S.37
File With _____

SECTION 131 FORM

Appeal No: PL 244439.

Defer Re O/H ☐

To. SE O _____

Having considered the contents of the submission dated/received 10/3/15 from applicant I recommend that section 131 of the Planning and Development Act, 2000 be/not be invoked at this stage for the following reason(s): ~~Non Material~~ Planning issues

EO: _____ Date: 27-05-2015.

To EO: _____

Section 131 not to be invoked at this stage ☐

Section 131 to be invoked - allow 2/4 weeks for reply ☐

SEO: _____ Date: _____

SAO: _____ Date: _____

M _____

Please prepare BP _____ Section 131 notice enclosing a copy of the attached submission to: _____

Allow 2/3/4 weeks BP _____

EO: _____ Date: _____

AA: _____ Date: _____

CORRESPONDENCE FORM

Appeal No: PL 06.24.4439

M _____

Please treat correspondence received on 10/3/15 **as follows:**

1. Update database with new agent for Applicant/Appellant _____	
2. Acknowledge with BP 20	**1. RETURN TO SENDER with BP** _____
3. Keep copy of Board's Letter ☐	2. Keep Envelope: ☐
	3. Keep Copy of Board's letter ☐

Amendments/Comments
applicants Response to 3rd Party appeal

4. Attach to file	**RETURN TO EO** ☐
(a) R/S ☐ (d) Screening ☐	
(b) GIS Processing ☐ (e) Inspectorate ☐	
(c) Processing ☐	

	Plans Date Stamped ☐
	Date Stamped Filled in ☐
EO: Lisa Quinn	**AA:** Stefan Burke
Date: 10/3/15	**Date:** 13/03/15

FEHILY TIMONEY & COMPANY

CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES

Our Ref: Q: 2014/LE14/702/02/Let010/MG

The Secretary
An Bord Pleanala
64 Marlborough Street
Dublin 1

AN BORD PLEANÁLA
TIME _____ BY _____
10 MAR 2015
LTR DATED _____ FROM _____
PL

09 March 2015

RE: Cork County Council Planning Reference 14/557 – Response to Third Party Appeal to An Bord Pleanála in relation to a Decision to Grant Planning Permission

Dear Secretary,

Arran Windfarm Ltd. [**the applicant**] has appointed Fehily Timoney and Company (FTC), Core House, Pouladuff Road, Cork [**the agent**] to prepare a response to a third party appeal to An Bord Pleanála in respect of Cork County Council's decision to grant planning permission (Planning reference no. 14/557) on 13 January 2015 for a proposed development at Barnadivane (Kneeves), Terelton, Co. Cork.

The proposed development, for which a 10 year permission was granted by Cork County Council, comprises:

The construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works.

An Environmental Report and a Stage 1 Appropriate Assessment Screening Report accompanied the planning application.

The third party appeal to the grant of permission is made by Noonan Linehan Carroll Coffey on behalf of the following:

- Stephanie Larkin of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Michael O'Donovan of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Denis Buckley of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Noelle Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Pat Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Nora Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Aisling Connolly of Moneygaff East, Enniskeane, Co. Cork
- Gerard Connolly of Moneygaff East, Enniskeane, Co. Cork
- Dan Galvin of Gurranreigh, Lissarda, Co. Cork
- Patrick Manning of Barnadivane, Terelton, Macroom, Co. Cork
- Sabrina Hurley of Moneygaff East, Enniskeane, Co. Cork

Cont'd.....

Please find attached a report prepared in response to the third party appeal, entitled *'Barnadivane 110 kV Substation, Terelton, Co. Cork (CCC Planning Ref. 14/557) – Response to Third Party Appeal made to An Bord Pleanála'*, which sets out the applicants response to the grounds for the appeal made by the third.

If you have any further queries please contact the undersigned.

Yours faithfully,

Clodagh O'Donovan
Director
for and on behalf of **Fehily Timoney & Company**

Encl.

AN BORD PLEANÁLA
TIME _____ BY _____
10 MAR 2015
LTR DATED _____ FROM _____
PL _____

BARNADIVANE 110 KV SUBSTATION, TERELTON, CO. CORK, (CCC PLANNING REF. 14/557) – RESPONSE TO THIRD PARTY APPEAL MADE TO AN BORD PLEANÁLA

ARRAN WINDFARM LTD.

AN BORD PLEANÁLA
TIME _____ BY _____
10 MAR 2015
LTR DATED _____ FROM _____
PL _____

MARCH 2015

FEHILY TIMONEY & COMPANY

BARNADIVANE 110 KV SUBSTATION, TERELTON, CO. CORK, (CCC PLANNING REF. 14/557) – RESPONSE TO THIRD PARTY APPEAL MADE TO AN BORD PLEANÁLA

ARRAN WINDFARM LTD.

User is Responsible for Checking the Revision Status of this Document

Rev. No.	Description of Changes	Prepared by	Checked by	Approved by	Date
0	Issue to Client	CO'D/MG	COD	COD	09.03.2015

Client: Arran Windfarm Ltd.

Keywords: Barnadivane, 110 kV, substation, planning, appeal

Abstract: Cork County Council issued a Notification of a Decision to Grant Permission to Arran Windfarm Ltd. (CCC planning ref 14/557) in connection with the development of a proposed 110 kV substation at Barnadivane, near Terelton, Co. Cork. This decision by Cork County Council has been appealed to An Bord Pleanála by third parties. This document comprises the applicant's response to the third party appeal against this decision, being made to An Bord Pleanála.

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LIST OF APPENDICES

1 INTRODUCTION

On 26 September 2014, Arran Windfarm Ltd. submitted a planning application (planning ref 14/557) to Cork County Council for the development of a 110 kV substation at Barnadivane (Kneeves), Terelton, Co. Cork. This application was to replace a previously permitted 110 kV substation granted planning under An Bord Pleanála reference PL04.219620 (Cork Co. Co. reference 05/5907). A 10 year planning permission was sought for a development which consisted of:

The construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works.

The proposed substation development is intended to replace that already permitted. As we will demonstrate comprehensively herein, the change in substation layout is necessitated by current Eirgrid requirements. Further, given these requirements, the substation footprint has increased substantially, which means the permitted substation location is no longer suitable. The applicant therefore, was required to consider a change of location, footprint and layout design, in order to accommodate the Eirgrid requirements.

Given that the proposed development comprises a 110 kV substation, the applicant engaged in pre-application consultations with An Bord Pleanála in 2014 (ref PL01.VC0074), as required under the Planning and Development Act, as amended. During this consultation process, the applicant outlined the key aspects of this proposed development to the Board. This specifically dealt with the need for the revised substation and the reasons for re-location. Following consideration of the issues, An Bord Pleanála determined that the development did not constitute Strategic Infrastructure Development, under the Act, and directed the applicant that the planning application should instead be made to Cork County Council.

The applicant also engaged in pre-application consultation with Cork County Council and other relevant stakeholders, in order to inform and scope the environmental assessment for the proposed development.

An EIA Screening Report was prepared and submitted to Cork County Council in advance of the planning application (see Appendix 1 herein). This EIA Screening Report assessed the proposed development in terms of the relevant environmental and planning legislation and concluded that an EIS was not required for the development. Cork County Council also carried out its own EIA screening report and is included on file as "Senior Planners - EIA Screening" dated 6th November 2014). A copy of this report is included as Appendix 2. Cork County Council concludes in this report that *"an EIA is not necessary in this case and the proposal is sub-threshold"*.

An Environmental Report and an Appropriate Assessment Screening Report were prepared, assessing the potential impacts of the proposed development on the surrounding environment and Natura 2000 sites respectively. These reports also assessed the potential cumulative impacts of the proposed development with the permitted wind farm and other relevant developments in the area, including the adjacent operational Garranereagh Wind Farm. The Environmental Report and the Appropriate Assessment Screening Report accompanied the planning application to Cork County Council.

On 13 January 2015, Cork County Council issued a Notification of a Decision to Grant Permission for the proposed development, subject to conditions, stating that:

Having regard to the development plan objectives for the area and the pattern of development in this rural area, it is considered that subject to compliance with conditions attached in the Second Schedule, the proposed development would not seriously injure the amenities of the area and would not be prejudicial to public health and, therefore, would be in accordance with the proper planning and sustainable development of the area.

Following the decision by Cork County Council to grant permission, a third party appeal was lodged with An Bord Pleanála by Noonan Linehan Carroll Coffey, Solicitors, on behalf of the following appellants:

- Stephanie Larkin of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Michael O'Donovan of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Denis Buckley of Moneygaff East, Castletown, Enniskeane, Co. Cork
- Noelle Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Pat Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork

- Nora Sheehan of Moneygave, Coppeen, Enniskeane, Co. Cork
- Aisling Connolly of Moneygaff East, Enniskeane, Co. Cork
- Gerard Connolly of Moneygaff East, Enniskeane, Co. Cork
- Dan Galvin of Gurranreigh, Lissarda, Co. Cork
- Patrick Manning of Barnadivane, Terelton, Macroom, Co. Cork
- Sabrina Hurley of Moneygaff East, Enniskeane, Co. Cork

The third party appeal is made in relation to several grounds the majority of which were raised in the various third party submissions that were submitted to the Planning Authority during its processing of the application. While it is considered that the issues raised have been dealt with in a comprehensive manner by the Planning Authority in its assessment of the application the issues raised by the appellants are discussed further in section 3 of this response document.

2 BACKGROUND TO THE PROPOSED DEVELOPMENT

The aim of this section is to provide the Board with a summary of the main elements of the proposed project.

2.1 Policy and Legislative Context

The proposed substation is considered to be in accordance with European, national and local policy and legislation as set out below. This was detailed in the Environmental Report which accompanied the planning application.

At EU level, the EU Directive on the Promotion of the Use of Energy from Renewable Sources (2009/28/EC)[1] sets a target of 20% of EU energy consumption from renewable sources by 2020 and a 20% cut in greenhouse gas emissions by 2020, the so-called 20:20:20 plan. As part of this Directive, Ireland's overall national target for the share of energy from renewable sources in gross final consumption of energy in 2020 is 16% (increased from 3.1% in 2005)[2]. Ireland has set its own target in this respect, which is 40% of all electricity to come from renewable sources by 2020.

At national level, the National Spatial Strategy for Ireland (NSS) 2002-2020 states on page 36 that (emphasis added);

> *'National and international evidence also demonstrates that rural areas have a vital contribution to make to the achievement of balanced regional development. This involves utilising and developing the economic resources of rural areas, particularly in agriculture and food, marine, tourism, forestry,* ***renewable energy****, enterprise and local services, while at the same time capitalising on and drawing strength from vibrant neighbouring urban areas. In this way rural and urban areas are seen as working in partnership, rather than competing with each other. This urban — rural partnership model is in line with the approach taken in the European Spatial Development Perspective (ESDP).'*

The White Paper 'Delivering a Sustainable Energy Future for Ireland'[3] sets out the Government's Energy Policy Framework 2007 - 2020 to deliver a sustainable energy future for Ireland. It is set firmly in the global and European context which has put energy security and climate change among the most urgent international challenges. A number of key issues relating to renewable energy include the government's commitment to delivering a significant growth in renewable energy. The renewable target was increased to 40% of the electricity consumed in 2020 by the Minister for the Environment, Heritage and Local Government in his Second Carbon Budget in October 2008. It is estimated that wind energy will provide up to 90% of the energy required to meet this target.

The "All Island Grid Study" (2008), undertaken by the Department of Communications, Energy and Natural Resources, and the Northern Ireland Department of Enterprise, Trade and Investment, concluded that it was feasible to increase the share of electricity generated from renewable sources to 42% of total demand without incurring excess societal costs. The study concluded that the capacity of renewable plant required to deliver this contribution could include up to 6,000 MW of wind, 360 MW of base renewables such as biomass or biogas, and 285 MW of other variable renewables such as wave or tidal energy. Irish government targets are based on the results of this study.

According to the Irish Wind Energy Association the Republic of Ireland's total installed wind energy capacity is over 2,650 MW generated from over 211 wind energy developments in 26 counties[4]. Other renewable energy developments have grid connection offers and are expected to be constructed within the next two to five years, including Barnadivane Wind Farm. The proposed substation is required to facilitate the connection of Barnadivane Wind Farm to the national grid.

The second National Climate Change Strategy, published in 2007, provides a framework for action to reduce Ireland's greenhouse gas emissions to comply with the target, set by the EU, to reduce greenhouse gas emissions by 20% on 1990 levels by 2020. The strategy states that *"Electricity generation from renewable sources provides the most effective way of reducing the contribution of power generation to Ireland's greenhouse gas emissions. The Government has therefore established ambitious national targets for the contribution of renewables to power generation; 15% of electricity consumed will be from renewable sources by 2010 and 33% by 2020. These are above and beyond existing EU targets."*

Directive 2009/28/EC requires each Member State to adopt a national renewable energy action plan and submit this to the European Commission. These plans are to set out Member States' national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020, taking into account the effects of other policy measures relating to energy efficiency on final consumption of energy.

The National Renewable Energy Action Plan (NREAP)[5] sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.

The development of renewable energy is central to overall energy policy in Ireland. Renewable energy reduces dependence on fossil fuels, improves security of supply, and reduces greenhouse gas emissions creating environmental benefits while delivering green jobs to the economy, thus contributing to national competitiveness. The NREAP was submitted to the European Commission in July 2010.

The Strategy for Renewable Energy was published by the Department of Communications, Energy and Natural Resources in May 2012. The Strategy acknowledges that the Government is confident that Ireland has the capability to achieve its 2020 target for renewable electricity, primarily through onshore wind power. With relevance to Barnadivane Wind Farm (and its associated wind farm), the Strategy highlights the economic benefits the development of projects of this nature may have for the Irish economy.

> *"Further strategic deployment of onshore wind projects will develop a base of indigenous and foreign companies and create employment in the short-term in wind farm construction, possible turbine component manufacturing and servicing, the opportunity to capture international supply chain opportunities and the manufacture of niche onshore renewable energy generating equipment."*

A key action of the Strategy is to *"Support delivery of the 40% target for renewable electricity through the existing GATE processes."*

The Green Paper on Energy Policy in Ireland (May 2014) states as its purpose *'to provide the regulatory and financial framework to deliver a national energy system that enables a sustainable quality of life.'*[6]

At a more local level then, the Regional Planning Guidelines for the South West Region were first adopted in 2004. It is acknowledged in the guidelines that *"The south west has considerable potential for the generation of electricity from sustainable renewable resources such as wind and wave."* Among the objectives (RTS-09) for the South West Region relating to Energy and Renewable Energy is the following:

- *It is an objective to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the network.* ***National grid expansion is important in terms of ensuring adequacy of regional connectivity as well as facilitating the development and connectivity of sustainable renewable energy resources.***

When this application was lodged the site of the proposed development was located in an area designated as a "Strategic Search Area" on Figure 6.3 of the then County Development Plan. Since the decision issued the new Cork County Development Plan 2015 has come into effect (adopted on 8th December 2014 and therefore effective from the 15th of January 2015). Under the provisions of the current County Development plan the site is located in an area that has been designated as "Acceptable in Principle" for large scale commercial wind energy developments (Chapter 9 and Figure 9.3 of the Cork County Development Plan 2014 refers). Areas designated as "Acceptable in Principle" are described as being "*optimal locations for wind farm development without significant environmental impacts*" (Section 9.3.13 of the County Development Plan refers).

The proposed substation development is ideally located within the footprint of a permitted wind farm and in close proximity to an existing 110kV overhead transmission line which allows the energy generated at the wind farm to connect directly to the national grid, avoiding the need for additional overhead cables and minimising electrical losses.

In summary therefore, by virtue of the existing permission, the principle of this type of development has already been established in the vicinity. The substation is required to facilitate the connection of electrical energy generated at Barnadivane Wind Farm to the national grid.

It is considered that the proposed development is in keeping with relevant plans and policies for the region in terms of strategic search/acceptable in principle areas, the provision of renewable energy infrastructure and contribution to renewable energy targets.

2.2 Site Selection

The purpose of the proposed substation is to replace that previously permitted under An Bord Pleanála reference PL04.219620 (Cork Co. Co. reference 05/5907). The substation is required to connect the Barnadivane Wind Farm (either that permitted under the same planning reference as above, or the amended proposal currently in the planning process, reference 14/06760) to the national grid. As such, proximity to the wind farm and to the grid connection point (existing 110 kV overhead line in the vicinity of the wind farm) is the key factor in site selection.

With this in mind, when surveying for a suitable site location within the wind farm study boundary and underneath the existing 110 kV overhead line, the primary drivers were selecting a site with the least environmental impacts and obtaining landowner agreement.

A review of the entire area within the permitted wind farm site boundary was carried out to identify the most suitable location in terms of technical, planning and environmental requirements. The following key criteria were considered when selecting the location for the proposed substation:

Capacity for accommodating future expansion:
The substation will form part of the national grid network and Eirgrid plc will take operational control of the majority of it. One of Eirgrid's requirements for new substations is to ensure that there is a sufficient area for expansions or change of plant if such works were required at a future date.

Siting of the substation to be in proximity to the permitted wind farm
The substation has to be located in proximity to the permitted wind farm as it is being proposed to connect the wind farm to the grid. The site selection process for the substation has been fully informed through reviewing the EIS and EIA that was carried out under the previous wind farm application. The EIS study area comprised an area of approximately 355ha in the vicinity and the sensitivity of the receiving environment within the study was characterised at the time. The outcomes of this study and the various assessments allowed the environmentally sensitive areas within proximity to the permitted wind farm to be avoided.

Proximity to transmission system:
The substation site needs to be capable of connecting directly to the existing 110kV overhead cable traversing the site, and therefore needs to be along the line of the cable.

Visual screening:
The substation should not be excessively dominant or visually obtrusive in the landscape and should be sited and designed accordingly.

Land Owner Consent:
The permitted wind farm and surrounding lands are situated on private lands. Land owner consent is required for the proposed development.

The proposed substation location was considered the most favourable from a technical, planning and environmental perspective considering all the relevant criteria.

Following the selection of the site, the preliminary layout was subsequently confirmed following site visits, the initial investigation of ground conditions and additional constraints identified through the environmental assessment. The proposed construction methods were also informed by the environmental assessment such that potential impacts were reduced.

In terms of the substation layout, and as outlined in the applicants response to the request for further information issued by Cork County Council, the original planning application for the 14 turbine wind farm, made in 2005, was based on a 2003 preliminary design for the 110 kV substation. At the time, the Transmission System Operator (TSO) was ESB.

However, in the interim, the role of TSO has passed to Eirgrid plc and the design requirements for 110 kV substations have substantially changed and have been standardised. Furthermore Eirgrid insist that space for future expansion of the substation must be accommodated.

The updated planning application seeks to address the required changes in layout, the potential requirement for future expansion, the increased building size and increased overall substation footprint. These amendments are required in order for EirGrid to assume operational control of the majority of the substation. A figure showing the constraints associated with the location of the substation (as included in the response to the request for further information from Cork County Council) is included in Appendix 3 for illustrative purpose s.

The final layout was confirmed following a review of the interaction of all elements that were assessed during the environmental assessment. The proposed layout is presented on the planning drawings accompanying this application.

2.3 Description of Existing Site

The proposed substation is located in the townland of Barnadivane (Kneeves), approximately 3.4 km northeast of Coppeen and 10 km south of Macroom. The nearest village is Terelton, approximately 3.4 km to the north.

As previously outlined, the substation is situated within the planning boundary of a currently permitted wind farm, granted by both the Planning Authority and An Bord Pleanála under planning reference numbers 05/5907 and PL 04.219620 respectively. An extension of duration was subsequently granted by Cork County Council under 11/6605.

The overall permitted development included 14 turbines with a maximum tip height of 105 m, a meteorological mast, a 110 kV substation and switching station and all associated access roads, handstands, drainage, cabling and ancillary infrastructure.

The proposed substation development covers an area of approximately 2.95 ha, within the overall study boundary of the permitted wind farm which covers an area of 355 ha.

There is a good network of local roads accessing the site. The nearest national route, the N22, is the main arterial route for traffic commuting between Cork and Killarney and is located approximately 5 km to the north at its closest. The nearest regional route, the R585 between Cork and Bantry, passes 1 km to the south of the site. The R585 connects to the N22 at Crookstown, 5 km to the east of the site.

The proposed substation is located on a south-facing plateau within the Bride River valley approximately 500m south west of the permitted substation. The proposed substation site ranges in elevation from 250 m on the southern boundary to 260 m along the northern boundary. The land to the south slopes downwards towards the River Bride and low-lying rolling farmland. To the north, outside the substation site boundary, the land slopes to the River Lee, which lies at approximately 70 m OD. The land to the east of the study area drops to below 200 m OD, with hills separated by river valleys. To the west of the site there is a series of hills with peaks in the region of 220 m OD to 240 m OD.

The proposed site is currently used for agricultural grazing. The field boundaries are defined both by the hedgerows and by sod and stone banks. There are a number of occupied dwellings within 1km of the site, with the closest (stakeholder) being over 250m from the proposed substation and the closed third party (non-stakeholder) being at a distance of c.440 m. The site is privately owned by a contributory landowner to the Barnadivane Wind Farm and is currently utilised for agriculture. There are no hospitals, schools, hotels or guesthouses within 1 km of the site. There are no recreational activities associated with this site. The nearest watercourse is a tributary of the River Bride over 500m west of the site.

The landform reflects the underlying geology of the region which is dominated by east-west anticlines and synclines. The anticlines form the hills with sandstone dominated bedrock and the synclines form the main river valleys (Lee, Bride and Bandon Rivers) which are underlain by limestone.

The proposed site does not lie within any Natura 2000 sites. There are three Natura 2000 sites (two cSACs[1] and one SPA) within a 10 km radius. The Gearagh cSAC (site code 000108) and the Gearagh SPA (004109) lie over 6.5 km to the north. The Bandon River cSAC (002171) lies over 9.5 km southwest of the proposed development site.

No recorded monuments occur within close proximity to the proposed sub-station site and only 2 monuments occur within 1km, the nearest being a ringfort (CO095-003) situated over 770m from the proposed substation.

Existing land use in the area surrounding the site is predominately agricultural. There is an existing wind farm, namely Garranereagh Wind Farm, with 4 operational turbines adjacent to the site. The nearest turbine is approximately 1 km from the proposed substation. This development, along with any other planned or permitted wind farms in the vicinity, were considered in the environmental assessment to evaluate any cumulative impacts that may arise.

2.4 Proposed Development and Key Aspects of Site Design

As outlined, the proposed substation will replace an already permitted 110kV substation and switch station within the boundary of the permitted wind farm.

The 110 kV substation compound will cover an area of approximately 108 m x 86 m on plan including a buffer area to the perimeter. There will be three single storey control buildings on the site. The control buildings will be of standard masonry construction, rendered externally with a pitched roof. Finishes will be in keeping with the surrounding buildings. The maximum floor area of each building will be 185m^2 and the maximum height of the buildings will be approximately 6.2 m above finished ground level. The control buildings and electrical equipment will be enclosed by a 2.4m high steel palisade fence painted green perimeter fence encompassing an area of approximately 76m x 97m. The substation compound will be connected to the public road via a short access track approximately 200m long.

The compound will contain assorted electrical equipment including transformers, switch gear including circuit breakers, metering transformers, busbars, post insulators, lightning protection masts, line gantries, etc., all in accordance with Eirgrid requirements.

Two steel lattice mast structures will be located approximately 10 m from the edge of the 110 kV compound and directly underneath the line of the existing 110 kV overhead line. They will have a maximum height of approximately 18 m.

Construction material for the fill and hardstanding areas at the substation and for the access track to the substation will be sourced from local quarries. It is likely that the total stone fill requirement will be in the order of 5,625 m^3. However, much of this fill material will likely be sourced on site, as there is a surplus of cut material available, from the excavations for the compound and road.

The proposed drainage comprises swales and settlement ponds at the location of the proposed substation. Access track drainage will consist of swales with silt traps and diffuse discharge overland or to soakpits as required.

In terms of landscaping, it is intended to plant native hedgerow species along the public road at either side of the site entrance, as well as along the southern site boundary, as shown on the drawing. This planting will be undertaken on completion of the development, within 1 year of the completion of construction. A maintenance plan will be put in place to ensure any plants that do not thrive will be replaced during the next planting season. A detailed landscaping plan was submitted to Cork County Council in response to its request for further information, a copy of which is included for ease of reference, in Appendix 4.

Although not permanently staffed, maintenance personnel will visit the substation on average three to four times a week. Any general office waste will be regularly disposed of to a licensed facility.

[1]At present all SACs in Ireland are currently 'candidate' SACs, and referred to as cSACs. The relevant Statutory Instruments for the SACs in Ireland have not yet been put in place, though these sites must still be afforded protection in accordance with the EU Habitats Directive (92/43/EEC).

An Bord Pleanála Pre-Application Consultation

Prior to making any planning application, it was necessary to determine the appropriate planning route for this proposed development.

Hence, the Developer commenced pre-application consultations with An Bord Pleanála in April 2014, in order to seek a determination as to whether the substation project was adjudged to be Strategic Infrastructure Development (SID) within the meaning of Section 182A of the Planning and Development Act, 2000, as amended.

Under Section 182(A) of the Planning and Development Act, as amended, as inserted by Section 4 of the Planning and Development (Strategic Infrastructure) Act 2006 where an undertaker:

> "*...intends to carry out development comprising or for the purposes of electricity transmission the undertaker shall prepare, or cause to be prepared, an application for approval of development under section 182B and shall apply to the Board for such approval accordingly*".

Subsection 9 of 182A states that:

In this section 'transmission', in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 but, for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of—

> *(a) a high voltage line where the voltage would be 110 kilovolts or more, or*
> *(b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not.*

In section 2(1) of the Electricity Regulation Act, 1999, "transmission" is defined in relation to electricity as meaning *"the transport of electricity by means of a transmission system, that is to say a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board."*

Subsection 9 of 182A sets a threshold of 110 kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. However, no specific threshold is set in respect of a substation.

Therefore, a letter, seeking a determination from the Board in this regard, was submitted in April 2014 (see copy included in Appendix 5). Following a meeting with ABP in August 2014, the Board determined that the development was not considered SID and the application should be made directly to Cork County Council.

A pre-planning meeting was also held with Cork County Council on 16 July 2014 to discuss the project. At this meeting, the background to the project was provided by the applicant, together with a description of the proposed development.

The requirement for the Environmental Impact Assessment of various types of developments is transposed into Irish Legislation under the *Planning and Development Acts 2000 – 2014* and the *Planning and Development Regulations 2001 – 2013.* EIS is compulsory for projects falling within classes of development prescribed by article 93 of, and Schedule 5 to, the *Planning and Development Regulations 2001 – 2013*. When a development does not fall within a class or is below the thresholds (sub-threshold) of Schedule 5, an EIS is may still be required if the development is associated with *'significant effects on the environment'* (ref, Articles 103 the Planning and Development Regulations).

Screening is the first stage in the EIA process, whereby a decision is made on whether or not EIA is required. A Screening Assessment would generally have regard to the following legislation and guidance:

- *Planning and Development Acts 2001 - 2014*
- *Planning and Development Regulations 2001 - 2013*
- *Guidance on EIA, Screening, European Commission, 2001*

- *EIA, Guidance for Consent Authorities regarding Sub-threshold Development, DoEHLG, 2003*
- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009.*

An EIA Screening Report was prepared by the applicant and submitted to Cork County Council (see Appendix 1), which concluded that an EIA was not required for this project, as outlined in Section 1.

To accompany the planning application, an environmental report was prepared, which assessed the potential impacts of the proposed development on the surrounding environment. Where any potential impacts were highlighted, measures were taken by design or through the recommendation of mitigation measures to eliminate or reduce to acceptable levels any remaining potential impacts.

The preparation of the Environmental Report broadly followed standard environmental impact assessment methodology in accordance with best practice EIA guidelines:

- *Guidelines on the Information to be contained in Environmental Impact Statements*, (EPA, 2002)
- *Advice notes on Current Practice (in the preparation of Environmental Impact Statements)* (EPA, 2003)

The Environmental Report concluded that, based on the positive energy and climate impacts that will be facilitated by the proposed development and the slight visual, soils, ecology and water quality impacts, it is considered that the proposed site is a suitable site for the proposed development.

An AA Screening Report was prepared in full accordance with the requirements of the relevant legislation. This AA screening assessment looked at potential impacts of the proposed development on Natura 2000 sites within 10 km of the proposed development and looked at direct, indirect and cumulative impacts. It concluded that the proposed development would not have adverse impacts on the integrity of these sites, as a result of the proposed development.

In the intervening period since the submission of the application for the substation, Barna Wind Energy (B.W.E.) Ltd. has also lodged a separate application for a wind farm at the site (reference 14/06760), to replace the permitted wind farm, should the planning authority grant permission. The proposed development consists of 6 no. wind turbines with a tip height of up to 131m, associated foundations and hardstanding areas, access tracks and drainage, a borrow pit, underground cabling and communications cables, a permanent met mast, a new access junction and improvements to the public road, permanent signage and associated site works.

It should be noted that these two applications are by two separate applicants, Barna Wind Energy (B.W.E.) Ltd. (wind farm) and Arran Windfarm Ltd. (substation) albeit that Arran Windfarm Ltd. acknowledges that both companies form part of a larger group of companies owned by Enerco Energy Ltd.). The applicant also acknowledges that since making this application both companies are now under common control.

A third application by Barna Wind Energy (B.W.E.) Ltd. has also been lodged with Cork County Council. This application (reference 14/06803), for the construction of a private roadway, approximately 150 m long, from the R585 to the L6008 and all associated works, is to facilitate the delivery of abnormal loads to the proposed Barnadivane Wind Farm (subject of application reference 14/06760).

The two applications by Barna Wind Energy (B.W.E.) Ltd are linked, in that the private roadway and associated works are to facilitate delivery of the turbines to the proposed wind farm. Prior to the application being lodged the applicant consulted with Cork County Council in relation to the works to facilitate delivery of abnormal loads to the wind farm. Cork County Council advised that it is not acceptable to have more than one red line boundary for one application. This necessitated a separate application for these works as it was not practical to link both areas with one red outline (see correspondence from Cork County Council in this regard in Appendix 6).

The EIS for the wind farm planning application (planning reference 14/06760) includes in its assessment the potential cumulative impacts of the wind farm, the proposed turbine delivery route realignment, the proposed substation and any other relevant developments in the area (including the adjacent operational Garranereagh Wind Farm). This ensures that the overall impact of the various developments, both permitted and proposed in the vicinity of this site, is fully considered.

It should also be noted that no further phases or expansion at or adjacent to the Barnadivane site are planned as a constraints assessment indicates that there is no suitable or further viable area for wind farm development in this location.

Further, if any further wind farm or other electricity generating facility proposes to connect to the proposed substation its connection will form part of the assessment & consent process for that facility regardless by whom it is proposed.

3 RESPONSE TO GROUNDS OF THIRD PARTY APPEAL

3.1 General

The appellants have submitted an appeal on various grounds, as set out in the appeal documentation. The key issues raised include:

- Substation Size
- Location of Substation
- Function of the proposed substation
- Visual Assessment
- Control building
- Construction
- Duration of permission
- EIS
- Concurrent Applications
- Habitats Directive/Ecology

The applicant has addressed each of the grounds of appeal herein under a number of key headings. Where relevant, for ease of reference, the text of the appeal is provided in italic text, with the appellants response provided thereafter.

3.2 Substation

The appellants have queried the justification for the substation size in their appeal. The key points raised relate to the need for an increased size and whether or not this means that multiple future wind farm connections will be made to the substation. The appellants also query the need for the change in location of the substation. Our response to these aspects of the appeal are provided below.

Substation Size

As outlined in the applicants response to Cork County Councils Request for Further Information (RFI), in a letter, dated 05 December 2014 (copy of relevant aspects of the RFI response are provided in Appendix 7), the original planning application for the 14 turbine wind farm, made in 2005, was based on a 2003 preliminary design for the 110 kV substation.

At the time, the Transmission System Operator (TSO) was ESB and at that time, the substation layout may have been acceptable to this body. However, in the interim, the role of TSO has passed to Eirgrid plc and the design requirements for 110 kV substations have substantially changed. This is confirmed in a letter from Wind Prospect Ltd. (see enclosed in Appendix 7), who are acting for the applicant in this regard.

The current Air Insulated Switchgear (AIS) 110kV substation required layout from EirGrid is appended to the Wind Prospect correspondence. This layout has evolved from EirGrid's primary 2011 changes as identified in Arran Windfarm Ltd.'s planning submission.

The Wind Prospect letter also states '*As can be seen in the EirGrid drawings the requirements now include that the substation be suitable in its electrical plant layout and overall footprint size to allow for potential future expansion (this is identified in red in the EirGrid drawings). We also note the differences in building sizes and electrical plant configuration. EirGrid will operate the majority of the substation when the construction is completed; however they will not take control of a substation that does not fulfil their current or at the least a very recent specification*'.

This is the key reason behind the increase in footprint for the 110 kV substation, as stated both in the planning application and in the applicant's response to the RFI from Cork County Council.

The updated planning application seeks to address the required changes in layout, the potential requirement for future expansion, the increased building size and increased overall substation footprint. These amendments are required in order for EirGrid to assume operational control of the majority of the substation. Eirgrid will not connect the wind farm if the substation is not compliant with its operational requirements.

Substation Location

In relation to the change in location of the substation, this was also dealt with in the planning application and again, in further detail in the response to the RFI from Cork County Council. For the applicant's response to the RFI, a drawing was prepared, (LE14-702-02_Figure 1_Layout_SubStationConstraints - See Appendix 3 herein for a copy) showing the constraints associated with the location of the substation as currently permitted. It is clear that the new proposed substation (as required by Eirgrid) is substantially bigger than the original permitted substation.

The permitted location is constrained, as you can see from this figure, in a number of ways. Firstly, there is very little room between the road and the overhead line, as is demonstrated by the drawing. If the proposed substation was to be located in the permitted location, then the existing overhead line (110 kV) would need to be diverted around the substation compound. If this is diverted to the west, it brings it closer to the permitted turbines, and diverting to the east, will require it to be diverted to the other side of the road. Any relocation of this overhead line would require consent from Eirgrid plc, the landowners and the requisite planning consent.

The proposed substation, given its larger footprint, would also require the removal of significant lengths of hedgerow, to the north of the permitted site, with the attendant impacts on local ecology. Further, additional land agreements would be required, to facilitate expansion to the north.

Should the proposed substation be provided at the previously approved location it would be in closer proximity to dwellings (approximately within 200 metres).

It was for these reasons that the applicant made the decision to move the substation from the permitted location, to the proposed location, which is not constrained in such a way. It was considered that the impact of moving the substation to the proposed location would result in considerably less impact on the local environment, than attempting to design suitable mitigation for the constraints identified at the permitted site, given the change in substation footprint.

Function of the Proposed Substation

The appellant's contend that the key intention in respect of this new application for the substation is to facilitate the connection of multiple other wind farms to the national grid. This is not the case, certainly from the applicant's perspective. For clarity, the substation, is being developed as 'contestable works', with the asset being transferred to Eirgrid once complete. The applicant therefore will have no control over what future connections are made to this substation, while it is acknowledged that Eirgrid have a standing (and reasonable) corporate requirement for new substations to be capable of expansion in the event of changing technology and future national grid requirements, should these become necessary.

An application for permission to develop a 6 turbine wind farm, in place of the permitted 14 turbine wind farm (planning reference 14/06760) is currently with Cork County Council for decision. Should planning be granted for this development, it will replace the 14 turbine wind farm currently permitted. If planning is not granted, the applicant intends to develop the permitted 14 turbine wind farm. The substation will therefore connect either the 14 turbine permitted wind farm or its proposed replacement 6 turbine wind farm, if permitted.

The applicant is clear that it has no plans for further phases of wind energy development, in the immediate area surrounding this proposed Barnadivane Wind Farm.

The applicant is also clear and has included in the planning documentation that the substation will replace that permitted under planning reference 05/5907 and PL 04.219620 with an extension of duration granted under 11/6605. See copy of newspaper notice, included in Appendix 8 herein, for the description of the proposed development, which is clear on this issue.

Visual Assessment

A detailed landscape and visual impact assessment was carried out by MosArt, as part of the Environmental Report, which accompanied the planning application for this proposed development. As detailed therein, the proposal site is located in a landscape of rolling pastoral farmland where a network of relatively modest sized fields defined by broadleaf hedgerows and coniferous tree lines meets a more extensive field pattern of rough grazing and semi-natural grassland. The latter occurs immediately to the west of the site and has a more open character than the landscape to the east due to the low scrubby hedgerows that prevail. The site is located near the top of a south facing slope that overlooks the headwaters of the River Bride.

The proposed substation site is within a landscape type defined as *Fissured Fertile Middle Ground* in the County Development Plan known as Type 10(a) as shown in Map 14 of the Landscape maps in Volume 3 of the Cork County Development Plan 2009 - 2015.

The draft strategy states that landscape Type 10(a) – Fissured Fertile Middle Ground has a landscape value of **"low",** a landscape sensitivity of **"low"** and a landscape importance of **"local"**. The nearest designated scenic route is located on a third class road near the village of Terelton, with the nearest point being approximately 1.75 km northwest of the proposed substation.

As the proposed substation is most exposed to uphill views from the south and southeast, it is proposed that the perimeter of the site (where slope and land availability allows) will, where possible, be planted with semi-mature native trees to provide year round screening of the substation infrastructure. This type of planting is a familiar feature in this landscape, particularly surrounding the fields a short distance to the east of the site. A detailed landscaping plan was submitted as part of the response to the request for further information from Cork County Council (copy attached in Appendix 4 for ease of reference).

From a visual impact perspective the proposed substation is uphill from the nearest residential receptors who enjoy a higher degree of amenity from the southward views over the valley in the opposite direction. Indeed several of these dwellings utilise shelter vegetation to their uphill sides, which will screen views of the substation. The substation will draw the eye of viewers in the immediate vicinity and as a cluttered industrial form of development it will detract from the amenity of the broad rural views. However, it represents a minor intrusion on such views and not a visual obstruction. It will also blend into the visual context to a greater degree as any mitigation planting which can be planted, matures.

For people travelling along the R585 nearer the base of the valley, the proposed substation will intrude on pleasant uphill views. However, it will be a small scale feature in such views, particularly in the context of the existing Garranereagh and permitted Barnadivane wind turbines, which also make it a less incongruous feature in the landscape. The substation is likely to be difficult to discern once mitigation planting matures.

Indeed the Planners Report on file for this application states that *"the site is not visible from the nearest scenic route which is located towards the settlement of Terelton to the north of the proposed development".*

The visual assessment included in the Environmental Report concluded that, overall, it is considered that the proposed substation at Barnidivane will not give rise to significant landscape and visual effects. Instead the effects will be slight and localised in nature.

Control Building

As outlined above, the applicant is required to construct the substation to the Eirgrid requirements and not its own design, so any aspects of the design are outside of its control. In relation to the operation of the facility, these types of facility are in place throughout the country and are, as described in the planning documentation, generally unmanned. Regardless of the duration of use by the operatives adequate welfare facilities must be in place and are included in the planning application.

The applicant has clarified above, that it has no control over the potential future use of this substation by Eirgrid and therefore cannot comment in this regard, over and above what is included herein, save to clarify that it does not intend any further phases of wind energy development in the immediate vicinity of this site.

Construction

The planning drawings which accompanied the planning application for this development show the proposed detail regarding the civil engineering design of the substation compound. Construction material for the fill and hardstanding areas at the substation and for the access track to the substation will be sourced from local quarries . It is likely that the total stone fill requirement will be in the order of 5,625 m^3. However, much of this fill material will likely be sourced on site, as there is a surplus of cut material available, from the excavations for the compound and road.

As detailed in the Environmental Report prepared for the planning application, there is a good network of local roads accessing the site. The nearest national route, the N22, is the main arterial route for traffic commuting between Cork and Killarney and is located approximately 5 km to the north at its closest. The nearest regional route, the R585 between Cork and Bantry, passes 1 km to the south of the site. The R585 connects to the N22 at Crookstown, 5 km to the east of the site.

Access to the site will be provided from the R585, along a local road north to Garranereagh, which then turns west and south, to the proposed site entrance at Barnadivane. A new access road will provide access from the public road, to the substation site.

Public perception of the construction phase will be influenced primarily from the impact of traffic movements. The degree of traffic disturbance caused by the construction phase will depend on the civil engineering requirements for the proposed development, the electrical equipment to be delivered to the substation site and the length of the construction period.

Construction traffic will require regular access to the site at varying times throughout the construction phase. Procedures will be put in place to manage traffic effectively on site and in the immediate vicinity of the proposed substation to ensure the continued movement of traffic on the public roads and to minimise disturbance during transportation of materials, particularly oversize loads.

Prior to the commencement of construction, a construction traffic management plan will be prepared by the main contractor, in liaison with all relevant stakeholders. This document will be updated as necessary throughout the project .

The hours of construction activity will be limited to avoid unsociable hours as per Section 8.5 (d) of the code of practice for BS 5228: Part 1: 1997. Construction operations will generally be restricted to between 08:00 hours and 19:00 hours Monday to Saturday. Work on Sundays or public holidays will only be conducted in exceptional circumstances or in an emergency. Additional emergency works may also be required outside of normal working hours as quoted above.

The main impact on traffic and transportation will be during the construction phase of the project, which will be of short duration. Even when the cumulative impact of parallel construction of the consented Barnadivane wind farm is assessed, the overall impact will not be significant.

3.3 Duration of Permission

The appellant queries the need for a ten year permission in place of a 5 year permission in the case of the proposed development. The applicant's response to this ground of appeal is provided below.

Durationof Permission

A ten year permission is sought to enable the developer adequate time to complete the proposed development. Cork County Council sought clarification on this issue in its RFI to the applicant. A response from the applicant was provided in this regard (see Appendix 7 for relevant extracts).

The response to the RFI stated that, while the proposed development represents an application for a substation, the proposed substation will form a critical piece of infrastructure associated with the wind farm development.

The consented development comprises 14 turbines permitted under PL04.219620 (05/5907) and subsequently extended under 11/6605.

At the applicants pre-application consultation meeting with Cork County Council, the applicant discussed its intention to seek a separate consent for a wind farm, replacing that consented under the planning references above. The applicant confirms that this application (for a revised 6 turbine wind farm) has been lodged with Cork County Council and is currently within the planning process. The planning reference for this application is 14/06760.

The proposed substation will facilitate the connection of the wind farm (either that permitted or the proposed replacement) to the national grid. For clarity, the EIS for the proposed wind farm (reference 14/06760) includes an assessment of the cumulative impact of the wind farm in combination with the proposed substation.

The substation will therefore be delivered, programmed, constructed and financed as part of the development of the overall wind farm project. Accordingly it is essential that the permission lifespan of the proposed substation is consistent with that of the permitted (and proposed) wind farm. Circular Letter PD 3/08, (Department of the Environment Heritage and Local Government), a copy of which is enclosed in Appendix 9, highlights the complex connection between wind farm project delivery and grid connection. It reiterates and reinforces the Department's Wind Energy Guidelines which recommend that where appropriate planning authorities should consider granting permission for a duration longer than 5 years. The circular concludes that *"This provision could be a means of providing the necessary flexibility, in respect of new developments, and having regard to the nature and extent of the relevant development, to allow for proper sequencing of permissions and grid connections".*

The 10 year permission period is sought to allow adequate time for the developer to fully complete and commission the works. A preliminary programme has been identified at this stage, which is obviously subject to change as the project progresses, but which includes the following:

- Planning compliance requirements (estimated 6 month programme)
- Financing of the project (estimated 12 month programme)
- Tendering of the works (estimated 16 month programme)
- Construction of the works (18 month programme)
- Commissioning of the works (6 month programme)

There is the potential for substantial delays in all stages of a wind farm project, should any issues arise in relation to any of these elements. In particular, accessing finance for the wind farm can be a particularly lengthy process, which can incur significant delay to the overall programme. Ample time has to remain on a planning permission to give financial institutions comfort that delays don't render the planning permission void.

The developer has thus sought to align the permission for the proposed wind farm and the substation, to allow adequate time to ensure that each can be completed, within the permission period.

3.4 Environmental Impact Statement

The aspects of the appeal relating to EIS requirements are provided in italic text below for ease of reference. The applicant's response is provided thereafter.

The substation is an integral part of a yet to be built wind farm. The related wind farm is one which is subject to the mandatory EIS provisions under Irish and European Law and to mandatory requirements arising under the Habitats Directive including the carrying out of an appropriate assessment. Despite that, the Applicant, who has submitted an Environmental Report, asserts in his planning application form (at Question 22) that the application does not require an EIS. We disagree.

In addition to being an integral part of a permitted windfarm, it is clear from the scale of the enlarged substation and from the reported words of the developer's parent company spokesperson, that the substation is in fact an integral part of a much larger series of windfarms, entailing as yet unknown and therefore completely unassessed connection infrastructure. The only disclosed information on those windfarms is that they are to be within a 25 km radius.

Need for Standalone Application

The first aspect of this ground for appeal is that the proposed substation forms *an integral part of a yet to be built wind farm.* The applicant has been clear from the outset, in the application documentation, that this substation permission is sought to enable the connection of the permitted wind farm to the national grid.

