cranes etc.	Collision or overturn which has resulted in operator or third-party injury.
Peat Instability	Excessive movement of peat on site; onset of peat slide.
Abrasive wheels/Portable Tools	Entanglement, amputation or electrical shock associated with portable tools
Contact with services	Electrical shock or gas leak associated with an accidental breach of underground services
Fire	Injury to operative through exposure to fire
Falls from heights including falls from scaffold towers, scissor lifts, ladders, roofs and turbines	Injury to operative after a fall from a height
Sickness	Illness unrelated to site activities of an operative e.g. heart attack, loss of consciousness, seizure
Turbine Specific Incident	This will be included the turbine manufacturers' emergency response plan.

In the event of an emergency situation associated with, but not restricted to, the hazards outlined in Table 5-1 the Site Supervisor/Construction Manager will carry out the following:

- Establish the scale of the emergency situation and identify the number of personnel, if any, have been injured or are at risk of injury.
- Where necessary, sound the emergency siren/foghorn that activates an emergency evacuation on the site. The Site Supervisor/Decommissioning Manager must proceed to the assembly point if the emergency poses any significant threat to their welfare and if there are no injured personnel at the scene that require assistance. The Site Supervisor/Commissioning Manager will be required to use their own discretion at that point. In the case of fire, the emergency evacuation of the site should proceed, without exception. The site evacuation procedure is outlined in Section 4.1.3.
- Make safe the area if possible and ensure that no identifiable risk exists with regard to dealing with the situation e.g., if a machine has turned over, ensure that it is in a safe position so as not to endanger others before assisting the injured.
- Contact the required emergency services or delegate the task to someone. If delegating the task, ensure that the procedures for contacting the emergency services as set out in Section 5.2 is followed.
- Take any further steps that are deemed necessary to make safe or contain the emergency incident e.g., cordon off an area where an incident associated with electrical issues has occurred.
- Contact any regulatory body or service provider as required e.g., ESB Networks the numbers for which as provided in Section 5.2.
- Contact the next of kin of any injured personnel where appropriate.

5.1.3

Site evacuation/Fire Drill

A site evacuation/fire drill procedure will provide basis for carrying out the immediate evacuation of all site personnel in the event of an emergency. The following steps will be taken:

- Notification of the emergency situation. Provision of a siren or foghorn to notify all personnel of an emergency situation.
- An assembly point within the site will be designated and will be marked with a sign. All site personnel will assemble at this point.
- A roll call will be carried out by the Site Security Officer to account for all personnel on site.
- The Site Security Officer will inform the Site Supervisor/Decommissioning Manager when all personnel have been accounted for. The Site Supervisor/Decommissioning Manager will decide the next course of action, which be determined by the situation that exists at that time and will advise all personnel accordingly.

All personnel will be made aware of the evacuation procedure during site induction. The Fire Services Acts of 1981 and 2003 require the holding of fire safety evacuation drills at specified intervals and the keeping of records of such drills.

5.1.4

Spill Control Measures

Every effort will be made to prevent an environmental incident during the decommissioning phase of the project. Oil/fuel spillages are one of the main environmental risks that will exist on the site which will require an emergency response procedure. The importance of a swift and effective response in the event of such an incident occurring cannot be over emphasised. The following steps provide the procedure that will be followed in the event of such an incident:

- Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers.
- If applicable, eliminate any sources of ignition in the immediate vicinity of the incident.
- Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill.
- If possible, cover or bund off any vulnerable areas where appropriate such as drains, watercourses or sensitive habitats.
- If possible, clean up as much as possible using the spill control materials.
- Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited.
- Notify the ECoW immediately giving information on the location, type and extent of the spill so that they can take appropriate action.
- The ECoW will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring.
- The ECoW will notify the appropriate regulatory body such as the local authority, and the Environmental Protection Agency (EPA), if deemed necessary.

Environmental incidents are not limited to just fuel spillages. Therefore, any environmental incident will be investigated in accordance with the following steps.

- The ECoW must be immediately notified.
- If necessary, the ECoW will inform the appropriate regulatory authority. The appropriate regulatory authority will depend on the nature of the incident.

