

# Table of Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
<b>1.1</b>	<b>Overview .....</b>	<b>1</b>
<b>1.2</b>	<b>The Applicant.....</b>	<b>2</b>
<b>1.3</b>	<b>Site Location .....</b>	<b>2</b>
<b>1.4</b>	<b>Project Summary .....</b>	<b>3</b>
1.4.1	Landowner and Application Area .....	3
<b>1.5</b>	<b>Assessment Methodology .....</b>	<b>4</b>
1.5.1	Legislative and Policy Context Overview.....	4
1.5.2	Screening.....	4
1.5.3	Scoping.....	5
1.5.4	Consultation during the Cushaling Wind Farm EIAR .....	6
1.5.5	Consultation for the stand alone Kilcumber Bridge 110kV substation .....	7
<b>1.6</b>	<b>Structure of the Environmental IMPACT ASSESSMENT Report .....</b>	<b>8</b>
1.6.1	Technical Difficulties and Availability of Data .....	9
1.6.2	Note on Quotation .....	9
1.6.3	Note on Drawings and Graphics.....	9
<b>1.7</b>	<b>Study Team and Contributors to the Environmental Report .....</b>	<b>9</b>

## List of Figures

Figure 1-1:	Location of the Proposed Development.....	3
-------------	---	---

## 1 INTRODUCTION

This Environmental Impact Assessment Report (EIAR) has been prepared on behalf of Cloncant Renewable Energy Ltd. (CREL) for the development of a 110kV substation and grid connection in the townlands of Ballykilleen, Cloncreen and Ballinowlart North, Co. Offaly. The EIAR has been prepared in support of a planning application to An Bord Pleanála. A full description of the proposed development and development lands of the project is provided in Chapter 2 of this EIAR.

The EIAR consists of a systematic analysis and assessment of the potential effects of the entire proposed project on the receiving environment. The intended purpose of the EIAR is to:

- inform decision makers and the public of the possible environmental impacts and effects associated with implementation of the proposed development;
- determine whether the identified effects could be significant; and
- suggest mitigation measures for potential effects where feasible.

This chapter of the EIAR sets out the background and terms of reference for the EIAR. It sets out the structure, assessment topics and assumptions which underlie the EIAR. It also introduces the project and the project environmental assessment team. The scope of the EIAR is explained and the site location and characteristics are introduced.

### 1.1 OVERVIEW

Cloncant Renewable Energy Ltd. (“the Applicant”) are seeking planning permission from An Bord Pleanála to construct a 110kV substation and 400m grid connection.

Malachy Walsh and Partners (MWP) have been engaged to prepare an Environmental Impact Assessment Report (EIAR), on behalf of the Applicant, to accompany the planning application.

Preparation of the EIAR, had regard to the following regulations and guidelines:

- The requirements of EC Directives and Irish Regulations regarding Environmental Impact Assessment;
- Guidelines on the Information to be Contained in Environmental Impact Statements (Draft) (Environmental Protection Agency [EPA], August 2017);
- 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 the Environment, Community and Local Government [DoECLG], 2013); and
- In addition, specialist disciplines have had regard to other relevant guidelines, as noted in the specific chapters of the EIAR.

The methodology has regard to the aforementioned 2017 EPA Draft Guidelines. The Report is based on the data gathered during the assessment process. It applies accepted methodologies in determining if impacts will be significant and recommends mitigation measures to avoid or reduce impacts where possible.

Each of the chapters contains a description of the existing environment, an assessment of the likelihood and extent of any potential environmental impacts and proposes mitigation measures, where necessary.

## 1.2 THE APPLICANT

The applicant is Cloncant Renewable Energy Ltd., a subsidiary of Statkraft Ireland Ltd. Statkraft Ireland Ltd. is wholly owned by Statkraft, a leading company in hydropower internationally and Europe's largest generator of renewable energy. The Group is involved in the generation of hydropower, wind power, solar power and gas-fired power and supplies district heating and flexible grid services including battery storage projects. Statkraft is a global company in energy market operations. In October 2018, Statkraft acquired 100 per cent of the shares in Element Power Ireland Ltd. The team at Statkraft Ireland has constructed a portfolio of approximately 210 Megawatts (MW) of wind projects in Ireland, operates approximately 290MW and has an established track record in wind energy in Ireland, with its Irish team based in Tullamore, Co. Offaly and Cork. This team has previously developed over 16 wind farms in Counties Clare, Cork, Kerry, Donegal, Limerick, Galway, Waterford, Tipperary, Offaly and Tyrone.