The Environmental Report accompanying the planning application states that "*The original wind farm planning application included for a substation, however, since receiving the original planning consent new Eirgrid standards have been adopted which require 110kV substations to have a larger development footprint which includes available land for potential future expansion. As a consequence, a new planning application is required for this substation*".

This is further evidenced by the response by the applicant to the RFI, which stated that the applicant "*needed to address the required changes in layout, the potential requirement for future expansion, the increased building size and increased overall substation footprint.*"

The applicant acknowledges that it has, since the submission of the substation planning application, sought permission for a new wind farm at the permitted wind farm site. This application (planning reference 14/06760) is currently being considered by Cork County Council. This proposed wind farm, which comprises 6 turbines, will, if granted planning permission, replace the permitted wind farm and the application documentation is clear in that respect.

It should be noted that the application for the proposed wind farm (reference 14/06760) was accompanied by an EIS, as is required for such a project. This application, which followed that for the substation, also considered the cumulative impact of the proposed wind farm, with that of the proposed substation and any other relevant development in the area. This and any other subsequent application has no bearing on the assessment of this application.

The substation, if granted permission, will be constructed by the applicant as 'contestable works' and will, following construction become an asset of the transmissions system operator, Eirgrid. As such, the applicant will have no control, following the handover to Eirgrid, in relation to the connection of any further developments, wind farms or otherwise, through this substation. This will be entirely under the control of Eirgrid.

If planning for the 6 turbine wind farm is not granted, the applicant intends to build the permitted 14 turbine wind farm, in accordance with the planning permission for same.

A standalone permission for the substation provides a grid connection for the wind farm (either permitted or proposed) and provides the greatest flexibility to the relevant consenting authorities in their consideration of the proposal, while ensuring that all impacts, including cumulative impacts, were considered appropriately.

Pre-Application Consultations with Planning Authority and An Bord Pleanala

Having established the reasons why a stand-alone permission for the substation was required, the applicant consulted with An Bord Pleanála and the planning authority with regard to the appropriate planning route for this proposed development.

Following correspondence and a meeting with An Bord Pleanála, the Board determined (in a letter dated 27 August 2014, copy included in Appendix 5) that "..*having regard to the scale and nature of the proposed development An Bord Pleanala has concluded that the proposed development does not come within the scope of Section 182A of the Planning and Development Act, 2000, as amended. Accordingly any application for planning consent for the proposed development should be made to the local planning authority for the area in accordance with the provisions of Section 34 of the Planning and Development Act, 2000, as amended".*

A pre-planning meeting was held with Cork County Council on 16 July 2014 to discuss the project. At this meeting, the background to the project was provided by the applicant, together with a description of the proposed development.

The applicant also detailed the pre-application process which was ongoing at the time with An Bord Pleanála with respect to whether a planning application to the Board would be required, in lieu of a planning application to Cork County Council.

The key environmental aspects of the proposed development were also outlined. The applicant committed to undertaking AA/EIA screening for the proposed development and, should Cork County Council be determined as the relevant planning authority, that an EIA Screening Report and AA Screening Report would be submitted to the Council, to assist the council in its screening assessment.

EIA Requirement

The European Union Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, requires member states to ensure that a competent authority carries out an assessment of the environmental impacts of certain types of project, as listed in the Directive, prior to development consent being given for the project.

The proposed 110kV substation development does not fall within the mandatory requirements for the production of an EIS. Accordingly, EIA screening for the proposed 110kV substation must be undertaken by the competent authority.

The applicant prepared an EIA Screening Report for the proposed development, which was submitted to Cork County Council in advance of the planning application (copy enclosed in Appendix 1).

The conclusions of the EIA Screening Report are useful to demonstrate that the proposed development is not likely to have significant effects on the environment. The report concluded that:

- The proposed development is in compliance with relevant plans and policies in relation to the development and renewable energy.
- The primary reason for this application is to meet current Eirgrid standards in substation design and the proposed development will replace the currently permitted substation that is not yet constructed. No significant demolition works are associated with the proposed development.
- Abundance, quality and nature of natural resources in the area will not be impacted to any significant degree as a result of the proposed development.
- No impact on wetlands, coastal zones, mountain and forest areas or historical/cultural heritage will be realised
- The siting of the proposed substation away from sensitive environmental receptors such as residential areas, single dwellings, or environmentally vulnerable sites will result in little or no impacts in terms of noise, pollution or any other potential nuisances.
- Potential effects from the proposed development would be considered to be localised in nature and non-transfrontier. The magnitude of the impacts will be minimised by design or appropriate mitigation. Potential for negative effects does exist during construction, but this potential is considered low as the magnitude of these impacts will be minimised or avoided by the implementation of a Construction Environmental Management Plan (CEMP).

The CEMP referenced above will be prepared in advance of construction, to incorporate all mitigation measures as outlined in the Environmental Report and ensure they are implemented in full and to further ensure that best practice construction methodologies and environmental controls are provided by the Contractor.

It is clear from the above, that the applicant considered the need or otherwise for an EIA, in respect of the proposed development, in accordance with all relevant legislation. The applicant prepared and submitted an EIA Screening Report to Cork County Council in this respect. This report concludes that an EIA is not required for the proposed development.

Cork County Council, as the competent authority, has through its own assessment, concurred with the applicant's findings in this regard, concluding that *"an EIA is not necessary in this case and the proposal is sub-threshold"*. The planner's report is included in Appendix 2 herein.

The previously approved wind farm was subject to EIA as is the new proposed wind farm. The proposed development if built with the permitted wind farm represents an alteration of the previously approved wind farm the cumulative impacts of which have been assessed in the Environmental Report. If the substation is built with the currently proposed wind farm (reference 14/06760), cumulative impacts are reviewed within the EIS for that project. The consenting authorities therefore have full details of all potential impacts that could arise to inform their consideration of this application.

Energy Policy

At the end of the appeal, the following general comment in relation to energy policy is included:

The application is said to be consistent with certain national energy policies. On national energy needs, Ireland's peak electrical power demand is about 5 GW. Installed wind power generation capacity is already about 2 GW. There is no need either in terms of EU policy on renewables or in terms of national economic benefit, for increasing the proportion of wind generation connected to the grid. On power station capacity and other sources such as interconnectors, as UCD Economist Colm McCarthy has observed:

"The new gas units were planned before the bust. There is now 3300 MW of modern gas capacity plus 880 of peaking plant. Plus 500 MW of new interconnection to Wales. Plus almost 900 MW at coal-fired Moneypoint. Plus hydro at about 500 MW, plus peat at about 340, plus oil – the total dispatchable is 7400 MW. Non-dispatchable, mainly wind, adds 2,400, grand total 9800, twice peak demand."

The applicant would refer to Section 2.1 herein, which provides a brief summary of the policy and legislative context for this proposed development. Further detail and information is also provided in the Environmental Report which accompanied the application. The proposed development is clearly in line with EU, national and local energy policy.

3.5 Concurrent Planning Applications

The appellants raise the following point in their appeal (italic text below) with the applicants response provided thereafter.

Two further planning applications are pending in relation to the project of which this substation forms part. They are in relation to a new private road linking two existing public roads, and in relation to a windfarm on the site with 6no. 131 metre high wind turbines each having a power output of 3 megawatts. We enclose our submission on behalf of clients to Cork County Council in relation to the windfarm application. Please treat this letter as part of the material relied on in relation to this appeal. Viewed objectively, we submit that it would be hard to imagine a more blatant case of project splitting.

The reasons for the stand-alone substation application are outlined in detail in Section 3.4 above.

The proposed wind farm application, which was accompanied by an EIS and AA Screening Report, is currently being considered by Cork County Council (planning reference 14/06760).

The applicant acknowledges that a third application has been made by Barna Wind Energy (B.W.E.) Ltd. (planning reference 14/06803) for the construction of a private roadway, approximately 150 m long, from the R585 to the L6008 and all associated works, to facilitate the delivery of abnormal loads to the proposed Barnadivane Wind Farm (subject of application reference 14/06760).

The two applications by Barna Wind Energy (B.W.E.) Ltd are linked, in that the private roadway and associated works are to facilitate delivery of the turbines to the proposed wind farm. Prior to the application being lodged the applicant consulted with Cork County Council in relation to the works to facilitate delivery of abnormal loads to the wind farm. Cork County Council advised that it is not acceptable to have more than one red line boundary for one application. This necessitated a separate application for these works as it was not practical to link both areas with one red outline (see correspondence from Cork County Council in this regard, in Appendix 6).

As detailed herein, the EIS for the wind farm planning application (planning reference 14/06760) includes in its assessment the potential cumulative impacts of the wind farm, the proposed turbine delivery route realignment, the proposed substation and any other relevant developments in the area (including the adjacent operational Garranereagh Wind Farm). This ensures that the overall impact of the various developments, both permitted and proposed in the vicinity, is fully considered.

3.6 Validity of Application

Again, the appellant's text in this regard is provided in italic text below, with the applicant's response thereafter.

The European Court of Justice has made it clear that there can be no piecemeal approval of elements of a larger EIA type development which when taken together with the remaining elements would require EIA or AA. Trying to obtain so-called salami style development consents, where an overall development is broken down in to smaller elements which of themselves appear not to trigger EIA or Habitats Directive obligations and so which would defeat the purpose of the directives is legally impermissible as well as contrary to proper planning and sustainable development principles. Ireland has been condemned by the Court for failing to ensure that this approach is respected in its planning legislation, as you will be aware.

That principle has recently been upheld by the High Court in the case of Ó'Grianna vs. An Bord Pleanála. We rely on that judgement, copy of which is ***enclosed****.*

A project cannot be sliced and diced with the intent that only fragments of it are put forward for assessment by a planning authority at any one time. Plainly this salami style approach is what is happening here. Legally, the proposed substation cannot be considered in isolation, yet that is how it has been presented.

We submit accordingly that the application is invalid.

A full and detailed justification for the stand-alone substation application is provided in Section 3.4 herein.

The Environmental Report which accompanies the planning application clearly assesses the cumulative impact of the proposed substation with the permitted wind farm and the adjacent operational Garranereagh Wind Farm, as well as any other relevant development in the area.

Further, although not directly relevant to this appeal, the EIS for the proposed new wind farm (reference 14/06760) considers the cumulative impact of the wind farm, the substation, the proposed turbine delivery route realignment and the adjacent operational Garranereagh Wind Farm, in combination with any other relevant developments in the area.

This clearly demonstrates that the applicant has considered, and presented, the cumulative impact of the proposed development within the application for the substation, in full accordance with the findings of the above judgement. The cumulative impacts of the proposed wind farm (reference 14/06760) and the substation is the responsibility of the wind farm application (reference 14/06760).

3.7 Habitats Directive

The appellant's have queried the assessment of the project in respect of Habitats Directive requirements (see italic text below). The applicant's response follows.

The applicant has presented a limited Appropriate Assessment Screening Report. We submit that this is wholly inadequate and fails to enable the Board to meet the mandatory test laid down under the Habitats Directive. The obligations on planning authorities in relation to appropriate assessment have recently been helpfully clarified in the ***enclosed*** *High Court Judgement of Finlay Goeghegan J. in Kelly v. An Bord Pleanála delivered 25th July 2014 Record Number: 2013/802JR. We refer the Board to that decision and we rely upon it.*

The decision of the High Court in the Kelly case establishes that the previous practice of planning authorities, including the Board, did not meet the legal standard required under the Habitats Directive.

The applicant, in the first instance, points to the assessment by the competent authority, Cork County Council in this respect, (see copy of planners report included in Appendix 2) which concludes that *"The Heritage Officer is satisfied the proposed development would not have significant impacts on any Natura 2000 sites.."*

Further, the applicant prepared a comprehensive Environmental Report and an Appropriate Assessment Screening Report, to accompany the planning application for the proposed development and to inform the competent authority, regarding its own assessment.

The proposed substation does not lie within any Natura 2000 sites. There are three Natura 2000 sites (two cSACs[2] and one SPA) within an approximate 10 km radius of the substation. Figure 3.2 in the Appropriate Assessment Screening Report (reproduced overleaf) shows the locations of the Natura 2000 sites in relation to the proposed substation. The Gearagh cSAC (site code 000108) lies 6.7 km to the north of the proposed substation, and the Gearagh SPA (004109) lies 6.8 km to the north. The Bandon River cSAC (002171) lies 10.8 km southwest of the proposed substation.

Given the distances from each of these designated sites, there will be no direct impacts on the integrity of these sites, as a result of the proposed development.

There is the potential for indirect impacts on the Bandon River cSAC, the Gearagh cSAC and the Gearagh SPA, identified both in the Environmental Report and the Appropriate Assessment Screening Report accompanying the planning application. These potential impacts include:

- Siltation or pollution of watercourses during construction and operation of the substation leading to pollution of watercourses draining to sites designated for aquatic habitats and species. Siltation or pollution of watercourses could result in a significant negative impact on aquatic species by affecting growth and reproduction in aquatic species and/or reducing the scale of aquatic habitats.
- Disturbance/displacement impacts on birds from the Gearagh SPA arising from construction of the substation. This could result in a significant negative impact on the SPA and could impact on the conservation objective of the SPA which is to maintain a favourable conservation condition (or population status) of the birds for which the SPA is designated.

Having identified the potential impacts, thorough examinations and analysis were undertaken of the proposed development site, including:

- Habitat survey
- Mammal survey
- Bat survey
- Breeding bird survey
- Winter bird survey
- Water quality assessment

These are all detailed in the Environmental Report accompanying the application.

Consultation with NPWS, the statutory authority with responsibility for the designation of conservation sites in Ireland, was also undertaken. These consultations informed the surveys to be carried out and the level of analysis required for this site.

Potential Disturbance/Displacement Impacts

A winter bird Vantage Point (VP) survey following SNH (2013) guidelines, was carried out at the proposed development site from November 2013 to March 2014. Two fixed VPs overlooking the site and surrounding area were monitored for a total of 36 hours for bird activity over the proposed development.

[2] At present all SACs in Ireland are currently 'candidate' SACs, and referred to as cSACs. The relevant Statutory Instruments for the SACs in Ireland have not yet been put in place, though these sites must still be afforded protection in accordance with the EU Habitats Directive (92/43/EEC).

In terms of the qualifying interests/species of the Gearagh SPA, only Mallard was recorded flying over the site, on one occasion in January 2014. Mallard is cited as 'common' within the Natura 2000 standard form available online at www.npws.ie. No other qualifying species, or species of note, from the SPA were recorded.

Based on the consultation with relevant stakeholders, and the detailed bird surveys (and analysis) carried out in the vicinity of the site and taking into consideration the low levels of activity of wintering waterbirds recorded during these surveys, it can be concluded with relative certainty, that the construction of the substation will not result in adverse impacts, including disturbance to flight paths, or disturbance of key species from the Gearagh SPA, having regard to the sites respective conservation objectives in circumstances where no reasonable scientific doubt exists.

Siltation & Pollution of Watercourses

A detailed hydrological and water quality assessment of the proposed development was carried out as part of the Environmental Report prepared to accompany the planning application.

There are no watercourses within the proposed substation site. The site drains south-eastwards into two agricultural drains, or drainage ditches, which meet at a T-Junction at the bottom of the field. The site is situated within the catchment of the River Bride, which rises approximately 1.5 km southwest of the site, flowing in an easterly direction and then south eastwards from the proposed site for 5 km towards the R585 regional road. The river then flows north east adjacent to the R585 to Crookstown. It then follows the N22 eastwards to Ovens.

The proposed development location is not within an area of 'benefitting lands' or 'drainage districts' and there are no reported incidents of flooding in the vicinity of the proposed development, as per national flood hazard mapping (www.floodmaps.ie).

Given that the substation is located within the River Bride catchment, and is not linked to the Bandon River cSAC, and the fact that the River Bride discharges to the River Lee downstream of the Gearagh cSAC and Gearagh SPA, it can be concluded with relative certainty, that the proposed development will not adversely impact on the integrity of the Bandon River cSAC, Gearagh SPA or Gearagh cSAC, in relation to indirect impacts in respect of siltation or pollution of watercourses, having regard to the sites respective conservation objectives in circumstances where no reasonable scientific doubt exists.

Ecology Surveys

The applicant has demonstrated above, in the Environmental Report and in the Appropriate Assessment Screening Report which accompanied the planning application, that it has undertaken a comprehensive assessment of the existing ecological environment in the area. The applicant has also assessed the potential impact of the proposed development on this environment, as well as any potential cumulative impacts with the permitted wind farm and any other relevant development in the area, such as the adjacent Garranereagh Wind Farm.

A winter bird Vantage Point (VP) survey following SNH (2013) guidelines, was carried out at the proposed development site from November 2013 to March 2014. Two fixed VPs overlooking the site and surrounding area were monitored for a total of 36 hours for bird activity over the site. A breeding bird survey was also undertaken at the site. Both were carried out in accordance with current best practice methodologies.

A small flock of about 35 Golden plover were recorded flying about 2 km west of the proposed substation on one occasion in January 2014. No other qualifying species, or species of note, from the nearby Gearagh SPA were recorded. None of the other species mentioned above were recorded during any surveys.

The ecological assessment concluded that, as a result of the mitigation measures to be applied as part of the proposed development, the proposed substation is expected to have a slight to imperceptible impact on ecology (according to EPA (2002) guidelines).

3.8 Previous Permission

In this regard, the appellant's text is provided in italic text below, followed by the applicant's response.

That fact also means that the Board can place no reliance on the previous planning permission when considering the present application. It was granted under a procedure now seen to be unlawful, and it related to a 14 turbine windfarm that may be unlikely to bear much resemblance to what is intended for this site.

The planning application, the subject of this appeal, refers to a proposed 110 kV substation. This substation is required to connect a permitted wind farm, to the national grid. The wind farm is permitted under planning references PL04.219620 (05/5907), with the permission subsequently extended under 11/6605.

Despite the appellant's allegations, there is therefore a wind farm permitted at this location and this existing permission remains valid and can be enacted by the developer.

The applicant acknowledges that Barna Wind Energy (B.W.E.) Ltd. has applied for permission for a new wind farm (reference 14/06760) at this site, to replace that permitted. However, if permission for this wind farm is not granted, the developer intends to construct and operate the permitted wind farm.

The substation proposal, the subject of this appeal, has been made in accordance with all relevant legislation and best practice.

An EIA Screening Report was prepared, to consider whether an EIS was required for this proposed development. This concluded that an EIS was not required. Further, Cork County Council, as the competent authority, has through its own assessment, concurred with the applicant's findings in this regard, concluding that "*an EIA is not necessary in this case and the proposal is sub-threshold*". The planner's report is included in Appendix 2 herein.

The applicant also entered into pre-application consultations with An Bord Pleanala, to determine if this development constituted strategic development under the Planning and Development Act, as amended. The Board determined that this was not the case and that the relevant planning authority was Cork County Council.

The applicant also engaged in pre-planning consultation with Cork County Council to discuss this, and the proposed new wind farm.

A comprehensive Environmental Report was prepared assessing the potential impacts of the substation on the surrounding environment. This report also considered the potential cumulative impacts of the substation, when considered in combination with the permitted wind farm and other relevant developments in the area, such as the adjacent Garranereagh Wind Farm.

An Appropriate Assessment Screening Report was prepared to assess the potential impacts on Natura 2000 sites, in accordance with the relevant legislation. This report concluded that the proposed development would not have adverse impacts on the integrity of the Natura 2000 sites in the vicinity of the site. Cork County Council, as the competent authority in this respect, has concurred with this assessment.

It is also worth noting that an EIS and an AA Screening Assessment were also undertaken for the proposed new wind farm (planning reference 14/06760), which is currently being considered by Cork County Council. This EIS considered the cumulative impact of the proposed wind farm, the proposed substation and the proposed turbine delivery route realignment in combination with any other relevant developments in the area.

The proposed substation does not necessitate the preparation of an EIS and is not subject to EIA as set out in the pre-planning EIA screening report submitted and in the EIA screening assessment carried out by the Planning Authority. The site enjoys the benefit of planning permission for a wind farm development which remains valid and operable and is subject to a further application to optimise the permitted wind farm. Both the permitted and proposed wind farm are subject to EIA and are supported by EIS documents. There has therefore been a comprehensive review of all aspects of the site of the proposed development. The current proposal is supported by an Environmental Report and AA screening report which demonstrates that the proposed development is appropriate and can be provided without significant adverse impacts arising.

3.9 Extent of Project

The appellant's have queried the true extent of the project, as detailed below (italic text). The applicants response is provided thereafter.

The Applicant has submitted an Environmental Report, prepared with, it is claimed, some regard to EIA guidance, but the Report tells the public nothing at all about the impact of the turbines that will be connected to the new substation. The inference is that those turbines will be as already permitted, but nowhere is that expressed in any binding way. Our clients do not accept that they will be the same turbines (in terms of number, size, scale or power output) as those that were the subject of a planning permission sought almost ten years ago. The Board and the public are entitled to know what is proposed. At present, only the Applicant has that knowledge. That is legally unacceptable by reference to the EIA Directive, the Habitats Directive and the Aarhus Convention as incorporated into EU and Irish Law.

The applicant has set out in detail in the foregoing sections of this appeal response, the reasons for the stand alone application made in respect of the proposed substation development. The applicant has also confirmed that it intends to develop a wind farm, at the site, to connect to the National Grid.

Barna Wind Energy (B.W.E.) Ltd has submitted a planning application for a proposed 6 turbine wind farm to Cork County Council (reference 14/06760), which is currently in the planning process. As is clearly stated in that application, should planning permission be granted, this development would supercede and replace that of the permitted 14 turbine development, i.e. only one of these developments would proceed. Obviously, Barna Wind Energy (B.W.E.) Ltd.'s preference is for the new 6 turbine development. However, should planning be refused, the applicant has indicated that it intends to proceed with the development of the permitted wind farm.

As the substation, when completed and operational will become an Eirgrid asset, the applicant cannot control the future use of the substation, with respect to the connection of other planned or potential developments. The applicant has however, made it clear, herein, that no additional phases of wind energy development are planned by it now, or in the future, in the immediate area surrounding the site.

Further, as detailed in Sections 3.5 and 3.6 herein, the potential cumulative impact of the proposed substation and the permitted wind farm (in combination with other relevant developments in the vicinity) were considered in the application. The potential cumulative impact of the proposed wind farm, the proposed substation and the proposed turbine delivery route realignment (again in combination with other relevant developments in the vicinity) were also addressed in the EIS prepared for the proposed wind farm application (reference 14/06760), currently with Cork County Council for decision.

It is clear therefore, from all of the above, that the applicant is being transparent in relation to its proposals for this site, and the assessment of potential impacts, in full accordance with all relevant legislation.

4 CONCLUSION

The applicant, Arran Windfarm Ltd. has applied for permission to develop a 110 kV substation at Barnadivane (Kneeves), near Terelton, Co. Cork.

In so doing, the applicant has followed all relevant policy, legislation and best practice in respect of such a planning application.

Pre-application consultations with An Bord Pleanála, Cork County Council and other relevant stakeholders were undertaken to establish the appropriate planning route and to scope the level of environmental assessment required for this development.

An EIA Screening exercise was undertaken to assess the need or otherwise for an EIS. The applicant prepared an EIS Screening Report, which was submitted to Cork County Council. The Council, as the competent authority, undertook an EIA screening assessment, which concluded that an EIS was not required for this proposal.

An Environmental Report, which assessed the potential impacts of the proposed development on the surrounding environment, was prepared to accompany the planning application. This Environmental Report also considered the potential cumulative impacts of the proposed development in combination with the permitted wind farm and any other relevant developments in the area.

An Appropriate Assessment Screening Report was also prepared, in accordance with all relevant legislation, to accompany the planning application. Cork County Council, as the competent authority, undertook an Appropriate Assessment Screening Assessment, which concluded that the development would not have adverse impacts on Natura 2000 sites in the vicinity of the proposal.

All of this demonstrates the robust nature of the proposal, which was borne out by the granting of permission for the development by Cork County Council.

It is acknowledged that further applications have since been lodged in respect of a proposed wind farm (reference 14/06760) and minor road works to accommodate the delivery of oversized loads (reference 14/06803). The EIS for the proposed wind farm has assessed the potential cumulative impact of the proposed wind farm, the substation and the road realignment.

The applicant has been very clear, throughout the planning documentation, that the proposed substation is to replace that previously permitted (under the permitted wind farm, planning reference 05/5907 and PL 04.219620, with an extension of duration granted under 11/6605). The applicant has also clearly stated that the proposed wind farm (planning reference 14/06760) would replace the permitted wind farm. The substation would therefore connect either the permitted wind farm or the proposed wind farm.

The applicant has explained the rationale for the required changes to the substation, in terms of location, layout and design. These are necessitated to meet current Eirgrid requirements and the applicant, since this development will become an asset of Eirgrid once complete, has no control over any future connections to this substation. Notwithstanding this, the applicant has stated that it does not intend any further phases of wind energy development in the immediate vicinity of this site.

It is clear from all of the above, that this proposal represents a robust planning application, which has been prepared in full accordance with the statutory and best practice requirements, has assessed all relevant potential impacts on the surrounding environment and is in line with European, national and local energy and planning policy.

The applicant therefore requests that An Bord Pleanala upholds the decision of Cork County Council to grant permission for this proposed development.

[1] EU Directive on Promotion of the Use of Energy from Renewable Sources, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:EN:PDF

[2] Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources, 2008/0016 (COD), Council of the European Union, Brussels, December 2008; http://www.ewea.org/fileadmin/ewea_documents/documents/00_POLICY_document/RES-directive_consolidated.pdf

[3] White Paper 'Delivering a Sustainable Energy Future for Ireland' http://www.dcenr.gov.ie/NR/rdonlyres/54C78A1E-4E96-4E28-A77A-3226220DF2FC/27356/EnergyWhitePaper12March2007.pdf

[4] http://www.iwea.com/index.cfm?page=bycounty&county=cork; last updated: August 2014

[5] http://www.dcenr.gov.ie/NR/rdonlyres/C71495BB-DB3C-4FE9-A725-0C094FE19BCA/0/2010NREAP.pdf

[6] Green Paper on Energy Policy in Ireland, May 2014, http://www.dcenr.gov.ie/NR/rdonlyres/ED7DCC31-9F0A-4350-8E2D-979DBEAE4034/0/DCENRSummaryofGreenPaperonEnergyIreland.pdf

Appendix 1

Copy of EIA Screening Report

ENVIRONMENTAL BALANCE IN DESIGN AND CONSTRUCTION

EIA SCREENING REPORT

110kV GRID CONNECTION SUBSTATION AT BARNADIVANE, CO. CORK

SEPTEMBER 2014

FEHILY TIMONEY & COMPANY

EIA SCREENING REPORT

110kV GRID CONNECTION SUBSTATION AT BARNADIVANE, CO. CORK

User is Responsible for Checking the Revision Status of this Document

Rev. Nr.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
0	Draft Issue to Client	POB/MG	COD	COD	14.08.2014
1	Issue to Client	POB/MG	COD COD	COD COD.	05.09.2014

Client: Arran Windfarm Limited

Keywords: EIA, screening, significant effects, environment, substation, wind farm

Abstract: This document presents an assessment of whether a proposed 110kV grid connection substation at Barnadivane, Co. Cork would or would not be likely to have significant effects on the environment, as per Schedule 7 of the Planning and Development Regulations 2001 to 2013.

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LIST OF FIGURES & TABLES

1. INTRODUCTION

Fehily Timoney and Company (FTC) was commissioned by Arran Windfarm Limited to prepare an EIA Screening Report, to determine if a proposed 110kV grid connection substation at Barnadivane (Kneeves), near Coppeen, Co. Cork, would or would not be likely to have significant effects on the environment. Arran Windfarm Limited is a specific purpose vehicle (SPV) company set up to develop the substation at Barnadivane.

The proposed 110kV substation will replace a currently permitted substation that is not yet constructed. The development does not fall within the mandatory requirements for the production of an EIS.

This screening report has been prepared to assist the competent authority in its evaluation of whether the project would or would not be likely to have significant effects on the environment, with reference to its scale, nature, location and context, and accordingly whether or not EIA is required.

The purpose of this report is to identify the considerations that may influence the decision of the competent authority in respect of its statutory obligation to make a 'screening' decision as to whether or not an Environmental Impact Assessment (EIA) should be undertaken for the proposed substation.

1.1 Project Overview

The developer intends to seek permission for a new grid connection substation in the townland of Barnadivane (Kneeves), near Coppeen, Co. Cork. A site location map is presented in Figure 1.1. The current substation application will replace a currently permitted substation that is not yet constructed.

Permission currently exists for a 110kV substation and switch station as part of a 14 turbine wind farm on the site. The permitted development was granted by both the Planning Authority and An Bord Pleanála under planning reference numbers 05/5907 and PL 04.219620 respectively, an extension of duration also being granted by Cork County Council under 11/6605. The permitted development is discussed further in Section 1.4.

The permitted development has not yet commenced construction due to various reasons of a commercial, economic and technical nature that were outside the control of the Developer, including significant delays in securing a grid connection offer due to the grid connection moratorium as well as uncertainty regarding the REFIT tariff and Single Energy Market. For large electrical generators, the grid connection location, method and voltage is determined by Eirgrid and communicated by means of a grid connection offer. In 2010, Barna Wind Energy Ltd. secured a firm access agreement for connection to the transmission system within Gate 3 under Grid No. TG44. Barnadivane Wind Farm is scheduled for a connection national grid in 2015.

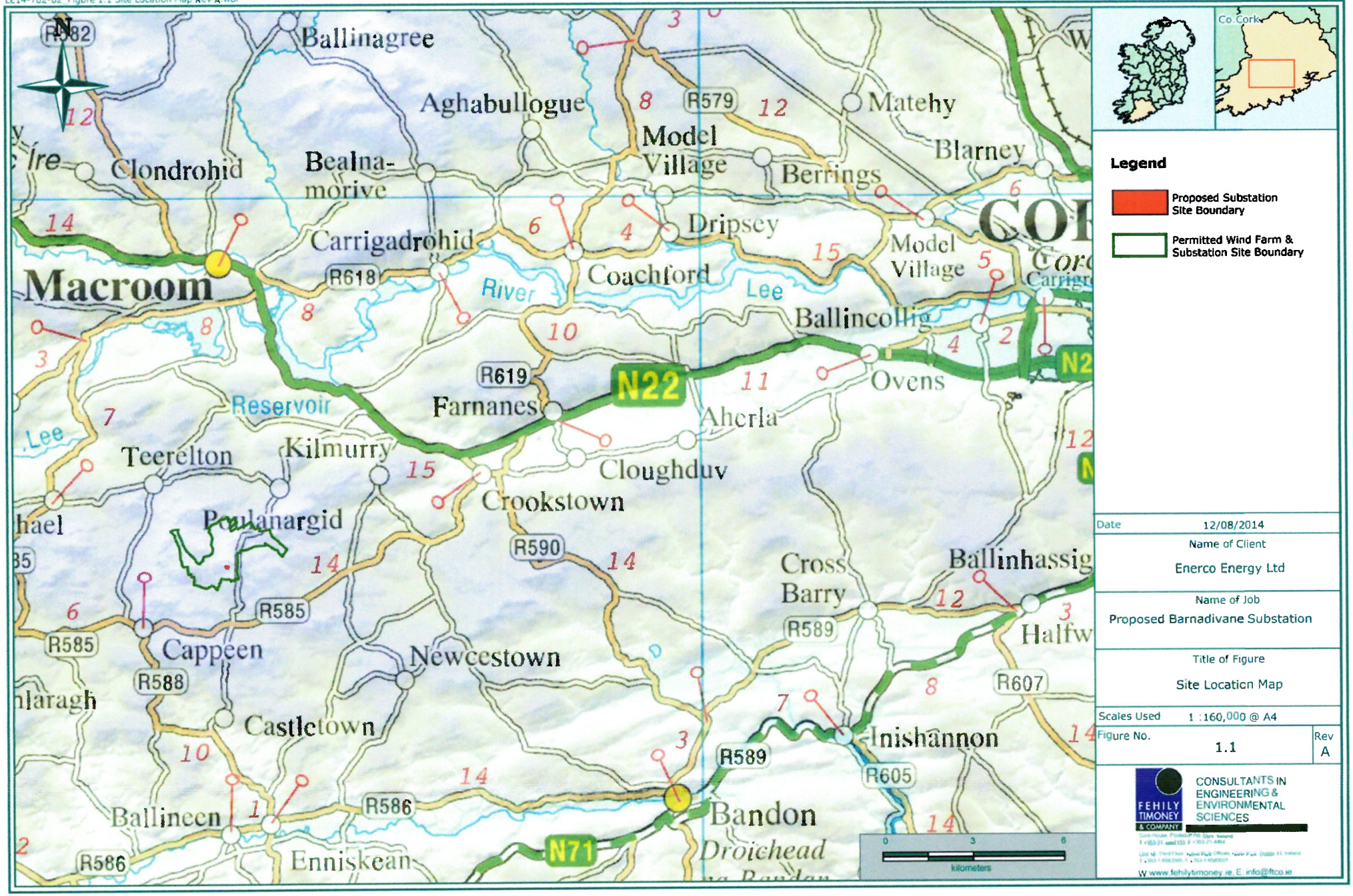
The original wind farm planning application included for a substation but, since receiving the original planning consent, new Eirgrid standards require 110kV substations to have available land to facilitate future expansion. Any wind farm electricity substation must meet the design, electrical and layout requirements of Eirgrid and/or ESB Networks, as the substation will form part of the national electricity grid and will be taken in charge by Eirgrid or ESB Networks. In this case, given the electrical rating of the substation at 110kV, the substation will be taken in charge by Eirgrid and, therefore, will have to meet current Eirgrid specifications and requirements. Eirgrid's current design standards for substations of this nature were issued in 2011 after the planning application was made. As a consequence, a new planning application is required for this substation.

The proposed substation layout now takes account of the Eirgrid requirements, but gives rise to a larger development footprint than that of the permitted substation. The permitted substation is constrained to the west by the existing 110kV overhead line and to the east by the local road. On that basis, a new site has been identified for the proposed substation within the study area of permitted wind farm that meets the necessary criteria such as, capacity for accommodating Eirgrid requirements, proximity to transmission system, good access and visual screening.

The proposed 110kV grid connection substation will have a defined planning boundary which will include a 110kV grid connection substation compound with associated control buildings and electrical equipment as well as ancillary infrastructure such as internal access roads, oil interceptor and security fencing. The proposed substation is discussed further in Section 1.5.

R:\Map Production\2014\LE14\702\02\Workspace\Substation Environmental Report
LE14-702-02_Figure 1.1 Site Location Map Rev A.wor

Mapping Reproduced Under Licence from the Ordnance Survey Ireland Licence No. EN 0001214 © Government of Ireland



Legend

- Proposed Substation Site Boundary
- Permitted Wind Farm & Substation Site Boundary

Date	12/08/2014
Name of Client	Enerco Energy Ltd
Name of Job	Proposed Barnadivane Substation
Title of Figure	Site Location Map
Scales Used	1 :160,000 @ A4
Figure No.	1.1
Rev	A

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1.2 Relevant Planning History

The proposed substation is situated within the planning boundary of a permitted wind farm development which was granted by both the Planning Authority and An Bord Pleanála under planning reference numbers 05/5907 and PL 04.219620 respectively, with an extension of duration being subsequently granted by Cork County Council under 11/6605. The permitted application was accompanied by an Environmental Impact Statement and was subject to an Environmental Impact Assessment carried out by the Planning Authority and An Bord Pleanala.

The current proposed substation development is seeking to replace the permitted substation. This section sets out the relevant planning history for the site.

Planning Reference No: 03/2365

In May 2003, Barna Wind Energy Ltd. originally applied for planning permission for 26 wind turbines to Cork County Council. This layout was revised in August 2003 to one of 23 wind turbines. Planning Permission was granted by Cork County Council for 17 wind turbines. In March 2004, following third party and first party appeals, permission was refused by An Bord Pleanála (04.204928). The reason for refusal was primarily based on the adverse visual impact, the Bord considered the development excessively dominant and visually obtrusive in the landscape.

Planning Reference No: 05/5907

In August 2005, Barna Wind Energy Ltd. applied for planning permission for 18 wind turbines to Cork County Council (CCC). This layout was revised in June 2006 to one of 14 turbines, with a revised site boundary to exclude pockets of the site not being developed. In August 2006, planning permission was granted by Cork County Council for 12 wind turbines. In February 2007, following third party and first party appeals, permission was granted by An Bord Pleanála (ABP)(04.219620) for all 14 wind turbines. ABP was satisfied that the development, by virtue of its revised scale and turbine configuration, had addressed to a sufficient degree ABP's concern in relation to the previous wind farm proposal on this site.

Planning Reference No: 11/06605

In December 2011, Barna Wind Energy Ltd. applied to extend the duration of the appropriate period of Planning Permission 05/5907, under Section 42 of the 2000 Act, as amended. Cork County Council granted an extension for a period of 5 years due to considerations of a commercial, economic or technical nature beyond the control of the applicant.

1.3 Overview of the Permitted Development

An Environmental Impact Statement accompanied the planning application for the permitted development. For the purposes of that EIS, the study area covered approximately 355 ha within which the permitted development is located. The development footprint, comprising the area taken up by the turbines, transformers, hardstanding, site tracks, substation, switch station and wind monitoring mast occupies less than 2% of the study area.

The permitted development site is located in the townlands of Barnadivane (Kneeves), Knockboy, Garranereagh, Lackareagh and Reenacaheragh, near Terelton, Co. Cork. Within the study area elevation ranges from 170 m on the southern aspect to 270 m along the north eastern boundary. Access to the site is off the R585 at Moneynacroha Cross Roads approximately 3 km east of Coppeen. The nearest villages to the study area are Terelton, approximately 3.4 km to the north and Coppeen approximately 3.4 km to the south west. The town of Macroom lies approximately 9 km north of the study area boundary.

The study area consists mainly of pastureland. A number of streams rising in the south of the study area join the River Bride, which is a tributary of the River Lee. The Cummer River rises near the study area's northern boundary and also drains into the Lee.

The overall permitted development can be summarised as follows:

- **Turbines:** 14 no. wind turbines with a tip height of 105 m have been permitted. Each turbine consists of the following key components: a concrete foundation (or base), a tower, a nacelle and blades. Each turbine will have a transformer located adjacent to it or within the tower below the ground floor.
- **Turbine Hardstand Areas:** the permitted hardstanding area consists of an area approximately 40 m x 20 m beside each turbine, to accommodate a crane during the assembly of the turbine, and occasionally for maintenance.
- **Meteorological Masts** : the permitted mast will consist of a narrow lattice tower of approximately 70 m in height for gathering meteorological data.
- **Access Tracks:** the permitted tracks will be approximately 4.5 m wide along straight sections and wider at turns as per the layout on the planning drawings.
- **Drainage:** the permitted internal site drainage consists of open swales at the site track edge and 300 mm diameter pipe work at track crossings, with run-off from the site discharging to streams via sediment traps to the north and south of the site.
- **110kV Substation and Switching Station:** the permitted development consists of a substation and associated control house, switching station and associated control house, within a compound covering approximately 0.43 ha that includes masts, electrical equipment and security fencing all in accordance with ESB requirements at the time. A two-metre high security fence has been permitted surrounding the compound.
- **Underground Cables:** underground electrical and communication cables linking the turbines with the permitted onsite sub-station
- **All related site works and ancillary development**

The proposed substation which is the subject of this application is located centrally within the study area of the permitted development. Figure 1.2 illustrates the proposed substation location in the context of the permitted development.

1.4 Overview of the Proposed Development

The developer is seeking permission for a new 110kV grid connection substation that meets current Eirgrid standards, in place of the permitted 110kV substation and switch station.

The original wind farm planning application included for a substation but, since receiving the original planning consent, new Eirgrid standards require 110kV substations to have available land to facilitate future expansion. A planning application to increase the size of the permitted substation location was initially considered however the permitted site is situated between the local road and the existing 110kV overhead line which constrained the site. On that basis, it was decided to consider other sites within the wind farm EIA study boundary where the construction costs, environmental impact and planning risks might be reduced.

The proposed substation site is situated underneath the existing 110 kV Macroom to Dunmanway overhead line, within the EIA boundary for the permitted wind farm, approximately 500m southwest of the permitted substation location. The proposed site is situated within undulating improved grassland used for agricultural grazing on a south facing plateau. An existing local public road forms the northern boundary of the site and provides good accessibility. Proposed ground levels within the substation compound will be set approximately 8m below road level. Natural topography and mature tree screening to the north reduces the visual impact from the designated scenic route (S36), which is approximately 2km northwest of the proposed development.

Following review of a number of potential substation sites, the proposed site was considered the most suitable for the following reasons:

- takes advantage of natural topography and mature tree screening minimising visibility from the scenic route to the north
- underneath the existing ESB overhead line removing the need for additional 110 kV overhead lines while minimising the size of the substation
- located centrally within the permitted wind farm minimising the distance of the underground cable connection between the turbines and the substation
- not located close to dwellings, being over 250 metres from the nearest house (which is owned by a contributory land owner associated with Barnadivane Wind Farm)
- not located close to ecologically sensitive areas such as natura 2000 sites, rivers or woodland areas

The siting of the proposed substation away from sensitive environmental receptors such as residential areas, single dwellings, or environmentally vulnerable sites will result in little or no impact in terms of noise, pollution or any other potential nuisances.

R:\Map Product-cn\2014\LE14\702\02\Workspace
LE14-702-02_Figure 1.2_Proposed Substation within the Context of the Permitted Development_Rev A.wor

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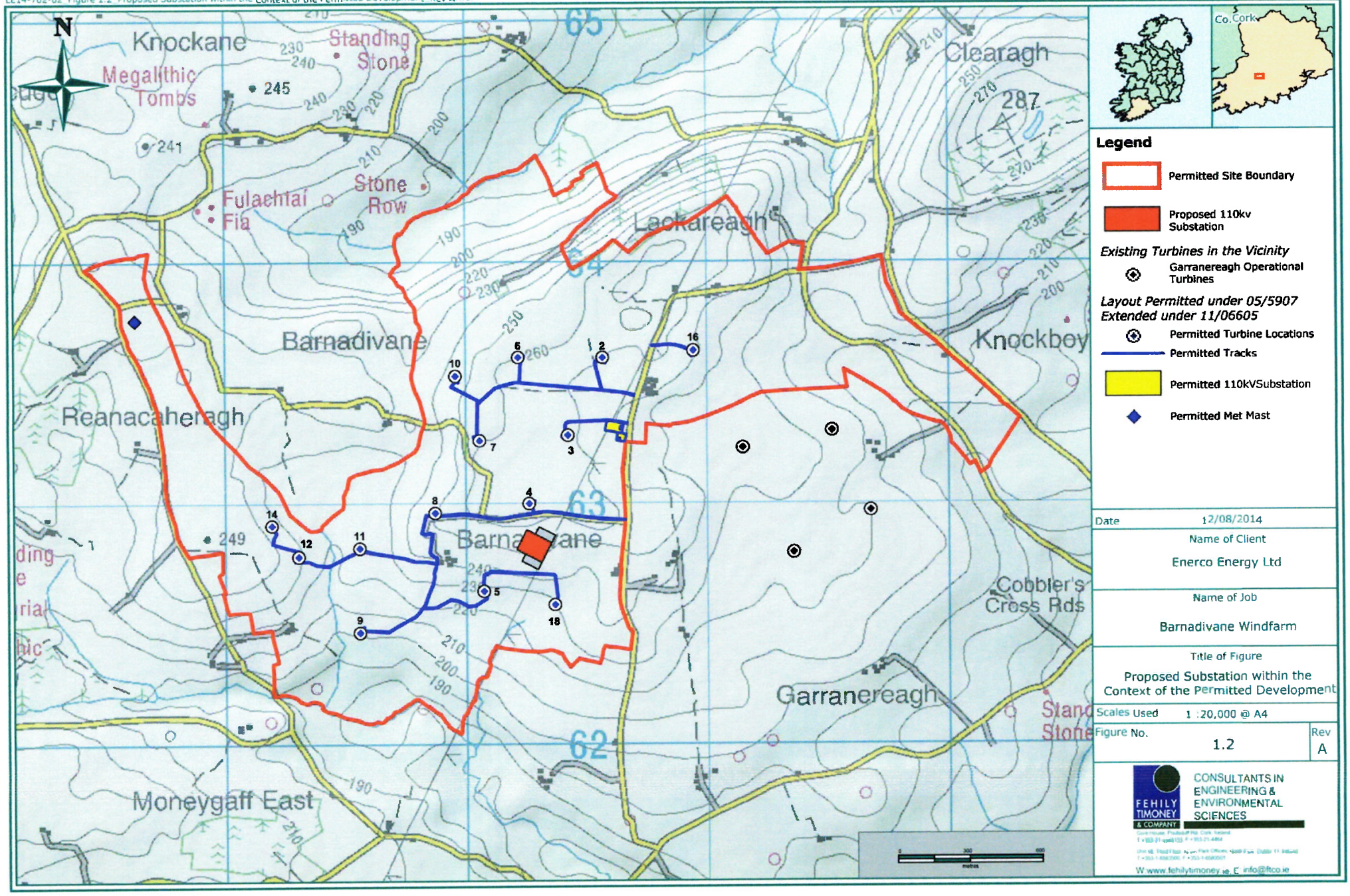

Date	12/08/2014
Name of Client	Enerco Energy Ltd
Name of Job	Barnadivane Windfarm
Title of Figure	Proposed Substation within the Context of the Permitted Development
Scales Used	1 :20,000 @ A4
Figure No.	1.2
Rev	A

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1.5 Need for the Proposed Development

It is necessary to find a suitable location to connect the electricity to be generated from Barnadivane Wind Farm to the national grid. The original wind farm planning application included for a substation. However, the proposed new substation is necessitated in order to meet current Eirgrid standards in substation design and will replace the currently permitted substation that is not yet constructed.