- The details of the incident will be recorded on an Environmental Incident Form which will provide information such as the cause, extent, actions and remedial measures used following the incident. The form will also include any recommendations made to avoid reoccurrence of the incident.
- If the incident has impacted on a sensitive receptor such as an archaeological feature the ECoW will liaise with the Project Archaeologist.
- A record of all environmental incidents will be kept on file by the ECoW and the Main Contractor. These records will be made available to the relevant authorities such as the local authority and EPA, if required.

The ECoW will be responsible for any corrective actions required as a result of the incident e.g., an investigative report, formulation of alternative works methodologies or environmental sampling, and will advise the Main Contractor as appropriate.

5.2

Contact the Emergency Services

In the event of requiring the assistance of the emergency services the following steps should be taken:

Stay calm. It is important to take a deep breath and not get excited. Any situation that requires 999/112 is, by definition, an emergency. The dispatcher or call-taker knows that and will try to move things along quickly, but under control.

Know the location of the emergency and the number you are calling from. This may be asked and answered a couple of times but do not get frustrated. Even though many emergency call centres have enhanced capabilities meaning they are able to see your location on the computer screen they are still required to confirm the information. If for some reason you are disconnected, at least emergency crews will know where to go and how to call you back.

Wait for the call-taker to ask questions, then answer clearly and calmly. If you are in danger of assault, the dispatcher or call-taker will still need you to answer quietly, mostly "yes" and "no" questions.

If you reach a recording, listen to what it says. If the recording says your call cannot be completed, hang up and try again. If the recording says all call takers are busy, WAIT. When the next call-taker or dispatcher is available to take the call, it will transfer you.

Let the call-taker guide the conversation. He or she is typing the information into a computer and may seem to be taking forever. There is a good chance, however, that emergency services are already being sent while you are still on the line.

Follow all directions. In some cases, the call-taker will give you directions. Listen carefully, follow each step exactly, and ask for clarification if you do not understand.

Keep your eyes open. You may be asked to describe victims, suspects, vehicles, or other parts of the scene.

Do not hang up the call until directed to do so by the call taker.

Due to the remoteness of the site, it may be necessary to liaise with the emergency services on the ground in terms of locating the site. This may involve providing an escort from a designated meeting point that may be located more easily by the emergency services. This will form part of the site induction to make new personnel and sub-contractors aware of any such arrangement or requirement if applicable. A list of emergency contacts for the construction phase is presented in Table 5-2. This list will be updated as necessary ahead of the decommissioning phase.

Table 5-2 Emergency Contacts

Contact	Telephone no.
Emergency Services – Ambulance, Fire, Gardaí	999/112
Doctor – Leighlinbridge Health Centre	059 972 1452
Hospital – St. Lukes General Hospital	056 778 5000
ESB Emergency Services	1850 372 999
Gas Networks Ireland Emergency	1850 20 50 50
Gardaí – Carlow Garda Station.	059 913 6627
Health and Safety Co-ordinator - Health & Safety Services	TBC
Health and Safety Authority	1890 289 389
Inland Fisheries Ireland (IFI)	0818 347 424
Project Supervisor Construction Stage (PSCS): TBC	TBC
Project Supervisor Design Stage (PSDS): TBC	TBC
EDF Renewables Ireland Ltd.	0871 344 002

5.3 Procedure for Personnel Tracking

All operatives on site without any exception will have to undergo a site induction where they will be required to provide personal contact details which will include contact information for the next of kin.

In the event of a site operative becoming involved in an emergency situation where serious injury has occurred and hospitalisation has taken place, it will be the responsibility of the Site Manager or next in command if unavailable to contact the next of kin to inform them of the situation that exists.

5.4 Induction Checklist

Table 5-3 provides a list of items highlighted in this ERP which will be included or obtained during the mandatory site induction of all personnel that will work on the site. This will be updated throughout the various stages of the project.

Table 5-3 Emergency Response Plan Items Applicable to the Site Induction Process

5-3ERP Items to be included in Site Induction	Status
All personnel will be made aware of the evacuation procedure during site induction	
Due to the remoteness of the site, it may be necessary to liaise with and assist the emergency services on the ground in terms of locating the site. This may involve providing an escort from a designated meeting	

5-3ERP Items to be included in Site Induction	Status
point that may be located more easily by the emergency services. This will form part of the site induction to make new personnel and sub-contractors aware of any such arrangement or requirement if applicable.	
All operatives on site without any exception will have undergo a site induction where they will be required to provide personal contact details which will include contact information for the next of kin.	