## 1.3 SITE LOCATION

The proposed development site is in the townlands of Ballykilleen, Cloncreen and Ballinowlart North, Co. Offaly. Grid Ref. (ITM) Easting = 660810, Northing = 726820. The site is located approximately 6 kilometres south of Edenderry in east Co. Offaly (

**Figure 1-1).**

The site can be accessed from the R401 just west of Kilcumber Bridge. The Site is approximately 1km east of the consented Cloncreen Wind Farm, and adjacent to the Edenderry Power Plant and the existing Cushaling 110kV EirGrid substation. The consented Cushaling Wind Farm lies approximately 1.2km to the northeast.

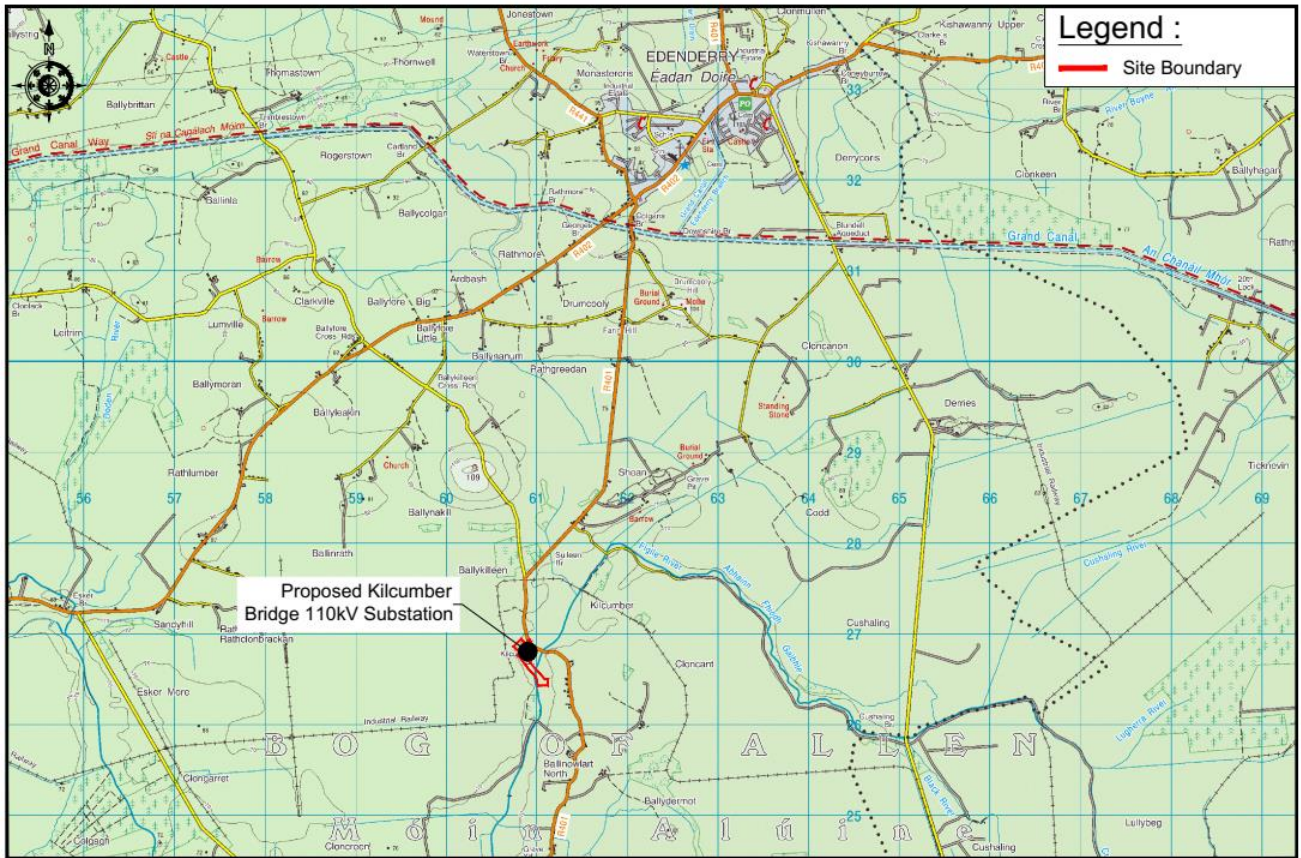


Figure 1-1: Location of the Proposed Development

1.4 PROJECT SUMMARY

The proposed development will consist of the following elements:

- A 110kV Air Insulated Switchgear (AIS) Loop Substation (Kilcumber Bridge Substation); and
- A grid connection consisting of a 400m overhead line (OHL) going south east from the substation and connecting into the adjacent existing Cushaling – Mount Lucas 110kV OHL.
- All associated site development works.