The proposed substation will facilitate the connection of Barnadivane Wind Farm to the national grid, thereby facilitating Ireland in meeting its renewable energy targets. The proposed substation will facilitate the connection of renewable energy to the national grid which will help to achieve the national targets as set out below.

The need for the renewable energy generated at Barnadivane is driven by the following:

- urgent need for increased capacity to generate electricity
- national renewable energy targets
- increasing national energy security
- commitment to limit greenhouse gas emissions under the Kyoto protocol
- provision of energy price stability
- provision of cost-effective power production

Ireland is one of the most energy import-dependent countries in the European Union, importing 85% of its fuel in 2012[i]. This makes Ireland particularly vulnerable to future energy crises and fluctuations given its location on the periphery of Europe. The international fossil fuel market is growing increasingly expensive and is increasingly affected by international politics. Any steps to reduce dependence on imported fossil fuels will add to financial autonomy and stability in Ireland.

The burning of fossil fuels for energy creates greenhouse gases, which contributes significantly to climate change. These and other emissions also create acid rain and air pollution. Sources of renewable energy that are utilised locally with minimal impact on the environment are necessary to meet the challenges of the future.

The EU has adopted a Directive (2009/28/EC)[ii] on the Promotion of the Use of Energy from Renewable Sources in April 2009 which includes a common EU framework for the promotion of energy from renewable sources. The Directive sets a mandatory national target for the overall share of energy from renewable sources for each Member State. This package is designed to achieve the EU's overall 20:20:20 environmental target, which consists of a 20% reduction in greenhouse gases, a 20% share of renewable energy in the EU's total energy consumption and a 20% increase in energy efficiency by 2020. To ensure that the mandatory national targets are achieved, Member States must follow an indicative trajectory towards the achievement of their target.

Ireland's mandatory national target is to supply 16% of its overall energy needs from renewable sources by 2020. This target covers energy in the form of electricity, heat and transport fuels. For electricity alone, Ireland's national target is 40% by 2020. Government policies identify the development of renewable energy, including wind energy, as a primary strategy in implementing national energy policy.

Currently over 2,600MW of installed wind generating capacity is connected to the system on the island Ireland[iii]. It is estimated that approximately 4,000MW of wind generating capacity will be required to meet the 40% target.

1.6 Strategic Infrastructural Development

The Developer commenced pre-application consultations with An Bord Pleanála in April 2014, in order to seek a determination as to whether the substation project is adjudged to be 'strategic infrastructure' under the Act, as amended. A copy of this correspondence is included in Appendix 1.

Under Section 182(A) of the Planning and Development Act where an undertaker:

> *"...intends to carry out development comprising or for the purposes of electricity transmission the undertaker shall prepare, or cause to be prepared, an application for approval of development under section 182B and shall apply to the Board for such approval accordingly".*

Subsection 9 of 182A states that:

In this section 'transmission', in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 but, for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of—

> *(a) a high voltage line where the voltage would be 110 kilovolts or more, or*
> *(b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not.*

In section 2(1) of the Electricity Regulation Act, 1999, "transmission" is defined in relation to electricity as meaning *"the transport of electricity by means of a transmission system, that is to say a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board."*

Subsection 9 of 182A sets a threshold of 110 kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. No threshold is set in respect of a substation, therefore it is reasonable to refer directly to Section 37A(2) of the Planning and Development (Strategic Infrastructure) Act, 2006. Section 37A(2) sets out the criteria that a proposed development must meet before it can be deemed a Strategic infrastructure Development:

> *(c) the development would be of strategic economic or social importance to the State or the region in which it would be situated,*
>
> *(b) the development would contribute substantially to the fulfilment of any of the objectives in the National Spatial Strategy or in any regional planning guidelines in force in respect of the area or areas in which it would be situated,*
>
> *(c) the development would have a significant effect on the area of more than one planning authority."*

The legislation explicitly sets a threshold of 110 kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. However, as included above, no specific threshold is set in respect of a substation.

Having regard to the nature and scale of the development, it is our opinion that the proposed development is not SID for the following reasons:

1. The permitted wind farm development at Barnadivane to be served by the proposed substation is not itself within the strategic infrastructure threshold s of more than 25 turbines or having a total output greater than 50 megawatts, as specified in the Seventh Schedule
2. The development will not make a significant contribution to the delivery of regional planning guidelines or the National Spatial Strategy
3. The development is entirely within the catchment of a single planning authority.

Environmental Impact Statement

Under section 182A(2) of the Act, an EIS is required to be prepared for development which belongs to a class of development identified as requiring assessment for the purposes of Section 176 of the Act. The relevant classes of development are set out in Schedule 5 of the *Planning and Development Regulations 2001 – 2013*.

The proposed 110kV substation development does not fall within the class of development in Schedule 5.

1.7 Appropriate Assessment Requirements

Appropriate Assessment is required under the EU Habitats Directive (92/43/EEC) – 'on the conservation of natural habitats and of wild fauna and flora'. It is an assessment of the potential impacts of a proposed plan or project, on its own or in combination with other plans or projects, on one or more Natura 2000 sites [Special Protection Areas (SPA) for birds, Special Areas of Conservation (SAC) for habitats and species].

Fehily Timoney and Company (FTC) was commissioned by Barna Wind Energy Ltd. to prepare an Appropriate Assessment (AA) Screening Report, for the proposed 110 kV substation at Barnadivane, near Coppeen, Co. Cork. The AA Screening Report indicates that based on the objective scientific evidence provided, significant effects can be excluded and as such a full Appropriate Assessment is not required in this instance.

The findings of this assessment will be taken into account by the relevant competent authority to inform its assessment of the proposed development. A copy of the screening report is included in Appendix 2.

1.8 EIA Requirements

The European Union Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, requires member states to ensure that a competent authority carries out an assessment of the environmental impacts of certain types of project, as listed in the Directive, prior to development consent being given for the project.

The requirement for the Environmental Impact Assessment of various types of developments are transposed into Irish Legislation under the *Planning and Development Acts 2000 – 2014* and the *Planning and Development Regulations 2001 – 2013.* EIS is compulsory for projects falling within classes of development prescribed by article 93 of, and Schedule 5 to, the *Planning and Development Regulations 2001 – 2013*. When a development does not fall within a class or is below the thresholds (sub-threshold) of Schedule 5, an EIS is may still be required if the development is associated with *'significant effects on the environment'* (ref, Articles 103 the Planning and Development Regulations).

Screening is the first stage in the EIA process, whereby a decision is made on whether or not EIA is required. This Screening Assessment was undertaken with regard to the following legislation and guidance:

- *Planning and Development Acts 2001 - 2014*
- *Planning and Development Regulations 2001 - 2013*
- *Guidance on EIA, Screening, European Commission, 2001*
- *EIA, Guidance for Consent Authorities regarding Sub-threshold Development, DoEHLG, 2003*
- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009.*

The proposed 110kV substation development does not fall within the mandatory requirements for the production of an EIS. Accordingly, EIA screening for the proposed 110kV substation must be undertaken by the competent authority. This report has been prepared to assist the relevant authority in their assessment of the development.

1.9 Report Structure

This report considers whether the project would or would not be likely to have significant effects on the environment, with reference to its scale, nature, location and context.

The following chapters of this report will be structured as follows:

- Chapter 2 - Existing Site Setting
- Chapter 3 – Proposed Development
- Chapter 4 – Planning and Policy Context
- Chapter 5 – Schedule 7 Criteria
- Chapter 6 – Checklist Criteria for Evaluating the Significance of Effects
- Chapter 7 – Conclusion

1.9.1 Chapter 2 - Existing Site Setting

This section provides a general overview of the receiving site and surrounding area in terms of landuse, topography, geology, landform, heritage etc.

1.9.2 Chapter 3 – Proposed Development

This section outlines in detail the main characteristics of the proposed substation in terms of the construction, operation and decommissioning stages of the project.

1.9.3 Cha pter4 – Planning and Policy Context

Prior to examining the characteristics of the proposed development, this section examines the proposed development in terms of its compliance with relevant plans and policies.

1.9.4 Chapter 5 – Schedule 7 Criteria

This section examines the individual criteria identified in Schedule 7 in terms of the characteristics of the proposed development.

1.9.5 Chapter 6 – Checklist Criteria for Evaluating the Significance of Effects

The Department of Environment, Heritage and Local Government published *'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development'* to assist the consenting authority in deciding if significant effects on the environment are likely to arise regarding developments below the mandatory EIA thresholds. Chapter 6 addresses each of the questions listed to assist the consenting authority in their assessment of this proposal.

1.9.6 Chapter 7 – Conclusion

Chapter 7 provides an overall summary of the screening assessment and concluding statements.

2. EXISTING SITE SETTING

The proposed substation is located in the townland of Barnadivane (Kneeves), approximately 3.4 km northeast of Coppeen and 10 km south of Macroom. The nearest village is Terelton, approximately 3.4 km to the north.

The substation is situated within the planning boundary of a currently permitted wind farm, granted by both the Planning Authority and An Bord Pleanála under planning reference numbers 05/5907 and PL 04.219620 respectively. An extension of duration was granted by Cork County Council under 11/6605. The proposed substation development covers an area of approximately 1.1 ha, within the overall study boundary of the permitted wind farm which covers an area of 355 ha.

There is a good network of local roads accessing the site. The nearest national route, the N22, is the main arterial route for traffic commuting between Cork and Killarney and is located approximately 5 km to the north at its closest. The nearest regional route, the R585 between Cork and Bantry, passes 1 km to the south of the site.

The proposed substation is located on a south-facing plateau within the Bride River valley approximately 500m south west of the permitted substation. The proposed substation site ranges in elevation from 250 m on the southern boundary to 260 m along the northern boundary. The land to the south slopes downwards towards the River Bride and low-lying rolling farmland. To the north, the land slopes to the River Lee, which lies at approximately 70 m OD. The land to the east of the study area drops to below 200 m OD, with hills separated by river valleys. To the west of the site there is a series of hills with peaks in the region of 220 m OD to 240 m OD. An aerial view encompassing the permitted and proposed sites is presented in Figure 2.1.

The proposed site is currently used for agricultural grazing. The field boundaries are defined both by the hedgerows and sod and stone banks. There are a number of occupied dwellings within 1km of the site, with the closest being over 250m from the proposed substation. Dwellings within 1km of the substation are presented in Figure 2.2. The site is privately owned by a contributory landowner associated with Barnadivane Wind Farm and is currently utilised for agriculture. There are no operating hospitals, schools, hotels or guesthouses within 1 km of the site. There are no recreational activities associated with this site. The nearest watercourse is a tributary of the River Bride over 500m west of the site.

The landform reflects the underlying geology of the region which is dominated by east-west anticlines and synclines. The anticlines form the hills with sandstone dominated bedrock and the synclines form the main river valleys (Lee, Bride and Bandon Rivers) which are underlain by limestone.

The proposed site does not lie within any Natura 2000 sites. There are three Natura 2000 sites (two cSACs[1] and one SPA) within a 10 km radius. The Gearagh cSAC (site code 000108) and the Gearagh SPA (004109) lie over 6.5 km to the north. The Bandon River cSAC (002171) lies over 9.5 km southwest of the proposed development site.

No recorded monuments occur within close proximity to the proposed sub-station site and only 2 monuments occur within 1km, the nearest being a ringfort situated over 770m from the proposed substation.

Existing land use in the area surrounding the site is predominately agricultural. There are a number of existing and permitted wind farm developments nearby. There is an existing wind farm, namely Garranereagh Wind Farm with 4 operational turbines adjacent to the site. The nearest turbine is approximately 1 km from the proposed substation. This development, along with any other planned or permitted wind farms in the vicinity, will be considered in the environmental assessment to evaluate any cumulative impacts that may arise.

[1] At present all SACs in Ireland are currently 'candidate' SACs, and referred to as cSACs. The relevant Statutory Instruments for the SACs in Ireland have not yet been put in place, though these sites must still be afforded protection in accordance with the EU Habitats Directive (92/43/EEC).

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LE14-702-02_Figure 2.1_Aerial View of Permitted and Proposed Substation Sites_Rev A.wor

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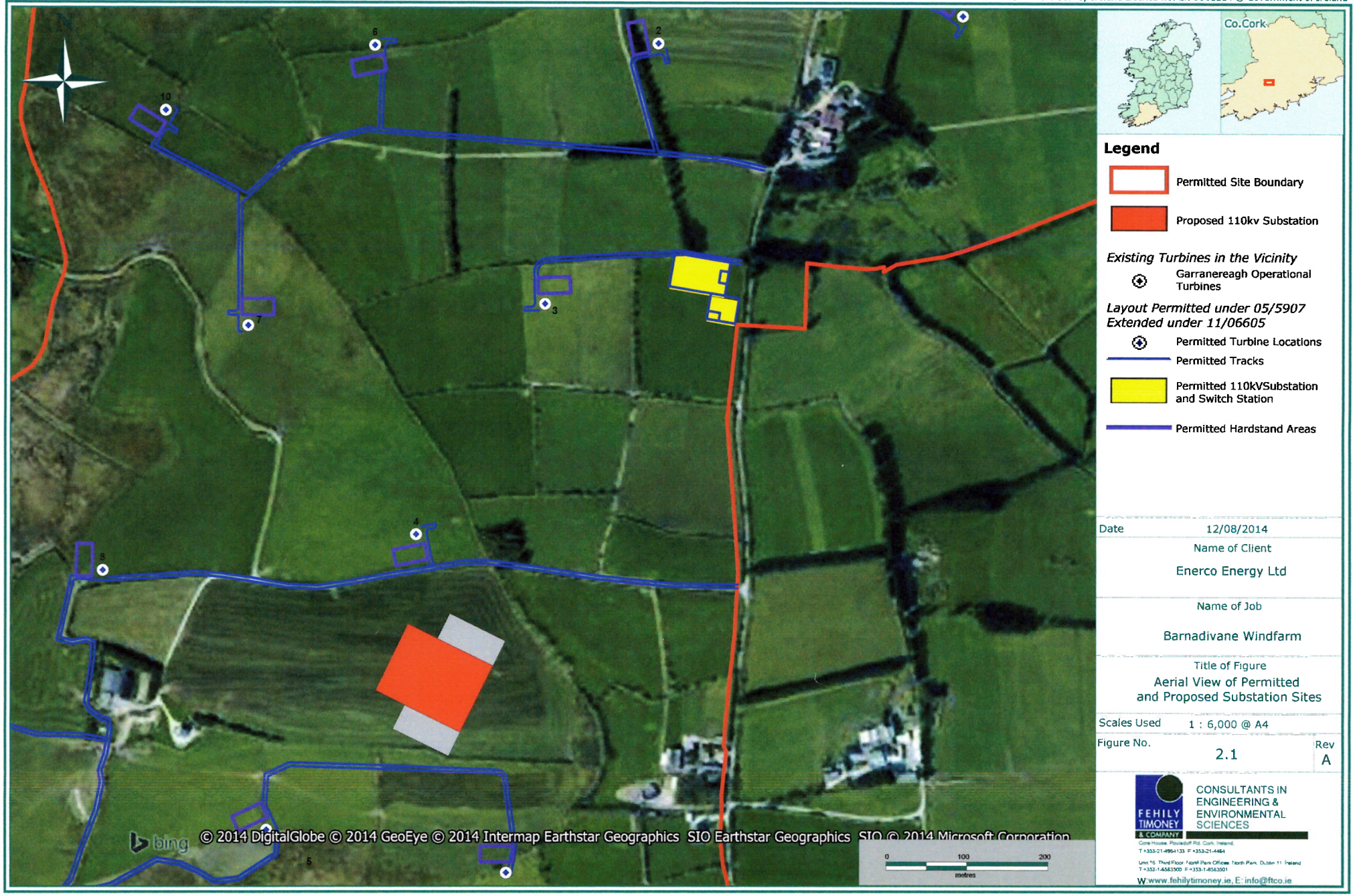

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Name of Client	Enerco Energy Ltd
Name of Job	Barnadivane Windfarm
Title of Figure	Aerial View of Permitted and Proposed Substation Sites
Scales Used	1 : 6,000 @ A4
Figure No.	2.1
Rev	A

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R:\Map Production\2014\LE14\702\02\Workspace\Substation Environmental Report
LE14-702-02_Figure 2.2_Neighbouring Dwellings within 1 km of the Proposed Substation Rev A.wor

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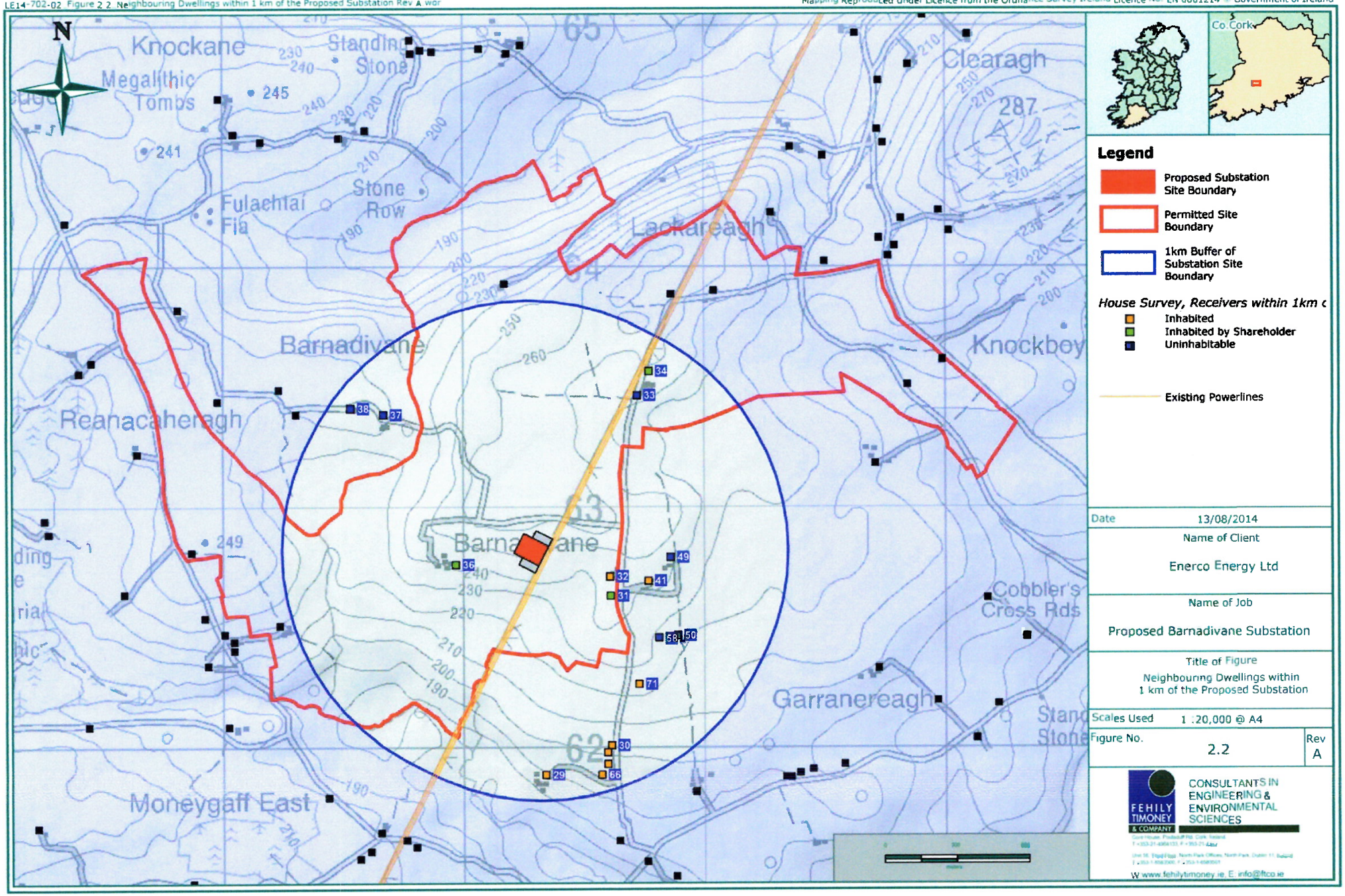

Date	13/08/2014
Name of Client	Enerco Energy Ltd
Name of Job	Proposed Barnadivane Substation
Title of Figure	Neighbouring Dwellings within 1 km of the Proposed Substation
Scales Used	1 :20,000 @ A4
Figure No.	2.2
Rev	A

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3. PROPOSED DEVELOPMENT

The 110 kV substation compound will cover an area of approximately 90 m x 117 m on plan including a security fence. There will be three single storey control buildings on the site. The control buildings will be of standard masonry construction, rendered externally with a pitched roof. Finishes will be in keeping with the surrounding buildings. The maximum floor area of each building will be 185m^2 and the maximum height of the buildings will be approximately 6.2 m above finished ground level. The substation compound will be connected to the public road via a short access track approximately 200m long. An image of a typical 110kV substation layout is shown in Figure 3.1.

The compound will contain assorted electrical equipment including transformers, switch gear including circuit breakers, metering transformers, busbars, post insulators, lightning protection masts, line gantries, etc., all in accordance with Eirgrid requirements.

Two steel lattice mast structures will be located approximately 10 m from the edge of the 110 kV compound and directly underneath the line of the existing 110 kV overhead line. They will have a maximum height of approximately 18 m.

Although not permanently staffed, maintenance personnel will visit the substation on average three to four times a week. Any general office waste will be regularly disposed of to a licensed facility.

The substation compound will be bounded by a 2.4 m high steel palisade fence painted green.

Construction Phase

The land area requirement for the proposed development is approximately 1.1 ha. The construction of the substation will be carefully managed. All earthworks required on site will be carried out by an experienced contractor in accordance with current best practice.

During the construction phase it will be necessary to provide temporary facilities for the workers. Such facilities will include:

- site office and canteen
- site compound
- toilet facilities
- bottled water for potable supply
- a water tanker to provide water for other purposes such as dust suppression
- diesel generator
- contractor lock-up facility
- employee parking.

Construction material for the fill and hardstanding areas at the substation and for the access track to the substation will be reclaimed site won fill or sourced locally. It is likely that the total stone fill requirement will be in the order of 4,000 m^3, it is estimated that 50% will be site won with 50% being imported from local quarries.

Other building materials required include the following:

- blocks, sand and cement, roofing material, etc., for the control house
- electrical equipment
- 2.4 m high security fencing (around the 110 kV substation compound).

Construction materials will be brought on-site as required. A temporary site compound will be provided during the construction phase to store construction materials. Typical plant associated with the construction phase would include track excavator, tractor, roller, paver, water bowsers etc.

Figure 3-1: Representative 110kV Substation

Photograph taken at Mount Lucas Wind Farm, courtesy of Bord Na Mona

Operational Phase

Most operation and monitoring activities will be carried out remotely with the aid of computers connected via a telephone broadband link. However, some visits (an average of three to four per week) will be necessary to carry out routine inspection and preventative maintenance.

The following sections of this report assess the proposed development against the Schedule 7 criteria identified previously.

4. PLANNING POLICY CONTEXT

4.1.1 Introduction

Prior to examining the characteristics of the proposed development, this section examines the proposed development in terms of its compliance with relevant plans and policies.

4.1.2 Regional Planning Guidelines for the South West Region 2010 - 2022

The Regional Planning Guidelines for the South West Region were first adopted in 2004. It is acknowledged in the guidelines that *"The south west has considerable potential for the generation of electricity from sustainable renewable resources such as wind and wave."* The objectives (RTS-09) for the South West Region relating to Energy and Renewable Energy are described below:

- *It is an objective to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the network.* ***National grid expansion is important in terms of ensuring adequacy of regional connectivity as well as facilitating the development and connectivity of sustainable renewable energy resources.***
- *It is an objective to ensure that future strategies and plans for the promotion of renewable energy development and associated infrastructure development in the Region will promote the development of renewable energy resources in a sustainable manner. In particular, development of wind farms shall be subject to:*
    - *the Wind Energy Planning Guidelines*
    - *consistency with proper planning and sustainable development*
    - *criteria such as design and landscape planning, natural heritage, environmental and amenity considerations,*
- *It is an objective of the guidelines to promote the sustainable provision of renewable energy from tidal, wave and pumped storage developments together with bioenergy resources, as critical elements of the long-term secure energy supply throughout the region.*

4.1.3 Cork County Development Plan 2009 - 2015

The planning objectives for County Cork are set out in the Cork County Development Plan 2009-2015. The objectives of the Authority on renewable energy development are contained in Chapter 6 of the Plan. Those policies which are considered the most relevant are summarised in Table 4.1.

Table 4.1: Extracts from the Cork County Development Plan 2009

Policy	Description
Objective INF 7-3 *Renewable Energy Production*	It is an objective generally to encourage the production of energy from renewable sources, including in particular that from biomass, waste material, solar, wave, micro hydro power and wind energy, subject to normal proper planning considerations, including in particular the impact on areas of environmental or landscape sensitivity.
Objective INF 7-4 *Wind Energy Projects*	(a) It is an objective to encourage prospective wind energy businesses and industries. In assessing potentially suitable locations for projects, potential wind farm developers should focus on the strategic search areas identified in the Plan and generally avoid wind energy projects in the strategically unsuitable areas identified in this Plan. (b) It is an objective to support existing and established businesses and industries who wish to use wind energy to serve their own needs subject to proper planning and sustainable development.

Policy	Description
	(c) It is an objective in the strategic search areas (and in those areas that are identified as neither strategic search areas nor strategically unsuitable areas), to consider new, or the expansion of existing, wind energy projects on their merits having regard to normal planning criteria including, in particular, the following: • The sensitivity of the landscape and of adjoining landscapes to wind energy projects; • The scale, size and layout of the project, any cumulative effects due to other projects, and the degree to which impacts are highly visible over vast areas; • The visual impact of the project on protected views and prospects, and designated scenic landscapes as well as local visual impacts; • The impact of the project on nature conservation, archaeology and historic structures; • Local environmental impacts including noise and shadow flicker; • The visual and environmental impacts of associated development such as access roads, plant, grid connections etc. • The proximity and sensitivity of a recognised settlement, • The impact of the project on archaeology and historic structures, • The impact of nature conservation, in particular avoiding designated and proposed European sites. (d) Similar criteria would be taken into account in the strategically unsuitable areas except that suitable projects will generally be on a smaller scale and on very special, carefully chosen sites.

The Council has prepared a renewable energy strategy for the County in Section 6.7.12 of the County Development Plan 2009-2015. The Council's Wind Energy Strategy identifies two classifications for wind farm development:

- *"**STRATEGIC SEARCH AREAS**: Areas which have both relatively high wind speeds and relatively low landscape sensitivity to wind projects. These could be considered to be strategic 'search areas' for wind farm development. Prospective developers would be encouraged generally to focus on these areas when searching for potentially suitable sites in County Cork. While not all locations within these areas would be suitable for wind projects..., they do give a strategic representation of generally preferred areas.*

- ***STRATEGICALLY UNSUITABLE AREAS**: Areas which, because of high landscape sensitivity, are considered generally to be unsuitable for wind energy projects. While there may be a small number of locations within these areas with limited potential for small-scale wind projects, their contribution to any significant reduction in greenhouse gas emissions would be negligible. Except on a small scale and at particularly suitable locations, wind projects would normally be discouraged in these areas."*

The proposed site is located in a 'strategic search area' on Figure 6.3 of the County Development Plan as indicated on Figure 4.1. The proposed substation development is ideally located within the footprint of a permitted wind farm and in close proximity to an existing 110kV overhead transmission line which allows the energy generated at the wind farm to connect directly to the national grid, avoiding the need for additional overhead cables and minimising electrical losses.

4.1.4 Cumulative impact of proposed development on CDP

We are not aware of strategic areas in the vicinity of the development that would be prevented from being developed as a result of this proposed substation.

R:\Map Production\2014\LE14\702\02\Workspace
\ LE13-702-02_Figure 4.1_Cork County Strategic Wind Energy Areas Map_Rev A.wor

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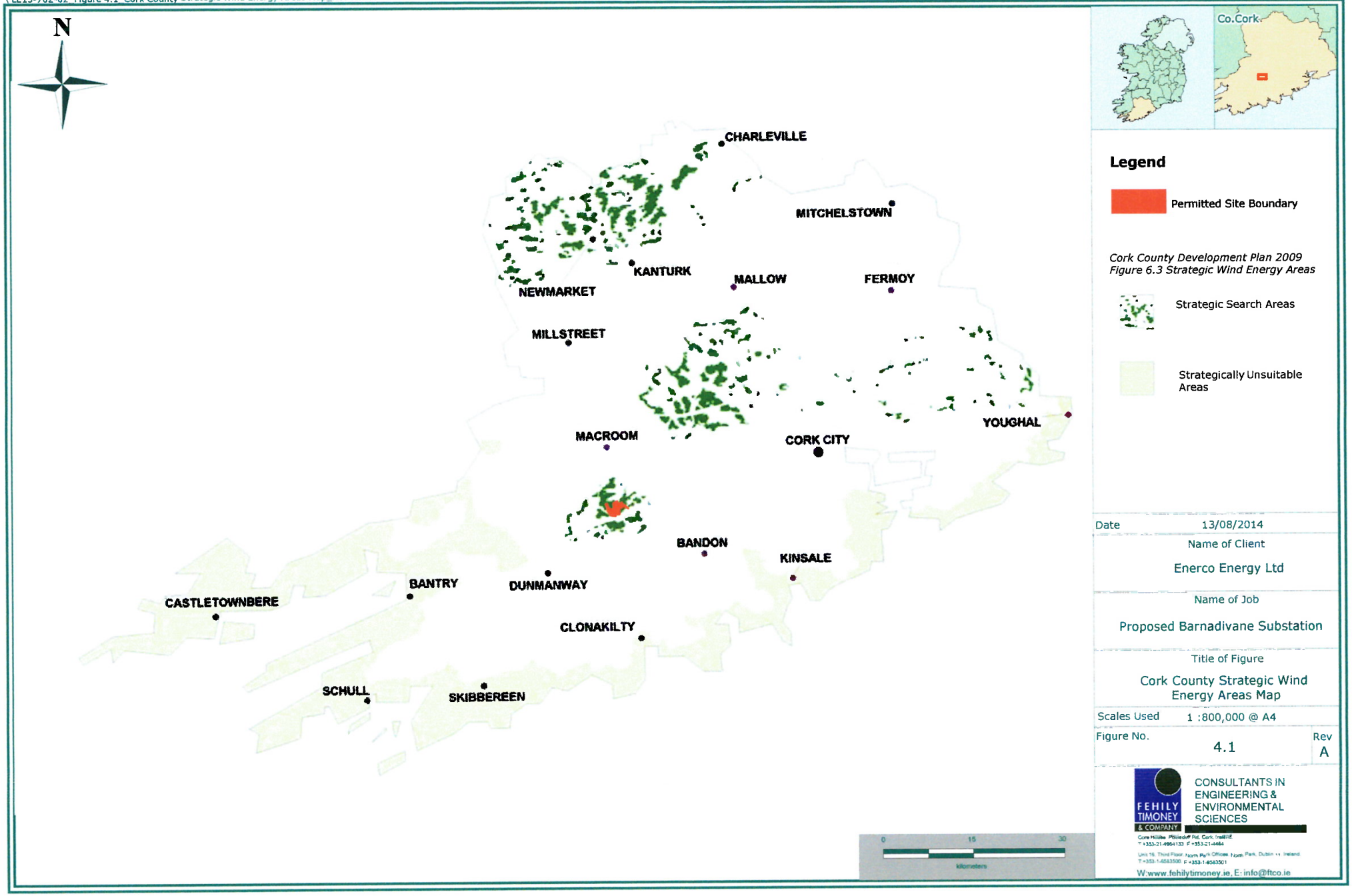

Date	13/08/2014
Name of Client	Enerco Energy Ltd
Name of Job	Proposed Barnadivane Substation
Title of Figure	Cork County Strategic Wind Energy Areas Map
Scales Used	1 :800,000 @ A4
Figure No.	4.1
Rev	A

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4.1.5 Overall Compliance with Relevant Plans and Policies

It is considered that the proposed development is in keeping with relevant plans and policies for the region in terms of strategic search areas, the provisions of renewable energy infrastructure and contribution to renewable energy targets.

By virtue of the existing permission, the principle of this type of development has already been established in the vicinity. The substation is required to facilitate the connection of electrical energy generated at Barnadivane Wind Farm to the national grid.

5. SCHEDULE 7 CRITERIA

The following criteria are laid down in Schedule 7 of the Planning and Development Regulations 2001 – 2013 for the purposes of assessing if a proposed development would or would not be likely to have significant effects on the environment:

1. *Characteristics of proposed development*

   The characteristics of proposed development, in particular:

   - *the size of the proposed development*
   - *the cumulation with other proposed development*
   - *the nature of any associated demolition works*
   - *the use of natural resources*
   - *the production of waste*
   - *pollution and nuisances*
   - *the risk of accident, having regard to substances or technologies used.*

2. *Location of proposed development*

   The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to:

   - *The existing land use*
   - *The relative abundance, quality and regenerative capacity of natural resources in the area*
   - *The adsorption capacity of the natural environment, paying particular attention to the following areas:*
     - *wetlands*
     - *coastal zones*
     - *mountain and forest areas*
     - *nature reserves and parks*
     - *areas classified or protected under legislation, including special protection areas designated pursuant to Directive 79/409/EEC and 92/43/EEC*
     - *areas in which the environmental quality standards laid down in legislation of the EU have already been exceeded*
     - *densely populated areas*
     - *landscape of historical, cultural or archaeological significance*

3. *Characteristics of potential impacts*

   The potential significant effects of proposed development in relation to criteria set out under paragraphs 1 & 2 above and having regards in particular to:

   - *the extent of the impact (geographical area and size of the affected population)*
   - *the transfrontier nature of the impact*
   - *the magnitude and complexity of the impact*
   - *the probability of the impact*
   - *the duration, frequency and reversibility of the impact*

5.1 Characteristics of the proposed development

This section examines the individual criteria identified in Schedule 7 in terms of the characteristics of the proposed development. As previously identified, Schedule 7 of the Planning and Development Regulations 2001 – 2013 requires the assessment of:

The characteristics of proposed development, in particular:

- *the size of the proposed development*
- *the cumulation with other proposed development*
- *the nature of any associated demolition works*
- *the use of natural resources*
- *the production of waste*
- *pollution and nuisances*
- *the risk of accident, having regard to substances or technologies used.*

5.1.1 The Size of the Proposed Development

The 110 kV substation compound will cover an area of approximately 90 m x 117 m on plan including a security fence. The overall development including roads and hardstanding areas will cover approximately 1.1 ha, within the overall study boundary of the permitted wind farm which covers an area of 355 ha. The proposed substation will replace a permitted substation and switch station on a 32 m by 35.5 m compound and 70 m by 45 m compound respectively. The proposed substation site is within private lands in the ownership of a contributory landowner associated with Barnadivane Wind Farm.

5 1.2 The Cumulation with Other Proposed Development

The proposed substation is required to facilitate the connection of energy generated at Barnadivane Wind Farm to the National Grid. The proposed substation location is approximately 500m southwest of the permitted substation, within the planning boundary of the permitted wind farm which was subject to an EIA by both Cork County Council and An Bord Pleanála.

There are a number of existing and permitted wind farm developments nearby. There is an existing neighbouring wind farm with 4 operational turbines and a substation, namely Garranereagh Wind Farm. The nearest turbine is approximately 1km from the proposed substation. This development, along with any other planned or permitted wind farms in the vicinity, has been considered in the environmental assessment for the relevant wind farms.

The proposed substation is in place of a permitted substation. Notwithstanding the larger footprint, the cumulative effects of the development are not considered to be a significant issue.

5.1.3 The Nature of Any Associated Demolition Works

There are no demolition works associated with the proposed substation development.

5.1.4 The Use of Natural Resources

The use of natural resources in relation to the proposed development is not considered to be a significant issue. The development is required to facilitate the connection of renewable energy to the national grid. In addition, the production of energy from a renewable source offsets the production of energy from fossil fuels.

In terms of use of natural resources at the proposed development, resources such as granular construction materials, cementitious materials, water etc. will all be used during the construction phase. Granular construction material will be sourced locally. During operations, fuel oil will be used in the facility vehicles and other oils and similar consumables will be used as part of operations.

5.1.5 The Production of Waste

Construction Waste

The wastes/spoils likely to be generated during the construction phase will include the following:

- Excavated material arising from the cut for the foundations. This will be used on site for the new site tracks, the hardstanding areas and embankments where possible.
- Cut-offs from construction material. This will be taken off site for re-use (where appropriate), recycled (in the case of metal cut-offs), or taken to a licensed landfill facility.
- Domestic type waste generated by contractors. This material will be collected on site, stored in an enclosed skip and disposed of at a licensed landfill facility.

All wastes will be collected at the end of the construction phase, taken off site, and reused, recycled and disposed of according to industry best practices at an authorised facility.

Operation/Maintenance Waste

All waste arising as a result of servicing and maintenance (e.g. lubricating oils, cooling oils, packaging from spare parts or equipment, unused paint, etc.) will be removed from the site and reused, recycled or disposed of in accordance with best practice in an authorised facility. The production of waste in relation to the proposed development will be managed in accordance with best practice and is not considered to be a significant issue.

5.1.6 Pollution and Nuisances

The proposed substation location has been selected on the basis that it is away from sensitive environmental receptors such as residential areas, single dwellings, or environmentally vulnerable sites and no significant environmental impacts are anticipated once the substation is operational.

As with any development of this nature, the following environmental impacts have the potential to be realised during construction:

- Noise generation
- Impact on surface water
- Impact on groundwater
- Impact on air quality
- Traffic congestion

Noise Generation

During the construction phase, noise generation potential is likely but expected to be intermittent and short term. A construction phase environmental management plan (CEMP) will be put in place for the construction period which will specify noise emission limits during construction.

During the operational phase of the development, potential for noise generation is not considered significant.

Impact on Surface Water

The site is situated within the catchment of the River Bride. There will be no direct discharges to any natural watercourses, with all drainage waters being dispersed to soakaways or as overland flows via vegetation filters at a significant distance from the nearest natural watercourses. The River Bride rises at an elevation of 220 m OD between Moneygaff East and Barnadivane (Kneeves) over 1.5km to the southwest of the site.

The proposed development location is not within an area of 'benefitting lands' or 'drainage districts' and there are no reported incidents of flooding in the vicinity of the proposed development, as per national flood hazard mapping (www.floodmaps.ie).

As a result of the significant separation distance and construction best practice measures to be applied to the proposed development, the substation is expected to have a negligible impact on the receiving environment in terms of surface water.

Impact on Groundwater

The groundwater section of the GSI website classifies the bedrock underlying the site as a 'Locally Important Aquifer (Ll)', with bedrock which is 'moderately productive only in localised zones'.

As a result of the construction best practice measures to be applied to the proposed development, the substation is expected to have a negligible impact on the receiving environment in terms of ground water.

Impacts on Air Quality

Construction phase air quality impacts will be in relation to potential dust generation. As a result of the construction best practice measures to be applied to the proposed development, the substation is expected to have a negligible impact on the receiving environment in terms of air quality.

Traffic Congestion

The site is accessed via a local road running east west serving a number of one off dwellings and farms between Barnadivane and Terelton.

Traffic associated with the grid connection will include deliveries of a limited quantity of imported material, construction materials and electrical infrastructure for the proposed substation and workers entering and leaving the site. Most of the deliveries will be spread over the duration of the construction works. Nearly all loads will be normal truck deliveries with the exception of the transformer which will be a heavy load of approximately 96 tons with dimensions 7 m by 5 m by 5.5 m in height. The transportation vehicle for the transformer will have sufficient axles such that the load per axle does not exceed the normal limits.

Due to the relatively low volume of heavy loads anticipated for the construction of the substation, the impact of construction traffic on the condition of the local roads is considered to be slight.

The construction duration for the proposed substation is not expected to exceed 12 months, however the majority of the construction traffic will be concentrated over a shorter period of time.

Operational traffic will be very low and potential impacts will be insignificant.

Consideration of Cumulative Potential Pollution and Nuisance Parameters

The existing permission on the site permitted the construction of a substation and wind farm concurrently and this impact has been already assessed in the EIS for the permitted development. Notwithstanding the slightly larger footprint, if the proposed substation development is constructed in parallel with Barnadivane Wind Farm the potential for cumulative traffic impacts and nuisance is considered slight. In addition, a construction phase environmental management plan (CEMP) and traffic management plan (TMP) will be put in place for the construction period which will monitor and control these impacts during construction.

5.1.7 The Risk of Accident, having regard to Substances or Technologies Used

The risk of accident associated with technologies and substances used is considered low, as evidenced by the safe construction and operations of many such substations across the county by EirGrid, ESB and their contractors.

5.1.8 Consideration of the Characteristics of the Proposed Development

In terms of the characteristics of the proposed development, it is considered that:

- The proposed development is in compliance with relevant plans and policies
- There will be no significant demolition works associated with the proposed development

- Usage of natural resources will be limited to those used during construction and as consumable materials during operations.
- The siting of the proposed substation away from sensitive environmental receptors such as residential areas, single dwellings, or environmentally vulnerable sites will result in little or no impacts in terms of noise, pollution or any other potential nuisances.

5.2 Location of the proposed development

This section examines the individual criteria identified in Schedule 7 in terms of the location of proposed development of the proposed development. As previously identified, Schedule 7, identifies that regard must be given to:

The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to:

- *The existing land use*
- *The relative abundance, quality and regenerative capacity of natural resources in the area*
- *The adsorption capacity of the natural environment, paying particular attention to the following areas:*
    - *wetlands*
    - *coastal zones*
    - *mountain and forest areas*
    - *nature reserves and parks*
    - *areas classified or protected under legislation, including special protection areas designated pursuant to Directive 79/409/EEC and 92/43/EEC i.e. the Habitats Directive*
    - *areas in which the environmental quality standards laid down in legislation of the EU have already been exceeded*
    - *densely populated areas*
    - *landscape of historical, cultural or archaeological significance*

5.2.1 Existing Land Use

The site primarily consists of improved agricultural grassland, which is cattle or sheep grazed. Hedgerows and earth banks bound the site. Vehicular access to the proposed site is via a local road serving a number of houses and farms.

The proposed substation location is approximately 500m southwest of the permitted substation, within the planning boundary of the permitted wind farm which was subject to an EIA by both Cork County Council and An Bord Pleanála. Accordingly, this area is deemed suitable for a development of this nature.

The proposed substation location is within a strategic search area for a wind farm, strategic search areas have been identified by Cork County Council as the most suitable areas for wind farm development in the county, including associated infrastructure.

5.2.2 Relative Abundance, Quality and Regenerative Capacity of Natural Resources in the Area

It is not considered that the proposed development will impact on the abundance, quality and regenerative capacity of natural resources of the area. It is not proposed to abstract ground or surface waters for the development, nor is the mining of minerals proposed.

The only natural resources considered relevant to the proposed development are minerals that will be used during construction which will be sourced from local suppliers. Quantities will not be significant and will not impact on the abundance of such materials in the locality.

5.2.3 Adsorption Capacity of the Natural Environment

The adsorption capacity of the natural environment is considered to be a measure of the ability of the proposed development to 'fit in' with the locality.

In visual terms this proposal consists of two steel lattice structures, approximately 18m high, that lie outside the substation compound but within the site boundary and connect the existing 110kV electricity line into the sub-station. The lines will connect to a gantry with a height of approximately 10 m. At ground level the substation plant consists of a series of transformers, circuit breakers and post insulators which are all vertical structures between approximately 5 m and 10 m in height. Lightning masts of approximately 15 m height are also located within the compound. Also contained within the substation compound are three single storey control buildings and associated car parking areas. The substation site is approximately 90 m x 117 m in area and will be surrounded by a 2.4 m high security fence.

The proposed substation site is within a landscape type defined as *Fissured Fertile Middle Ground* in the County Development Plan known as Type 10(a) as shown in Map 14 of the Landscape maps in Volume 3 of the Cork County Development Plan 2009 - 2015.

The draft landscape strategy for County Cork classifies the landscape value of each landscape type within the county from very low to very high. The landscape value of each area was derived from an assessment of the natural, scenic and cultural value as determined within that area. Generally, Landscape value represents aesthetic, ecological, historical, socio-cultural, religious and other characteristics of the LCA. Landscape Character Sensitivity identifies the landscapes ability to accommodate change without adverse impact on its character.

The draft strategy states that landscape Type 10(a) – Fissured Fertile Middle Ground has a landscape value of **"low",** a landscape sensitivity of **"low"** and a landscape importance of **"local"**. The nearest designated scenic route is located on a third class road near the village of Terelton approximately 2km northwest of the proposed substation.