RECEIVED: 07/05/2024

6.

PROGRAMME OF WORKS

6.1

Decommissioning Schedule

The decommissioning phase will take approximately 6 months to complete from commencing the removal of turbines to the final reinstatement of the site.

At this time, it is not possible to determine when exactly decommissioning will take place, however, it will be 35-years after the commissioning of the Proposed Project.

The phasing and scheduling of the main decommissioning task items are outlined in Figure 6-1 below, where the 1st January has been shown as an indicative start date for decommissioning to commence.

Figure 6-1 Indicative Decommissioning Schedule

ID	Task Name	Task Description	Month 1-3	Month 3-6
1	Site Health and Safty			
2	Turbine Decommissioning	Disconnect Power Output		
3	Turbine & Met Mast Dismantling	Disassemble Turbine Components		
4	Turbine Removal	Tranpsort of all Turbine Componetns off Site		
5	Cable Removal	Remove Underground Cables from Ducting		
6	Turbine & Met Mast Foundations Backfill	Reinstate Foundation Areas by Covering with Soil Material		
7	Accommodation Areas Reinstatement	Reinstate Temporary Abnormal Load Entrance and any necessary Boundary Treatments		

7.

MITIGATION PROPOSALS

All mitigation measures relating to decommissioning of the Proposed Project were set out in the various sections of the Environmental Impact Assessment Report (EIAR) and NIS prepared as part of the planning permission application to both Carlow County Council and Kilkenny County Council.

This section of the DP groups together all of the mitigation measures presented in the above documents. The mitigation measures are presented in Table 7-1.

By presenting the mitigation proposals in the below format, it is intended to provide an easy to audit list that can be reviewed and reported on during the decommissioning phase of the project.

Table 7-1 Mitigation Measures

Ref. MM no.	Reference Location	Mitigation Measure
EIAR Chapter 4 – Description of the Proposed Project		
Decommissioning Phase		
MM1	EIAR Chapter 4	Prior to the end of the operational period the Decommissioning Plan (Appendix 4-8 of the EIAR) will be updated in line with decommissioning methodologies that may exist at the time and will agree with the competent authority at that time.
MM2	EIAR Chapter 4 DP Section 2	<p>Upon decommissioning of the Proposed Project site, all above ground turbine components will be separated and removed off-site for recycling. Turbine foundations will remain in place underground and will be covered with earth and reseeded as appropriate.</p> <p>On removal of turbines, the covering of the foundation will be completed using locally sourced material imported to site as the required quantity of material does not currently exist at the site. The imported soil will be spread and graded over the foundation using a tracked excavator and revegetation enhanced by spreading of an appropriate seed mix to assist in revegetation.</p> <p>The underground cabling route connecting the turbines to the on-site substation will be removed from the cable ducts. The cable ducting will be left in-situ as it is considered the most environmentally prudent option, avoiding unnecessary excavation and soil disturbance. The cable materials will be transferred to a suitable recycling or recovery facility.</p>
MM3	EIAR Chapter 4 DP Section 3	<p>The following mitigation measures are proposed to avoid release of hydrocarbons at the site:</p> <p>All plant and machinery will be equipped with fuel absorbent material and pads to deal with any event of accidental spillage.</p> <p>Only designated trained and competent operatives will be authorised to refuel plant on site. Mobile measures such as drip trays, spill kits and fuel absorbent mats will be available if necessary, during all refuelling operations.</p> <p>Road-going vehicles will be refuelled off site wherever possible;</p> <p>Fuels volumes stored on site should be minimised.</p> <p>Any fuel storage areas will be bunded appropriately for the fuel storage volume for the time period of the construction and fitted with a storm drainage system and an appropriate oil interceptor;</p> <p>Oils or fuels stored in turbines will be drained and disposed of off-site by a licenced waste contractor, to prevent leakage to groundwater or surface water;</p> <p>The plant used will be regularly inspected for leaks and fitness for purpose;</p> <p>An emergency plan for the construction phase to deal with accidental spillages will be developed (refer to Section 5 of this DP) Spill kits will be available to deal with and accidental spillage in and outside the refuelling area.</p>