The proposed Kilcumber Bridge 110kV Substation development will be subject to a planning application to An Bord Pleanála (ABP) as Strategic Infrastructure Development (SID) in accordance with the requirements of Section 182A(1) and 182B of the Planning and Development Act 2000 (as amended)

1.4.1 Landowner and Application Area

The planning application area spans a total of approximately 5.32 ha, which contains the development footprint of the proposed Kilcumber Bridge 110kV substation and the grid connection route.

The proposed development described above spans a number of property folios owned by private landowners and will be developed under separate agreements with the relevant landowners. The proposed development site is currently used as agricultural grassland. Landowner letters of consent are included with the planning application.

The planning application area represents the development footprint. It also includes the route of the grid connection. This is, therefore, the planning application area as presented in the planning application drawings. The red line area of the proposed development (outlined in **Planning Drawing 21280-MWP-00-00-DR-C-5002**) was assessed for the purposes of this EIAR and it is this boundary that is presented throughout the Report and graphics.

## 1.5 ASSESSMENT METHODOLOGY

### 1.5.1 Legislative and Policy Context Overview

Environmental Impact Assessment (EIA) is the process of examining the anticipated environmental effects of a proposed project - from consideration of environmental aspects at design stage, through consultation and preparation of an Environmental Impact Assessment Report (EIAR), evaluation of the EIAR by a competent authority and the subsequent decision as to whether the project should be permitted to proceed, encompassing public response to that decision. An EIAR is a report or statement of the effects, if any, which the proposed project, if carried out, would have on the environment.

EIA in Ireland is governed by EIA Directives issued by the EU. The main goal of EIA Directives is to ensure that projects which are likely to have significant effects on the environment are subject to an assessment of their likely impacts. The current EU Directive is 2014/52/EU ("2014 EIA Directive") amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the "2011 EIA Directive"). It requires that, before consent is given for certain public and private projects, an assessment of the effects on the environment is undertaken by the relevant competent authority. The EU EIA Directives have been transposed into Irish legislation primarily under the Planning and Development Act 2000 and subsequent regulations, collectively cited as the Planning and Development Regulations 2001 to 2018. The 2014 EIA Directive has been transposed by the EU (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018), which came into effect on the 1<sup>st</sup> September 2018, and the Planning and Development Regulations 2001 to 2018.

The preparation of this Report follows standard EIA methodology according to the various categories listed in Schedule 2 of the European Communities (Environmental Impact Assessment) (Amendment) Regulations 1999 (S.I. No. 93 of 1999), Schedule 2B of the Planning and Development Regulations 2001-2018, and the requirements of the 2014 EIA Directive. The methodology has regard to the EPA Guidance Document '*Draft Guidelines on the Information to be contained in Environmental Impact Reports*' (EPA, 2017), which is based on the 2014 EIA Directive.

The EIA process begins with Screening to determine whether EIA is required followed by Scoping and Consultation to identify the specialist studies required in the EIA. Where effects are considered to be unacceptable, they can be avoided or mitigated against at the design stage.

### 1.5.2 Screening

The Kilcumber Bridge 110kV substation is a stand alone development that is proposed to be built and handed over to Eirgrid for use as a 110kV substation node on the Irish electrical grid. The purpose of the substation is to act as the grid connection for permitted and future renewable energy projects in county Offaly. The Cushaling Wind Farm is a permitted development that plans to use the Kilcumber Bridge 110kV substation as a grid connection.

Judgements in recent legal cases (Daly v. Kilronan Windfarm Ltd. (2016/372) and O’Grianna & Ors. v. An Bord Pleanála (2014/632)) have ruled that an entire wind energy development, including the method of grid connection, must be made subject to EIA. Previously, the Cushaling Wind Farm EIAR considered the 110kV substation as part of the project for environmental impact assessment. However, the 110kV substation was not included in the Cushaling Wind Farm planning application at that time. Planning consent is now being sought and as the 110kV substation will form a part of the transmission network, it was deemed Strategic Infrastructure by An Bord Pleanála. During pre application consultation with An Bord Pleanála, it was agreed that an EIAR would be carried out for the substation development. Advice on the content of the EIAR was received from An Bord Pleanála during this consultation.