As a general comment, it is considered that the locality for the proposed development has the ability to absorb the proposed development on the following basis:

- The draft strategy defines low value landscapes as *"monotonous landscapes without particular scenic quality, local level of natural or cultural heritage"* and low sensitivity landscapes as *"robust landscapes, which are tolerant to change, and which have the ability to accommodate development pressure".*
- The proposed substation location is approximately 500m southwest of the permitted substation, within the planning boundary of the permitted wind farm which was subject to an EIA by both Cork County Council and An Bord Pleanála. Accordingly, this area is deemed suitable for a development of this nature.
- Proposed location within a strategic search area for a wind farm, strategic search areas have been identified by Cork County Council as the most suitable areas for wind farm development in the county, including associated infrastructure.
- Proposed location is further from the scenic route than the permitted substation location, and the natural topography and mature tree screening to the north will offer natural screening from the scenic route.
- An existing 110kV overhead electricity line supported on double timber poles traversing the site creates a thematic association with the proposed substation development in terms of technological image.

As per the requirements of Schedule 7, the following table explores the individual area to be assessed in more detail.

Table 5-1: Individual Criteria Examined

Area	Description	Potential Impact
Wetlands	The Gearagh SPA (004109) is located approximately 6km to the north of the proposed development. This site is identified as a SPA (Special Protection Area). The site synopsis indicates that principal habitat is now a shallow lake which is fringed by wet woodland, scrub and grassland that is prone to flooding.	It is not considered that the proposed development will impact on this site. There will be no direct emissions, or disposal of material into any Natura 2000 site as a result of the proposed development. Taking into consideration the fact that the development works are not hydrologically linked to the SPA, there will be any adverse impacts on these wetlands.
Coastal Zones	The proposed development is located over 30 km from a coastal area.	At this distance, it is not considered that the proposed development has any potential to impact on coastal zones
Mountains and Forest area	The nearest mountain ranges are the Boggeragh/Mushera Mountains to the north and the Shehy Mountain Range located approximately 25 km west of the proposed development location.	It is not considered that the proposed development will impact on these areas, given the distance.
Areas classified under Habitats Directive	The proposed wind farm site does not lie within any Natura 2000 sites. There are three Natura 2000 sites (two cSACs[2] and one SPA) within a 10 km radius. The Gearagh cSAC (site code 000108) lies over 6.5 km north of the proposed development site, and the Gearagh SPA (004109) lies over 6km to the north. The Bandon River cSAC (002171) lies over 9.5 km southwest of the proposed development site. The Mullaghanish to Musheramore Mountains SPA (004162) lies over 13 km north of the proposed development site.	The potential for 'significant effects' on these sites will be determined through the Appropriate Assessment process. Refer to Appendix A for a copy of the screening assessment that concludes significant effects are not likely.

[2] At present all SACs in Ireland are currently 'candidate' SACs, and referred to as cSACs. The relevant Statutory Instruments for the SACs in Ireland have not yet been put in place, though these sites must still be afforded protection in accordance with the EU Habitats Directive (92/43/EEC).

Area	Description	Potential Impact
Areas in which environmental quality standards have been exceeded	It is considered that this refers to exceedances in the locality of relevant parameters in relation to, *inter alia,* surface and groundwater, noise and air quality.	Many similar developments are operating throughout the country without exceeding environmental quality standards. All works will be carried out in accordance with relevant best practice. It is considered unlikely that environmental quality standards could be exceeded.
Densely populated areas	The closest settlements are Terelton, (approx. 3.4km to the north west) and Coppeen (approx. 3.4km to Southwest) of the site.	It is considered that the potential to impact on these settlements can be considered minimal, given the distance.
Landscape of historical, cultural or archaeological significance	No recorded monuments occur within close proximity to the proposed sub-station site and only 2 monuments (ringforts) occur within 1km (the nearest being 771m and 845m). No direct or indirect impacts are likely as a result of the proposed development.	With no further development proposed beyond the current site boundary, it is considered that the proposed development will not impact on any of the sites of interest identified.

5.2.4 Consideration of the Location of the Proposed Development

In terms of the location of the proposed development, it is considered that:

- The proposed site, identified as a 'Wind Energy Strategic Search Area' as per the Cork County Development Plan 2009-2014, is considered suitable for this type of development
- The proposed development will have negligible impact on the natural resources in terms of their abundance, regenerative capacity and quality
- The substation will connect to an existing 110kV overhead line traversing the site. The existing feature comprise of wooden pole sets, with some steel angle masts, supporting three electrical conductors. The location of the substation will avoid the need for overhead cables to connect a permitted wind farm to the national grid.
- In general, the proposed development is well absorbed by the proposed location, subject to screening for appropriate assessment and the assessment of potential environmental impacts as part of the planning process.

5.3 Characteristics of potential impacts

Schedule 7 of the Planning and Development Regulation 2001 to 2013 requires a holistic assessment of the effects of the potential development, as follows:

The potential significant effects of proposed development in relation to criteria set out under paragraphs 1 & 2 above and having regards in particular to:

- *the extent of the impact (geographical area and size of the affected population)*
- *the transfrontier nature of the impact*
- *the magnitude and complexity of the impact*
- *the probability of the impact*
- *the duration, frequency and reversibility of the impact*

5.3.1 Potential Significant Effects of the Proposed Development

The potential significant effects in relation to the proposed development are considered to be as follows:

1. Environmental Impacts during the construction stage
2. Additional traffic generation during the construction stage
3. Absorption capacity of the natural environment, with regard to visual impact

These significant effects are examined in Table 5-2 with regard to the individual criteria identified above.

Table 5-2: Potential Significant Effect versus Individual Criteria

Potential Significant Effect	Extent of the Impact	Transfrontier nature of the impact	Magnitude and complexity of the impact	Probability of the Impact	Duration, frequency and reversibility of the impact
General Environmental Effects (Construction Stage)	Impact would be considered localised in nature	Impact would not be considered transfrontier in nature	Magnitude of the impact will be minimised by the implementation of a Construction Environmental Management Plan (CEMP). Considered a relatively un-complicated impact	The probability of the impact being significant can be considered low. Low probability is dependent on the implementation of an appropriate TMP.	Duration and frequency can be considered short and infrequent; reversibility of an ongoing event is facilitated through the elimination of the source
Generation of traffic (Construction Stage)	Impact would be considered localised in nature	Impact would not be considered transfrontier in nature	Magnitude of the impact will be minimised by the implementation of a traffic management plan (TMP). Considered a relatively un-complicated impact	Additional traffic will be generated during the construction phase, but the probability of the impact being significant can be considered low. Low probability is dependent on the implementation of an appropriate TMP.	Duration and frequency can be considered short and infrequent; reversibility of an ongoing event is facilitated through the elimination of the source
Visual Impact	Impact would be considered localised in nature	Impact would not be considered transfrontier in nature	As with any structure or building, the residual visual impact will be continuous and will extend over the lifetime of the project. This will be a localised impact that is mitigated by distance and natural screening. Considered a relatively un-complicated impact	As with any structure or building, the residual visual impact is unavoidable, but has been mitigated by careful design.	Duration and frequency can be considered continuous; reversibility is facilitated through decommissioning of the substation

6. CHECKLIST OF CRITERIA FOR EVALUATING THE SIGNIFICANCE OF ENVIRONMENTAL EFFECTS

The Department of Environment, Heritage and Local Government published *'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development'* to assist the consenting authority in deciding if significant effects on the environment are likely to arise regarding developments below the mandatory EIA thresholds.

This document includes the following checklist to aid consenting authorities in the decision process:

1. Will there be a large change in environmental conditions?
2. Will new features be out-of-scale with the existing environment?
3. Will the effect be particularly complex?
4. Will the effect extend over a large area?
5. Will there be any potential for transfrontier impact?
6. Will many people be affected?
7. Will many receptors of other types (fauna and flora, businesses, facilities) be affected?
8. Will valuable or scarce features or resources be affected?
9. Is there a risk that environmental standards will be breached?
10. Is there a risk that protected sites, areas, features will be affected?
11. Is there a high probability of the effect occurring?
12. Will the effect continue for a long time?
13. Will the effect be permanent rather than temporary?
14. Will the impact be continuous rather than intermittent?
15. If it is intermittent will it be frequent rather than rare?
16. Will the impact be irreversible?
17. Will it be difficult to avoid, or reduce or repair or compensate for the effect?

Each of the questions listed above is addressed in the following section to assist the consenting authority in their assessment of this proposal.

6.1.1 Will there be a large change in environmental conditions?

It is unlikely there will be any large change to baseline environmental conditions as a result of the proposed development. The proposed substation location has been selected to minimise adverse impacts on sensitive environmental receptors. The new 110kV substation will represent a new visual feature in the environment, however the proposed substation will replace an already permitted substation.

6.1.2 Will new features be out-of-scale with the existing environment?

The substation will connect to an existing 110kV overhead line traversing the site. The existing feature comprises wooden pole sets, with some steel angle masts, supporting three electrical conductors. The existing overhead electricity line creates a thematic association with the proposed substation development in terms of technological image. The proposed substation has been sited to minimise any potential visual and other environmental impacts that could arise.

6.1.3 Will the effect be particularly complex?

The effects are reasonably predictable as there are many substations throughout the country. There are no new or complex technologies proposed.

6 1. 4 Will the effect extend over a large area?

The development footprint is approximately 1.1 ha comprising two steel lattice structures, approximately 18m high with electrical lines connected to a gantry with a height of approximately 10 m. At ground level the substation plant consists of a series of transformers, circuit breakers and post insulators which are all vertical structures between approximately 5 m and 10 m in height. Lightning masts of approximately 15 m height are also located within the compound. Also contained within the substation compound are three single storey control buildings and associated car parking areas. The substation site is approximately 90 m x 117 m in area and will be surrounded by a 2.4 m high security fence. Access to the substation will be from the local public road running along the northern boundary of the site, a short section of new access track approximately 200m long will also be constructed.

6.1.5 Will there be any potential for transfrontier impact?

There is no potential for transfrontier impact.

6.1.6 Will many people be affected?

The proposed substation will directly affect one consenting landowner, by virtue of development on private land. Development is being proposed with the land owners consent. Once constructed the asset will be transferred to the Transmission Operator, Eirgrid. The nearest dwelling is approximately 250m away and this property is owned by a contributory landowner associated with Barnadivane Wind Farm. There are 11 inhabited dwellings within 1 km of the substation as indicated on Figure 2.2.

With regard to the operational impact of the development, the likely effects for people relate primarily to visual effects. The significance of effect will vary depending on the location of the receptor in relation to the structure.

6.1.7 Will many receptors of other types (fauna and flora, businesses, facilities) be affected?

The proposed substation has been carefully selected to avoid sensitive receptors. The proposed substation is located within improved grassland habitat that is of low ecological importance, outside of and removed from designated Natura 2000 sites.

There is potential risk to water quality during the construction phase through pollution or siltation. During construction works there is also potential for direct short term disturbance and nuisance in the vicinity of the proposed works. An Environmental Report and Screening Report for Appropriate Assessment will accompany the planning application. As a result of the construction best practice measures to be applied to the proposed development, the substation is expected to have a negligible impact on the receiving environment.

6.1.8 Will valuable or scarce features or resources be affected?

The proposed substation has been carefully selected to avoid sensitive areas. The site is not located within close proximity to any valuable or scarce features or resources, or any Natura 2000 site. Accordingly, it is not considered likely that these will be affected. A Screening Report for Appropriate Assessment, included in Appendix 2, considers Natura sites within 10km of the proposed substation.

6.1.9 Is there a risk that environmental standards will be breached?

Environmental standards can be measured and controlled to ensure the project is constructed and operated within the relevant guidelines and statutory requirements. There are many substations operating successfully throughout the county without breaching environmental standards. Adverse impacts are not anticipated as a result of the proposed development. An Environmental Report and Screening Report for Appropriate Assessment will accompany the planning application. Mitigation measures will be implemented as appropriate to minimise all potential impacts identified during the assessment process and to ensure environmental standards are not breached.

Any wind farm electricity substation must meet the requirements of Eirgrid and/or ESB Networks, as the substation will form part of national electricity grid and will be taken in charge by Eirgrid or ESB Networks. ESB and Eirgrid have a proven track record in operating similar developments.

6.1.10 Is there a risk that protected sites, areas, features will be affected?

The siting of the proposed substation and the selection has been cognisant of risks with regard to potential effects upon protected sites, areas and features and has been selected and designed to avoid sensitive environmental receptors (including sites, areas and features).

6.1.11 Is there a high probability of the effect occurring?

With regard to the residual effects of the development during operation, the likely effects for people relate primarily to visual effects. The significance of effect will vary depending on the location of the receptor in relation to the structure. Construction effects will be controlled by appropriated mitigation and construction best practice.

6.1.12 Will the effect continue for a long time?

The residual visual effects of the substation will extend over the lifetime of the project. The potential impacts associated with the construction phase of the proposed development are likely to be short lived in nature.

6.1.13 Will the effect be permanent rather than temporary?

The local visual impact will be permanent. This will be a localised impact that is mitigated by distance and natural screening from a dense network of hedgerows.

6.1.14 Will the impact be continuous rather than intermittent?

The construction period will be temporary, accordingly any associated impacts will also be temporary.

With regard to the operational impact of the development, the likely effects primarily relate to visual impacts. As with any structure or building, the residual visual impact will be continuous and will extend over the lifetime of the project. This will be a localised impact that is mitigated by distance and natural screening.

6.1.15 If it is intermittent will it be frequent rather than rare?

The construction period will be temporary, accordingly any associated impacts can be considered short and infrequent.

6.1.16 Will the impact be irreversible?

Generally reversibility of an ongoing event is facilitated through the elimination of the source or upon decommissioning of the substation. It is not considered likely that there would be significant irreversible effects.

6.1.17 Will it be difficult to avoid, or reduce or repair or compensate for the effect?

The proposed substation has been carefully selected to avoid sensitive receptors. An Environmental Report and Screening Report for Appropriate Assessment will accompany the planning application, both documents will recommend appropriate mitigation measures to ensure no likely significant impact on environmental receptors.

7. CONCLUSION

Following an examination of the Schedule 7 criteria to determine whether the proposed development would or would not be likely to have significant effects on the environment, as per the Planning and Development Regulations 2001 to 2013, the following statements are made:

- The proposed development is in compliance with relevant plans and policies in relation to the development and renewable energy.
- The primary reason for this application is to meet current Eirgrid standards in substation design and the proposed development will replace the currently permitted substation that is not yet constructed. No significant demolition works are associated with the proposed development.
- Abundance, quality and nature of natural resources in the area will not be impacted to any significant degree as a result of the proposed development.
- No impact on wetlands, coastal zones, mountain and forest areas or historical/cultural heritage will be realised
- The siting of the proposed substation away from sensitive environmental receptors such as residential areas, single dwellings, or environmentally vulnerable sites will result in little or no impacts in terms of noise, pollution or any other potential nuisances.
- Potential effects from the proposed development would be considered to be localised in nature and non-transfrontier. The magnitude of the impacts will be minimised by design or appropriate mitigation. Potential for negative effects does exist during construction, but this potential is considered low as the magnitude of these impacts will minimised or avoided by the implementation of a Construction Environmental Management Plan (CEMP).

In light of the above, it is considered that potential significant effects are not considered likely.

Appendix 1

Correspondence to ABP




FEHILY TIMONEY & COMPANY

CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES

IRELAND UNITED KINGDOM POLAND SAUDI ARABIA

Our Ref: Q:/2014/LE14/702/01/Let001/MT

The Secretary
An Bord Pleanála
64 Marlboro St
Dublin 2

03 April 2014

RE: Request seeking a determination from An Bord Pleanála as to the status of a proposed development comprising a 110kV Substation at Barnadivane, Co. Cork in relation to the Strategic Infrastructure Development Act under Section 182A / Section 37B of the Planning and Development Act, 2000, as amended by the Planning and Development (Strategic Infrastructure) Act, 2006.

Dear Sir/Madam

This document has been prepared by Fehily Timoney and Company and forms the pre-application consultation submission of Arran Windfarm Limited (herein after referred to as the applicant), for a proposed 110kV substation development at Barnadivane, Co. Cork, to serve a wind farm development. The following outlines the main elements of the proposed development and sets out the planning legislative context.

Introduction

The applicant intends to seek planning permission to construct a 110kV grid connection substation compound with associated control buildings, equipment plinths, bunds and fencing, oil interceptor, treated effluent storage tank and associated site development works at Barnadivane, Co. Cork. Barnadivane wind farm has been permitted under 05/5907 and PL04.219620 and a 5 year extension of planning permission was granted by Cork County Council under 11/06605. The requirement for a substation was anticipated in the planning application for the wind farm, and planning permission has been obtained for a 110 kV control building and switch station "*to ESB specifications*".

However new Eirgrid requirements necessitate this application and the applicant is commencing pre-application discussions with An Bord Pleanála to determine whether this proposal constitutes "strategic infrastructure development" (SID).

Cont'd.....

Description of the Permitted Development, including a currently permitted 110kV substation

The Barnadivane Wind Farm was permitted by An Bord Pleanála on 30 June 2006, comprising of 14 no. turbines, with hub height up to 70m and rotor diameter of 70m, and base to blade-tip height of 105m, 14 no. associated transformers, a 70m meteorological mast, substation and switch station compounds, construction of internal tracks, turbine foundations, hardstands and associated works and a connection to the national grid.

An Environment Impact Statement accompanied the planning application. The requirement for a substation was anticipated in the planning application, which referred to the following development works:

- Control building and compound surrounded by a 2m high security fence adjacent to the local road on the eastern side of the site.

- An application for a power line connection to the national grid was submitted to the ESB at the time of the original application which necessitated the construction of a switch station which is located adjacent to the proposed substation on a 70m by 45m compound.

Details of the permitted substation are illustrated on the following drawings that accompanied the planning application which you will find enclosed in Appendix A:

- Drawing No. 2003-188-01-007: Plan and Elevation of Proposed Substation
- Drawing No. 2003-188-01-008: Plan and Section of Proposed ESB Switch Station Compound

The permitted 110kV substation arrangement was based on ESB requirements at the time of the planning application and is no longer in accordance with current Eirgrid requirements. Any wind farm electricity substation must meet the design, electrical and layout requirements of Eirgrid and/or ESB Networks, as the substation will form part of national electricity grid and will be taken in charge by Eirgrid or ESB Networks. In the case of the substation granted permission as part of the wind farm permitted under 05/5907 and PL04.219620, given the electrical rating of the substation at 110kV, the substation will be taken in charge by Eirgrid and, therefore, will have to meet current Eirgrid specifications and requirements.

In this regard, Eirgrid's current design standards for substations of this nature were issued in 2011 after the planning application was made.

Description of the Proposed Development

The proposed substation is based on current Eirgrid requirements as illustrated on the following, which you will find enclosed in Appendix B:

- Drawing No. LE14-702-01-001: Proposed Barnadivane Substation Schematic Layout

Cont'd.....

There is some design flexibility in the layout of the individual components, provided certain minimum separation distances and other requirements are met. The proposed substation layout shown in the enclosed drawings now takes account of the Eirgrid requirements, but gives rise to a larger development footprint than that of the permitted substation. This larger footprint necessitated it to be relocated.

The proposed development will comprise of a 110kV grid connection substation compound with associated control buildings, equipment plinths, bunds and fencing, oil interceptor, treated effluent storage tank and associated site development works. The proposed substation is situated approximately 500m southwest of the permitted substation location, just south of an existing local road, as indicated the following which you will find enclosed in Appendix B:

- Figure No. LE14-702-01: Barnadivane Substation Site Location Map 'Permitted vs Proposed'

The new location was selected to accommodate the increased compound area whilst maintaining an appropriate separation distance from the existing 110kV overhead line traversing the site and avoiding the need for 110 kV overhead lines.

The proposed development is not within, adjoining or in relative proximity to a Natura 2000 site. The nearest sites are Boylegrove Wood (NHA), approx 4km northwest, Killaneer House Glen (NHA), approximately 5km southeast and Gearagh (SAC/NHA/SPA and Nature Reserve), approximately 6km to the north of the study area.

Planning Legislative Context

Under Section 182(A) of the Planning and Development Act as inserted by Section 4 of the Planning and Development (Strategic Infrastructure) Act 2006 where an undertaker:

> *"...intends to carry out development comprising or for the purposes of electricity transmission the undertaker shall prepare, or cause to be prepared, an application for approval of development under section 182B and shall apply to the Board for such approval accordingly".*

Subsection 9 of 182A states that:
In this section 'transmission', in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 but, for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of—

> *(a) a high voltage line where the voltage would be 110 kilovolts or more, or*
> *(b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not.*

Cont'd.....

In section 2(1) of the Electricity Regulation Act, 1999, "transmission" is defined in relation to electricity as meaning *"the transport of electricity by means of a transmission system, that is to say a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board."*

Subsection 9 of 182A sets a threshold of 110 kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. No threshold is set in respect of a substation, therefore it is reasonable to refer directly to Section 37A(2) of the Planning and Development (Strategic Infrastructure) Act, 2006. Section 37A(2) sets out the criteria that a proposed development must meet before it can be deemed a Strategic infrastructure Development:

> *(a) the development would be of strategic economic or social importance to the State or the region in which it would be situated,*
>
> *(b) the development would contribute substantially to the fulfilment of any of the objectives in the National Spatial Strategy or in any regional planning guidelines in force in respect of the area or areas in which it would be situated,*
>
> *(c) the development would have a significant effect on the area of more than one planning authority."*

Planning Legislative Assessment

The legislation explicitly sets a threshold of 110 kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. However, no specific threshold is set in respect of a substation. Therefore, the applicant is commencing pre-application discussions with An Bord Pleanála to determine whether this proposal constitutes "strategic infrastructure development".

Having regard to the nature and scale of the development, it is our opinion that the proposed development is not SID for the following reasons:

1. The permitted wind farm development at Barnadivane that the proposed substation will serve is not itself within the strategic infrastructure thresholds of more than 25 turbines or having a total output greater than 50 megawatts, as specified in the Seventh Schedule

2. The development will not make a significant contribution to the delivery of regional planning guidelines or the National Spatial Strategy

3. The development is entirely within the catchment of a single planning authority.

Cont'd.....

Planning Precedent

The applicant wishes to draw the attention of the Board to a number of previous decisions on similar cases:

- VC0069 - 110kV substation at Barnakyle, Grange Castle, Clondalkin, County Dublin.
- VC0061 - Redevelopment of existing 110kV electricity substation at Ardnacrusha, Co. Clare.
- PC0161 - Alterations to a permitted electrical substation serving Slievecallan Wind Farm. Co Clare
- VC0067 - Proposed extension to existing substation compound, removal, reconfiguration, replacement and new substation infrastructure and local realignment of part of existing 220 kV circuits and 2 no. supporting towers at existing Knockraha 220kV substation, Co Cork.
- VC0063 - Redevelopment of existing 220/110kV electricity substation at Killonan, Milltown, Ballysimon, Co. Limerick.
- VC0031 - Line bay in Corderry 110 kV station to facilitate connection of Garvagh Glebe Windfarm

It was the decision of the Board on all of these pre-SID applications that the proposed grid connection works did not fall within the meaning of Section 182A of the Act and that a planning application should be made in the first instance to the relevant Local Authority.

Conclusion

The requirement for a substation was anticipated in the planning application for the permitted wind farm and planning permission has been obtained for a 110 kV control building and switch station *"to ESB specifications"*. The proposed development is required to meet current Eirgrid standards in substation design and will replace the currently permitted substation that is not yet constructed.

Having regard to the nature and scale of the development, it is our opinion that the proposed development is not SID for the following reasons:

1. The permitted wind farm development at Barnadivane that the proposed substation will serve is not itself within the strategic infrastructure thresholds of more than 25 turbines or having a total output greater than 50 megawatts, as specified in the Seventh Schedule

2. The development will not make a significant contribution to the delivery of regional planning guidelines or the National Spatial Strategy

3. The development is entirely within the catchment of a single planning authority.

The applicant is seeking a determination from An Bord Pleanála as to whether the proposed development is considered SID within section 182A of the Act, having regard to the provisions of the legislation.

Cont'd.....

We enclose the statutory fee of €4,500 for the Board's determination of this case. We understand that €3,500 may be refunded if no more than one meeting with An Bord Pleanála is required.

We look forward to hearing from you on the matter.

Yours faithfully

Paul O'Brien
for and on behalf of **Fehily Timoney & Company**

APPENDIX A

Drawings of Existing Development:

Plan and Elevation of Proposed Substation

Plan and Section of Proposed ESB Switch Station Compound

Sheet FTC-A1-2000 rev. J (template filed in C:\Acad\Templates\Autocad) (Sept. 2004) - template externally referenced

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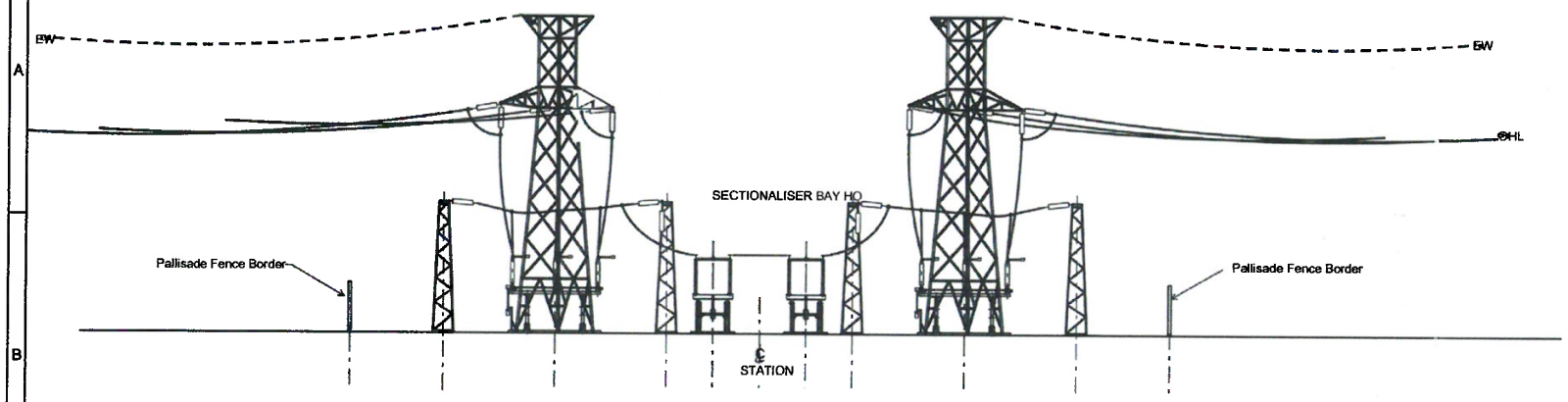

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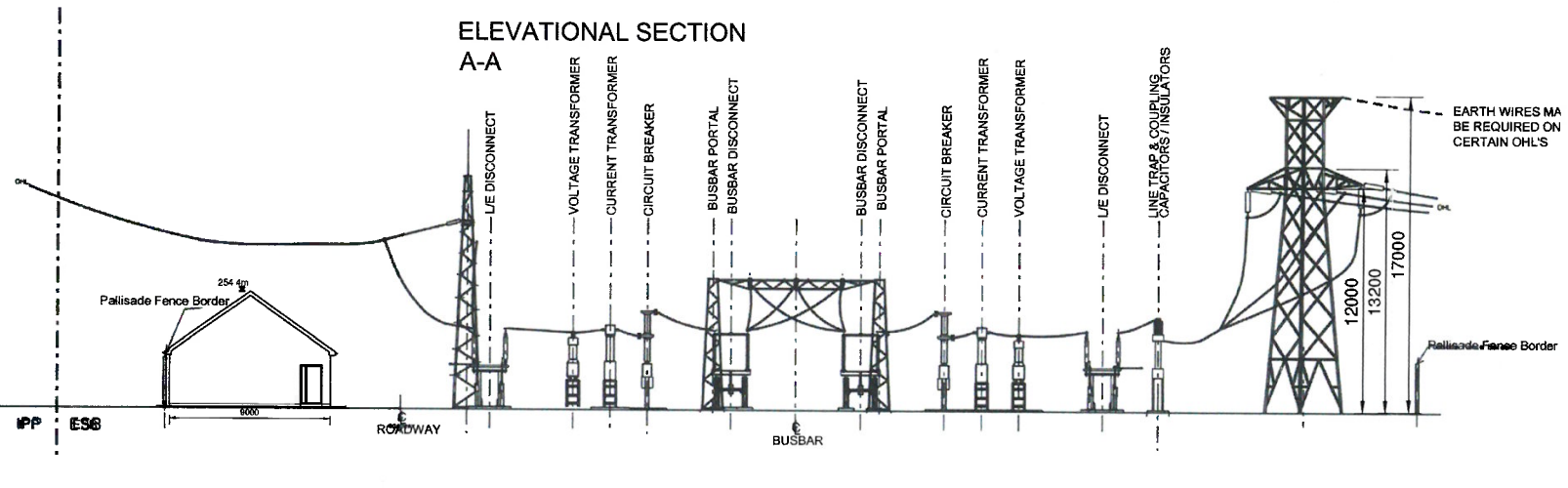
A-A



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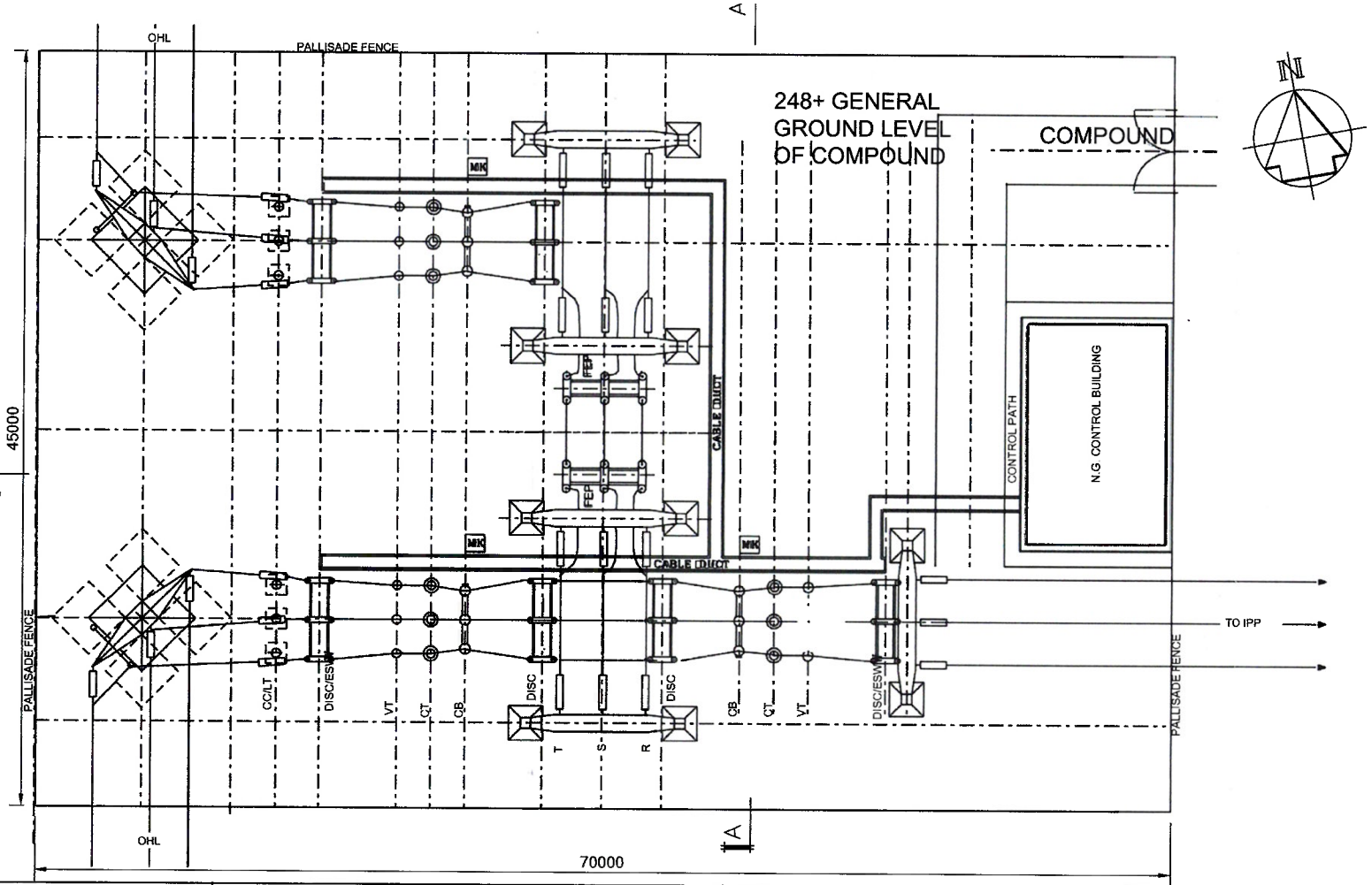

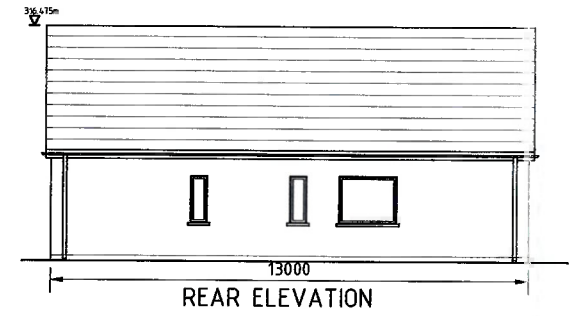

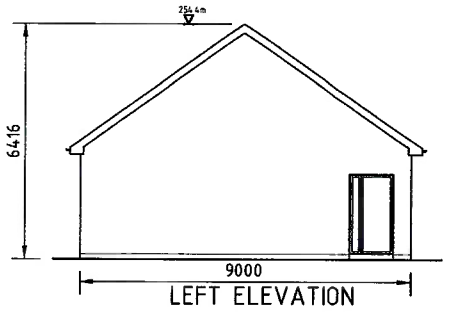

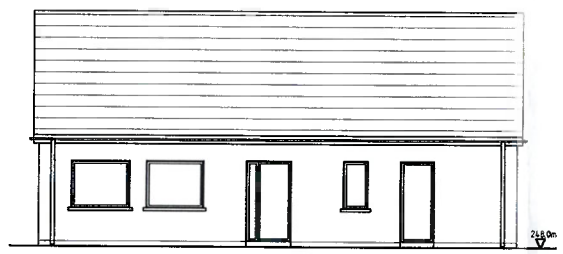

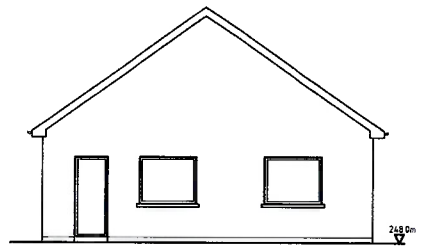

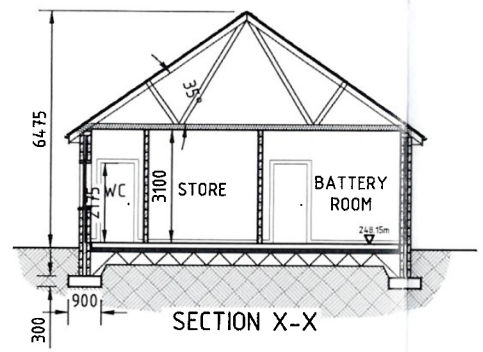

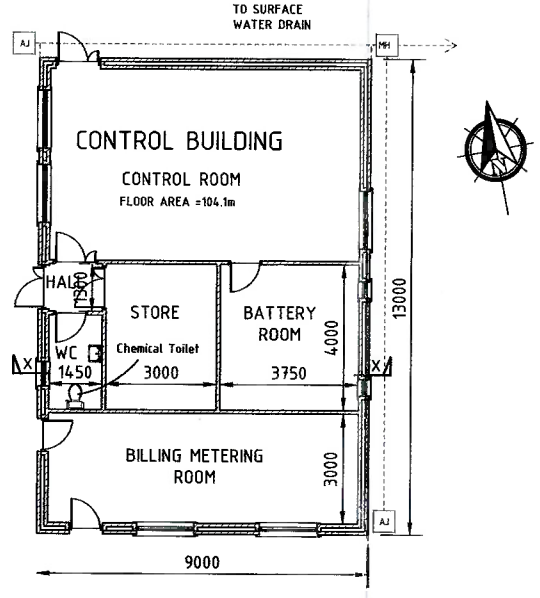

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A	SR	KC	ET	15.08.2005	ISSUE FOR PLANNING APPLICATION

Name of Client
BARNA WIND ENERGY LTD.

Name of Job
PROPOSED WIND FARM AT BARNADIVANE (KNEEVES), TERELTON, MACROOM, CO. CORK

Title of Drawing
1:200 PLAN & SECTION OF PROPOSED ESB SWITCH STATION COMPOUND

Scales Used
A1 1:200, 1:100

Dwg. No. 2003-188-01-007
Rev. B

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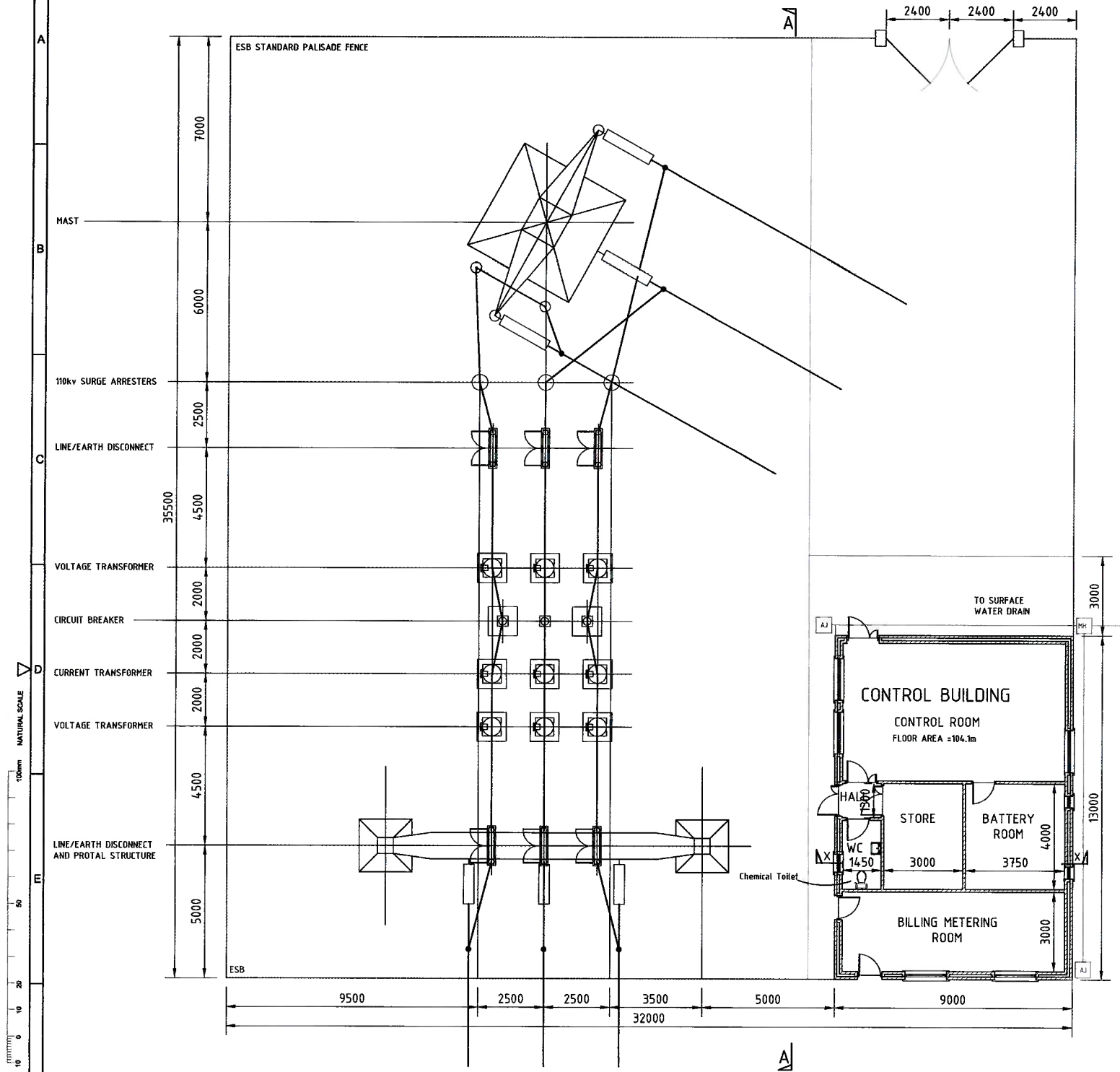

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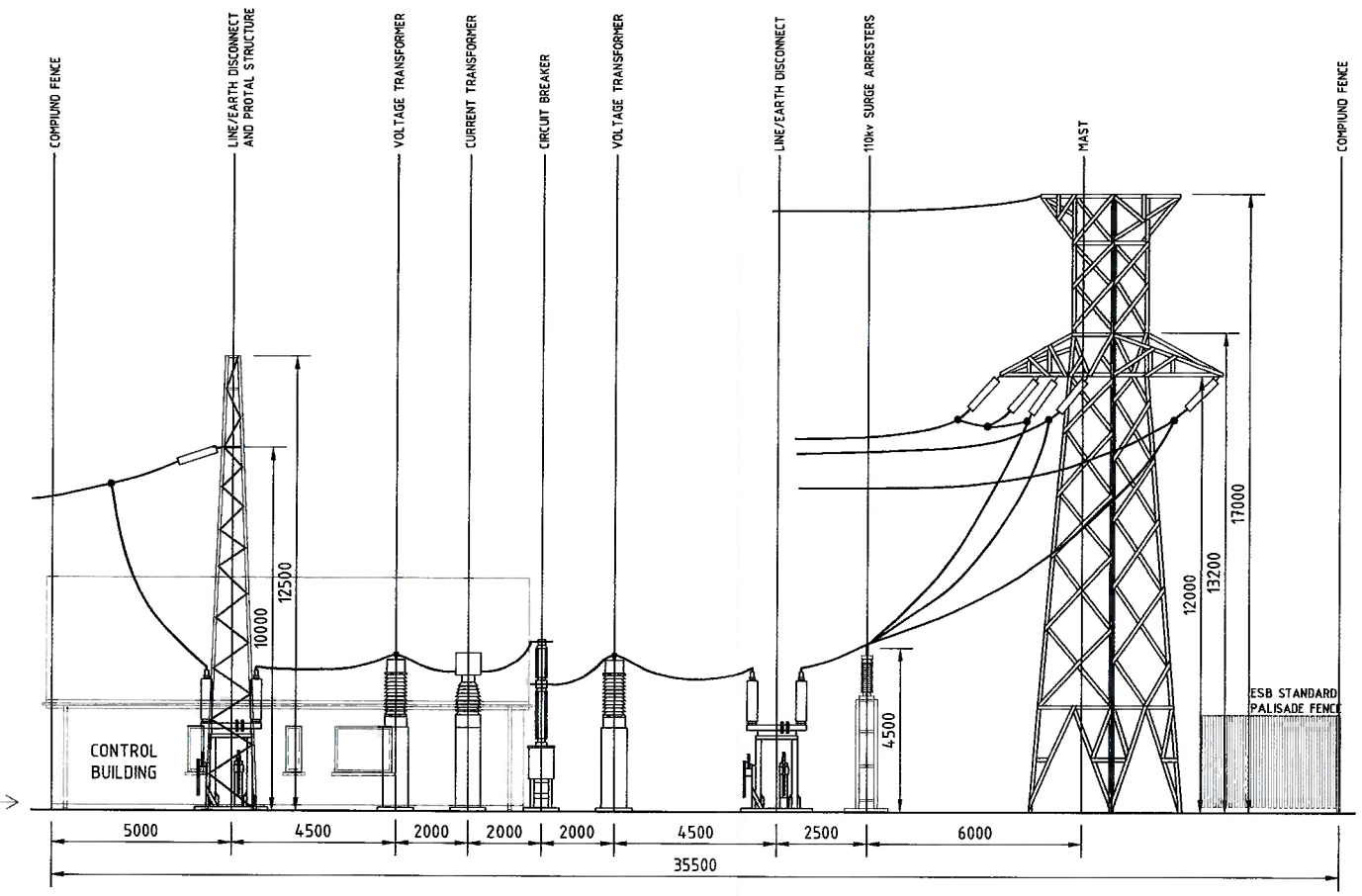

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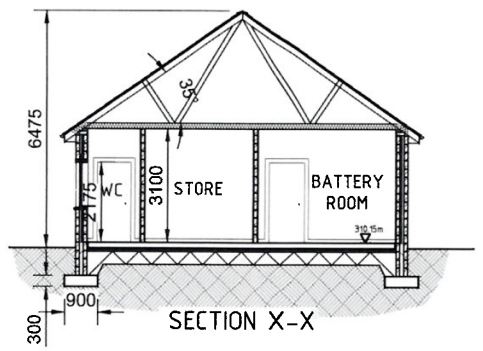

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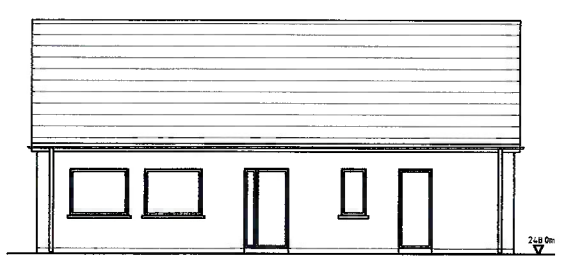

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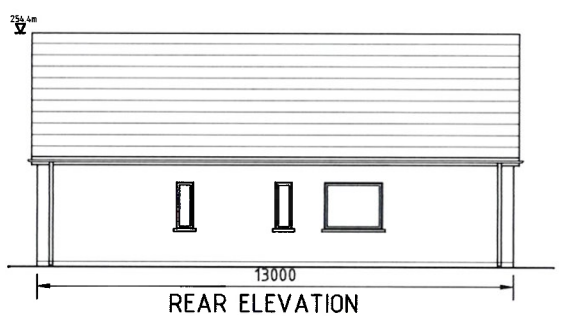

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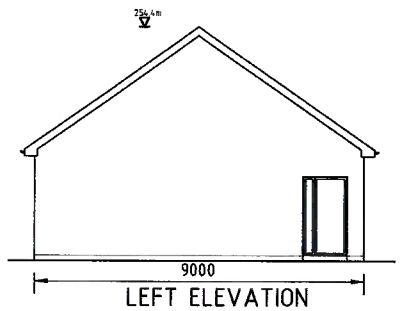

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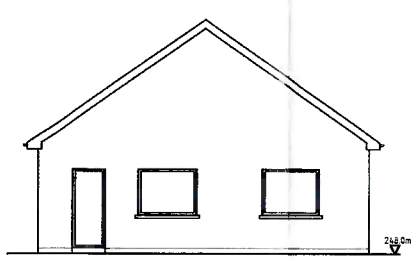

RIGHT ELEVATION

Rev.	Drawn	Chkd	Apprvd	Date	Description
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A	SR	MC	ET	15.06.2005	ISSUE FOR PLANNING APPLICATION

Name of Client
BARNA WIND ENERGY LTD.