RECEIVED: 01/05/2024

Ref. MM no.	Reference Location	Mitigation Measure
		<p>> A programme for the regular inspection of plant and equipment for leaks and fitness for purpose will be developed at the outset of the decommissioning phase</p>
Chapter 5 Population and Human Health		
Decommissioning Phase		
MM4	EIAR Chapter 5	<p>Any effect and consequential effect that occurs during the decommissioning phase will be similar to that which occurs during the construction phase, however to a lesser extent, and the mitigation measures outlined above will be implemented during the Decommissioning Phase. A Decommissioning Plan has been prepared as part of this EIAR and is included as Appendix 4-7. This Decommissioning Plan follows the most up to date Scottish Natural Heritage (SNH) guidance. An updated decommissioning plan will be agreed with the local authorities three months prior to decommissioning the Proposed Project.</p> <p>The Proposed Project will be decommissioned in accordance with all relevant Health and Safety Legislation, including:</p> <ul style="list-style-type: none"> ○ Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005); ○ Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2016 (S.I. No. 36 of 2016); ○ S.I. No. 528/2021 - Safety, Health and Welfare at Work (Construction) (Amendment) Regulations 2021 and <p>Safety, Health and Welfare at Work (Work at Height) Regulations 2006 (S.I. No. 318 of 2006).</p>
Chapter 6 Biodiversity		
Decommissioning Phase		
MM5	EIAR Chapter 6	<p>The same mitigation to prevent significant impacts on water quality and associated aquatic fauna and other terrestrial fauna during construction will be applicable to the decommissioning phase.</p>
MM6	EIAR Chapter 6	<p>Any soil material that will be imported to the Proposed Wind Farm site as part of the foundation reinstatement will be free of any invasive species (listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011)). The Site Manager will take steps to ensure the sourcing of suitably clean soil material and verify the quality of the material by having it inspected prior to bringing it to site by a suitably qualified ecologist. Prior to decommissioning, a suitably qualified ecologist will complete an invasive species survey of the Site to identify invasive species where any minor excavation will be required. If present in these areas, the ecologist will propose suitable management measures.</p>
Chapter 7 Birds (Appendix 7-1)		
Decommissioning Phase		

RECEIVED: 2024.05.03

Ref. MM no.	Reference Location	Mitigation Measure
MM7	EIAR Chapter 7	Decommissioning monitoring surveys will be undertaken prior to works associated with decommissioning at the wind farm. Survey methodology and timing will be the same as that outlined for construction phase surveys in Chapter 7 of this EIAR. The survey will include a thorough walkover survey to a 500m radius of the development footprint and all works areas, where access allows. If winter roosting or breeding activity of birds of high conservation concern is identified, the roost or nest site will be located and earmarked for monitoring at the beginning of the first winter or breeding season of the decommissioning phase. If it is found to be active during the decommissioning phase, no works shall be undertaken within a species-specific disturbance buffer in line with industry best practice (e.g. Forestry Commission Scotland, 2006; Ruddock and Whitfield, 2007; Goodship and Furness, 2022). No works shall be permitted within the buffer until it can be demonstrated that the roost/nest is no longer occupied
EIAR Chapter 8 Land Soils & Geology		
Decommissioning Phase		
MM8	EIAR Chapter 8	Mitigation measures applied during decommissioning activities will be similar to those applied during construction where relevant. Some of the effects associated with reinstatement of the Proposed Wind Farm site (excavation of turbine bases, access tracks etc.) will be avoided by leaving these in place. The bases will be rehabilitated by covering with local topsoil in order to regenerate vegetation which will reduce runoff and sedimentation effects. Mitigation measures to avoid contamination by accidental fuel leakage and compaction of soil by on-site plant will be implemented as per the construction phase mitigation measures.
EIAR Chapter 9 Hydrology		
Decommissioning Phase		
MM9	EIAR Chapter 9	The potential effects associated with decommissioning of the Proposed Project will be similar to those associated with construction but of reduced magnitude (i.e., soil/subsoil/bedrock excavation; Contamination by Leakage/Spillages). Mitigation measures applied during decommissioning activities will be similar to those applied during construction where relevant (i.e., mitigation outlined at Sections 8.5.2.2 and 8.5.2.3). Some of the effects will be avoided by leaving elements of the Proposed Project in place where appropriate i.e the 110 kV substation and underground cabling. Mitigation measures to avoid contamination by accidental fuel leakage and compaction of soil by on-site plant will be implemented as per the construction phase mitigation measures..
MM10	EIAR Chapter 9 Appendix 4-4	Potential effects will be similar to the construction phase but to a lesser degree. There may be increased trafficking and an increased risk of disturbance to underlying soils at the Proposed Wind Farm site, during the decommissioning phase. Any such potential effects will be less than during the construction stage as the drainage system will be fully mature and will provide additional filtration of runoff. Any diesel or fuel oils stored on site will be banded.