### 1.5.3 Scoping

The EIA Regulations require that the EIAR identifies likely significant environmental effects arising from a proposed plan or project. It is recognised in the EIA Regulations that not all environmental effects are significant. In order for environmental effects to be assessed, the key issues must be identified and included in the EIA.

EIA requirements are set out in EIA legislation, including:

- The Planning and Development Act 2000 and Amendment Act 2010;
- The Planning and Development Regulations 2001-2018;
- EIA Regulations 1989 (SI No. 349 of 1989);
- EIA (Amendment) Regulations (SI No. 93 of 1999);
- EIA (Planning and Development Act, 2000) Regulations 2012 (SI No. 419 of 2012);
- EU Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (2011 EIA Directive);
- EU EIA Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment (2014 EIA Directive);
- EU (Planning and Development)(Environmental Impact Assessment) Regulations 2018 (SI No. 216 of 2018);

The EIAR will have regard to the following EPA guidance on EIA:

- EPA Guidelines on Information to be Contained in Environmental Impact Statements, 2002 and the Revised Draft Guidelines, 2017;
- EPA Advice Notes on Current Practice in the preparation of Environmental Impact Statements, 2003 and draft Revised Notes 2015;

The aforementioned legislation and guidance identify a range of environmental topics or areas of concern, the significant effects of which should be addressed in an EIAR. These include population and human health, biodiversity, land and soil, water, air and climate, noise and vibration, landscape, cultural heritage and material assets as well as the inter-relationship between the above topics. The scoping process involved the identification of aspects to be considered during the EIA process and the possible impact during the construction and operational phases.

#### 1.5.4 Consultation during the Cushaling Wind Farm EIAR

The Kilcumber Bridge 110kV substation was part of the EIAR for the Cushaling Wind farm project. There are two differences in the layout plan of the Kilcumber Bridge 110kV substation in the Cushaling Wind Farm plan that underwent consultation and the current proposed development. These are a movement of the substation southwest by about 20 meters and the introduction of the overhead line as the grid connection. As part of the Cushaling Wind Farm EIAR it underwent the following consultations;

##### 1.5.4.1 Pre-Planning Meeting with Offaly County Council

A pre-planning meeting was held with Offaly County Council Planning Department on the 29<sup>th</sup> May 2019. The objective of the meeting was to outline the proposal and to discuss any concerns or comments that OCC may have in relation to the proposal and any planning and development policy particularly relating to renewable energy strategy. Follow-up discussions were also held with the Roads Department regarding road access to the site.

The Applicant also had a pre-planning consultation meeting with the Edenderry Roads Engineer for Offaly County Council on 26<sup>th</sup> August 2019. During this meeting, the project was outlined by the Applicant and Offaly County Council advised of their expectations with regards to the use of public roads approaching and within the wind farm, ducting through public roads, public road upgrade works and reinstatement finishes etc.

##### 1.5.4.2 Pre-Planning Meeting with Kildare County Council

A pre-planning meeting was held with Kildare County Council Planning Department on the 9<sup>th</sup> July 2019. The objective of the meeting was to outline the proposal and to discuss any concerns or comments that KCC may have had in relation to the proposal and any planning and development policy particularly relating to renewable energy strategy.

##### 1.5.4.3 Consultation with Statutory and Non-Statutory Consultees

The Applicant undertook consultation with a range of statutory and non-statutory bodies identified as relevant to the project and location. Community groups relevant to the area were also identified and included.

##### 1.5.4.4 Public Consultation with the Local Community

Cloncant Renewable Energy Ltd. commenced the public consultation for the proposed Cushaling Wind Farm in June 2019 at an early stage in the development process. A Community Liaison Strategy (CLS) was established and set into motion with a nominated Community Liaison Officer (CLO). Since this time, the CLO has been the main point of contact with the local community. The CLS is based on the 'Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement' (December 2016).