Name of Job
PROPOSED WIND FARM AT BARNADIVANE (KNEEVES), TERELTON, MACROOM, CO. CORK

Title of Drawing
PLAN & ELEVATION OF PROPOSED ESB SUBSTATION

Scales Used
A1 1:100

Dwg. No. 2003-188-01-008 Rev. B

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NATURAL SCALE
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APPENDIX B

Drawings of Proposed Development:

Proposed Substation

Barnadivane Substation Site Location Map Permitted vs Proposed

R:\Map Production\2014\LE14\702\01\Workspace
LE14-702-01_Figure 1.1_Barnadivane Site Location Map_Rev C

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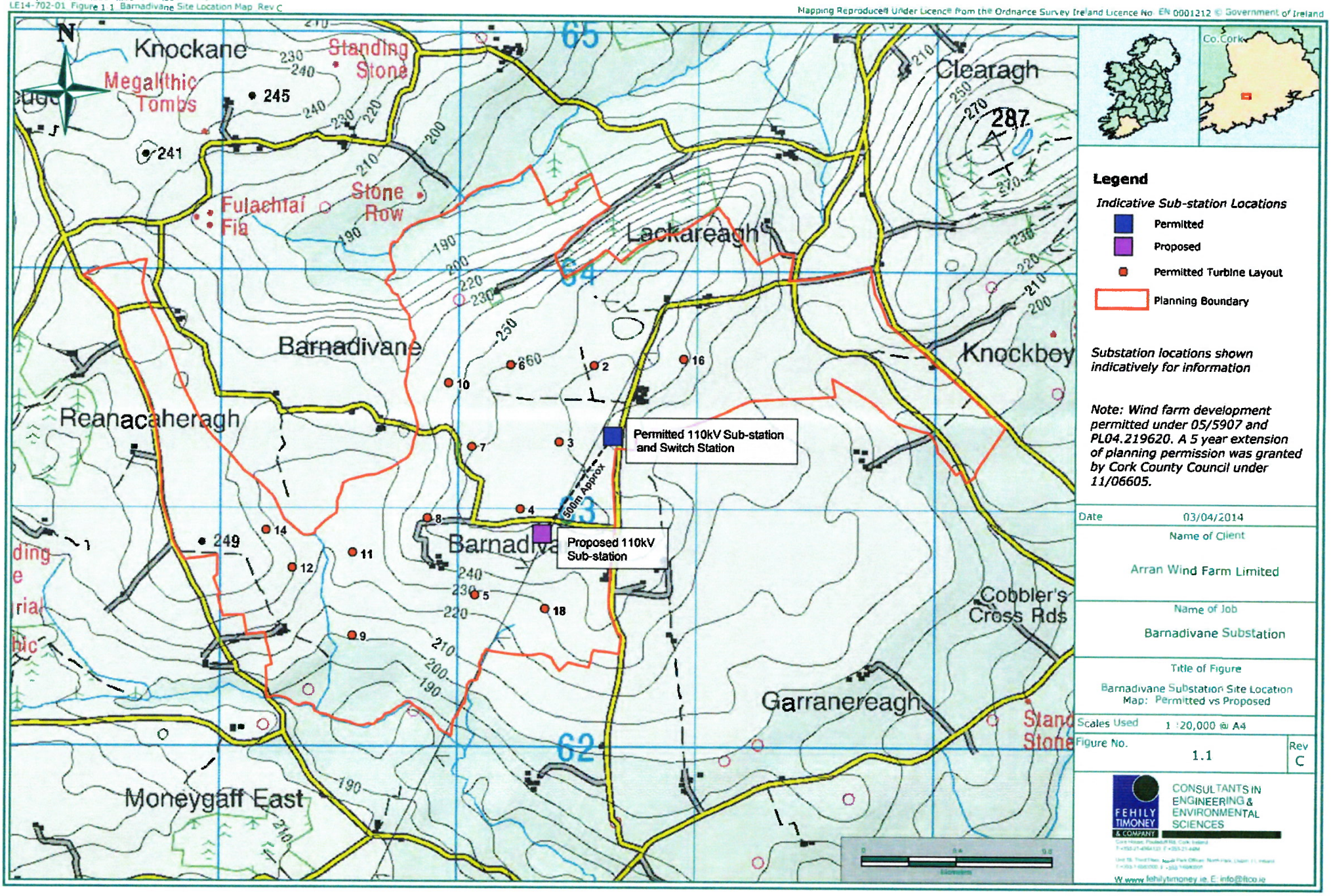

Legend

Indicative Sub-station Locations

- Permitted
- Proposed
- Permitted Turbine Layout
- Planning Boundary

Substation locations shown indicatively for information

Note: Wind farm development permitted under 05/5907 and PL04.219620. A 5 year extension of planning permission was granted by Cork County Council under 11/06605.

Date	03/04/2014
Name of Client	Arran Wind Farm Limited
Name of Job	Barnadivane Substation
Title of Figure	Barnadivane Substation Site Location Map: Permitted vs Proposed
Scales Used	1 :20,000 @ A4
Figure No.	1.1
Rev	C

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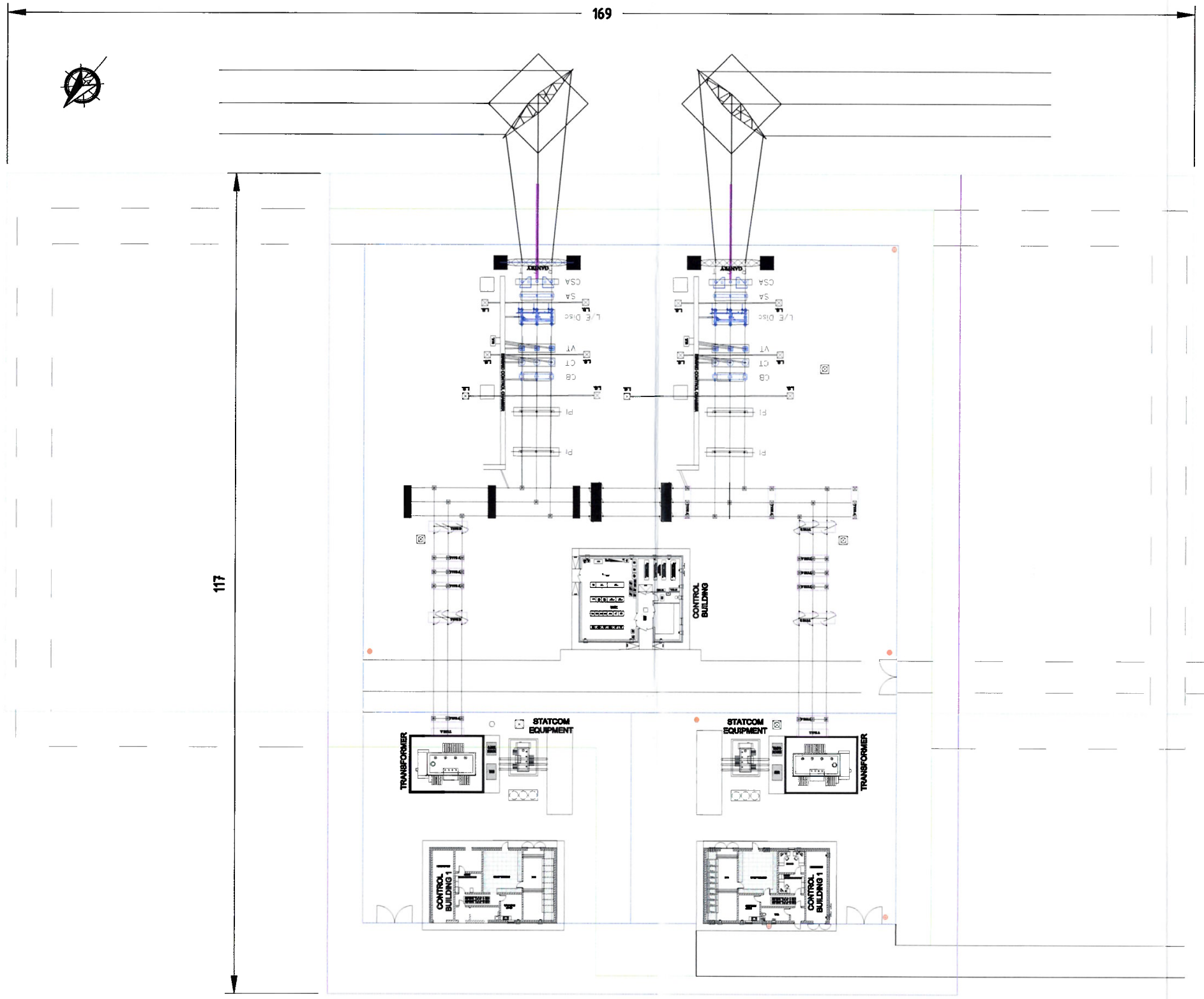

PLAN

Scale NTS

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Note:
The proposed schematic substation layout takes account of the Eirgrid requirements as indicated on 110kV Station Design Standard, Dwg: 0020 KH-PPS-011. Substation layout extracted from Proposed Substation, Dwg: 004-001-01 received 03.04.2014.

The layout is subject to detailed design and there is some design flexibility in the layout of the individual components, provided Eirgrid requirements are met.

Dimensions in metres.

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DRAFT No: 1
PRIOR TO ISSUE: A
DRN BY: VALID ONLY ON: 09.04.14
Rev. A Drawn

Name of Client

ARRAN WINDFARM LIMITED

Name of Job

PROPOSED 110kV SUBSTATION

Title of Drawing

PROPOSED BARNADIVANE SUBSTATION
SCHEMATIC LAYOUT

Scales Used: NTS
This Drawing was printed to ISO Expand A1 (841.00 X 594.00 MM)

Dwg. No.: LE14-702-01-001
Rev.: A

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ORIGINAL DRAWING SIZE A1 - (841 x 594)
SCALE - VERTICAL
SCALE HORIZ.

Appendix 2

AA Screening Report

APPROPRIATE ASSESSMENT SCREENING REPORT FOR A PROPOSED 110kV GRID CONNECTION SUBSTATION AT BARNADIVANE, CO. CORK

ARRAN WINDFARM LTD.

SEPTEMBER 2014

FEHILY TIMONEY & COMPANY

APPROPRIATE ASSESSMENT SCREENING REPORT FOR A PROPOSED 110kV GRID CONNECTION SUBSTATION AT BARNADIVANE, CO. CORK

User is Responsible for Checking the Revision Status of This Document

Rev. Nr.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
0	Issue to Client	AMC/MG	POB COD.	COD COD.	05.09.2014

Client: Arran Windfarm Ltd.

Keywords: Stage One Screening Report, Article 6 of the Habitats Directive, Natura 2000 sites, 110kV substation, Barnadivane

Abstract: This document comprises the Appropriate Assessment Stage One Screening Report for a proposed 110kV substation at Barnadivane, Co. Cork. Appropriate Assessment is required under Article 6 (3) and (4) of the Habitats Directive for any project or plan that may give rise to significant effects on a Natura 2000 site. Stage one is the first stage in the Appropriate Assessment process. This assessment follows the methodological guidelines set out in the document 'Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites' (2001) and published guidelines from the Department of Environment, Heritage and Local Government (2009).

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1 INTRODUCTION

Fehily Timoney and Company (FTC) was commissioned by Arran Windfarm Ltd. to prepare an Appropriate Assessment (AA) Screening Report, for a proposed a 110kV grid connection substation at Barnadivane (Kneeves), Co. Cork. The site is located approximately in the midpoint of a triangle formed by Macroom, Dunmanway and Bandon.

Appropriate Assessment is required under the EU Habitats Directive (92/43/EEC) – 'on the conservation of natural habitats and of wild fauna and flora'. It is an assessment of the potential impacts of a proposed plan or project, on its own or in combination with other plans or projects, on one or more Natura 2000 sites [Special Protection Areas (SPAs) for birds, Special Areas of Conservation (SACs) for habitats and species].

Accordingly, AA screening for the proposed 110kV substation must be undertaken by the competent authority. This report has been prepared to assist the relevant authority in their assessment of the development.

The developer intends to seek permission for a new grid connection substation in the townland of Barnadivane (Kneeves), Co. Cork. The current substation application will replace a currently permitted substation that is not yet constructed. The proposed substation site is approximately 10 km south of Macroom.

This AA Screening Report assesses the potential impact(s) of the proposed substation, and associated infrastructure, on the Natura 2000 sites which lie within an approximate 10 km radius of the substation site boundary. The site boundary of the proposed substation does not lie within any designated nature conservation site. There are however three Natura 2000 sites within an approximate 10 km radius of the site (i.e. two cSACs and one SPA). The Gearagh cSAC (site code 000108) lies 6.7 km north of the proposed site boundary, and the Gearagh SPA (004109) lies 6.8 km to the north. The Bandon River cSAC (002171) lies 10.8 km southwest of the proposed site boundary.

1.1 Legislative Requirements

Appropriate Assessment is a requirement of Article 6(3) and 6(4) of the EU Habitats Directive which states:

6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the sites conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

The statutory agency responsible for Natura 2000 sites is the National Parks and Wildlife Service (NPWS) of the Department of Arts, Heritage and the Gaeltacht (DAHG). The European Court of Justice, on 13 December 2007, issued a judgement in a legal case against Ireland that found Ireland had failed in its statutory duty to confer adequate protection on designated areas. In December 2009 "Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government" was published. This guidance document was prepared jointly by the NPWS and Planning Divisions of the Department of Environment, Heritage and Local Government (DoEHLG), now DAHG, with input from local authorities.

The Habitats Directive formed a basis for the designation of Special Areas of Conservation (SACs). Similarly, Special Protection Areas are legislated for under the Birds Directive (Council Directive 79/409/EEC on the Conservation of Wild Birds).

1.2 Regulatory Context

In 1997, the Habitats Directive was transposed into Irish national law by the European Union (Natural Habitats) Regulations, SI 94/1997 (as amended by S.I. 233/1998 & S.I. 378/2005). The European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477/2011) consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005, and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the Court of Justice of the European Union (CJEU) judgements. Following an additional amendment in 2013 (S.I. 499/2013) the regulation is now the European Communities (Birds and Natural Habitats) Regulations 2011 to 2013.

The Regulations have been amended to address several judgments of the CJEU against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

2 METHODOLOGY

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures to be addressed in the AA process. Firstly, a project should aim to avoid any negative impacts on Natura 2000 sites by identifying possible impacts early in the project, and should design the project in order to avoid such impacts.

2.1 Appropriate Assessment Methodology

There are four stages in an AA, as outlined in the European Commission Guidance document (2001). The following is a brief summary of these steps.

Stage One - Screening: This stage examines the likely effects of a project either alone or in combination with other projects upon a Natura 2000 Site and considers whether it can be objectively concluded that these effects will not be significant.

Stage Two - Appropriate Assessment: In this stage, the impact of the project on the integrity of the Natura 2000 site is considered with respect to the conservation objectives of the site and to its structure and function. Mitigation measures should be applied to the point where no adverse impacts on the site(s) remain.

Stage Three - Assessment of Alternative Solutions: Should the Appropriate Assessment determine that adverse impacts are likely upon a Natura 2000 site, this stage examines alternative ways of implementing the project that, where possible, avoid these adverse impacts.

Stage Four - Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the Natura site will be necessary. European case law highlights that consideration must be given to alternatives outside the project area in carrying out the IROPI test. It is a rigorous test which projects are generally considered unlikely to pass.

In the preparation of this assessment therefore regard has been given to the EU Habitats Directive and the European Communities (Birds and Natural Habitats) Regulations 2011, and with reference to the relevant guidance, in particular:

- *Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, European Commission 2001.
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats Directive' 92/43/EEC*, European Commission, 2000.
- *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin 2009.

In order to identify potential cumulative or 'In Combination Effects', other projects were identified for this area. The following data sources have been considered:

- Cork County Council Online Planning Enquiry System http://maps.corkcoco.ie/
- EPA Envision maps
- Water Framework Directive WaterMaps Viewer http://watermaps.wfdireland.ie/
- Cork County Development Plan

2.2 Impact Assessment

The first step in the screening process is to develop a list of Natura 2000 sites potentially affected by the proposed development. Each Natura 2000 site is reviewed to establish whether or not the proposed development is likely to have a significant effect on the integrity of the site, as defined by its structure and function, and its conservation objectives.

The qualifying interests of each Natura 2000 site are identified and the potential threats are summarised into the following categories for the screening process, and described within the screening matrix:

- Direct impacts refer to habitat loss or fragmentation arising from land-take requirements for development or agricultural purposes. Direct impacts can be as a result of a change in land use or management, such as the removal of agricultural practices that prevent scrub encroachment.

- Indirect and secondary impacts do not have a straight-line route between cause and effect, and it is potentially more challenging to ensure that all the possible indirect impacts of the plan (or project) – in combination with other plans and projects - have been established. These can arise when a development alters the hydrology of a catchment area, which in turn affects the movement of groundwater to a site, and the qualifying interests that rely on the maintenance of water levels. Deterioration in water quality can occur as an indirect consequence of development, which in turn changes the aquatic environment and reduces its capacity to support certain plants and animals. The introduction of invasive species can also be defined as an indirect impact, which results in increased movement of vectors (humans, fauna, surface water), and consequently the transfer of alien species from one area to another.

Disturbance to fauna can arise directly through the loss of habitat (e.g. bat roosts) or indirectly through noise, vibration and increased activity associated with construction and operation.

2.3 Statement of Authority

This report has been carried out by Dr. Alison McCarthy PhD, MSc, BSc, MCIEEM. Alison is a Project Ecologist with FTC. Alison holds a BSc, MSc and PhD in the fields of Zoology and Marine Ecology. Alison is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and has over eight years' professional experience in ecological consultancy and research. Alison is experienced in managing and co-ordinating Ecological Impact Assessments and Appropriate Assessments for a wide range of projects, including pipelines, roads, wind farms, ports, landfill sites, housing and commercial developments. Alison received specialist training in Appropriate Assessment for Waste Water Treatment Plant licensing while working for the Environmental Protection Agency in 2008 and has regularly attended Appropriate Assessment workshops over the last number of years.

Alison is very experienced in flora and fauna survey techniques including specialised avian surveys, as well as surveys for bats, other mammals and habitat surveys. She has specialist knowledge of the aquatic environment, both coastal and freshwater, particularly in invertebrate taxonomy. She has guest lectured in University College Cork on the Diploma in Environmental Science and Social Policy, and has published research papers in several peer-reviewed international journals.

Alison attended the most recent Chartered Institute of Environment and Ecological Management (CIEEM) Irish conference on 'Protected Habitats and Species: A Best Practice Approach' held in Dublin in November 2013. She also attended the '6th Ornithological Research Conference' held in UCC in November 2013. Alison's full CV is attached in Appendix 1.

3 STAGE ONE – SCREENING

3.1 Brief Description of the Proposed Development Site

The developer intends to seek permission for a new grid connection substation in the townland of Barnadivane (Kneeves), Co. Cork. The current substation application will replace a permitted substation that is not yet constructed. The proposed substation is approximately 10 km south of Macroom.

Permission currently exists for a 110kV substation and switch station as part of a 14 turbine Barnadivane wind farm. The permitted development was granted by both the Planning Authority and An Bord Pleanála under planning reference numbers 05/5907 and PL 04.219620 respectively. An extension of duration was granted by Cork County Council under 11/6605.

The original wind farm planning application included for a substation but, since receiving the original planning consent, new Eirgrid standards require 110kV substations to have available land to facilitate future expansion. The permitted substation is constrained on the west by the existing 110kV overhead line and on the east by the local road. Accordingly, a new substation application is required to service Barnadivane Wind Farm. On that basis, a new site has been identified for the proposed substation within the study area of the permitted wind farm that meets the necessary criteria such as, capacity for accommodating Eirgrid requirements, proximity to transmission system, good access and visual screening.

The proposed 110kV grid connection substation will have a defined planning boundary which will include a 110kV grid connection substation compound with associated control buildings and electrical equipment as well as ancillary infrastructure such as internal access roads, oil interceptor and security fencing. The proposed substation development covers an area of approximately 1.1 ha, within the overall study boundary of the permitted wind farm which covers an area of 355 ha.

The 110 kV substation compound will cover an area of approximately 90m x 117m on plan including a buffer area to the perimeter. There will be three single storey control buildings on the site. The control buildings will be of standard masonry construction, rendered externally with a pitched roof. Finishes will be in keeping with the surrounding buildings. The maximum floor area of each building will be 185m^2 and the maximum height of the buildings will be approximately 6.2 m above finished ground level. The control buildings and electrical equipment will be enclosed by a 2.4m high perimeter fence encompassing an area of approximately 76m x 97m. The substation compound will be connected to the public road via a short access track approximately 200m long.

During the construction phase it will be necessary to provide temporary facilities for the workers. Such facilities will include:

- site office and canteen
- site compound
- toilet facilities
- bottled water for potable supply
- a water tanker to provide water for other purposes such as dust supression
- diesel generator
- contractor lock-up facility
- employee parking.

Habitat, mammal and bat surveys of the proposed substation site boundary were carried out by FTC on the 11 June and 08 July 2014. The proposed site boundary lies within improved agricultural grassland (GA1) habitat, according to the Fossitt (2000) classification system, primarily used for cattle grazing and silage cutting. The field boundaries consist of hedgerows (WL1) primarily, with some earth banks (BL1) to the north, and a small treeline (WL2) on the eastern field boundary. No bat activity was recorded along the field boundaries, probably due to the exposed nature of the site. Foxes and rabbits were widespread in the surrounding farmland.

It is anticipated that construction for the proposed development will commence immediately following receipt of planning permission.

The substation site boundary is situated within the catchment of the River Bride. It lies within the SW_Lee228Bride_3Upper - IE_SW_19_1213 waterbody subcatchment (see Figure 3.2). Drainage from the site boundary is in a southeasterly direction, however there are no watercourses within the substation site boundary.

It should be is noted that the proposed substation site boundary is outside of the Bandon River Catchment which is a known Fresh Water Pearl Mussel catchment. This catchment is approximately 10 km to the southwest. The Bandon pearl mussel catchment is drained by the Bandon and Caha rivers and lies east of the Shehy Mountains. Freshwater Pearl Mussel distribution in the Bandon River is known to be widespread, with records from Cullenagh Lake to Bandon Town. The Caha and Blackwater Rivers also have wide distributions of the mussel. In the Bandon River main channel, the mussel is abundant in places, although the conservation status of the mussels in the catchment is unfavourable (NS 2, 2010).

3.2 Brief Description of the Natura 2000 Sites

The proposed substation does not lie within any Natura 2000 sites. There are three Natura 2000 sites (two cSACs[1] and one SPA) within an approximate 10 km radius of the substation. Figure 3.2 shows the locations of the Natura 2000 sites in relation to the proposed substation. The Gearagh cSAC (site code 000108) lies 6.7 km to the north of the proposed substation, and the Gearagh SPA (004109) lies 6.8 km to the north. The Bandon River cSAC (002171) lies 10.8 km southwest of the proposed substation.

Table 3.2 summarises the details of the Natura 2000 sites, including their qualifying interests, area, conservation objectives and the current threats. The following descriptions are extracted from the site synopses available on the NPWS website www.npws.ie.

The Mullaghanish to Musheramore Mountains SPA (004162) lies approximately 14.7 km north of the proposed substation. This extensive site is an SPA under the E.U. Birds Directive, of special conservation interest for Hen Harrier. During the breeding season, Hen Harriers forage over a large home range, and may feed (especially males) up to 10 km from a nest site (Hardey *et al.*, 2009).

As the proposed development site is greater than 14 km from the SPA, and outside of the typical foraging range for Hen Harriers from the SPA, it is not considered likely to impact on the conservation interests of the SPA. Furthermore, a winter season Vantage Point (VP) survey, following Scottish Natural Heritage (SNH, 2013) guidance was carried out in the townland of Barnadivane (Kneeves) as part of the ecological surveys. The VP surveys were carried out to assess the presence of Hen Harrier in the area, in additional to wintering birds of conservation concern such as Golden Plover, Whooper Swan and Lapwing. The surveys commenced in November 2013 and were completed in March 2014. Two VP locations were used during the survey and 36 hours of VP watches in total were completed per VP. Two Hen Harrier observations (both of males) were made during the entire 36 hours of survey time. The total Hen Harrier observation time was 187 seconds or 0.14% of the total survey time. The results of the VP surveys showed that the Barnadivane area is not an important site for Hen Harrier during the winter period, for roosting or foraging, and it is unlikely that there is any connection between the Barnadivane area and the Mullaghanish to Musheramore Mountains SPA. Therefore the SPA is not considered to be in the zone of potential impact of the substation, and it is not assessed further in this screening report.

[1] At present all SACs in Ireland are currently 'candidate' SACs, and referred to as cSACs. The relevant Statutory Instruments for the SACs in Ireland have not yet been put in place, though these sites must still be afforded protection in accordance with the EU Habitats Directive (92/43/EEC).

Table 3-1: Characteristics of the Natura 2000 Sites within approximately 10 km of the Proposed Substation

Site Name & Code	Site Summary & Qualifying Interests	Area	Conservation Objectives	Threats	Distance from Proposed Substation
The Gearagh cSAC (000108)	The site is a cSAC selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): **Qualifying Interests** [3260] Floating River Vegetation [91A0] Old Oak Woodlands [91E0] Alluvial Forests* [1355] Otter (*Lutra lutra*) This unusual area has formed where the River Lee breaks into a complex network of channels (2 to 6 m wide) weaving through a series of wooded islands. The alluvial woodland which remains today at the Gearagh is of unique scientific interest, and qualifies as a priority habitat under Annex I of the E.U. Habitats Directive. The islands in the Gearagh consist of rather dry alluvium, and support an almost closed canopy of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Birch (*Betula* spp.). Within the heavily forested channels there is little or no aquatic vegetation, but in the more open areas the E.U. Habitat type 'floating river vegetation' occurs. An oakwood occurs just north of Toon Bridge. Otter, an Annex II species on the E.U. Habitats Directive, is frequent throughout the site. The Gearagh supports part of an important wintering bird population. At the Gearagh, Whooper Swans are regular (40-110, 1990's), as are Wigeon (640, average max.1992-1994), Teal (707, average max. 1992-94), Mallard (250 in January 1993) and Tufted Duck (154, average max. 1992-94).	557.95 Ha	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the cSAC has been selected.	There are no major threats to this site. Damage to marginal areas from drainage attempts and grazing/poaching by cattle may occur in some areas. Illegal removal of timber may occur from time to time. The aquatic communities could be adversely affected by eutrophication.	6.7 km to the north

Site Name & Code	Site Summary & Qualifying Interests	Area	Conservation Objectives	Threats	Distance from Proposed Substation
	Golden Plover utilise the site on occasions (e.g. 2,000 in January 1994), while there is a regular flock of Dunlin (100-200, 1990s), a species unusual at inland sites. A late summering flock of Mute Swan is regular, with numbers between 120 and 250 from 1992 to 1994. Great Crested Grebe and Tufted Duck breed in small numbers, while there is a feral flock of about 50 Greylag Goose. Despite the fact that about half the original area has been destroyed, the Gearagh still represents the only extensive alluvial woodland in Ireland or Britain, or indeed west of the Rhine in Europe. For this reason it is a unique site and has been designated also as a Statutory Nature Reserve. The international importance of the site is recognised by its designation both as a Ramsar site and as a Biogenetic Reserve. The reservoir is also a Wildfowl Sanctuary.				
The Gearagh SPA (004109)	This site, located c. 2 km south-west of Macroom, comprises a stretch of the River Lee that was dammed in the 1950s as part of a hydroelectric scheme. The valley formerly held an extensive area of alluvial forest but only part of the forest now survives. The SPA extends from Annahala bridge westwards to Toon bridge. The principal habitat is now a shallow lake which is fringed by wet woodland, scrub and grassland that is prone to flooding. At times of low water, a diverse ephemeral pioneering plant community develops on the mud. The site supports important populations of wintering waterfowl, including swans, dabbling duck, diving duck and some waders.	322.72 Ha	To maintain or restore the favourable conservation condition of the bird species listed as special conservation interests for this SPA.	There are no imminent threats to the wintering bird populations as the site is a Nature Reserve. However, some disturbance is caused to the birds by illegal shooting.	6.8 km to the north

Site Name & Code	Site Summary & Qualifying Interests	Area	Conservation Objectives	Threats	Distance from Proposed Substation
	Habitat quality is good and the site provides both feeding and roost sites for the birds. Six of the species have populations of national importance: Mute Swan (*Cygnus olor*), Wigeon (*Anas penelope*), Teal (*Anas crecca*), Northern shoveler (*Anas clypeata*), Coot (*Fulica atra*) and Golden plover (*Pluvialis apricaria*). Other species which occur regularly include Whooper Swan (*Cygnus cygnus*), Tufted duck (*Aythya fuligula*) and Lapwing (*Vanellus vanellus*). The site is a Nature Reserve, Ramsar site and Biogenetic Reserve. **Qualifying Interests:** [A052] Teal (*Anas crecca*) [A050] Wigeon (*Anas penelope*) [A053] Mallard (*Anas platyrhynchos*) [A125] Coot (*Fulica atra*) [A999] Wetlands				
Bandon River cSAC (002171)	The Bandon River cSAC consists of relatively short adjoining stretches of the Bandon and Caha Rivers. These rivers flow in a southerly direction to the east of Dunmanway, Co. Cork. The site is a cSAC selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): **Qualifying Interests** [3260] Floating River Vegetation [91E0] Alluvial Forests* [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*) [1096] Brook Lamprey (*Lampetra planeri*)	321.26	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the cSAC has been selected.	Water quality of the river is presently quite good. There is the threat of local enrichment from agricultural run-off. This will impact on Annex II animal species. There is a proposal to alleviate flooding of the River. It is not known whether this proposal will proceed. Forestry upstream poses a threat. Agricultural improvement/reclamation along entire stretch also poses a threat.	10.8 km southwest

Site Name & Code	Site Summary & Qualifying Interests	Area	Conservation Objectives	Threats	Distance from Proposed Substation
	Wet broadleaved semi-natural woodland is found in an undisturbed area of braided river channels and islands below Dunmanway. Floating river vegetation is found along the length of the river and is dominated by water-crowfoots (*Ranunculus* spp). Some small areas of woodland occur within the site north of Long Bridge. A population of Freshwater Pearl Mussel is found in the river. This species is listed on Annex II of the E.U. Habitats Directive. The river also supports populations of protected fish species, notably Brook Lamprey and Salmon (*Salmo salar*), both of which are also listed on Annex II of the E.U. Habitats Directive. This site contains good examples of two habitats listed on Annex I of the E.U. Habitats Directive - alluvial forest and floating river vegetation - and supports populations of four Annex II species - Otter, Salmon, Brook Lamprey and Freshwater Pearl Mussel. The presence of a number of Red Data Book plant and animal species adds further interest to the site.				

R:\Map Production\2014\LE14\702\02\Workspace\Substation Environmental Report
LE14-702-02_Figure 3-1 Natura 2000 Sites Within 10km Rev A.wor

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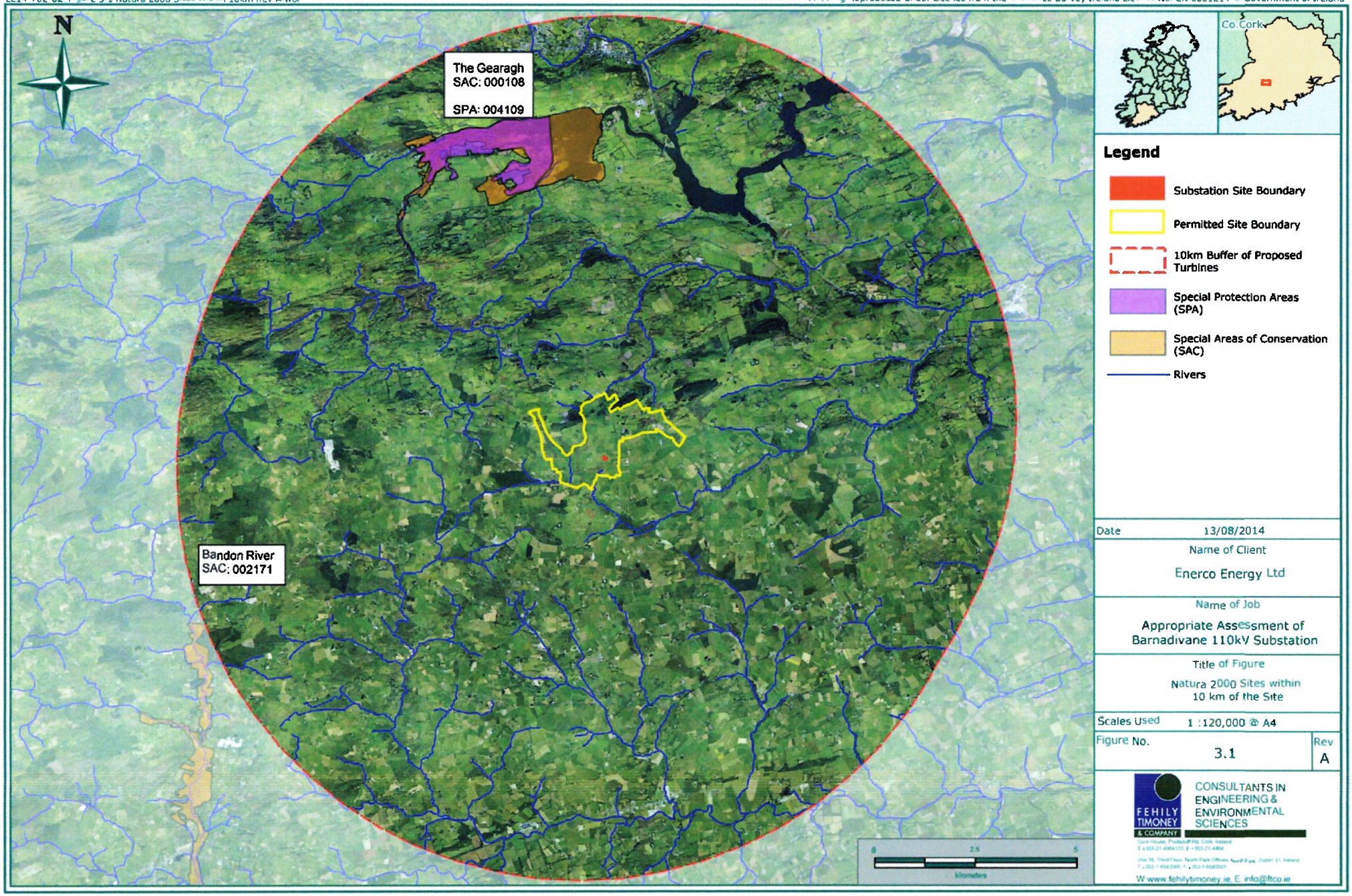

Legend

- Substation Site Boundary
- Permitted Site Boundary
- 10km Buffer of Proposed Turbines
- Special Protection Areas (SPA)
- Special Areas of Conservation (SAC)
- Rivers

Date	13/08/2014
Name of Client	Enerco Energy Ltd
Name of Job	Appropriate Assessment of Barnadivane 110kV Substation
Title of Figure	Natura 2000 Sites within 10 km of the Site
Scales Used	1 :120,000 @ A4
Figure No.	3.1
Rev	A

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R:\Map Production\2014\LE14\702\02\Workspace\Substation AA
LE14-702-02 Figure 3.2 Waterbody Catchments Rev A.wor

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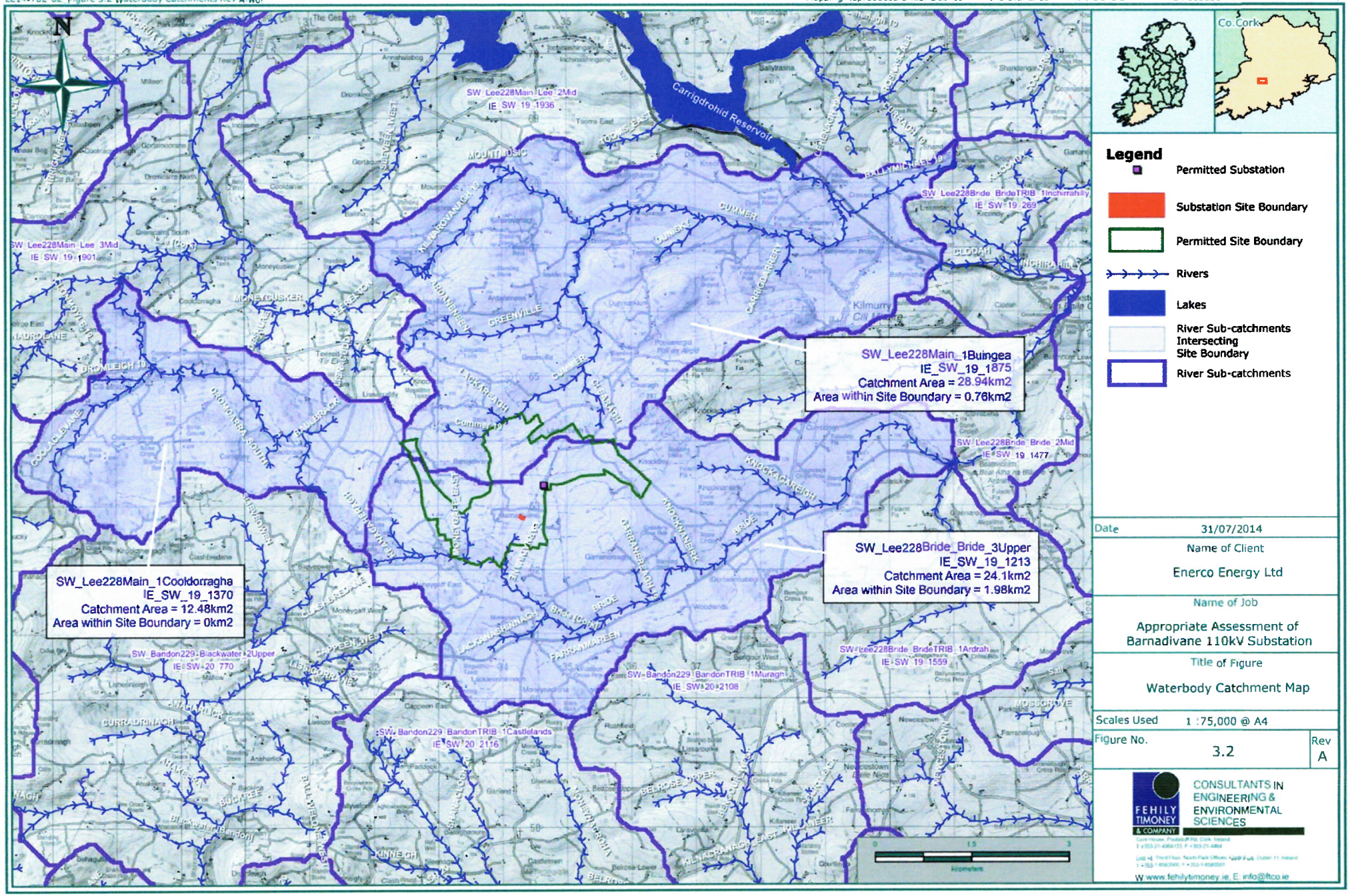

Date	31/07/2014
Name of Client	Enerco Energy Ltd
Name of Job	Appropriate Assessment of Barnadivane 110kV Substation
Title of Figure	Waterbody Catchment Map
Scales Used	1 :75,000 @ A4
Figure No.	3.2
Rev	A

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3.3 Screening Assessment

The following screening assessment has been carried out in accordance with the guidance document *Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, European Commission 2001 and using the standard screening assessment form provided in Annex 2 of this document. The line items in italics are taken directly from this guidance document.

Assessment criteria	
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 sites.	The individual elements of the proposed development that *could* give rise to impacts on the Natura 2000 sites are: • Siltation or pollution of watercourses during construction and operation of the substation leading to pollution of watercourses draining to the Gearagh cSAC and/or the Bandon River cSAC, and subsequent negative impacts on aquatic flora and fauna within the cSACs • Disturbance/displacement impacts on birds from the Gearagh SPA arising from construction of the substation.
Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of: ▪ *Size and scale;* ▪ *Land-take;* ▪ *Distance from Natura 2000 site or key features of the site;* ▪ *Resource requirements;* ▪ *Emissions;* ▪ *Excavation requirements;* ▪ *Transportation requirements;* ▪ *Duration of construction, operation etc.;* ▪ *Other.*	**Size and scale, land-take and distance from Natura 2000 sites** The proposed substation site boundary, does not lie within any Natura 2000 site. The Gearagh cSAC lies 6.7 km north, and the Gearagh SPA (0004109) lies 6.8 km to the north. The Bandon River cSAC (002171) lies 10.8 km southwest of the substation site boundary. The proposed substation development covers an area of approximately 1.1 ha. There are no other Natura 2000 sites within an approximate 10 km radius of the proposed substation site boundary. Thus there will be no direct impact on the size and scale of any Natura 2000 site as a result of the proposed development. Similarly the proposed development will not result in any land-take from any Natura 2000 site. **Resource requirements and Excavation requirements** There will be no direct resource or excavation requirements from the Natura 2000 sites as a result of the proposed development. **Emissions** There will be no direct emissions, or disposal of material into any Natura 2000 site as a result of the proposed development. The site is situated within the catchment of the River Bride. There will be no direct discharges to any natural watercourses, with all drainage waters being dispersed to soakaways or as overland flows via vegetation filters at a significant distance from the nearest natural watercourses. The River Bride rises at an elevation of 220 m OD between Moneygaff East and Barnadivane (Kneeves) over 1.5 km to the southwest of the site. The proposed development location is not within an area of 'benefitting lands' or 'drainage districts' and there are no reported incidents of flooding in the vicinity of the proposed development, as per national flood hazard mapping (www.floodmaps.ie).

Assessment criteria	
	As a result of the significant separation distance and construction best practice measures to be applied to the proposed development, the substation is expected to have a negligible impact on the receiving environment in terms of surface water. Taking into consideration the fact that the site boundary lies 6.7 km south of the Gearagh cSAC and 10.8 km northeast of the Bandon River cSAC, and that there will be no direct discharge to any watercourse from the development, it is not likely that there will be any negative impact on any Natura 2000 site, via hydrological links or indirect emissions via watercourses. **Transportation requirements, Duration of Construction and Operation** It is anticipated that construction for the proposed development will commence on site immediately after planning and take up to 12 months to complete. The site will be accessed from the south via a network of local public roads connected to the R585 regional road and therefore will not cross through or interfere with any of the Natura 2000 sites within 10 km of the proposed development.
Describe any likely changes to the site arising as a result of: ▪ *Reduction of habitat area;* ▪ *Disturbance of key species;* ▪ *Habitat or species fragmentation;* ▪ *Reduction in species density;* ▪ *Changes in key indicators of conservation value;* ▪ *Climate change.*	The proposed development site lies approximately 6.8 km south of the Gearagh SPA. Should birds from the SPA commute regularly over the proposed development site, indirect impacts could occur through disturbance or displacement during construction of the proposed development. The Gearagh SPA supports important populations of wintering waterfowl, including swans, dabbling duck, diving duck and some waders. The qualifying interests of the site are Teal, Wigeon, Mallard and Coot and wetland habitat. A winter bird Vantage Point (VP) survey following SNH (2013) guidelines, was carried out at the proposed development site from November 2013 to March 2014. Two fixed VPs overlooking the site and surrounding area were monitored for a total of 36 hours for bird activity over the site. In terms of the qualifying interests/species of the Gearagh SPA, only Mallard was recorded flying over the site, on one occasion in January 2014. Golden plover is not a qualifying species of the Gearagh SPA, but the SPA does support a population of national importance. A small flock of about 35 Golden plover were recorded flying in the vicinity of the proposed substation on one occasion in January 2014. No other qualifying species, or species of note, from the SPA were recorded. Taking into consideration the low levels of activity of wintering waterbirds recorded during VP watches, it is not likely that the construction of the substation will result in adverse impacts, or disturbance of key species from the Gearagh SPA. As discussed under 'Emissions' above, indirect adverse impacts on water quality and on aquatic flora and fauna in the Gearagh cSAC and the Bandon River cSAC have been considered unlikely to occur. Therefore, there will be no reduction in species density or disturbance of key species in these cSACs as a result of the proposed development. There will be no likely changes to any Natura 2000 site as a result of reduction in habitat area, disturbance of key species, habitat or species fragmentation, changes in key indicators of conservation value, or climate change from the proposed development.