RECEIVED: 07/05/2024

Ref. MM no.	Reference Location	Mitigation Measure
Chapter 10 Air Quality		
Decommissioning Phase		
MM11	EIAR Chapter 10	Any impact and consequential effect that occurs during the decommissioning phase are similar to that which occur during the construction phase, be it of less effect. The mitigation measures prescribed for the construction phase of the Proposed Project will be implemented during the decommissioning phase thereby minimising any potential effects.
Chapter 11 Climate		
Decommissioning Phase		
MM12	EIAR Chapter 11	Any impact and consequential effect that occurs during the decommissioning phase are similar to that which occur during the construction phase, be it of less impact. The mitigation measures prescribed for the construction phase of the Proposed Project will be implemented during the decommissioning phase thereby minimising any potential impact.
EIAR Chapter 12 Noise		
Decommissioning Phase		
MM13	EIAR Chapter 12 DP section 3	Activities that occur during the decommissioning of the Proposed Wind Farm are unlikely to produce higher noise levels than those produced during construction and many of the activities will be similar in nature. As such it is considered that if construction noise levels are predicted to be below the threshold levels, then decommissioning noise will also be within the threshold levels.
Chapter 13 Cultural Heritage		
Decommissioning Phase		
MM14	EIAR Chapter 13	Any potential direct impacts effects will already have been resolved through mitigation measures during the construction phase
Chapter 15 Material Assets		
Decommissioning Phase		
MM15	EIAR Chapter 15	The mitigation measures prescribed for the construction phase of the Proposed Project will be implemented during the decommissioning phase thereby minimising any potential impacts.
Chapter 15 Material Assets - Traffic		
Decommissioning		

RECEIVED: 07/05/2024

Ref. MM no.	Reference Location	Mitigation Measure
MM16	EIAR Chapter 15	<p>The measures outlined for the construction phase are considered the same for the decommissioning phase.</p> <p>In the event that the Proposed Project is decommissioned after the 35 years of operation, a decommissioning plan, will be prepared for agreement with the local authority, as described in Chapter 4 and Appendix 4-8 Decommissioning Plan. The Decommissioning Plan will include a material recycling / disposal and traffic management plan will be prepared for agreement with the local authority prior to decommissioning, in accordance with Scottish Natural Heritage report (SNH) Research and Guidance on Restoration and Decommissioning of Onshore Wind Farms (SNH, 2013)</p>

8.

MONITORING PROPOSALS

All monitoring proposals relating to the pre-commencement, construction and operational phases of the Proposed Project were set out in various sections of the EIAR and NIS prepared as part of the planning permission application to Carlow County Council and Kilkenny County Council.

This section of the DP groups together all of the monitoring proposals presented in the planning documentation. The monitoring proposals are presented in the following pages.

By presenting the monitoring proposals in the below format, it is intended to provide an easy to audit list that can be reviewed and reported on during the decommissioning phase of the Proposed Project.