An important aspect of the community engagement strategy was the distribution of project information and the gathering of feedback. A Project Website was also set up ([www.cushalingwindfarm.ie](http://www.cushalingwindfarm.ie)). The CLO called to all houses within 2.2km of the design layout to provide the following information:

- A Project Booklet (June 2019);
- A subsequent Project Newsletter (October 2019);
- Details on the Project website (June 2019);

- Contact details for contacting the CLO at any time.

With regard to all consultation undertaken, all feedback received was carefully considered by the project design team in designing the layout and siting of wind farm infrastructure. Following this, the proposal was finalised and submitted as planning applications to Offaly and Kildare County Councils in November 2019.

## 1.5.5 Consultation for the stand alone Kilcumber Bridge 110kV substation

### 1.5.5.1 *Pre-Application Consultation Meeting with An Bord Pleanála*

A pre-application meeting was held with An Bord Pleanála on the 25<sup>th</sup> February 2020. The objective of the meeting was to outline the proposal and to discuss any concerns or comments that An Bord Pleanála may have in relation to the proposal. Confirmation that the project was a strategic infrastructure development was a part of the pre application process.

### 1.5.5.2 *Consultation with Eirgrid as operators of the Irish electricity grid.*

Cloncant Renewable Energy Ltd. had three meetings with EirGrid in 2020 where the Cushaling Wind Farm and its grid connection including Kilcumber Bridge 110kV substation or policy items effecting these items, were discussed:

- 22<sup>nd</sup> April
- 17<sup>th</sup> June
- 16<sup>th</sup> Sept

These meetings were in an effort to ensure that the needs of the grid operator were addressed.

### 1.5.5.3 *Consultation with statutory and non statutory bodies with a possible interest.*

Letters and project descriptions were sent out to a list of statutory and non statutory bodies that may have had an interest in the proposed development. A full list of the bodies and the project description is included in **Appendix 1**. The responses were taken on board and are also included in Appendix 1.

### 1.5.5.4 *Information drop to adjacent residential houses*

An information letter with a map regarding the proposed development was sent to all houses within 1km of the proposed substation.

### 1.5.5.5 *Additional consultation with Offaly County Council*

Offaly County Council were included in the non statutory bodies for a request for comments in relation to the project. An online meeting was held with Offaly Co. Co. on the 1<sup>st</sup> March 2021, in order to get the full information regarding Offaly County Council's thoughts on the proposed development.

### 1.5.5.6 *Project website*

Post EIAR an important aspect of the community engagement strategy is the setting up of the Project Website ([www.Kilcumberbridgesubstationsid.ie](http://www.Kilcumberbridgesubstationsid.ie)). This is due to go live once the planning application has gone in and will inform the community on all aspects of the proposed development as well as contain the full EIAR in a downloadable version.



## 1.6 STRUCTURE OF THE ENVIRONMENTAL IMPACT ASSESSMENT REPORT

The EIAR will be prepared in accordance with the requirements outlined in Schedule 6 of the Environmental Impact Assessment Regulations 2018 (S.I. No. 296 of 2018) and having regard to the aforementioned 2002 and 2017 EPA Guidelines.

The EIAR will be presented in 3 volumes as follows;

***Volume 1 – NON-TECHNICAL SUMMARY***

***Volume 2 – MAIN EIAR***

***Volume 3 – APPENDICES***

### ***Volume 1 - NON-TECHNICAL SUMMARY***

The Non-Technical Summary provides a short overview of the project and the EIAR in non-technical terms. The summary is presented similar to the grouped format structure which discusses each environmental topic separately and includes the information under the required sections (Existing Environment, Impacts of the Proposed Development, Mitigation Measures, Residual Impacts, and Conclusion).

### ***Volume 2 - MAIN EIAR***

This document provides a detailed description of the proposed project and contains specialist reports on each of the selected study areas. This document is prepared in the 'Grouped Format Structure' which examines each environmental topic area as a separate Chapter. This structure was selected for the Main EIAR as it facilitates straightforward investigation of individual topics. This document is likely to be structured as follows:

- Chapter 1 – Introduction
- Chapter 2 – Description of the Proposed Development
- Chapter 3 – Population and Human Health
- Chapter 4 – Biodiversity
- Chapter 5 – Land and Soils
- Chapter 6 – Water
- Chapter 7 – Air and Climate
- Chapter 8 – Noise
- Chapter 9 – Landscape and Visual
- Chapter 10 – Archaeology and Cultural Heritage
- Chapter 11 – Traffic and Transportation
- Chapter 12 – Material Assets
- Chapter 13 – Interaction of the Foregoing
- Chapter 14 – Schedule of Environmental Mitigation

Volume 2 of the EIAR contains the individual sections (or chapters) of the EIAR.