Assessment criteria	
Describe any likely impacts on the Natura 2000 site as a whole in terms of: ▪ *Interference with the key relationships that define the structure of the site;* ▪ *Interference with key relationships that define the function of the site.*	It is not considered likely that there will be any long term impacts on the key relationships that define the structure or function of any Natura 2000 site as a result of the proposed development.
Provide indicators of significance as a result of the identification of effects set out above in terms of: ▪ *loss,* ▪ *fragmentation,* ▪ *disruption,* ▪ *disturbance,* ▪ *change to key elements of the site (e.g. water quality etc.).*	As above. It is not considered likely that there will be any impacts on any Natura 2000 site as a result of the proposed development.
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.	As above. It has been concluded that the proposed development is not likely to have adverse impacts on Natura 2000 site. Stage Two of the AA process is not required. A Finding of No Significant Effects Report is available in Section 3.4.

3.4 FONSE Report

Finding of No Significance Effects Report	
Name and location of the Natura 2000 sites	• The Gearagh cSAC (000108) – 6.7 km north of proposed substation site boundary • The Gearagh SPA (004109) – 6.8 km north of proposed substation site boundary • Bandon River cSAC (002171) – 10.8 km southwest of proposed substation site boundary Note: distances are approximate.
Description of the project or plan	The developer intends to seek permission for a new grid connection substation in the townland of Barnadivane (Kneeves), Co. Cork. The current substation application will replace a currently permitted substation that is not yet constructed. The proposed 110kV grid connection substation will have a defined planning boundary which will include a 110kV grid connection substation compound with associated control buildings and electrical equipment as well as ancillary infrastructure such as internal access roads, oil interceptor and security fencing. The proposed substation development covers an area of approximately 1.1 ha, within the overall study boundary of the permitted wind farm which covers an area of 355 ha. The 110 kV substation compound will cover an area of approximately 90 m x 117 m on plan including a buffer area to the perimeter. There will be three single storey control buildings on the site. The control buildings will be of standard masonry construction, rendered externally with a pitched roof. Finishes will be in keeping with the surrounding buildings. The maximum floor area of each building will be 185m^2 and the maximum height of the buildings will be approximately 6.2 m above finished ground level. The control buildings and electrical equipment will be enclosed by a 2.4m high perimeter fence encompassing an area of approximately 76m x 97m. The substation compound will be connected to the public road via a short access track approximately 200m long. The compound will contain assorted electrical equipment including transformers, switch gear including circuit breakers, metering transformers, busbars, post insulators, lightning protection masts, line gantries, etc., all in accordance with Eirgrid requirements.
Is the Project or Plan directly connected with or necessary to the management of the site (provide details)?	No
Are there other projects or plans that together with the project of plan being	No.

Finding of No Significance Effects Report	
assessed could affect the site (provide details)?	The existing permission on the site permitted the construction of a substation and wind farm concurrently and this impact has been already assessed in the EIS for the permitted development. Notwithstanding the slightly larger footprint, if the proposed substation development is constructed in parallel with Barnadivane Wind Farm the potential for cumulative impacts is considered slight. In addition, a construction phase environmental management plan (CEMP) will be put in place for the construction period. Therefore it is not considered likely that there will be cumulative or in-combination impacts on any Natura 2000 sites as a result of the proposed development.
The Assessment of Significant Effects	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site	The proposed development is not likely to affect any Natura 2000 site.
Explain why these effects are not considered significant	The proposed development will not result in any significant impacts on any Natura 2000 site listed above, and there will not be any impacts on key species or habitats associated with the development.
Name of Agency or Body Consulted	**Summary of Response**
NPWS Divisional Ecologist Dr. Jervis Good, by phone on 01 November 2013	A number of consultations were carried out with the NPWS in relation to ecology at the site. NPWS Divisional Ecologist, Dr. Jervis Good was contacted by phone on 01 November 2013. Following discussions with Dr. Good, a winter bird vantage point survey, following best practice Scottish Natural Heritage (SNH, 2013) guidance was carried out at the site from November 2013 to March 2014.
NPWS staff Declan O'Donnell and Danny O'Keefe contacted by phone on 13 May 2014	With regard to the assessing the potential impact(s) of the proposed development on ecology, advice was given to screen for impacts on Hen Harrier, Golden Plover, Merlin, Barn Owl, Short-eared Owl, White-tailed Eagle, Red Grouse and Curlew, and also to address potential impacts on Freshwater Pearl Mussel.

Data Collected to Carry out the Assessment			
Who carried out the assessment	*Sources of Data*	*Level of assessment completed*	*Where can the full results of the assessment be accessed and viewed*

Finding of No Significance Effects Report			
Fehily Timoney & Company	Cork County Council online planning enquiry system http://maps.corkcoco.ie/ National Parks and Wildlife Service http://npws.ie/ Water Framework Directive WaterMaps Viewer http://watermaps.wfdireland.ie/	Stage One Screening	Cork County Council

4 REFERENCES

DOEHLG, 2009. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin 2009.

European Commission, 2000. Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats Directive' 92/43/EEC.

European Commission 2001. Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, November 2001.

Fossitt J.A. 2000. A Guide to Habitats in Ireland. Heritage Council, Kilkenny.

Hardy, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. 2009. Raptors: A Field Guide for Surveys and Monitoring. 2nd Edition. The Stationary Office: Edinburgh. 370pp.

NS 2, 2010. Freshwater Pearl Mussel Second Draft Bandon Sub-basin Management Plan. Produced by NS2, funded by Department of Environment, Heritage and Local Government.

SNH, 2013. Recommended bird survey methods to inform impact assessment of onshore wind farms. Scottish Natural Heritage Guidance, August 2013.

Websites accessed:

Water Framework Directive WaterMaps Viewer http://watermaps.wfdireland.ie/ (accessed 03/07/2014).

OPW National Flood Hazard Mapping www.floodmaps.ie (accessed 13/08/2014).

APPENDIX 1

CV – Dr. Alison McCarthy

Dr. Alison McCarthy Project Ecologist

Current Position:
Project Ecologist

Qualifications:
BSc Zoology (1st Class Hons), University College Cork 2000.
MSc Marine Resource Development & Protection (Distinction), Heriot-Watt University, 2002.
PhD NUI, Galway. Irish Coastal and Deep-sea Cumacea (Crustacea: Peracarida) with particular emphasis on the family Pseudocumatidae 2007.

Professional Memberships:
Full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM).

Publications:

Gerken, S. & McCarthy, A.M. 2008. *Kerguelenica petrescui* (Crustacea: Cumacea), a new species from Australian waters. *Journal of Crustacean Biology,* 28, 3, 564–571.
McGrath, D., McCarthy, A., Minchin, D. & Molloy, J.P. 2008. The swimming crab *Polybius henslowii* Leach in Irish waters. *Irish Naturalists' Journal*, 29, 1, 55–56.
McCarthy, A.M., Gerken, S., McCormack, G.P. & McGrath, D. 2006. *Monopseudocuma* a new genus from the North East Atlantic and redescription of *Pseudocuma gilsoni* Băcescu, 1950 (Cumacea: Pseudocumatidae). *Zootaxa*, 1203, 39–56.
McCarthy, A.M., McGrath, D. & Allen, B.M. 2005. The grey swimming crab *Liocarcinus vernalis* (Risso, 1827) in western Irish coastal waters (Decapoda: Brachyura, Portunidae). *Irish Naturalists' Journal*, 28, 1, 20 -26.

Employment History
May 2011-Present, FTC, Cork.
2010-2011– Project Manager, Cetacean Observer Programme, UCC.
2008-2009 Environmental Consultancy Aquatic Services Unit, UCC.
2008 Licensing Inspector, EPA, Cork.
2006-2007 Bord Iascaigh Mhara, Project Manager for inshore fisheries research projects.

Key Data
Alison is a Project Ecologist with FTC and holds a PhD, MSc and BSc in Zoology and Marine Ecology. She is a Full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and has over eight years' professional experience in ecological consultancy and research. Alison is experienced in a range of ecological field survey techniques including specialist avian surveys, bat surveys, terrestrial mammal and habitat surveys. She is involved in EIA/EIS, environmental and ecological reporting for numerous developments including large-scale windfarm developments, overhead powerlines, underground cable routes, infrastructural projects, waste facilities and land-use plans.

Alison is experienced in preparing Appropriate Assessment Screening Reports and Natura Impact Statements for numerous projects. Alison has published research papers in several peer-reviewed international journals.

Role & Selected Relevant Projects

General Ecological Impact Assessments (EcIA): Constraints, EIA / EIS, ER, RFI, Monitoring, Compliance — Ongoing.
Project Ecologist role on numerous EcIAs. Duties include project management, desktop review, co-ordination of field surveys (avian, mammal, bats, habitats), consultation and meetings with relevant bodies (*e.g.* NPWS), data-handling & analysis of field data, interpretation of data, identification of ecological issues and concerns, advise on ecological mitigation / constraint measures to input into project design, and reporting.

Knockacummer and Glentanemacelligot Wind Farms, May 2011-September 2013. Managed annual breeding season surveys for Hen Harrier at Knockacummer Wind Farm (2011–2013) and Glentanemacelligot Wind Farm, Co. Cork (2012–2013). Undertook Vantage Point avian surveys following standard Scottish Natural Heritage methodology, data-handling & analysis of field data, toolbox talks for construction staff, interpretation of data, desktop review, consultation with NPWS, and project reporting.

Post-construction Monitoring at Dromada Wind Farm, Co. Limerick, May 2011-September 2013
Acted as Project Ecologist at Dromada Wind Farm in post-construction breeding Hen Harrier surveys. Duties included vantage point field surveys from May–Aug 2011, and April–July 2012, data handling & data analysis, desktop review, consultation with NPWS, compilation of GIS figures of flight lines and nesting area for Hen Harrier, and project reporting.

Appropriate Assessment (AA)—Screening and NIS, 2008-Ongoing
Experienced in AA process since 2008 where I attained specialist training in reviewing AAs for the Environmental Protection Agency. Currently work on AAs for a range of projects, including desktop review, consultation with relevant bodies (e.g. NPWS), identification of ecological issues & concerns, advise on ecological mitigation to input into project design, and reporting in accordance with the guidelines (*e.g.* DoEHLG 2009, EU guidance documents 2000 & 2001).

Environmental Monitoring and Aquatic Surveys, Ireland: 2008-2011
Biological water quality monitoring, including desktop review, design and implementation of water sampling strategy, macro-invertebrate taxa identification, data-handling and analysis of field data in accordance with standard methods (eg. SSRS) and reporting. Monthly freshwater monitoring at Inniscarra reservoir for Dissolved Oxygen, turbidity, temp-depth profile analysis etc. Coastal habitat and faunal surveys on mudflats and sandflats, sampling invertebrates, and sediment analysis. Underwater video survey of habitats at marine outfalls.

FEHILY TIMONEY & COMPANY

[i] Sustainable Energy Authority of Ireland, Energy in Ireland Report 1990-2012, 2013

[ii] Directive 2009/28/EC of the European Parliament and of the Council OF 23 April 2009 on the Promotion of the Use of Energy from Renewable Sources and Amending and Subsequently Repealing Directives 2001/77/EC and 2003/30/EC; http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:EN:PDF

[iii] Irish Wind Energy Association, June 2014

Appendix 2

Copy of Cork County Council Planners Reports

HERITAGE UNIT REPORT
FURTHER INFORMATION

APPLICATION NO.	14/00557
APPLICANT	Arran Windfarm Ltd
DESCRIPTION	Construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works. This application is seeking a 10 year planning permission
LOCATION	Barnadivane Kneeves Terelton Co. Cork
DECISION DUE DATE	14/01/2015

Assessment

This application is for a substation to serve a permitted windfarm (11/6605) not yet constructed. As part of the original application, permission was granted for a substation in a different location to the current proposal. The applicant's indicate that the original site for the permitted substation is too small to cater for the requirements of Eirgrid. This is the reason for the current application. As part of the further information request it is noted that the applicant has to justify the location of this substation over the permitted substation. A detailed landscape plan was submitted also. Having reviewed the landscaping plan, I am satisfied that there will be no net loss of local biodiversity. The landscaping plan is to help screen the development, however the replacement hedgerows should be of native species of local origin. As per my previous report (17/11/2014), I am satisfied that the propose development will not have significant impacts on Natura 2000 site given the fact that the site is not hydrologically connected to any SAC's and is 16km from the nearest SPA. In my original report, while I had no issue with the bird data results in the interest of clarity, I asked for the following further information.

Further Information

1. The applications are requested to submit the results of the winter bird survey (2013-2014). The information should include details of numbers of records of individuals of each species recorded at each site visit, and any other data collected relating to individual species which might indicate how the site is used by that species, or where the species were recorded. A site layout showing the locations of the vantage points should also be submitted. **Response:** The bird count data for the wintering bird survey including the locations of the vantage points was submitted. The results and conclusion of the wintering bird survey are now backed up by the records. I am satisfied that the proposed development will not have significant impacts on birds of conservation concern.

Conclusion

Having reviewed the planning application including the further information submitted and given the type of development , I am satisfied that the proposed development will not have significant impacts on

HERITAGE UNIT REPORT
FURTHER INFORMATION

Natura 2000 sites , Annex species or on local biodiversity. If planning permission is recommended the following conditions should be attached.

Conclusion

There is no objection to permission being granted with the attachment of the following condition(s):

Or

Refusal is recommended for the following reason(s):

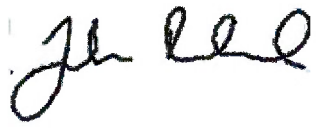
Or

Clarification is sought with regard to the following issues:

(Delete whichever of above is inapplicable)

Co rditions/Reasons

No.	Condition	Re ason
1	The landscaping plan shall be of native species of local origin. The Acacia falcata shall be substituted by either Prunus spinosa or Crataegus monogyna. The landscaping shall be completed within one growing season following the completion of construction.	In the nterest of protecting local biodiversity
2	Construction activities shall be carried out in accordance with good practise as set out in CIRIA Guidelines Control of Water Pollution From Construction Sites – Guide to Good Practise	Protection of water quality
3	The water protection measures detailed in the planning documents for the substation shall form part of the Construction Environmental Management Plan for the permitted wind farm development as required by Condition 13 of PL04.219620.	To protect water quality.



John Redmond

08/01/2015

PLANNER'S REPORT

PRIMARY

APPLICATION NO.	14/00557
APPLICANT	Arran Windfarm Ltd
DESCRIPTION	Construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works. This application is seeking a 10 year planning permission
LOCATION	Barnadivane Kneeves Terelton Co. Cork
DECISION DUE DATE	20/11/2014

Site Inspection: 17/10/2014 and 6/11/2014

Site notice displayed in two locations.

THE DEVELOPMENT AND ITS PLANNING CONTEXT

The site is located in a relatively isolated rural area mid way between the settlements of Capeen to the South and Teerelton to the North. The site is located between 250m and 260m contour line, and proposed structural and buildings have a total floor area of 541.97 sqm on a site measuring 2.95 ha. The site slopes upward from south to north.

In terms of **planning designations** the site is located in a rural area outside of any designation or specific control zone. The site is not within the natura 2000 screening zone. There is a scenic route S36 to the North of the proposal near the settlement of Teerelton.

This is a proposal for a 10 year permission to construct a new electrical substation which will replace a smaller substation located approx 400m to the north of the current proposal.

The primary planning issues in this case would appear to be as follows

- The project and its relationship to the national guidelines for renewable energy.
- Whether the proposal would give rise to any significant adverse visual impact when viewed from the surrounding area or whether there would be a significant effect on the general character or amenity when viewed from the designated scenic route.
- Whether the proposal would have a significant impact on the residential amenity of the nearby dwellings due to issues such as noise, light pollution, traffic safety
- Whether the scale and expansion of the facility is considered appropriate in a rural setting.
- Any significant environmental concerns associated with the application.
- Any significant Engineering issues that may be associated with the application.
- The planning history, whereby a smaller facility in the vicinity has full permission and is valid until 2017.

Other relevant policies in this case include:

Policy Context

National Policy

It is Government Policy to promote the development of renewable energy sources. This policy is outlined in Sustainable Development – A Strategy for Ireland, 1997. Sustainable Energy policy includes maximising the efficiency of generation and emphasising the use of renewable sources. The policy also seeks to minimise the emissions of greenhouse gases and other pollutants, both by clean generation and by sustainable consumption levels in all sectors.

The National Climate Change Strategy, issued by the Department of the Environment and Local Government in 2000 and it advocates the expansion of renewable energy to reduce emissions and to meet commitments under the Kyoto Protocol and wind energy is identified as a means of achieving this.

The National Spatial Strategy 2002 – 2020, it states "in economic development the environment provides a resource base that supports a wide range of activities that include agriculture, forestry, fishing, aqua-culture, mineral use, energy use, industry services and tourism. For these activities, the aim should be to ensure that the resources are used in sustainable ways that put as much emphasis as possible on their renewability" (page 114).

National Guidelines for Wind Farm Development.

The guidelines relating to wind farm development in Ireland are set out in the publication "*Wind Energy Development Guidelines, Guidelines for Planning Authorities*" by the Department of the Environment, Heritage and Local Government in June 2006. The presumption is in favour of wind farm development in suitable circumstances.

The Guidelines indicate:

- The need for a plan led approach.
- In section 4.3 there is reference to access to the electricity grid, and that best proactive practice would suggest that information on grid connection be included in applications as indicative or feasible options, it is however noted that this may not always be possible.
- Noise is another important consideration and is referred to in paragraph 5.6 and account should be taken of the nature and character of nearby surroundings and developments in assessing noise levels and guidance on levels for different locations outlined.
- Chapter 6 relates to aesthetic considerations in relation to siting and design.
- Regard should be had to profile, numbers, spacing and visual impact and the landscape character.
- Account should be taken of intervisibility of sites and the cumulative impact of developments.

The Guidelines consider that the following influence visual impact:-

- Form and characteristics of the landscape;
- Design and colour
- The existing skyline;
- Layout of turbines, and

- The number and size of turbines and intervisibility of sites.

The above guidelines generally refer to the placement of turbines and associated issues, which would include substation development.

Cork County Development Plan 2009 – 2015.

The policy for wind-farms is contained in Volume 1, Chapter 6: Transport and Infrastructure in the development plan. Following on from detailed studies undertaken by the Council in 2001-2002 the results from both the wind speeds and the landscapes of the County on a broad level have identified in broad strategic terms, two special areas called "Strategic Search Areas" and "Strategically Unsuitable Areas", and these areas are shown in map form (Fig 6.3).

The "Strategic Search Areas" are described as areas which have both relatively high wind speed and relatively low landscape sensitivity to wind projects. Developers would be encouraged generally to focus on these areas when searching for a potentially suitable site.

The "Strategically Unsuitable Areas" are areas of high landscape sensitivity, which are considered to be unsuitable for wind energy projects although there may be limited potential for small-scale wind projects. It would appear that the subject site is not located within either area and the proposed development should therefore be assessed on its own merits having regard to normal planning and sustainable development criteria.

The policy objectives for wind energy development are set out under INF 7-4 of the development plan as set out below:

(c) It is an objective in the strategic search areas (and in those areas identified as neither strategic search areas nor strategically suitable areas), to consider new, or the expansion of existing wind energy projects on their merits having regard to normal planning criteria including the following:

- The sensitivity of the landscape and of the adjoining landscapes to wind energy projects,
- The scale, size and layout of the project, any cumulative effects due to other projects and the degree to which the impacts are highly visible over vast areas,
- The visual impact of the project on protected views and prospects and designated scenic landscapes as well as local visual impacts,
- The impact of the project on nature conservation, archaeology and historic structures,
- Local environmental impacts including noise and shadow flicker,
- The visual and environmental impacts of associated development such as access roads, plant and grid connections etc,
- The proximity and sensitivity of a recognised settlement,
- The impact of the project on archaeology and historic structures,
- The impact of nature conservation, in particular avoiding designated and proposed European sites.

It is noted that the Cork County Development Plan does not contain any policies relating to maximum size or power output of wind energy projects.
The guidelines outlined above apply generally to the turbines but there is information relation to connectivity and therefore relevant to the substation proposal.

Other relevant policies

ENV 2-6 General Visual and Scenic Amenity: It is a general objective to protect the visual and scenic amenities of county Cork's built and natural environment.
ENV 2-9 General Views and prospects: It is a general objective to preserve the character of all important views and prospects, particularly sea views, river or lake views, views of unspoilt mountains, upland or coastal landscapes, views of historical or cultural sign ficance(including building and townscapes) and views of natural beauty as recognised in the Landscape Strategy.
ENV 2-11 Scenic Routes: it is a particular objective to preserve the character of those views and prospects attainable from scenic routes identified in this plan. These routes are shown on the Scenic amenity maps in Volume 3 and listed in Volume 2 of this plan. A profile of each route and the views to be protected are listed in Volume 2 of this plan.
ENV 2-13 Development on Scenic Routes: It is also an objective of the Planning Authority to require those seeking to carry out development in the environs of a scenic route and/or an area with important views and prospects, to demonstrate that there will be no adverse obstruction or degradation of the views towards and from vulnerable landscape features. In such areas, the appropriateness of the design, site layout, and landscaping of the proposed development must be demonstrated along with mitigation measures to prevent significant alterations to the appearance or character of the area.
(b) It is an objective to encourage appropriate landscaping and screen planting of developments along scenic routes. Where scenic routes run through settlements street trees and ornamental landscaping may also be required. Refer to Objective ENV 4-13, which provides guidance in relation to landscaping.

OTHER CONSIDERATIONS

Planning History
03/2365 – Permission refused by A.B.P following a third party appeal.
05/5907 – Permission granted by CCC and upheld on appeal by ABP (04.219620) for a total of 14 turbines and substation.
11/6605 – Permission granted for an extension of the duration of 05/5907 – application made on the basis that technical difficulties delayed the project.

Pre-planning
A pre planning meeting was held - The following details were discussed:
Whether the proposal constituted *strategic infrastructural development* or not. (submission to A.B.P confirms that it is not considered to be S.I.D). I spoke to Melissa Walsh (S.E.P) There were no significant discussions held and the issue of S.I.D was the main determining issue associated with the application. It should be noted that the new application is located in the Western division while the majority of the application including the turbines are located in the North cork division.

Submissions/Observations

To date, the following third party submission / observation have been referred to me:

NAME(S)	SUMMARY OF THE MAIN PLANNING ISSUES RAISED	INITIAL COMMENTS
Michael O' Donovan & Stephanie Larkin.	*Concerns expressed regarding the transparency, scale and overall long term intention of the developers of the proposed development is highlighted as a concern. It is noted that permission has already been granted and the*	Noted

NAME(S)	SUMMARY OF THE MAIN PLANNING ISSUES RAISED	INITIAL COMMENTS
	new proposal is of an unacceptable scale, which will have a serious visual impact in the area. The submission disagrees strongly with the applicants classification of the landscape value and the submission includes documentation referring to the local heritage walkways, and presence of a number of species worthy of protection. Concerns expressed regarding other issues and suggests an EIS is required.	
Denis Bradfield	*Concerns expressed re: technical issues relating to the application mainly that the previous application was lodged under a different name (Barna Energy)*	*Noted*
Noonan,Linehan, Carrol, Coffee Solicitors on behalf of 12 local residents	*Concerns expressed regarding the scale and relocation of the development The proposed time scale of 10 years is also questioned. Whether an EIS should be submitted and adequacy of the appropriate assessment submission is questioned and highlighted with case law.* *It would appear that the veracity of the application is being questioned and whether there is an intention to develop a larger wind farm and use the new substation.* *The main points raised in the submission can be summarised as follows.* *1. lack of clarity.* *2. Visual effects on the landscape are considered inappropriate.* *3. the necessity to provide on site services in an unmanned centre.* *4. The effect on the value of the area as a scenic walking route and local amenity area.* *5. The ecological value of the area in relation to wild birds is included.* *6. The inadequacy of the local road infrastructure to cater for the development.*	*Noted*

Technical reports

- Area Engineer (report dated 30/10/2014): Does not raise any significant Engineering issues, it is generally considered that the subject to bonds in relation to the road network that permission could be granted..

- Environmental Officer (report dated 31/10/2014) No significant issues are raised and the Environmental officer has no objection to permission being granted. Issues relating to the noise levels are discussed briefly in the report, and conditions relating to noise reduction have been included.

- Heritage Officer: Report dated Nov 2014 – Express concerns regarding the submission in relation to the bird surveys conducted on the site. Deferral is recommended.

- Senior Planners (report dated 6/11/2014) Examines the possibility of whether or not an E.I.S and or E.I.A is required. S.P concludes that neither is applicable in this case.

Report from Irish Water has been received – No issues are raised.

Assessment and Recommendation

The proposed site for the sub-station is located within an area deemed as a strategic search area for the development of wind energy. The wind turbine proposal has been granted permission previously and the overhead 110kv lines are available making connectivity to the grid easily achievable. Eirgrid developed new criteria regarding substation standards which were introduced in 2011,these require additional space whereby future expansion of facilities can be catered for. The applicants in my opinion should make this information available for public scrutiny in order to aid the overall transparency of the application and the process as a whole.

The previous proposal has been through a third party appeal process with An Board Pleanala and the key issues centred around visual aspects of the application in relation to the turbines and environmental issues including potential effect on wildlife and in particular birds.

The applicants have consulted with An Board Pleanala regarding potential requirements under section 182 (a) of the Planning and Development Act as amended in relation to whether or not the proposal is considered to be Strategic Infrastructural Development. The Board concluded that the proposal was not SID and the applicants were advised to apply for planning permission to the Local Authority.

The Senior planner has carried out an EIA screening report and concludes that an EIA is not necessary in this case and the proposal is sub threshold.

The proposal differs to the previous application

I examined the site on two separate occasions in order to make a balanced assessment of the proposal. In terms of visual amenity I have some concerns regarding the location of the proposal on an exposed elevated landscape. The previous site if developed would have less of a visual impact due to the location and general topography of the site, with some existing natural screening in the vicinity. I note the third party submissions on file which refer to the overall visual impact and agree somewhat that the overall effect including the new revised scale of the proposal will increase the visibility of the development from the surrounding landscape.

The application in my opinion contains little exploratory evidence which could dismiss the overall suitability of the previous site. It is stated that new technical and design standards were introduced by Eirgrid in 2011 after the initial decision to grant permission was made. In addition the applicants submit that the old site is not suitable due to the presence of the overhead lines to the west and the county road to the east which limit the expansion potential. The proposal could potentially be extended on the north south access although this does not appear to have been considered. The current application differs also in that there are now some facilities for staff members. It is stated that the site will be manned by maintenance staff three to four times a week.

The proposal however is located on a site which does have a reasonable backdrop where the land rises from the south to the north. The applicants have not provided a detailed landscaping plan which should be a requirement if planning permission is granted. The site

is not visible from the nearest scenic route which is located towards the settlement of Teerelton to the north of the proposed development.
The application has requested a 10 year permission – A rational for the prolonged period should be justified by the applicants. The *development management guidelines* June 2007 refers to prolonged periods of permission at the Authorities discretion for major developments, and Wind energy development is cited as an example. I do note however that a connection to the grid is scheduled for 2015. The turbine permission is valid only until 2017 following permission to Extend the Appropriate Period under Section 42 of the Planning and Development Act 2000, as amended by Sections 28 & 29 of the Planning and Development (Amendment) Act, 2010.
The necessity and rational for an extended period of 10 years should therefore by justified, in order to give the Planning Authority an opportunity to assess the proposal on its own merits.

Conclusion
On balance my recommendation in this instance deferral.

Please include the following text in the deferral letter:

It is considered that the information submitted with the application is not sufficient to enable the Planning Authority to make a decision in this case. This is because of:

1. Concerns regarding the suitability of the site in terms of exposure and effect on the general scenic and residential amenity of the area.
2. Concerns regarding the potential visual impact of the proposal on the general landscape amenity of the area.
3. There is insufficient information on file at present to enable the planning authority to assess the potential for the application to have impacts on the environment.

Therefore, in order to enable the Planning Authority give further consideration to the case, you are requested to provide six copies of the following further information:

a. The Planning Authority requires additional information regarding the unsuitability of the site originally granted permission for the substation. It is generally considered that the site, due to the local topography and natural screening would have a reduced visual impact on the surrounding landscape. A detailed survey is therefore required demonstrating clearly the constraints of the site in relation to current guidelines.
b. For the purposes of transparency and clarity please submit a copy of the guidelines issued by Eirgrid in relation to the upgrade and size increase required under the new standards for substations issued by Eirgrid in 2011.
In addition submit a detailed landscaping plan including a time scale for implementation.
c. The applications are requested to submit the results of the count data for the winter bird survey (2013-2014). The information should include details of numbers of records of individuals of each species recorded at each site visit, and any other data collected relating to individual species which might indicate how the site is used by that species, or where the species were recorded. A site layout showing the locations of the vantage points should also be submitted.

In addition to the above points the applicants are required to provide logical justification for the requirement for a10 year permission in this instance. The applicants should provide information regarding phasing of the development, which clearly identifies time scales and detailed phasing of the works proposed. It is noted that a grid connection is proposed in 2015 and the extension of the duration period for planning reference 11/6605 ends in February 2017.

Defer Application

Sean Taylor

14/11/2014

PLANNER'S REPORT
FURTHER INFORMATION ASSESSMENT

APPLICATION NO.	00557/14
APPLICANT	Arran Windfarm Ltd
DESCRIPTION	Construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works. This application is seeking a 10 year planning permission
LOCATION	Barnadivane Kneeves Terelton Co. Cork
DUE DATE	14/01/2015

This application was deferred for the following further information.

It was considered that the information submitted with the application was not sufficient to enable the Planning Authority to make a decision in this case. This was because of the following:

1. Concerns regarding the suitability of the site in terms of exposure and effect on the general scenic and residential amenity of the area.
2. Concerns regarding the potential visual impact of the proposal on the general landscape amenity of the area.
3. There is insufficient information on file at present to enable the planning authority to assess the potential for the application to have impacts on the environment.

Therefore, in order to enable the Planning Authority give further consideration to the case, the applicants were requested to provide six copies of the following further information:

a. The Planning Authority requires additional information regarding the unsuitability of the site originally granted permission for the substation. It is generally considered that the site, due to the local topography and natural screening would have a reduced visual impact on the surrounding landscape. A detailed survey is therefore required demonstrating clearly the constraints of the site in relation to current guidelines.
b. For the purposes of transparency and clarity please submit a copy of the guidelines issued by Eirgrid in relation to the upgrade and size increase required under the new standards for substations issued by Eirgrid in 2011. In addition submit a detailed landscaping plan including a time scale for implementation.
c. The applications are requested to submit the results of the count data for the winter bird survey (2013-2014). The information should include details of numbers of records of individuals of each species recorded at each site visit, and any other data collected relating to individual species which might indicate how the site is used by that species, or where the species were recorded. A site layout showing the locations of the vantage points should also be submitted.

In addition to the above points the applicants are required to provide logical justification for the requirement for a10 year permission in this instance. The applicants should provide information regarding phasing of the development,

which clearly identifies time scales and detailed phasing of the works proposed. It is noted that a grid connection is proposed in 2015 and the extension of the duration period for planning reference 11/6605 ends in February 2017.

Theapplicants have now responded to the further information and I can report as follows:

1. In relation to the request for additional information relating to the bird survey submitted. A report from the Heritage Office has been submitted on the 8/01/2015. The Heritage Officer is satisfied that there will be no impact on the local biodiversity or any significant impact on the bird population in the area. This aspect of the deferral is therefore considered to be acceptable.
2. The applicants have responded to the issue relating to the revised location of the substation and the following points are made. The need for a larger substation did not arise until after the boards initial decision to grant permission on the site. The applicants state that following the take over from ESB by Eirgrid that the design requirements changed substantially and the facilities were required to provide infrastructure and space which could support future expansion. The applicants state that the practicalities of using the existing facility would require the relocation of the 110Kv overhead lines, and this in turn would require the acquisition of additional lands in the ownership of different landowners. The development would be located quite close to residential development. The submission generally relates to external events and considerations which take into account topography, grid connection, landownership and considerations which could allow future expansion if required.
3. A detailed landscaping plan has been submitted.
4. In relation to the 10 year permission request, the applicants state that a new application is being considered for the replacement of the 14 turbines. No indication as to the intensification is indicated, however this is not necessary and any further application will be assessed through the planning process where the proper planning and sustainable development of the proposal will be tested against current Local and National policy guidelines. Circular letter PD 3/08, (Department of the Environment Heritage and Local Government) generally the circular letter advises the extended periods of permission to ensure that permission does not expire between the granting of the separate applications for grid connections.
   The applicants have provided and estimated period for the overall implementation and development of the proposal which has an estimated completion time of just under 5 years. The estimate indicates that there is significant potential for delays during all the stages of development.

Conclusion.

The proposed substation is important and necessary in order to facilitate the permission for the 14 turbines granted under PL 04.219620. The proposal is generally in accordance with the requirements of Eirgrid and is in compliance with current "*Wind Energy Development Guidelines*'.

The applicants have satisfied any Engineering, Environmental and Heritage requirements and it is considered that the proposal to relocate and construct a larger substation is reasonable, particularly as permission exists for 14 turbines. The issues relating to the overall effect on the visual amenity of the area is somewhat mitigated by the proposed landscaping plan and a bond relating to the implementation of this would appear appropriate. The landscape value of the area while somewhat elevated, and visible does not have any specific listing and is not located in an area where there are any recognised views or protected landscape areas. The nearest scenic route is located towards the settlement of Teerelton to the north where there is no visual impact. Development contributions have been levied on the original grant of permission for the turbine development including the substation. - €78,280.07 is outstanding.

On balance I recommend permission with the following permission.

Conclusion

Grant

Conditions/Reasons

No.	Condition	Reason
1	The proposed development shall be carried out in accordance with plans and particulars lodged with the Planning Authority on the 26/09/2014 and on the 9/12/2014 save where amended by the terms and conditions herein.	In the interests of clarity.
2	The duration of the grant of permission shall be 10 years from the date of the grant of this permission.	Having regard to the nature of the development, the Planning Autority considers it appropriate to specify a period of validity of this permission in excess of five years.
3	The site shall be landscaped in accordance with a comprehensive scheme of hard and soft	In the interests of visual amenity.

	landscaping, to include perimeter fencing, full details including colours and textures of which shall be submitted to and agreed in writing with the Planning Authority before any development commences, or, at the discretion of the Planning Authority, within such further period or periods of time as it may nominate in writing. The said scheme shall include, inter alia, a programme for the implementation and maintenance of the scheme.	
4	The landscaping plan shall be of native species of local origin. The Acacia falcata shall be substituted by either Prunus spinosa or Crataegus monogyna. The landscaping shall be completed within one growing season following the completion of construction.	In the interest of protecting local biodiversity
5	Before any development commences, or, at the discretion of the Planning Authority, within such further period or periods of time as it may nominate in writing, the developer shall provide, to the satisfaction of the Planning Authority, security in the amount of €3,000 to guarantee the satisfactory completion of tree and shrub planting and all other landscaping proposals for the site as required by Condition no 3. The sum lodged pursuant to this condition shall be refunded only when it is certified by the Planning Authority that the planting and landscaping have been completed to its satisfaction.	To ensure the satisfactory completion of the development.
6	Construction activities shall be carried out in accordance with good practise as set out in CIRIA Guidelines Control of Water Pollution From Construction Sites – Guide to Good Practise	Protection of water quality
7	The water protection measures detailed in the planning documents for the substation shall form part of the Construction Environmental Management Plan for the permitted wind farm development as required	To protect water quality.

	by Condition 13 of PL04.219620.	
8	Any solid waste arising on the site including any dredge waste, construction and demolition waste, rock, soil and stone shall be recycled as far as possible. Any materials exported from the site for recovery, recycling or disposal shall be managed at an approved licensed facility. Adaquate on site arranngements shall be made to the satisfaction of the planning Authority for the storage of recyclable materials prior to collection.	To protect the local environment.
9	Any hazardous or contaminated wastes arising on the site including any contaminated soil shall be recycled as far as possible or disposed. Materials exported from the site for recovery, recycling or disposal shall be managed at an approved facility. Adequate on site arrangements shall be made to the satisfaction of the Planning Authority for the storage of recyclable materials prior to collection.	To protect the environment
10	During construction Noise levels emanating from the proposed development when measured at noise sensitive location shall not exceed 55dBA (15 minute Leq) between 08.00 hours and 18.00 hours, Monday to Friday inclusive, and shall not exceed 45 dBA at any other time. Measurements shall be made in accordance with ISO recommendation R.1996/1 "Acoustics - Description and Measurement of Environmental Noise, Part 1: Basic Quantities and Procedures." If noise contains a discrete, continuous tone (whine, hiss screech, hum etc.), or if there are distinctive impulses in the noise (bangs, clicks, clatters or thumps), or if the noise is irregular enough in character to attract attention, a penalty of + 5dbA will be applied to the measured noise level and this	To protect the amenity of the area

	increased level shall be used in checking compliance with the specified levels.	
11	All site operations shall be carried out in such a manner as to ensure that no odour or dust nuisance occurs off site.	To protect the environment
12	Any over ground tanks containing liquid fuels shall be contained in a waterproof bunded areas of sufficient volume to hold 110% of the value of the largest tank within the bund. All valves on the tank shall be contained within the bunded area. The bunded area shall be fitted with a locking penstock valve, which shall be opened only to discharge storm water to the interceptor. The developer shall ensure that this valve is locked at all times.	To protect the environment
13	Site works / operations on site shall be carried out in such a manner that no polluting material enters any waters on, adjacent to or around the site.	To protect the local environment.
14	Any end-of-life equipment shall not be allowed to accumulate on site and any end-of-life equipment wastes arising on the site shall be recycled as far as possible. Materials exported from the site for recovery, recycling or disposal shall be managed at an approved facility. Adequate on site arrangements shall be made to the satisfaction of the Planning Authority for the storage of recyclable materials prior to collection.	To protect the local environment.
15	Any oil storage tanks area, chemical storage, drum storage area shall be rendered impervious to the materials stored therein. In addition, storage tank areas shall be bunded, either locally or remotely, to a volume of 110% of the largest tank within each individual bunded area. Drum storage areas shall be bunded to a volume equal to 110% of the sum of the volumes of the largest five drums likely to be stored therein.	To protect the local environment.

	The height of the bund for any drum storage area shall be not less than 300 millimetres.	
16	Any external lighting and flood-lighting shall be cowled and directed away from any light sensitive point, so as not to cause light glare. The lighting shall include remote timing options, and shall be installed, positioned, and directed to the satisfaction of the Planning Authority. Full details shall be agreed in writing with the Planning Authority prior to installation.	In the interests of public safety.
17	Noise levels emanating from the wind turbines following commissioning, when measured externally at a noise sensitive location, shall not exceed 43 dB(A), (LA90,10 mins) or maximum increase of 5 dB(A) above background noise (LA90,10 mins) at nearby noise sensitive locations. If noise contains a discrete, continuous tone (whine, hiss, screech, hum etc.), or if there are distinctive impulses in the noise (bangs, clicks, clatters or thumps), or if the noise is irregular enough in character to attract attention, a penalty of + 5dBA will be applied to the measures noise level and this increased noise level shall be used in checking compliance with the specified levels. All sound measurements shall be carried out in accordance with ISO recommendations R 1996, "assessment of Noise with Respect to Community response" as amended by ISO Recommendations R 1996/1, 2 and 3, "description and Measurement of Environmental Noise", as appropriate.	To safeguard the amenities of the area and control noise emissions from the development.
18	Before commencing any development the developer shall provide, to the satisfaction of the Planning Authority, security in the amount of €72,000 to cover the	To safeguard the amenities of the area.

	cost of remedial works in the event of significant damage to the local access road, bridges and culverts. Following the final survey at the end of the construction, any necessary repairs shall be carried out by the applicants to the satisfaction of the Local Authority.	
19	Prior to the commencement of develpment the developer shall provide a Pavement Condition Index and Digital video survey of the L8514, L8515,L8516, L8517, L6007, L6009 local secondary roadway pre and post construction work. Copies of the survey shall be given to the local authority following completion, and any repairs shall be carried out by the applicants at their own expence, with prior approval of the local authority.	In the interests of road Safety.
20	The contractor shall bring the average PCI of the roads back up to or better than the pre construction rating. Following completion of construction phase.	In the interest of road safety
21	Any utility poles currently within the roadside boundary set back required by other conditions of this schedule shall be repositioned behind the new boundary, and any surface chambers or manholes within it shall be repositioned in a location or at a level to be agreed in writing with the Planning Authority. The applicant shall be responsible for the costs of relocating these facilities, notifying the relevant statutory undertakers, obtaining any necessary licenses, and for notifying the Planning Authority of the revised locations of such utilities, prior to commencement of development, or, at the discretion of the Planning Authority, within such further period or periods of time as it may nominate in writing.	To protect existing utility infrastructure.
22	Surface water shall be disposed of within the site by means of soakaways and shall not be allowed to flow onto public road.	To prevent the flooding of the public road.

23	Existing road drainage shall not be obstructed and any the new entrance shall be designed and constructed to ensure the uninterrupted flow of road surface run-off.	To maintain proper roadside drainage and to prevent the flooding of the public road.
24	The developer shall provide and lay a concrete pipe drain of not less than 300 mm minimum internal diameter under the entrance from the public road, to the satisfaction of the Planning Authority.	To maintain proper roadside drainage and to prevent the flooding of the public road.
25	The developer shall ensure the provision of an adequate supply of potable water to serve the development.	In the absence of a public supply it is the developer's responsibility to provide an adequate water supply.
26	No dust, mud or debris from the site shall be carried onto or deposited on the public road/footpath. Public roads and footpaths in the vicinity of the site shall be maintained in a tidy condition by the developer during the construction phase.	To protect the amenities of the area and in the interests of road safety.
27	The applicant is required to engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930–2004) to carry out archaeological testing of sub-station site and associated access road. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her express consent. The archaeologist is required to notify the National Monuments Service of the Department of Arts Heritage & Gaeltacht (DAHG) in writing at least four weeks prior to the commencement of site preparations. This will allow the archaeologist sufficient time to obtain a licence to carry out the work. Having completed the work, the archaeologist shall submit a written Planning Authority and to the National Monuments Service of the DAHG for consideration. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and/or monitoring	To preserve item of archaeological importance.

	may be required and the Planning Authority and National Monuments Service of the DAHG will advise the Applicant/Developer with regard to these matters. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the National Monuments Service of the DAHG .	
28	The applicant is required to engage the services of a suitably qualified archaeologist to monitor all ground works associated with the development and make an appropriate record (photographs, sketch section & plans, written description) of all cultural heritage material impacted on during the course of the construction phase including field boundaries and foundation of houses . In the event that archaeological material is found during the course of monitoring, the archaeologist shall have work on the site stopped, pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Local Authority Archaeologist and National Monuments Service of the Department of Arts Heritage and the Gaeltacht with regard to any necessary mitigating action (e.g. preservation in situ, or excavation). The applicant shall facilitate the archaeologist in recording any material found. The Planning Authority and National Monuments Service of the Department of Arts Heritage and the Gaeltacht shall be furnished with a written and digital report describing the results of the monitoring and excavation report where necessary.	To preserve items of archaeological interest

Sean Taylor
12/01/2015

SENIOR EXECUTIVE PLANNER'S REPORT

APPLICATION NO.	14/00557
APPLICANT	Arran Windfarm Ltd
DESCRIPTION	Construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works. This application is seeking a 10 year planning permission
LOCATION	Barnadivane Kneeves Terelton Co. Cork
DECISION DUE DATE	14/01/2015

Assessment

The supplementary reports of the Area Planner (12/01/15), Heritage Officer (08/01/15), Area Engineer (10/12/14) and Environment Officer (06/01/15) are noted.

The Heritage Officer is satisfied the proposed development would not have significant impacts on any Natura 2000 sites while the Area Engineer recommends permission subject to a bond (€72,000) for the road network. A breakdown of the bond has been provided by the Area Engineer (see details below from email dated 12/01/15).

> *"Roads leading to the site L8514, L6007, L8515,L8516, L8517, L6009 adjoining the site,*
> *A bond should put in place for €72,000 i.e. 10% of the full cost of repairing the network.*
>
> *This is based on the full road re-garding, double surface dressing costs (12,000m (length of the roads above directly affected by the site) x 3m x €20) reduced by a figure to approximately 90% given the current fair condition of the road.* ***Bond of €72,000"***

The Environment Officer has no objection and recommends permission.