RECEIVED 07/05/2024

RECEIVED: 07/05/2024

Table 8-1 Schedule of Monitoring Proposals

Ref. No.	Reference Location	Monitoring Measure	Frequency	Reporting Period	Responsibility
Decommissioning Phase					
MX1	DP Section 1	In accordance with SNH guidance, “best practice not to limit options too far in advance of actual decommissioning but to maintain informed flexibility until close to the end-of-life of the wind farm”. A Decommissioning Plan will be updated prior to the end of the operational period in line with decommissioning methodologies that may exist at the time and will agree with the competent authority at that time	End of operational life	As required	Developer/ Appointed Contractor
MX2	EIAR Chapter 6 DP Section 3	The Site Manager in consultation with the ECoW will be responsible for employing the services of a suitably qualified ecologist and any other suitably qualified professionals as required throughout the decommissioning works.	As required	As required	Site Manager
MX3	EIAR Chapter 6 DP Section 3	Prior to decommissioning, a suitably qualified ecologist will complete an invasive species survey of any material proposed for use as part of foundation backfilling.	As required	As required	Project Ecologist
MX4	EIAR Chapter 7	Decommissioning monitoring surveys will be undertaken prior to works associated with decommissioning at the wind farm. The survey will include a thorough walkover survey to a 500m radius of the Proposed Wind Farm footprint and all works areas, where access allows. If winter roosting or breeding activity of birds of high conservation concern is identified, the roost or nest site will be located and earmarked for monitoring at the beginning of the first winter or breeding season of the decommissioning phase. If it is found to be active during the decommissioning phase, no works shall be undertaken within a disturbance buffer (Forestry Commission Scotland, 2006; Ruddock and Whitfield, 2007) in line with industry best practice. No works shall be permitted within the buffer until it can be demonstrated that the roost/nest is no longer occupied.	As required	As required	Project Ornithologist

9. COMPLIANCE AND REVIEW

9.1 Site Inspections and Environmental Audits

Routine inspections of decommissioning activities will be carried out on a daily and weekly basis by the ECoW and the Site Supervisor/Decommissioning Manager to ensure all controls to prevent environmental impacts, relevant to the decommissioning activities taking place at the time, are in place.

Environmental inspections will ensure that the works are undertaken in compliance with this DP and all other planning application documents. Only suitably trained staff will undertake environmental site inspections.

9.2 Auditing

In contrast to monitoring and inspection activities, audits are designed to shed light on the underlying causes of non-compliance, and not merely detect the non-compliance itself. In addition, audits are the main means by which system and performance improvement opportunities may be identified. Environmental audits will be carried out by the ECoW on behalf of the appointed contractor. It is important that an impartial and objective approach is adopted. Environmental audits will be conducted at planned intervals to determine whether the DP is being properly implemented and maintained. The results of environmental audits will be provided to the contractor.

An audit of compliance with the decommissioning mitigation measures will be completed by the ECoW during the decommissioning phase of the development. The findings of each audit will be documented by the ECoW in an audit report within the DP for the Proposed Project site. The audit report will be made available to the local authority on request.

9.3 Environmental Compliance

The following definitions shall apply in relation to the classification of Environmental Occurrences during decommissioning of the proposed wind farm development:

Environmental Near Miss: An occurrence which if not controlled or due to its nature could lead to an Environmental Incident.

Environmental Incident: Any occurrence which has potential, due to its scale and nature, to migrate from source and have an environmental impact beyond the site boundary.

Environmental Exceedance Event: An environmental exceedance event occurs when monitoring results indicate that limits for a particular environmental parameter (as indicated in the Environmental Monitoring Programme) has been exceeded.

An exceedance will immediately trigger an investigation into the reason for the exceedance occurring and the application of suitable mitigation where necessary.

Exceedance events can be closed out on achieving a monitoring result below the assigned limit for a particular environmental parameter.

Environmental Non-Compliance: Non-fulfilment of a requirement and includes any deviations from established procedures, programs and other arrangements related to the EMP.

9.4

Corrective Action Procedure

A corrective action is implemented to rectify an environmental problem on-site. Corrective actions will be implemented by the Site Supervisor/Decommissioning Manager, as advised by the site Environmental Clerk of Works. Corrective actions may be required as a result of the following:

- Environmental Audits.
- Environmental Inspections and Reviews.
- Environmental Monitoring.
- Environmental Incidents; and,
- Environmental Complaints.

A Corrective Action Notice will be used to communicate the details of the action required to the main contractor. A Corrective Action Notice is a form that describes the cause and effect of an environmental problem on site and the recommended corrective action that is required. The Corrective Action Notice, when completed, will include details of close out and follow up actions.

If an environmental problem occurs on site that requires immediate attention direct communications between the Site Supervisor/Decommissioning Manager and the ECoW will be conducted. This in turn will be passed down to the site staff involved. A Corrective Action Notice will be completed at a later date.

9.5

Decommissioning Plan Review

This Decommissioning Plan will be reviewed and updated prior to commencement of decommissioning works. It will be agreed with the Planning Authority prior to the commencement of decommissioning. Further updates will be completed to the plan during decommissioning works to adapt to specific situations or site conditions that are encountered that need to be considered by the plan.