Chapter 1 contains a general introduction to the project and details of the Project Team including details of their competencies and which section of the EIAR was completed by them.

A detailed description of the project including engineering design aspects is provided in Chapter 2.

The reasonable alternatives considered are assessed and presented in Chapter 2. This information includes the constraints analysis and project evolution.

The chapters which present the impact assessments (Chapters 3 to 12) include relevant information as outlined under Schedule 6 of the 2018 Regulations; *“should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term medium-term and long-term, permanent and temporary, positive and negative effects of the proposed development”*.

### **Volume 3 – APPENDICES**

This Volume will contain documentation and information in support of the main report such as details on the consultation process, maps, drawings, any additional specialist reports or other information gathered during the impact assessment process which may render the Main Environmental Impact Assessment Report too cumbersome.

The chapter layout was designed with regard to the current EPA Guidelines and relevant to current practice for topics to include in an EIS for an installation for wind energy production. The pertinent information on the results of the assessment of the impacts is contained within the Main Environmental Report (Volume 2).

#### **1.6.1 Technical Difficulties and Availability of Data**

There were no major difficulties in obtaining baseline and other data during the course of the EIA process. It is worth noting that the 1:50000, six-inch mapping used to generate many of the figures in the ER, are the copyright of Ordnance Survey Ireland (OSI Licence No. EN0015719).

#### **1.6.2 Note on Quotation**

Environmental Impact Assessment Reports contain statements describing the positive and negative aspects of a proposed development. Selective quotation out of context is not advisable as a misinterpretation of the overall findings of the study may arise. Where possible, quotations should be taken from the conclusions of specialist reports.

#### **1.6.3 Note on Drawings and Graphics**

Details of the proposed development are supported by the planning application drawings prepared by MWP in compliance with our internal Quality Management System accredited to ISO:9001. It should be noted that these drawings have been reduced in scale within the Environmental Report for more convenient reference.

### **1.7 STUDY TEAM AND CONTRIBUTORS TO THE ENVIRONMENTAL REPORT**

MWP Engineering and Environmental Consultants are the Environmental and Engineering Consultants to the Applicant for the project. This Environmental Impact Assessment Report (EIAR) has been compiled by MWP. The project team is presented in **Table 1-1**. The team is a combination of in-house specialists and sub-consultants. The in-house environmental and engineering team at MWP specialises in wind farm development at both the pre-planning and construction phases. Specialist sub-consultants engaged were:

- Macro Works – Landscape and Visual/Photomontages;
- Laurence Dunne Archaeology - Cultural Heritage;

**Table 1-1: Contributors to the EIAR**

Subject Area	Author	Company
Description of Development	Graeme Thornton – Senior Environmental Scientist/Project Manger	MWP
Civil Engineering and Design	Paddy Curran – Civil & Geotechnical Engineer Sean Doyle – Engineer/Hydrologist Cormac Murphy – Geotechnical Engineer Jeremy King – CAD Technician	MWP
Population, Human Health	Valerie Heffernan – Environmental Scientist	MWP
Biodiversity and Appropriate Assessment	Monica Kane – Senior Ecologist Gerard Hayes – Aquatic Ecologist Fiona McKenna – Ecologist	MWP
Water and Flood Risk Assessment	Graeme Thornton – Senior Environmental Scientist Sean Doyle – Engineer/Hydrologist	MWP
Land and Soils	Paddy Curran – Civil & Geotechnical Engineer Jasmin A. Spoerri - Geologist	MWP
Air and Climate	Fergus Doyle – Environmental Scientist	MWP
Noise and Vibration	Peter Barry – Environmental Consultant	MWP
Landscape and Visual	Macro Works	Macro Works
Traffic and Transportation	Seamus Quigley – Traffic & Transportation Engineer	MWP
Archaeology and Cultural Heritage	Laurence Dunne – Archaeologist	Laurence Dunne Archaeology
Material Assets	Sinead Ryan – Senior Environmental Scientist	MWP
Interaction of the Foregoing	Graeme Thornton – Senior Environmental Scientist	MWP
Non-Technical Summary	Sinead Ryan – Senior Environmental Scientist	MWP