The report of the Area Planner notes that the applicants have satisfactorily responded to the request for further information and recommends permission.

Having regard to the further information response received, the report of the Area Planner and supplementary inter-departmental reports, permission is recommended subject to the amended conditions set out below (Condition Nos.7 & 17 of the report of the Area Planner.

G.O'Mahony
12/01/15

Conclusion

Grant Application

Conditions/Reasons

No.	Co ndt'ıon	Reason
1	The proposed development shall be carried out in accordance with plans and particulars lodged with the Planning Authority on the 26/09/2014 and on the 09/12/2014 save where amended by the terms and conditions herein.	In the interests of clarity.
2	The duration of the grant of permission shall be 10 years from the date of the grant of this permission.	In the interests of clarity and orderly development.
3	The site shall be landscaped in accordance with a comprehensive scheme of hard and soft landscaping, to include perimeter fencing, full details including colours and textures of which shall be submitted to and agreed in writing with the Planning Authority before any development commences, or, at the discretion of the Planning Authority, within such further period or periods of time as it may nominate in writing. The said scheme shall include, inter alia, a programme for the implementation and maintenance of the scheme.	In the interests of visual amenity.
4	The landscaping plan shall be of native species of local origin. The Acacia falcata shall be substituted by either Prunus spinosa or Crataegus monogyna. The landscaping shall be completed within one growing season following the completion of construction.	In the interest of protecting local biodiversity
5	Before any development commences, or, at the discretion of the Planning Authority, within such further period or periods of time as it may nominate in writing, the developer shall provide, to the satisfaction of the Planning Authori ty, securit yin the amount of	To ensure the satisfactory completion of the development.

	€3,000 to guarantee the satisfactory completion of tree and shrub planting and all other landscaping proposals for the site as required by Condition no 3. The sum lodged pursuant to this condition shall be refunded only when it is certified by the Planning Authority that the planting and landscaping have been completed to its satisfaction.	
6	Construction activities shall be carried out in accordance with good practise as set out in CIRIA Guidelines Control of Water Pollution From Construction Sites – Guide to Good Practise	Protection of water quality
7	The developer shall implement in full all mitigation, protection, maintenance and monitoring measures, including water protection measures, for the development as detailed in the submitted 'Environmental Report' dated September 2014, to the satisfaction of the Planning Authority.	In the interests of the proper planning and sustainable development of the area.
8	Any solid waste arising on the site including any dredge waste, construction and demolition waste, rock, soil and stone shall be recycled as far as possible. Any materials exported from the site for recovery, recycling or disposal shall be managed at an approved licensed facility. Adaquate on site arranngements shall be made to the satisfaction of the planning Authority for the storage of recyclable materials prior to collection.	To protect the local environment.
9	Any hazardous or contaminated wastes arising on the site including any contaminated soil shall be recycled as far as possible or disposed. Materials exported from the site for recovery, recycling or disposal shall be managed at an approved facility. Adequate on site arrangements shall be made to the satisfaction of the Planning Authority for the storage of recyclable materials prior to collection.	To protect the environment
10	During construction Noise levels emanating from the proposed development when measured at noise	To protect the amenity of the area

	sensitive location shall not exceed 55dBA (15 minute Leq) between 08.00 hours and 18.00 hours, Monday to Friday inclusive, and shall not exceed 45 dBA at any other time. Measurements shall be made in accordance with ISO recommendation R.1996/1 "Acoustics - Description and Measurement of Environmental Noise, Part 1: Basic Quantities and Procedures." If noise contains a discrete, continuous tone (whine, hiss screech, hum etc.), or if there are distinctive impulses in the noise (bangs, clicks, clatters or thumps), or if the noise is irregular enough in character to attract attention, a penalty of + 5dbA will be applied to the measured noise level and this increased level shall be used in checking compliance with the specified levels.	
11	All site operations shall be carried out in such a manner as to ensure that no odour or dust nuisance occurs off site.	To protect the environment
12	Any over ground tanks containing liquid fuels shall be contained in a waterproof bunded areas of sufficient volume to hold 110% of the value of the largest tank within the bund. All valves on the tank shall be contained within the bunded area. The bunded area shall be fitted with a locking penstock valve, which shall be opened only to discharge storm water to the interceptor. The developer shall ensure that this valve is locked at all times.	To protect the environment
13	Site works / operations on site shall be carried out in such a manner that no polluting material enters any waters on, adjacent to or around the site.	To protect the local environment.
14	Any end-of-life equipment shall not be allowed to accumulate on site and any end-of-life equipment wastes arising on the site shall be recycled as far as possible. Materials exported from the site for recovery, recycling or disposal shall be managed at an approved	To protect the local environment.

	facility. Adequate on site arrangements shall be made to the satisfaction of the Planning Authority for the storage of recyclable materials prior to collection.	
15	Any oil storage tanks area, chemical storage, drum storage area shall be rendered impervious to the materials stored therein. In addition, storage tank areas shall be bunded, either locally or remotely, to a volume of 110% of the largest tank within each individual bunded area. Drum storage areas shall be bunded to a volume equal to 110% of the sum of the volumes of the largest five drums likely to be stored therein. The height of the bund for any drum storage area shall be not less than 300 millimetres.	To protect the local environment.
16	Any external lighting and flood-lighting shall be cowled and directed away from any light sensitive point, so as not to cause light glare. The lighting shall include remote timing options, and shall be installed, positioned, and directed to the satisfaction of the Planning Authority. Full details shall be agreed in writing with the Planning Authority prior to installation.	In the interests of public safety.
17	Noise levels emanating from the substation following commissioning, when measured externally at a noise sensitive location, shall not exceed 43 dB(A), (LA90,10 mins) or maximum increase of 5 dB(A) above background noise (LA90,10 mins) at nearby noise sensitive locations. If noise contains a discrete, continuous tone (whine, hiss, screech, hum etc.), or if there are distinctive impulses in the noise (bangs, clicks, clatters or thumps), or if the noise is irregular enough in character to attract attention, a penalty of + 5dBA will be applied to the measures noise level and this increased noise level shall be used in checking compliance with the	To safeguard the amenities of the area and control noise emissions from the development.

	specified levels. All sound measurements shall be carried out in accordance with ISO recommendations R 1996, "assessment of Noise with Respect to Community response" as amended by ISO Recommendations R 1996/1, 2 and 3, "description and Measurement of Environmental Noise", as appropriate.	
18	Before commencing any development the developer shall provide, to the satisfaction of the Planning Authority, security in the amount of €72,000 to cover the cost of remedial works in the event of significant damage to the local access road, bridges and culverts. Following the final survey at the end of the construction, any necessary repairs shall be carried out by the applicants to the satisfaction of the Local Authority.	To safeguard the amenities of the area
19	Prior to the commencement of develpment the developer shall provide a Pavement Condition Index and Digital video survey of the L8514, L8515,L8516, L8517, L6007, L6009 local secondary roadway pre and post construction work. Copies of the survey shall be given to the local authority following completion, and any repairs shall be carried out by the applicants at their own expence, with prior approval of the local authority.	In the interests of road Safety.
20	The contractor shall bring the average PCI of the roads back up to or better than the pre construction rating. Following completion of construction phase.	In the interest of road safety
21	Any utility poles currently within the roadside boundary set back required by other conditions of this schedule shall be repositioned behind the new boundary, and any surface chambers or manholes within it shall be repositioned	To protect existing utility infrastructure.

	in a location or at a level to be agreed in writing with the Planning Authority. The applicant shall be responsible for the costs of relocating these facilities, notifying the relevant statutory undertakers, obtaining any necessary licenses, and for notifying the Planning Authority of the revised locations of such utilities, prior to commencement of development, or, at the discretion of the Planning Authority, within such further period or periods of time as it may nominate in writing.	
22	Surface water shall be disposed of within the site by means of soakaways and shall not be allowed to flow onto public road.	To prevent the flooding of the public road.
23	Existing road drainage shall not be obstructed and any the new entrance shall be designed and constructed to ensure the uninterrupted flow of road surface run-off.	To maintain proper roadside drainage and to prevent the flooding of the public road.
24	The developer shall provide and lay a concrete pipe drain of not less than 300 mm minimum internal diameter under the entrance from the public road, to the satisfaction of the Planning Authority.	To maintain proper roadside drainage and to prevent the flooding of the public road.
25	The developer shall ensure the provision of an adequate supply of potable water to serve the development.	In the absence of a public supply it is the developer's responsibility to provide an adequate water supply.
26	No dust, mud or debris from the site shall be carried onto or deposited on the public road/footpath. Public roads and footpaths in the vicinity of the site shall be maintained in a tidy condition by the developer during the construction phase.	To protect the amenities of the area and in the interests of road safety.
27	The applicant shall engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930–2004) to carry out archaeological testing of sub-station site and associated access road. No sub-surface work shall be undertaken in the absence of the	To preserve items of archaeological importance.

	archaeologist without his/her express consent. The archaeologist is required to notify the National Monuments Service of the Department of Arts Heritage & Gaeltacht (DAHG) in writing at least four weeks prior to the commencement of site preparations. This will allow the archaeologist sufficient time to obtain a licence to carry out the work. Having completed the work, the archaeologist shall submit a written Planning Authority and to the National Monuments Service of the DAHG for consideration. Where archaeological material is shown to be present, avoidance, preservation in situ, preservation by record (excavation) and/or monitoring may be required and the Planning Authority and National Monuments Service of the DAHG will advise the Applicant/Developer with regard to these matters. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the National Monuments Service of the DAHG .	
28	The applicant shall engage the services of a suitably qualified archaeologist to monitor all ground works associated with the development and make an appropriate record (photographs, sketch section & plans, written description) of all cultural heritage material impacted on during the course of the construction phase including field boundaries and foundation of houses . In the event that archaeological material is found during the course of monitoring, the archaeologist shall have work on the site stopped, pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Local Authority Archaeologist and National Monuments Service of the Department of Arts Heritage and the Gaeltacht with regard to any necessary mitigating action (e.g. preservation in situ, or	To preserve items of archaeological interest

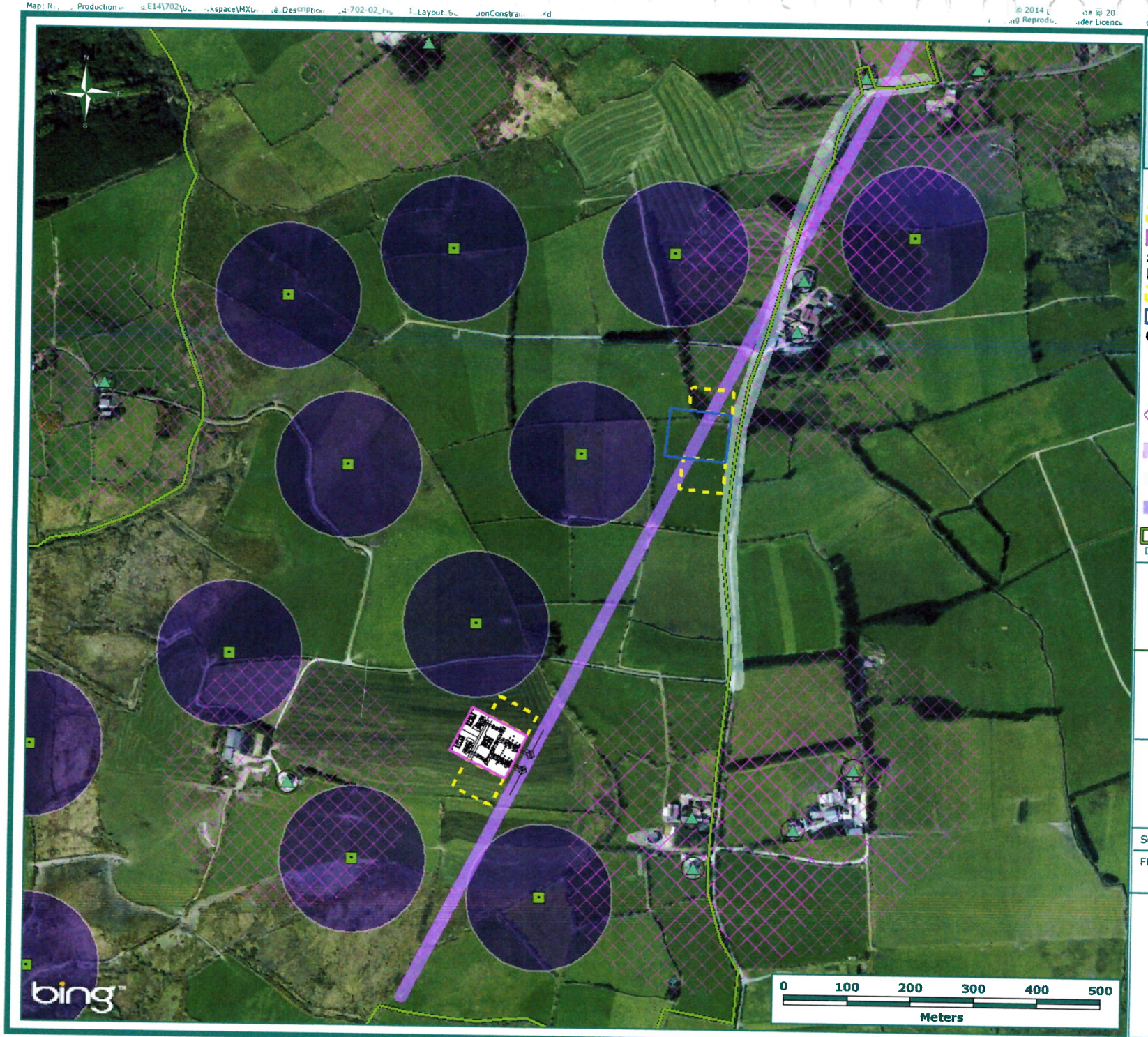
	excavation). The applicant shall facilitate the archaeologist in recording any material found. The Planning Authority and National Monuments Service of the Department of Arts Heritage and the Gaeltacht shall be furnished with a written and digital report describing the results of the monitoring and excavation report where necessary.	

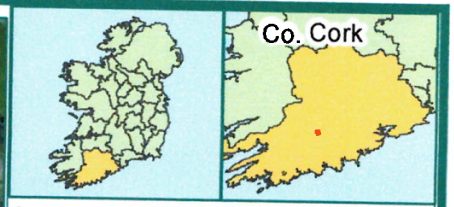
G. O'Mahony

Geraldine O'Mahony
Senior Executive Planner
12/01/2015

Appendix 3

Figures showing Constraints Associated with Site Selection





Legend

Proposed Substation location

- Future Expansion Area
- Fenceline of Proposed Substation

Substation footprint at permitted location

- Expansion Area
- Fenceline of Proposed Substation

Constraints

- Permitted Turbines
- Adjacent House
- Residential Visual Impact Constraints (200 meters)
- Existing 110kV Line Constraint (10 meters)
- Road Constraints (15 meters)
- Turbine (Permitted) Constraints 115.5m
- Study Area

Date 05/12/2014

Name Of Client

Barna Wind Energy Ltd.

Name Of Job

EIS for Barnadavine Wind Farm

Title Of Figure

Proposed substation Constraints

Scale Used 1:8,000 @ A4

Figure No. 1

Rev 0

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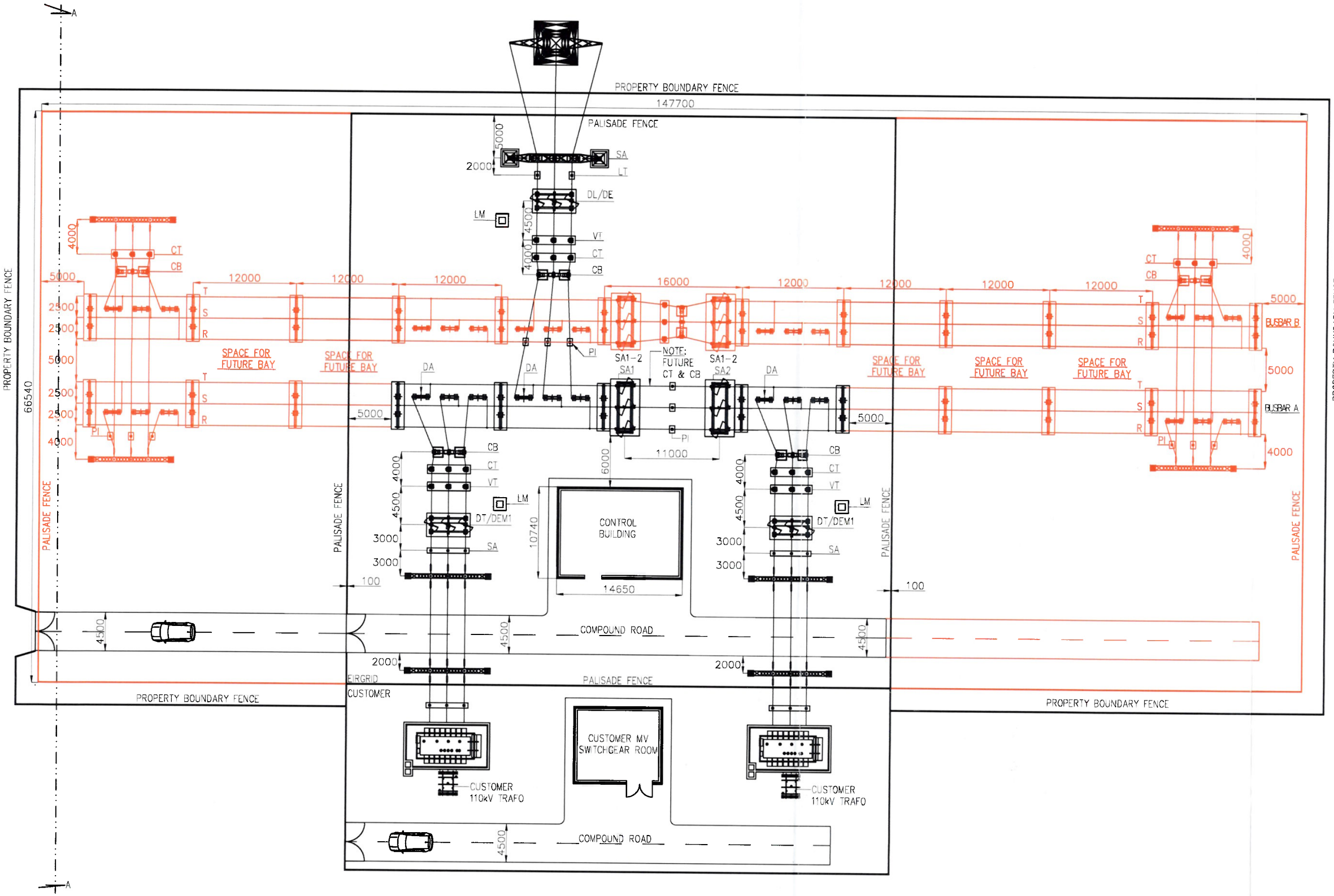

LEGEND

LM	LIGTHNING MAST
Q1(DA)	BUSBAR DISCONNECT
SA	SURGE ARRESTER
VT	VOLTAGE TRANSFORMER
CT	CURRENT TRANSFORMER, SINGLE PHASE
Q0(CB)	CIRCUIT BREAKER
PI	POST INSULATOR
LT	LINE TRAP (TYPICALLY R & T PHASES)
Q9/Q8 (DL/DE)	LINE/EARTH DISCONNECT
Q9/Q51 (DT/DEM1)	TRAFO/EARTH DISCONNECT
Q11/Q12 (SA1-2 SA1/ SA1-2 SA2)	SECTIONALISER

FUTURE RING STATION (SPACE ONLY)

NEW LOOP STATION

NOTE: THIS DRAWING IS PRODUCED FOR INFORMATION PURPOSE ONLY. ALL DIMENSIONS, REFERENCE GIVEN ARE INDICATIVE AND SHOULD NOT BE USED AS A PART OF A DETAILED DESIGN

REV	DESC	DRAWN	CHECKED	APPROVED	DATE
03	TRAFO & LINE EARTH SWITCHES UPDATED	JB	RB	PM	09/09/2013
02	PALISADE FENCE HEIGHT AMENDED	JB	RB	PM	22/01/2013
01	MINOR REVISIONS	JB	RB	PM	11/12/2012
00	FIRST ISSUE	JB	RB	PM	03/11/2012

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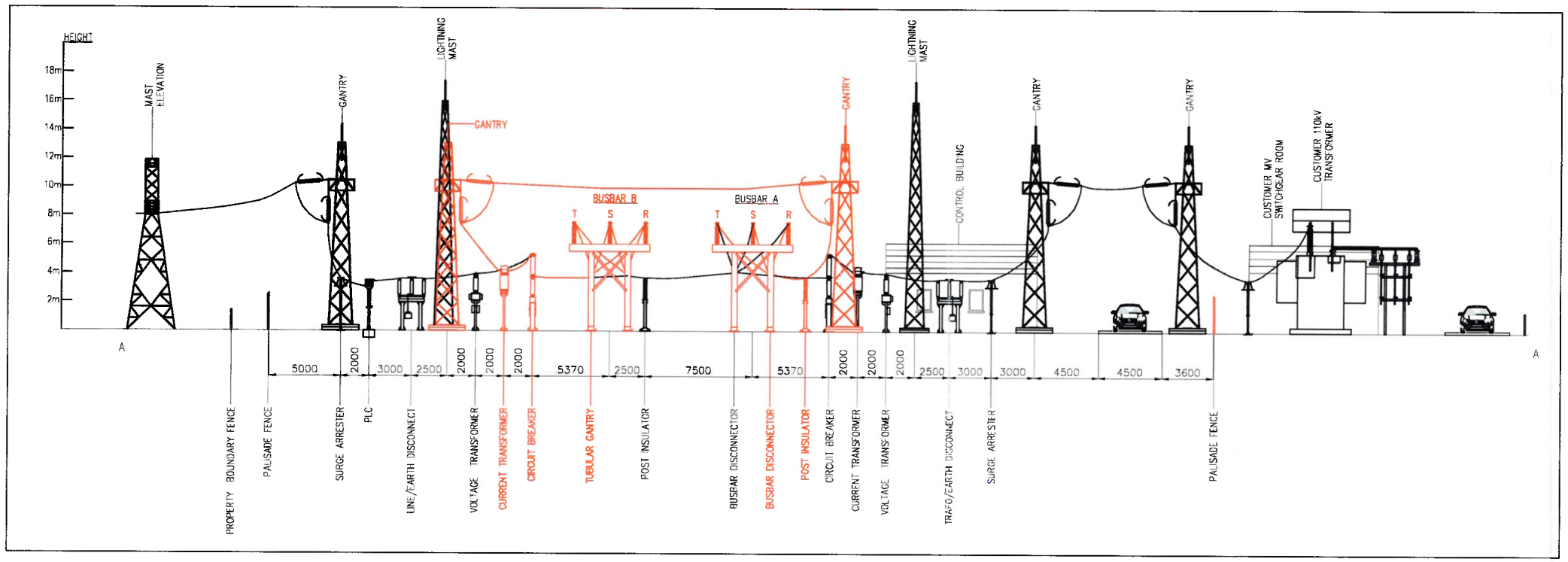
PROJECT
110kV STATION DESIGN STANDARD
AIS TAIL STATION

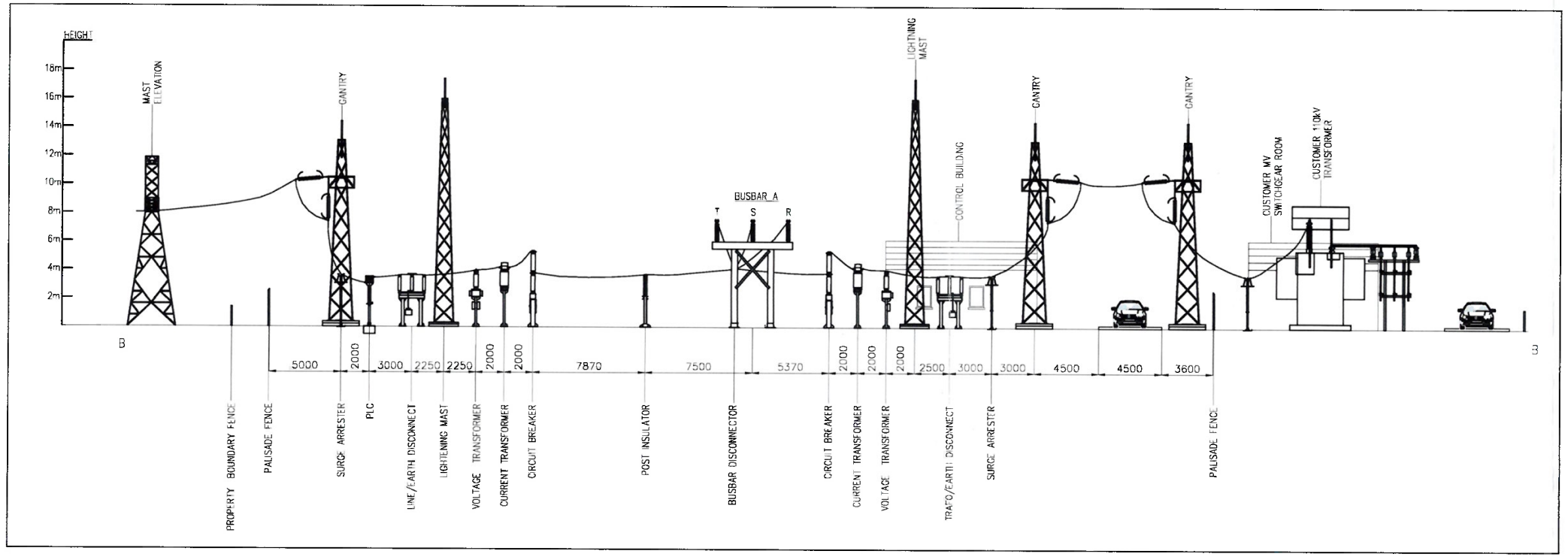
DRAWING TITLE
RING BUSBAR CONFIGURATION
1 LINE BAY & 2 TRAFO BAYS & SPACE FOR 5 FUTURE BAYS & 2 WING COUPLERS

No of Shts	SIZE	SCALE
02	A3	1:500

DRAWING NUMBER	SHEET	REV
XDN-LAY-ELV-STND-H-002	001	03



ELEVATION SECTION A–A (FUTURE RING STATION ADDED)



ELEVATION SECTION A–A

FUTURE RING STATION

NEW TAIL STATION

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REV	DESC	DRAWN	CHECKED	APPROVED	DATE
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00	FIRST ISSUE	JB	RB	PM	03/11/2012

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PROJECT
110kV STATION DESIGN STANDARD
AIS TAIL STATION

DRAWING TITLE
RING BUSBAR CONFIGURATION
1 LINE BAY & 2 TRAFO BAYS & SPACE
FOR 5 FUTURE BAYS & 2 WINC COUPLERS

No of Shts	SIZE	SCALE
02	A3	1:400

DRAWING NUMBER	SHEET	REV
XDN–LAY–ELV–STND–H–002	002	03

Appendix 4

Detailed Landscaping Plan

Sheet FTC-A1-2006 rev. C (template filed in O:\Acad\Templates\Autocad) (May 2007) - template externally referenced

PLANNING NOTICE 2 LOCATION

Retain existing sod and stone boundary ditch where possible, except where its removal is required to provide access to the site and adequate sight lines. Any existing ditch removed is to be replaced with new sod and stone wall. New roadside hedgerow consisting of salix, ilex verticillata & Acacia Falcata (Willow, Holly & Sally) to be provided along the extent of the site, 1000 plants for every 300m.

LANDS OWNED BY BARRY O'SULLIVAN

CF

253.00m

255.00m

252.00m

CONTROL BUILDING A

CONTROL BUILDING B

CONTROL BUILDING C

TRANSFORMER

Underground Foul Water Storage Tank

9.84

Native hedgerow to incorporate mixture of salix, ilex verticillata & Acacia Falcata (Willow, Holly & Sally) to be provided as indicated, 1000 plants for every 300m embankment distance.

SCALE - VERTICAL

SCALE HORIZ

0m 5m 10m 15m 20m 25m 30m 35m 40m 45m 50m

1:500

ORIGINAL DRAWING SIZE A1 - (841 x 594)

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OS Sheet Numbers 6460,6461, 6462, 6499, 6500, 6501

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Do not scale Use figured dimensions only If in doubt - Ask!

Note:
Implementation of the landscaping plan will coincide with construction completion. Should completion occur between May and August tree planting will follow in the subsequent planting season commencing in September.

Native hedgerow to incorporate mixture of salix, ilex verticillata & Acacia Falcata (Willow, Holly & Sally) to be provided as indicated, 1000 plants for every 300m embankment distance.

Existing boundary to be removed to ensure adequate sight lines are provided in accordance with requirements of TD41-42

NOTE:
INDICATIVE SUBSTATION ARRANGEMENT, FINAL LAYOUT SUBJECT TO DETAIL DESIGN TO EIRGRID REQUIREMENTS.

Rev.	Drawn	Chkd	Appd	Date	Description
A				Cork 28.11.14	ISSUE IN RESPONSE TO REQUEST FOR FURTHER INFORMATION
				Rev Origin	

Revision History: A

Name of Client
ARRAN WINDFARM LIMITED

Name of Job
PROPOSED 110kV SUBSTATION

Title of Drawing
PROPOSED LANDSCAPING PLAN

Scales Used: 1:500
This Drawing was printed to A1-

Dwg. No.: LE14-702-02-123
Rev.: A

FEHILY TIMONEY & COMPANY
CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES
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North Road, Dublin 11, Ireland
T:+353-1-6583500, F:+353-1-6583501

Appendix 5

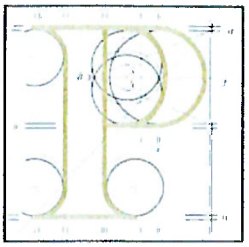
Correspondence with An Bord Pleanala re SID

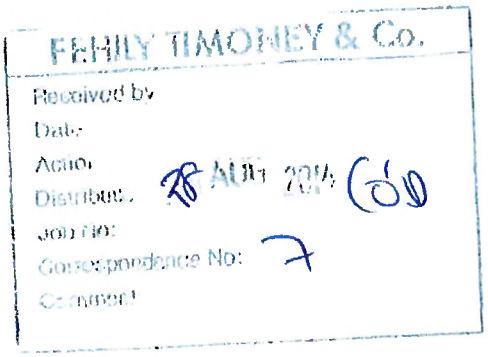



Our Ref: 04.VC0074

Your Ref: Q:/2014/LE14/702/01/LET001/MT

An Bord Pleanála





Clodagh O'Donovan
Fehily Timoney & Company
Core House
Pouladuff Road
Togher
Cork

27th August 2014

Re: Proposed 110kV Substation at Barnadivane,
Co. Cork

Dear Madam,

Please be advised that following consideration of the issues raised at the above consultation and having regard to the scale and nature of the proposed development An Bord Pleanála has concluded that the proposed development does not come within the scope of section 182A of the Planning and Development Act, 2000, as amended. Accordingly any application for planning consent for the proposed development should be made to the local planning authority for the area in accordance with the provisions of section 34 of the Planning and Development Act, 2000, as amended.

In accordance with section 146(3) of the Planning and Development Act, 2000, as amended, the Board will make available for inspection and purchase at its offices the documents relating to the decision within 3 working days following its decision. In addition, the Board will also make available the Board Direction on the decision on its website (www.pleanala.ie). This information is normally made available on the list of decided cases on the website on the Wednesday following the week in which the decision is made.

The attachment contains information in relation to challenges to the validity of a decision of An Bord Pleanála under the provisions of the Planning and Development Act, 2000, as amended.

In accordance with the fees payable to the Board and where not more than one pre-application meeting is held in the determination of a case, a refund of €3,500 is payable to the person who submitted the pre-application consultation fee. As only one meeting was required in this case, a refund of €3,500 will be sent to you in due course.

If you have any queries in relation to the matter please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Kieran Doherty
Executive Officer
Direct Line:01-8737248

Encls.

AHC/VC74.01.LTR

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64 Sráid Maoilbhríde,
Baile Átha Cliath 1.

64 Marlborough Street,
Dublin 1.

Judicial review of An Bord Pleanála decisions under the provisions of the Planning and Development Act, 2000, as amended

A person wishing to challenge the validity of a Board decision may do so by way of judicial review only. Sections 50, 50A and 50B of the Planning and Development Act 2000 (as substituted by section 13 of the Planning and Development (Strategic Infrastructure) Act 2006, as amended/substituted by sections 32 and 33 of the Planning and Development (Amendment) Act 2010 and as amended by sections 20 and 21 of the Environment (Miscellaneous Provisions) Act 2011) contain provisions in relation to challenges to the validity of a decision of the Board.

The validity of a decision taken by the Board may only be questioned by making an application for judicial review under Order 84 of The Rules of the Superior Courts (S.I. No. 15 of 1986). Sub section 50(6) of the Planning and Development Act 2000 requires that subject to any extension to the time period which may be allowed by the High Court in accordance with subsection 50(8), any application for judicial review must be made within 8 weeks of the decision of the Board. It should be noted that any challenge taken under section 50 may question only the validity of the decision and the Courts do not adjudicate on the merits of the development from the perspectives of the proper planning and sustainable development of the area and/or effects on the environme nt. Section 50A states that leave for judicial review shall not be granted unless the Court is satisfied that there are substantial grounds for contending that the decision is invalid or ought to be quashed and that the applicant has a sufficient interest in the matter which is the subject of the application or in cases involving environmental impact assessment is a body complying with specified criteria.

Section 50B contains provisions in relation to the cost of judicial review proceedings in the High Court relating to specified types of development (including proceedings relating to decisions or actions pursuant to a law of the state that gives effect to the public participation and access to justice provisions of Council Directive 85/337/EEC i.e. the EIA Directive and to the provisions of Directive 2001/12/EC i.e. Directive on the assessment of the effects on the environment of certain plans and programmes). The general provision contained in section 50B is that in such cases each party shall bear its own costs. The Court however may award costs against any party in specified circumstances. There is also provision for the Court to award the costs of proceedings or a portion of such costs to an applicant against a respondent or notice party where relief is obtained to the extent that the action or omission of the respondent or notice party contributed to the relief being obtained.

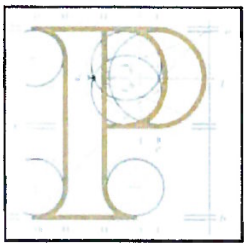
General information on judicial review procedures is contained on the following website, **www.citizensinformation.ie.**

Disclaimer: The above is intended for information purposes. It does not purport to be a legally binding interpretation of the relevant provisions and it would be advisable for persons contemplating legal action to seek legal advice.

Our Ref: 04.VC0074

Your Ref: Q:/2014/LE14/702/01/LET001/MT

An Bord Pleanála



FEHILY TIMONEY & Co.
Received by POB
Date 11 APR 2014
Action
Distribution
Job No:
Correspondence No: 3
Comment:

Paul O'Brien
Fehily Timoney & Company
Core House
Pouladuff Road
Togher
Cork

11th April 2014

Re: Propsed 110kV Substation at Barnadivane,
Co. Cork

Dear Sir,

An Bord Pleanála has received your request to enter into pre-application consultations under section 182E of the Planning and Development Act, 2000, as amended in respect of the above mentioned proposed development. A receipt for the fee lodged is enclosed.

Please be advised that the amendments introduced by the Planning and Development (Amendment) Act, 2010 provide for the Board to recover its costs in conducting pre-application consultations. These costs together with costs incurred by the Board in determining any **application** made to it will be included in the Board's decision. The Board will offset any application fees paid by the applicant against its costs.

Further advice or details in relation to the above will be provided by the Board at pre-application consultation meetings (if held).

The Board will revert to you in due course in respect of the request.

If you have any queries in the meantime please contact the undersigned officer of the Board.

Please quote the above mentioned An Bord Pleanála reference number in any correspondence with the Board.

Yours faithfully,

Kieran Doherty
Executive Officer
Direct Line:01-8737248

VC01.LTR

64 Sráid Maoilbhríde,
Baile Átha Cliath 1

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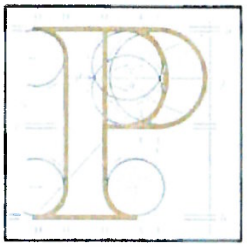
Faics (01) 872 2684 Fax
Láithreán Gréasáin www.pleanala.ie Web
Ríomhphost bord@pleanala.ie Email

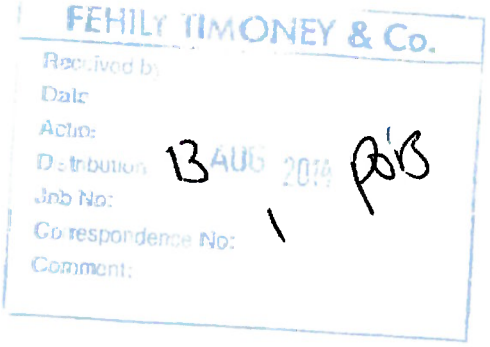
64 Marlborough Street,
Dublin 1

Our Ref: 04.VC0074

Your Ref: Q:/2014/LE14/702/01/LET001/MT

An Bord Pleanála





Paul O'Brien
Fehily Timoney & Company
Core House
Pouladuff Road
Togher
Cork

12th August 2014

Re: Proposed 110kV Substation at Barnadivane,
Co. Cork

Dear Sir,

I have been asked by An Bord Pleanála to refer further to the above-mentioned pre-application consultation request.

The Board intends to hold a pre-application consultation meeting and the arrangements are as follows:

Date: Friday, 15th August 2014

Time: 11.00 a.m.

Venue: Conference Room, An Bord Pleanála, 64 Marlborough Street, Dublin 1

Please note that it is intended that the meeting will be essentially for the purpose of facilitating the Board's consultation team to obtain information from the prospective applicant in relation to the proposed development.

Having regard to the above please be advised that the following information should be submitted by you at the meeting:

(a) A site location map to a reasonable scale (1:2500) to precisely pinpoint the propsoed site.

(b) Details of the nature of the issues on which advice is sought from the Board in respect of the proposed development application having regard to section 182E(2) of the Planning and Development (Strategic Infrastructure) Act, 2006 and to article 210 of the Planning and Development Regulations, 2001 as inserted by Article 41 of the Planning and Development Regulations, 2006.

With regard to the above, please provide three copies of any written documents or other materials which you intend to submit at the meeting.

In respect of the conduct of the consultation meeting you should also note the following general matters:

1. The meeting will be chaired by a representative from the staff of An Bord Pleanála.

2. Please be advised that the Board is required to keep a record in writing of any consultations in relation to a proposed development and that a copy of this record shall become publicly available after consultations have been completed. Accordingly any material or information discussed or presented at pre-application consultation meeting by a prospective applicant should be clearly understood not to be subject to any guarantee of confidentially by An Bord Pleanála.

3. You are requested to bring 5 copies of a list of your attendees to the meeting together with details of their status vis a vis the proposed development and professional qualifications as appropriate.

64 Sráid Maoilbhride,
Baile Átha Cliath 1

Teil: (01) 858 8100 Tel
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Faics (01) 872 2684 Fax
Láithreán Gréasáin www.pleanala.ie Web
Ríomhphost bord@pleanala.ie Email

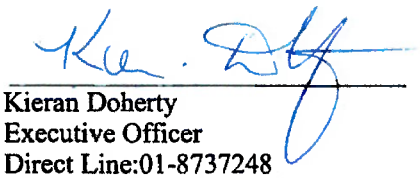
64 Marlborough Street,
Dublin 1

4. Please note that the holding of consultations does not prejudice the Board in any way and cannot be relied upon in the formal planning process or in legal proceedings.

5. No verbatim recording of the meeting by the use of recording equipment or a stenographer is allowed.

If you have any queries in relation to the matter please contact the undersigned officer of the Board. Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,



Kieran Doherty
Executive Officer
Direct Line:01-8737248

VC0/AC007400.ahc

FEHILY TIMONEY & COMPANY

CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES

IRELAND UNITED KINGDOM POLAND SAUDI ARABIA

Our Ref: Q:/2014/LE14/702/01/Let001/MT

The Secretary
An Bord Pleanála
64 Marlboro St
Dublin 2

03 April 2014

RE: Request seeking a determination from An Bord Pleanála as to the status of a proposed development comprising a 110kV Substation at Barnadivane, Co. Cork in relation to the Strategic Infrastructure Development Act under Section 182A / Section 37B of the Planning and Development Act, 2000, as amended by the Planning and Development (Strategic Infrastructure) Act, 2006.

Dear Sir/Madam

This document has been prepared by Fehily Timoney and Company and forms the pre-application consultation submission of Arran Windfarm Limited (herein after referred to as the applicant), for a proposed 110kV substation development at Barnadivane, Co. Cork, to serve a wind farm development. The following outlines the main elements of the proposed development and sets out the planning legislative context.

Introduction

The applicant intends to seek planning permission to construct a 110kV grid connection substation compound with associated control buildings, equipment plinths, bunds and fencing, oil interceptor, treated effluent storage tank and associated site development works at Barnadivane, Co. Cork. Barnadivane wind farm has been permitted under 05/5907 and PL04.219620 and a 5 year extension of planning permission was granted by Cork County Council under 11/06605. The requirement for a substation was anticipated in the planning application for the wind farm, and planning permission has been obtained for a 110 kV control building and switch station "*to ESB specifications*".

However new Eirgrid requirements necessitate this application and the applicant is commencing pre-application discussions with An Bord Pleanála to determine whether this proposal constitutes "strategic infrastructure development" (SID).

Cont'd.....

Description of the Permitted Development, including a currently permitted 110kV substation

The Barnadivane Wind Farm was permitted by An Bord Pleanála on 30 June 2006, comprising of 14 no. turbines, with hub height up to 70m and rotor diameter of 70m, and base to blade-tip height of 105m, 14 no. associated transformers, a 70m meteorological mast, substation and switch station compounds, construction of internal tracks, turbine foundations, hardstands and associated works and a connection to the national grid.

An Environment Impact Statement accompanied the planning application. The requirement for a substation was anticipated in the planning application, which referred to the following development works:

- Control building and compound surrounded by a 2m high security fence adjacent to the local road on the eastern side of the site.

- An application for a power line connection to the national grid was submitted to the ESB at the time of the original application which necessitated the construction of a switch station which is located adjacent to the proposed substation on a 70m by 45m compound.

Details of the permitted substation are illustrated on the following drawings that accompanied the planning application which you will find enclosed in Appendix A:

- Drawing No. 2003-188-01-007: Plan and Elevation of Proposed Substation
- Drawing No. 2003-188-01-008: Plan and Section of Proposed ESB Switch Station Compound

The permitted 110kV substation arrangement was based on ESB requirements at the time of the planning application and is no longer in accordance with current Eirgrid requirements. Any wind farm electricity substation must meet the design, electrical and layout requirements of Eirgrid and/or ESB Networks, as the substation will form part of national electricity grid and will be taken in charge by Eirgrid or ESB Networks. In the case of the substation granted permission as part of the wind farm permitted under 05/5907 and PL04.219620, given the electrical rating of the substation at 110kV, the substation will be taken in charge by Eirgrid and, therefore, will have to meet current Eirgrid specifications and requirements.

In this regard, Eirgrid's current design standards for substations of this nature were issued in 2011 after the planning application was made.

Description of the Proposed Development

The proposed substation is based on current Eirgrid requirements as illustrated on the following, which you will find enclosed in Appendix B:

- Drawing No. LE14-702-01-001: Proposed Barnadivane Substation Schematic Layout

Cont'd.....

There is some design flexibility in the layout of the individual components, provided certain minimum separation distances and other requirements are met. The proposed substation layout shown in the enclosed drawings now takes account of the Eirgrid requirements, but gives rise to a larger development footprint than that of the permitted substation. This larger footprint necessitated it to be relocated.

The proposed development will comprise of a 110kV grid connection substation compound with associated control buildings, equipment plinths, bunds and fencing, oil interceptor, treated effluent storage tank and associated site development works. The proposed substation is situated approximately 500m southwest of the permitted substation location, just south of an existing local road, as indicated the following which you will find enclosed in Appendix B:

- Figure No. LE14-702-01: Barnadivane Substation Site Location Map 'Permitted vs Proposed'

The new location was selected to accommodate the increased compound area whilst maintaining an appropriate separation distance from the existing 110kV overhead line traversing the site and avoiding the need for 110 kV overhead lines.

The proposed development is not within, adjoining or in relative proximity to a Natura 2000 site. The nearest sites are Boylegrove Wood (NHA), approx 4km northwest, Killaneer House Glen (NHA), approximately 5km southeast and Gearagh (SAC/NHA/SPA and Nature Reserve), approximately 6km to the north of the study area.

Planning Legislative Context

Under Section 182(A) of the Planning and Development Act as inserted by Section 4 of the Planning and Development (Strategic Infrastructure) Act 2006 where an undertaker:

> *"...intends to carry out development comprising or for the purposes of electricity transmission the undertaker shall prepare, or cause to be prepared, an application for approval of development under section 182B and shall apply to the Board for such approval accordingly".*

Subsection 9 of 182A states that:
In this section 'transmission', in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 but, for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of—

> *(a) a high voltage line where the voltage would be 110 kilovolts or more, or*
> *(b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not.*

Cont'd.....

In section 2(1) of the Electricity Regulation Act, 1999, "transmission" is defined in relation to electricity as meaning *"the transport of electricity by means of a transmission system, that is to say a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board."*

Subsection 9 of 182A sets a threshold of 110 kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. No threshold is set in respect of a substation, therefore it is reasonable to refer directly to Section 37A(2) of the Planning and Development (Strategic Infrastructure) Act, 2006. Section 37A(2) sets out the criteria that a proposed development must meet before it can be deemed a Strategic infrastructure Development:

> *(a) the development would be of strategic economic or social importance to the State or the region in which it would be situated,*
>
> *(b) the development would contribute substantially to the fulfilment of any of the objectives in the National Spatial Strategy or in any regional planning guidelines in force in respect of the area or areas in which it would be situated,*
>
> *(c) the development would have a significant effect on the area of more than one planning authority."*

Planning Legislative Assessment

The legislation explicitly sets a threshold of 110 kV in order for a high voltage electricity transmission line to be considered strategic infrastructure. However, no specific threshold is set in respect of a substation. Therefore, the applicant is commencing pre-application discussions with An Bord Pleanála to determine whether this proposal constitutes "strategic infrastructure development".

Having regard to the nature and scale of the development, it is our opinion that the proposed development is not SID for the following reasons:

1. The permitted wind farm development at Barnadivane that the proposed substation will serve is not itself within the strategic infrastructure thresholds of more than 25 turbines or having a total output greater than 50 megawatts, as specified in the Seventh Schedule

2. The development will not make a significant contribution to the delivery of regional planning guidelines or the National Spatial Strategy

3. The development is entirely within the catchment of a single planning authority.

Cont'd.....

Planning Precedent

The applicant wishes to draw the attention of the Board to a number of previous decisions on similar cases:

- VC0069 - 110kV substation at Barnakyle, Grange Castle, Clondalkin, County Dublin.
- VC0061 - Redevelopment of existing 110kV electricity substation at Ardnacrusha, Co. Clare.
- PC0161 - Alterations to a permitted electrical substation serving Slievecallan Wind Farm. Co Clare
- VC0067 - Proposed extension to existing substation compound, removal, reconfiguration, replacement and new substation infrastructure and local realignment of part of existing 220 kV circuits and 2 no. supporting towers at existing Knockraha 220kV substation, Co Cork.
- VC0063 - Redevelopment of existing 220/110kV electricity substation at Killonan, Milltown, Ballysimon, Co. Limerick.
- VC0031 - Line bay in Corderry 110 kV station to facilitate connection of Garvagh Glebe Windfarm

It was the decision of the Board on all of these pre-SID applications that the proposed grid connection works did not fall within the meaning of Section 182A of the Act and that a planning application should be made in the first instance to the relevant Local Authority.

Conclusion

The requirement for a substation was anticipated in the planning application for the permitted wind farm and planning permission has been obtained for a 110 kV control building and switch station *"to ESB specifications"*. The proposed development is required to meet current Eirgrid standards in substation design and will replace the currently permitted substation that is not yet constructed.

Having regard to the nature and scale of the development, it is our opinion that the proposed development is not SID for the following reasons:

1. The permitted wind farm development at Barnadivane that the proposed substation will serve is not itself within the strategic infrastructure thresholds of more than 25 turbines or having a total output greater than 50 megawatts, as specified in the Seventh Schedule

2. The development will not make a significant contribution to the delivery of regional planning guidelines or the National Spatial Strategy

3. The development is entirely within the catchment of a single planning authority.

The applicant is seeking a determination from An Bord Pleanála as to whether the proposed development is considered SID within section 182A of the Act, having regard to the provisions of the legislation.

Cont'd.....

We enclose the statutory fee of €4,500 for the Board's determination of this case. We understand that €3,500 may be refunded if no more than one meeting with An Bord Pleanála is required.

We look forward to hearing from you on the matter.

Yours faithfully

Paul O'Brien
for and on behalf of **Fehily Timoney & Company**

APPENDIX A

Drawings of Existing Development:

Plan and Elevation of Proposed Substation

Plan and Section of Proposed ESB Switch Station Compound

Sheet FTC-A1-2000 rev. J (template filed in C:/acad/Templates/Autocad) (Sept. 2004) - template externally referenced

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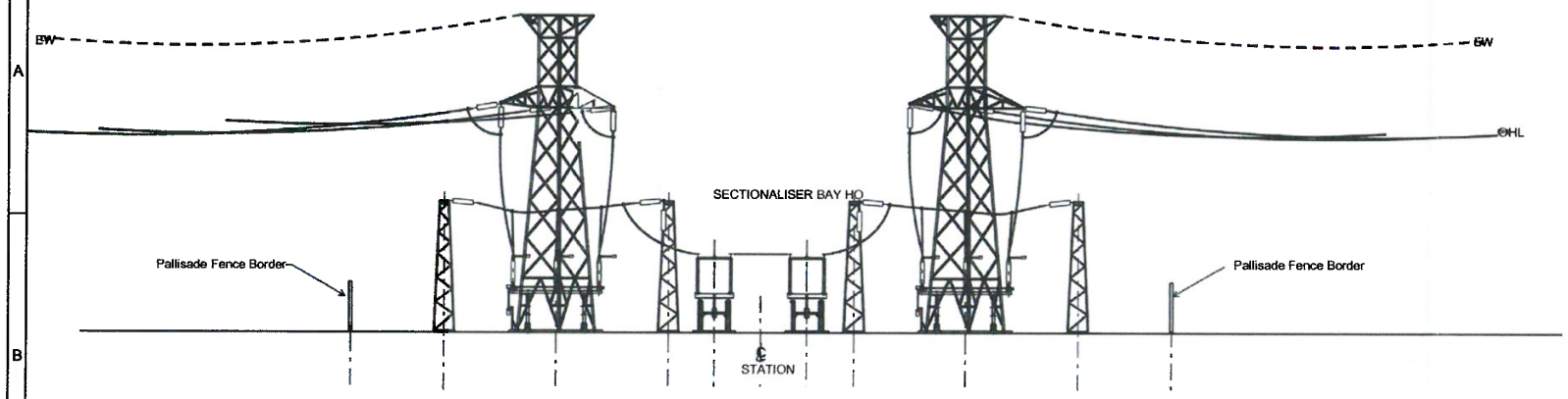

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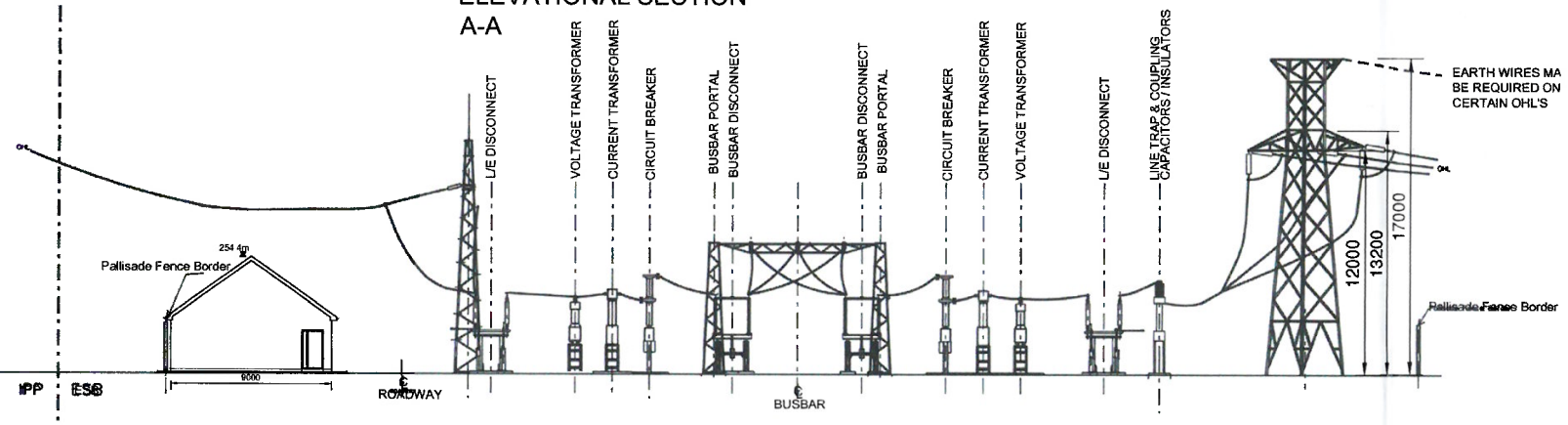
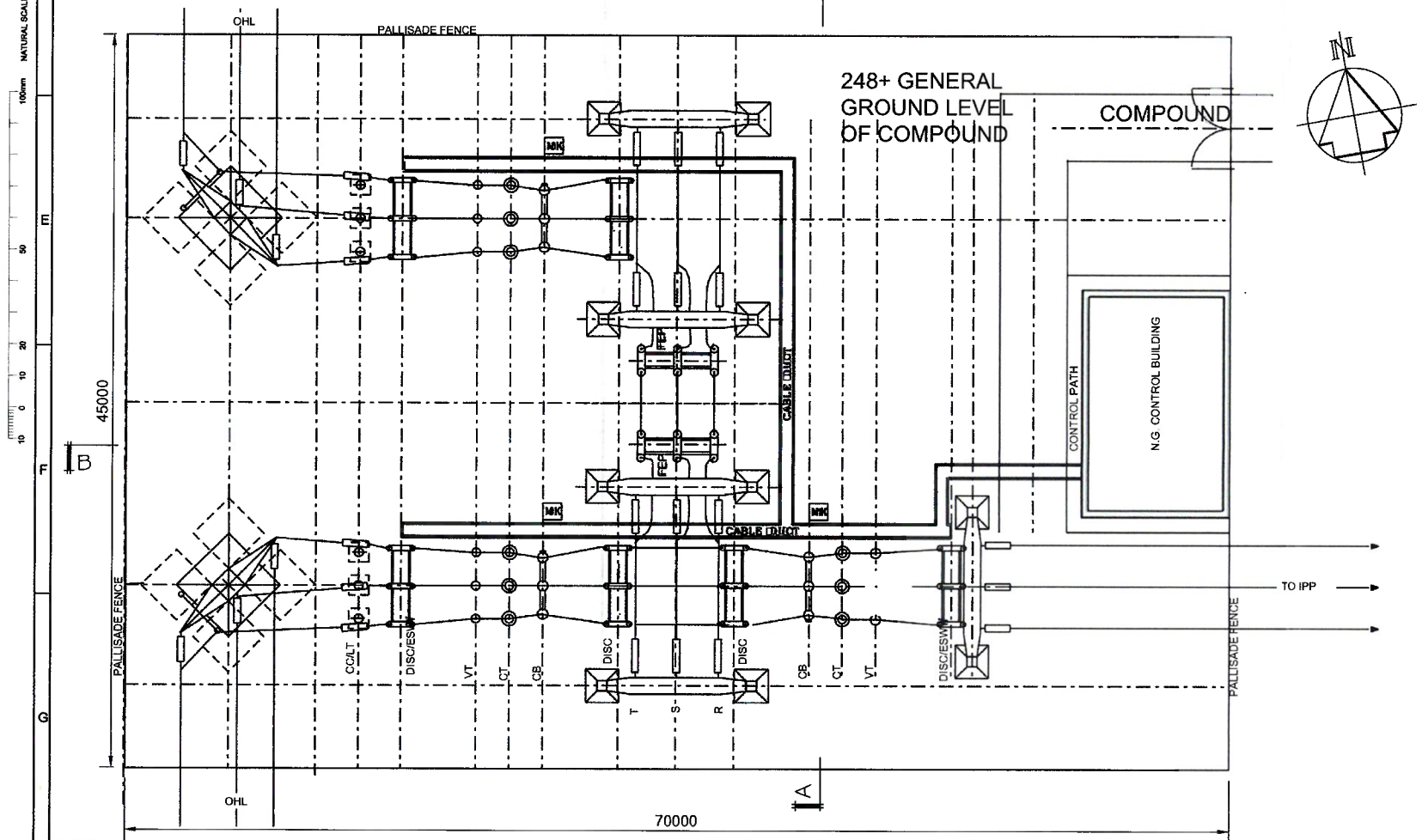
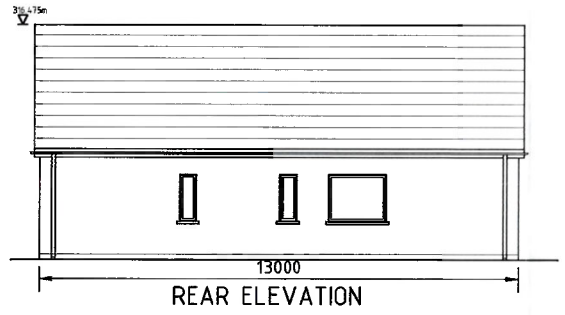
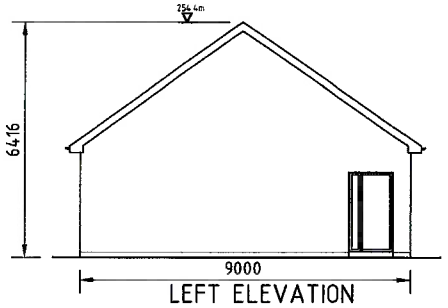
A-A

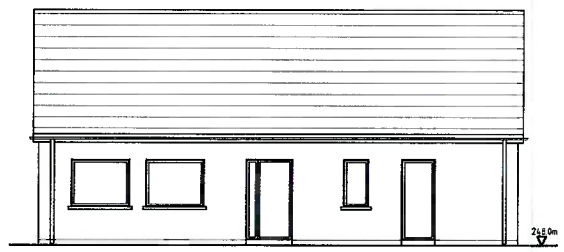


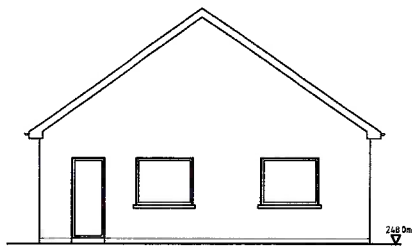
ELEVATIONAL SECTION B-B

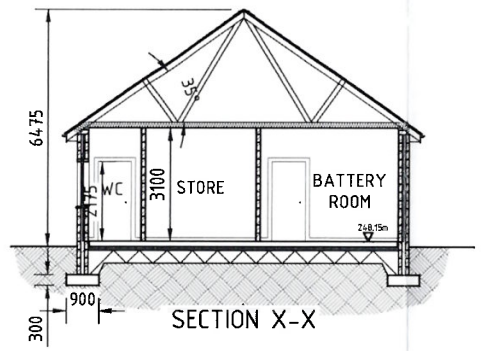


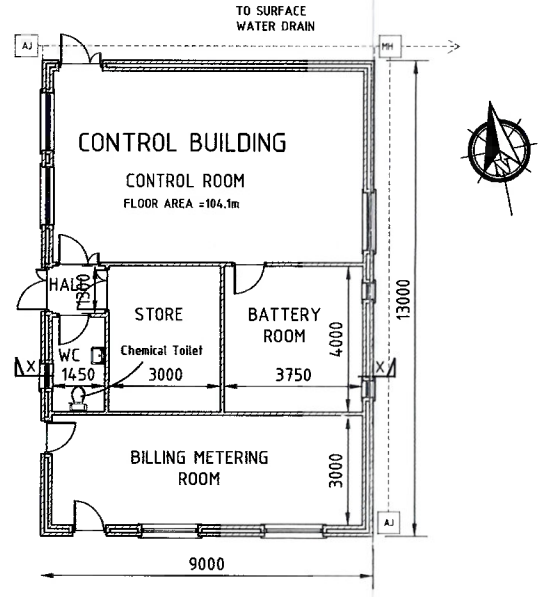












Rev.	Drawn	Chkd	Apprvd	Date	Description
B	MF	OK	FOR	16.06.2006	ISSUE FOR PLANNING APPLICATION
A	SR	NC	ET	15.08.2005	ISSUE FOR PLANNING APPLICATION

Name of Client
BARNA WIND ENERGY LTD.

Name of Job
PROPOSED WIND FARM AT BARNADIVANE (KNEEVES), TERELTON, MACROOM, CO. CORK

Title of Drawing
1:200 PLAN & SECTION OF PROPOSED ESB SWITCH STATION COMPOUND

Scales Used
A1 1:200, 1:100

Dwg. No. 2003-188-01-007 — Rev. B

O:\ACAD\2003\188\01\DC-DC_007

FEHILY TIMONEY & COMPANY
CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES
CORE HOUSE, POULADUFF Rd, CORK, IRELAND.
Phone:+353-21-4964133, Fax.:+353-21-4964464, Email: info@ftco.ie
WEB SITE: www.fehilytimoney.ie

ORIGINAL DRAWING SIZE A1 - (841 x 594)
O:\ACAD\2003\188\01\dc-ext_007.dwg, A1-Dwg No 007-Scale200, 19/06/2006 12:11:21, mauricef, 1:200

Sheet FTC-A1-2000 rev. J (template filed in C:\Acad\Templates\Autocad) (Sept. 2004) - template externally referenced

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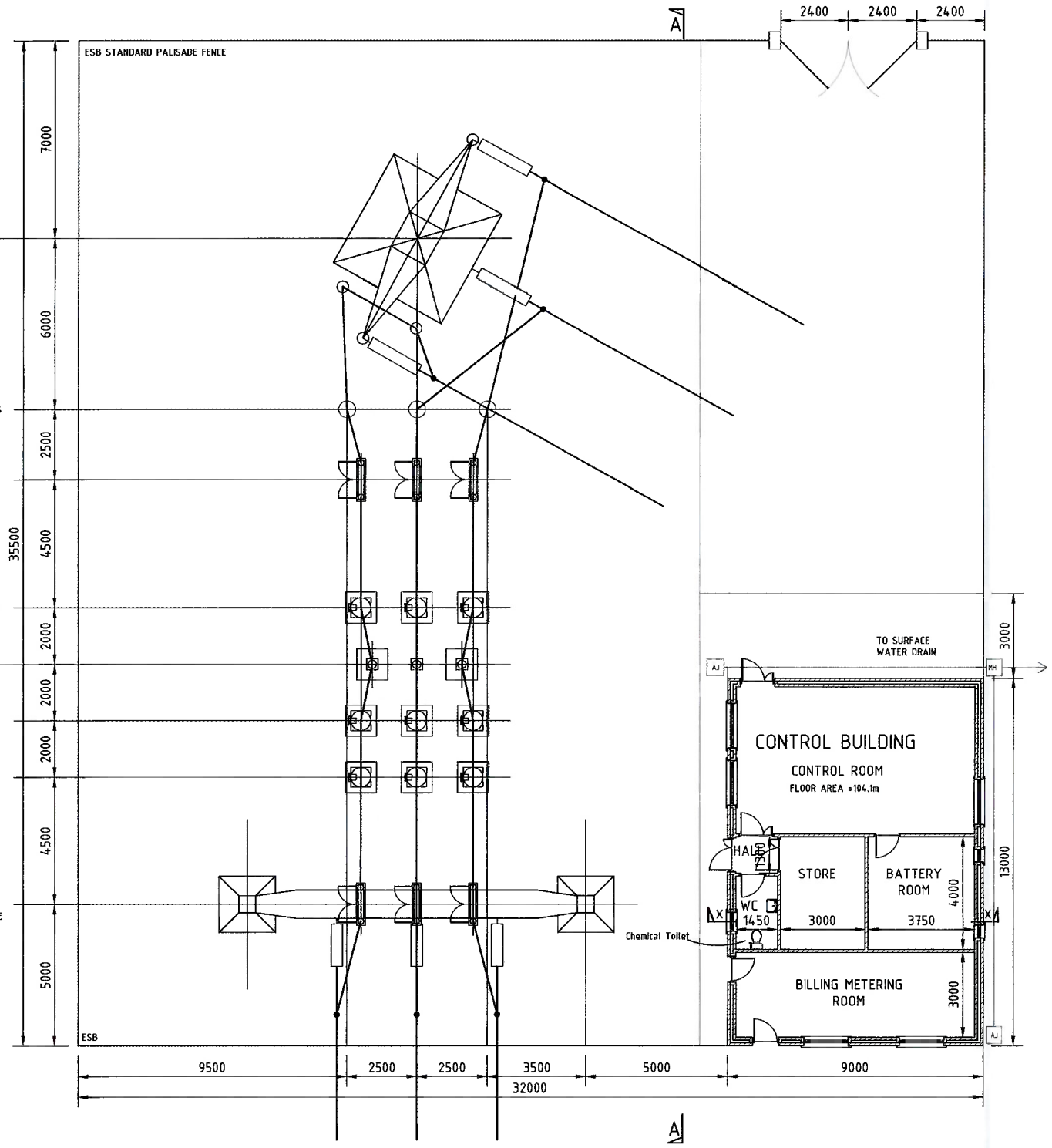
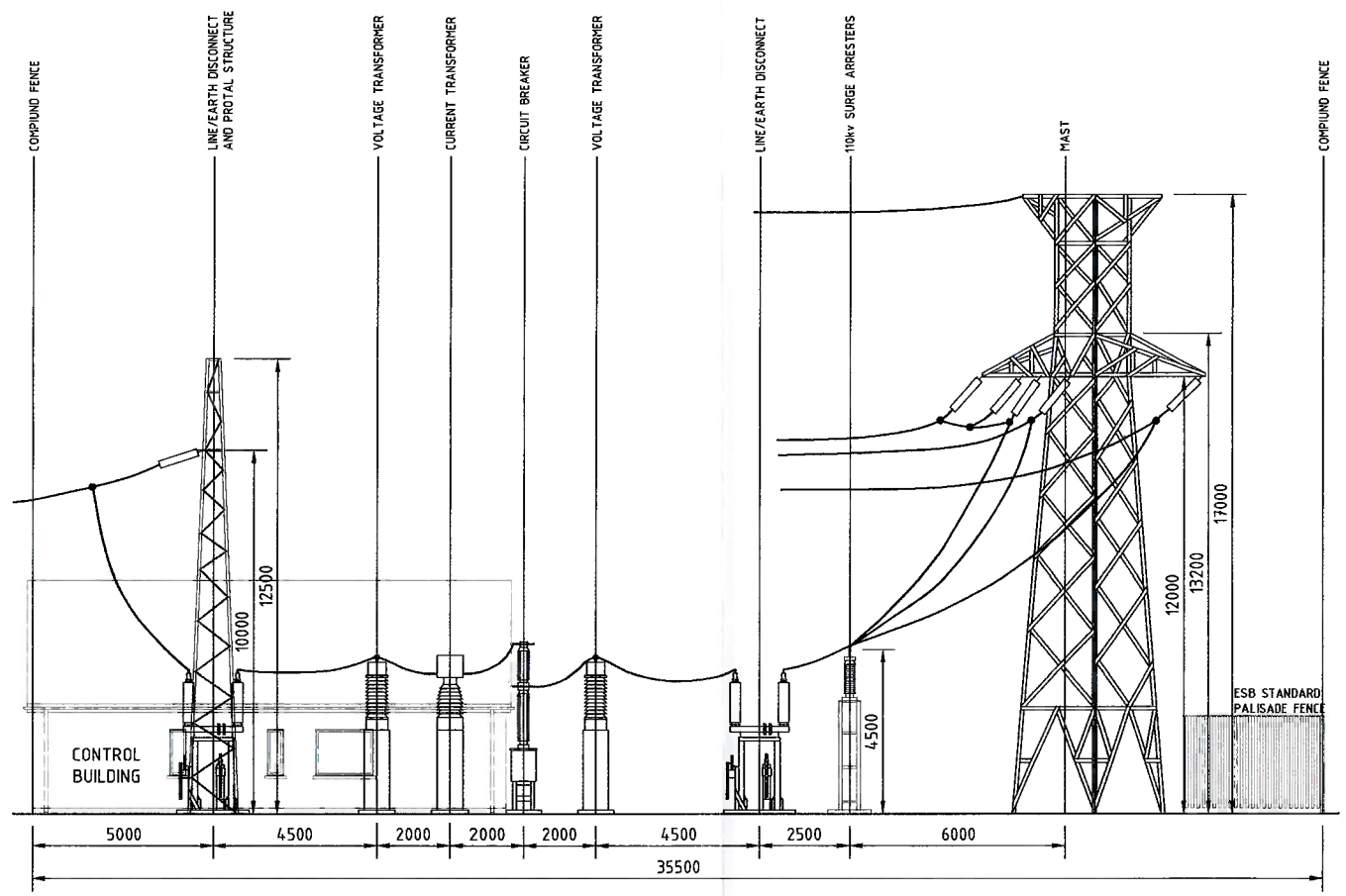
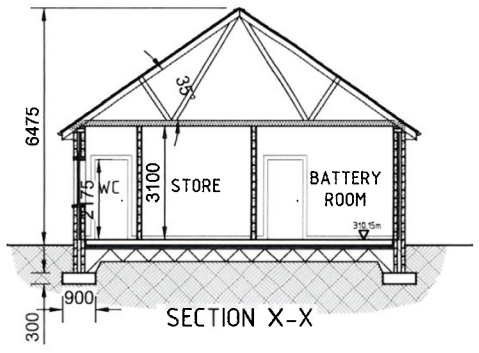


LAYOUT PLAN



SECTION A-A



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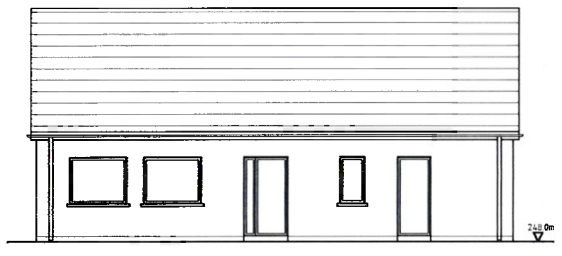
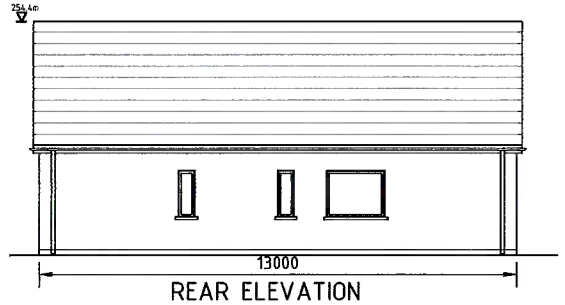
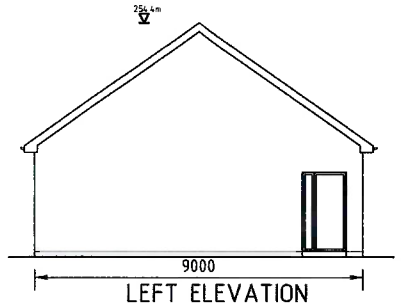


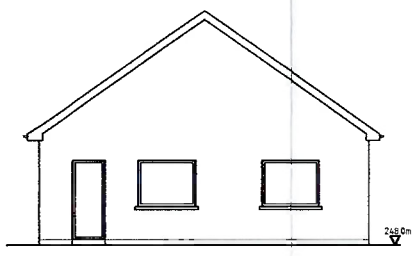
FRONT ELEVATION



REAR ELEVATION



LEFT ELEVATION



RIGHT ELEVATION

Rev.	Drawn	Chkd	Apprvd	Date	Description
B	MF	CK	FOR	16.06.2006	ISSUE FOR PLANNING APPLICATION
A	SR	KC	ET	15.08.2005	ISSUE FOR PLANNING APPLICATION

Name of Client
BARNA WIND ENERGY LTD.

Name of Job
PROPOSED WIND FARM AT BARNADIVANE (KNEEVES), TERELTON, MACROOM, CO. CORK

Title of Drawing
PLAN & ELEVATION OF PROPOSED ESB SUBSTATION

Scales Used
A1 1:100

Dwg. No. 2003-188-01-008 — Rev. B

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APPENDIX B

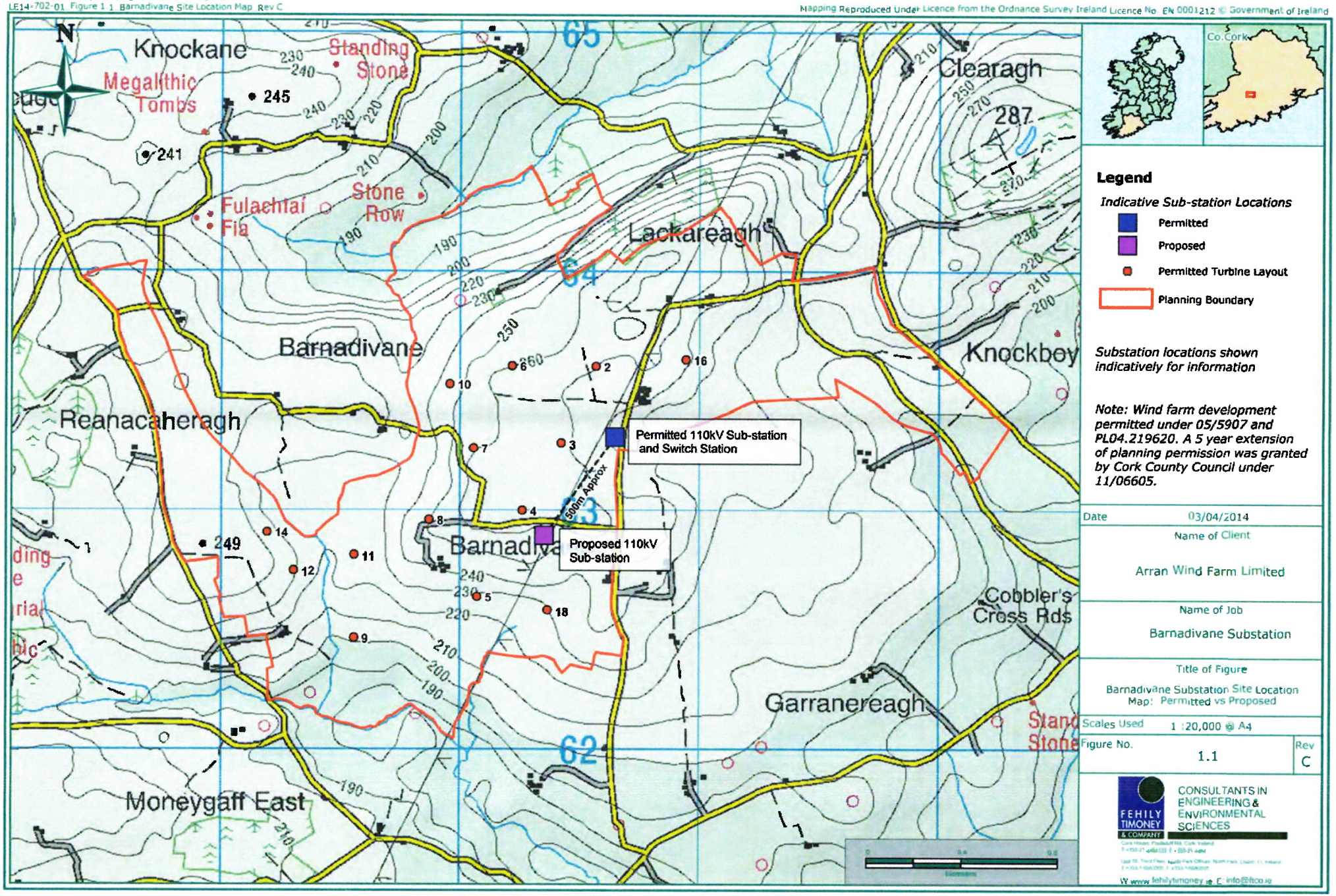
Drawings of Proposed Development:

Proposed Substation

Barnadivane Substation Site Location Map Permitted vs Proposed

R:\Map Production\2014\LE14\702\01\Workspace
LE14-702-01_Figure 1.1_Barnadivane Site Location Map_Rev C

Mapping Reproduced Under Licence from the Ordnance Survey Ireland Licence No. EN 0001212 © Government of Ireland



Date	03/04/2014
Name of Client	Arran Wind Farm Limited
Name of Job	Barnadivane Substation
Title of Figure	Barnadivane Substation Site Location Map: Permitted vs Proposed
Scales Used	1 :20,000 @ A4
Figure No.	1.1
Rev	C

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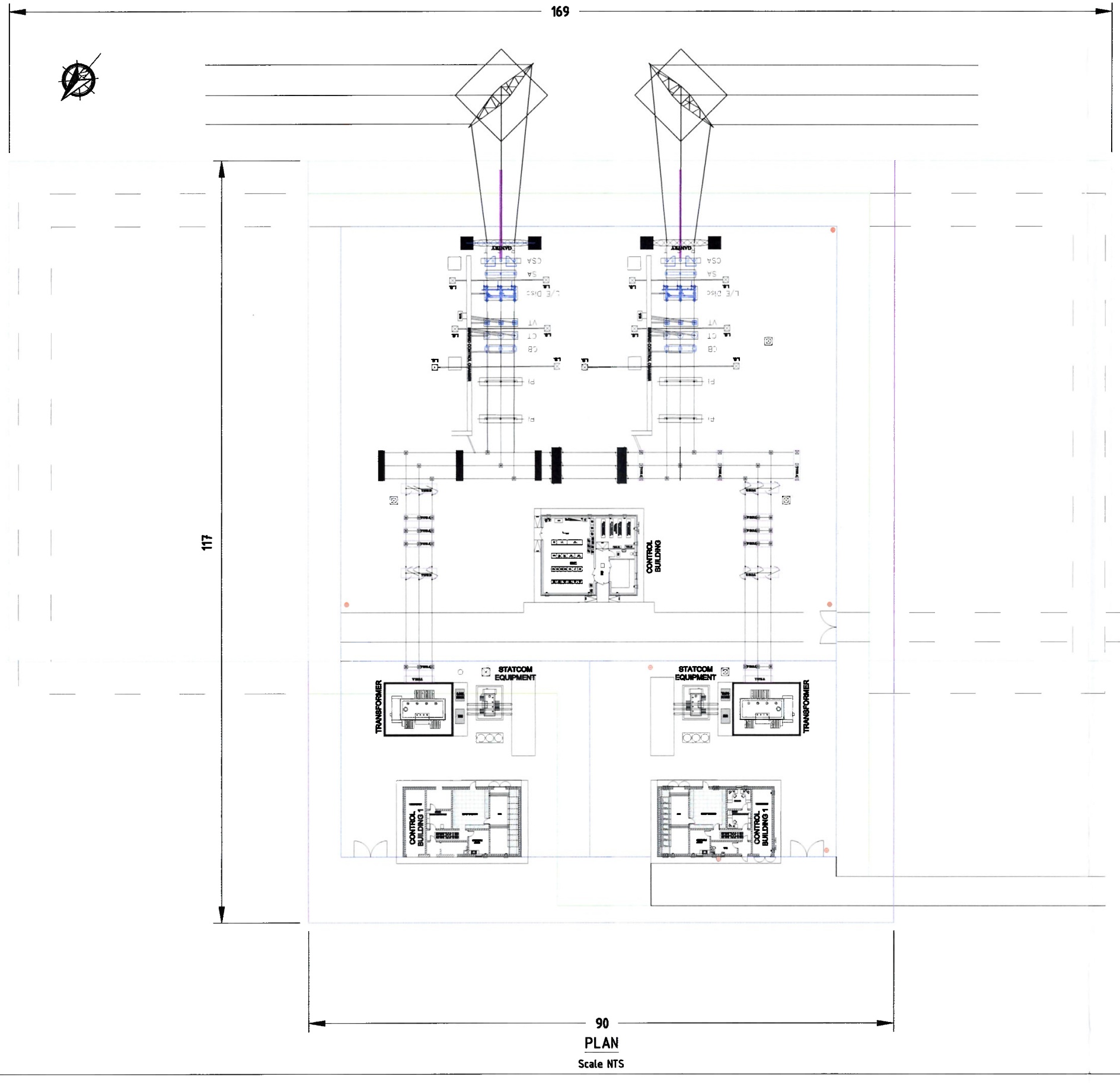

PLAN

Scale NTS

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Note:
The proposed schematic substation layout takes account of the Eirgrid requirements as indicated on 110kV Station Design Standard, Dwg: 0020 KH-PPS-011. Substation layout extracted from Proposed Substation, Dwg: 004-001-01 received 03.04.2014.

The layout is subject to detailed design and there is some design flexibility in the layout of the individual components, provided Eirgrid requirements are met.

Dimensions in metres.

FEHILY TIMONEY & Company
DRAFT No: 1
PRIOR TO ISSUE: A
DRN BY: Kieran Crowley VALID ONLY ON: 08.04.14
Rev. A Drawn
Revision History

Name of Client

ARRAN WINDFARM LIMITED

Name of Job

PROPOSED 110kV SUBSTATION

Title of Drawing

PROPOSED BARNADIVANE SUBSTATION
SCHEMATIC LAYOUT

Scales Used: NTS

This Drawing was printed to ISO Expand A1 (841.00 X 594.00 MM)

Dwg. No.: LE14-702-01-001

Rev.: A

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ORIGINAL DRAWING SIZE A1 - (841 x 594)
SCALE - VERTICAL
SCALE HORIZ.

Appendix 6

Correspondence from Cork County Council re: Planning and Red Line Boundary

Clodagh O'Donovan

From: Ger Moore <Ger.Moore@CorkCoCo.ie>
Sent: 06 March 2015 16:12
To: William O'Connor
Subject: RE: 2015-03-04-Planning Application Boundary

William,
The Councils attitude to applications showing multiple separate site areas is that they do not comply with Article 22 (2) (b) and 22 (2) (b) (i) of the Regs. These essentially state that the **site** to which the application relates must be marked so as to clearly identify "the **land or structure** to which the application relates and boundaries thereof in red". The planning authority considers on the basis of the above that any application, to comply with the above requirements, must show the site as **a single unit incorporating within its undivided boundaries all the elements of the application**. Where development is proposed that requires some type of ancillary work to the main proposal, on a separate site or sites that cannot be connected to the main site area, then separate applications must be made possibly linked in the development descriptions and with the applicants names.

Regards,
Ger

From: William O'Connor [mailto:william.oconnor@turnkeydev.com]
Sent: 04 March 2015 18:14
To: Ger Moore
Cc: O'Brien Neil
Subject: 2015-03-04-Planning Application Boundary

Ger,

I refer to our discussion regarding the red line boundary for Barnadivane Wind Farm (currently under consideration 14/6760).
You advised that Cork County Council do not allow more than one application boundary per planning application and therefore we made a separate application for road widening to facilitate the delivery of abnormal loads to the proposed 6 turbine wind farm. The reason for the separate applications in relation to the wind farm has been queried by Third Party submissions. I would be grateful if you could outline the reasons that more than one application boundary is not acceptable to Cork County Council by return.

Thank you

Regards,

William O'Connor

Enerco Energy Ltd., Lissarda Business Park, Lissarda, Co Cork, Ireland.

T DD +353 21 7336956 | T +353 21 7336034 (Ext 214)

E william.oconnor@turnkeydev.com | www.enercoenergy.ie

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Appendix 7

Response (cover letter) by Applicant to RFI

FEHILY TIMONEY & COMPANY

CONSULTANTS IN ENGINEERING & ENVIRONMENTAL SCIENCES

IRELAND UNITED KINGDOM POLAND SAUDI ARABIA

Our Ref: Q: LE14-702-02\Let007\COD\MG

Planning Department
Cork County Council
Western Division
Norton House
Cork Road
Skibbereen
Co. Cork

05 December 2014

RE: Ten-Year Planning Application for a 110 kV Substation Compound at Barnadivane, Kneeves, Co. Cork – Planning Reg. 14/00557 – Response to Request for Further Information

Dear Sir/Madam,

Your letter in respect of the above planning application, dated 18 November 2014, refers. In this letter you requested further information to be furnished to the planning authority in respect of the proposed development.

The further information sought has been addressed below. For convenience, the request for further information is presented in italic text, with the response of the applicant given thereafter.

1. *Results of the count data for the winter bird survey (2013-2014). The information should include details of number of records of individuals of each species recorded at each site visit, and any other data collected relating to individual species which might indicate how the site is used by that species, or where the species were recorded. A site layout showing the locations of the vantage points should also be submitted.*

A document, including the details required above and including a figure showing the vantage point locations is enclosed herewith, to address the issues raised.

2. *A copy of the guidelines issued by Eirgrid in relation to the upgrade and size increase required under the new standards for substations issued by Eirgrid in 2011 in the interests of clarity.*

Cont'd...

The original planning application for the 14 turbine wind farm, made in 2005, was based on a 2003 preliminary design for the 110 kV substation. At the time, the Transmission System Operator (TSO) was ESB and at that time, the substation layout may have been acceptable to this body. However, in the interm, the role of TSO has passed to Eirgrid plc and the design requirements for 110 kV substations have substantially changed. This is confirmed in a letter from Wind Prospect Ltd. (see enclosed), who are acting for the developer in this regard.

The current AIS 110kV substation required layout from EirGrid is appended to the Wind Prospect correspondence (enclosed herein). This layout has evolved from EirGrid's primary 2011 changes as identified in Arran Windfarm Ltd.'s planning submission.

The Wind Prospect letter also states *'As can be seen in the EirGrid drawings the requirements now include that the substation be suitable in its electrical plant layout and overall footprint size to allow for potential future expansion (this is identified in red in the EirGrid drawings). We also note the differences in building sizes and electrical plant configuration. EirGrid will operate the majority of the substation when the construction is completed; however they will not take control of a substation that does not fulfil their current or at the least a very recent specification'*.

3. *A detailed rationale as to why the original site of the substation granted permission under 11/6605 is considered unsuitable. The justification should clearly demonstrate the constraints of the previous site in relation to the current site and new standards for substation issued by Eirgrid in 2011.*

The updated planning application seeks to address the required changes in layout, the potential requirement for future expansion, the increased building size and increased overall substation footprint. These amendments are required in order for EirGrid to assume operational control of the majority of the substation.

We have prepared a drawing showing the constraints associated with the location of the substation as currently permitted (see attached Figure 1). It is clear that the new proposed substation (as required by Eirgrid) is substantially bigger than the original permitted substation.

The permitted location is constrained, as you can see, in a number of ways. Firstly, there is very little room between the road and the overhead line, as is demonstrated by the drawing. If the proposed substation was to be located in the permitted location, then the existing overhead line (110 kV) would need to be diverted around the substation compound. If this is diverted to the west, it brings it closer to the permitted turbines, and diverting to the east, will require it to be diverted to the other side of the road. Any relocation of this overhead line would require consent from Eirgrid plc, the landowners and the requisite planning consent.

Cont'd...

The proposed substation, given its larger footprint, would also require the removal of significant lengths of hedgerow, to the north of the permitted site, with the attendant impacts on local ecology. Further, additional land agreements would be required, to facilitate expansion to the north.

The proposed substation, in the permitted location, would also be within 200 m of houses, which is not ideal.

It was for these reasons that the applicant made the decision to move the substation from the permitted location, to the proposed location, which is not constrained in such a way. It was considered that the impact of moving the substation to the proposed location would result in considerably less impact on the local environment, than attempting to design suitable mitigation for the constraints identified at the permitted site, given the change in substation footprint.

4. *A detailed landscaping plan including a timescale for implementation.*

A landscaping drawing is enclosed herein, detailing the landscaping proposed for the substation site. It is intended to plant native hedgerow species along the public road at either side of the site entrance, as well as along the southern site boundary, as shown on the drawing. This planting will be undertaken on completion of the development, within 1 year of the completion of construction. A maintenance plan will be put in place to ensure any plants that do not thrive will be replaced during the next planting season.

5. *A detailed justification for the requirement for a 10 year permission for the proposed development and provide information regarding phasing of the development, which clearly identifies time scales and detailed phasing of the works proposed. It is noted that a grid connection is proposed in 2015 and the extension of the duration period for planning reference 11/6605 ends in February 2017.*

A ten year permission is sought to enable the developer adequate time to complete the proposed development.

While the proposed development represents an application for a substation, the proposed substation will form a critical piece of infrastructure associated with the wind farm development. The consented development comprises 14 turbines permitted under PL04.219620 (05/5907) and subsequently extended under 11/6605. As discussed at our pre-application consultation meeting with Cork County Council, the developer intends to seek a separate consent for a wind farm, replacing that consented. The proposed substation will facilitate the connection of the wind farm (either that permitted or the proposed replacement) to the national grid.

Cont'd...

The substation will therefore be delivered, programmed, constructed and financed as part of the development of the overall wind farm project. Accordingly it is essential that the permission lifespan of the proposed substation be consistent with that of the permitted (and proposed) wind farm. Circular Letter PD 3/08, (Department of the Environment Heritage and Local Government), a copy of which is enclosed herein, highlights the complex connection between wind farm project delivery and grid connection. It reiterates and reinforces the Department's Wind Energy Guidelines which recommend that where appropriate planning authorities should consider granting permission for a duration longer than 5 years. The circular concludes that *"This provision could be a means of providing the necessary flexibility, in respect of new developments, and having regard to the nature and extent of the relevant development, to allow for proper sequencing of permissions and grid connections".*

The 10 year permission period is sought to allow adequate time for the developer to fully complete and commission the works. A preliminary programme has been identified at this stage, which is obviously subject to change as the project progresses, but which includes the following:

- Planning compliance requirements (estimated 6 month programme)
- Financing of the project (estimated 12 month programme)
- Tendering of the works (estimated 16 month programme)
- Construction of the works (18 month programme)
- Commissioning of the works (6 month programme)

There is the potential for substantial delays in all stages of a wind farm project, should any issues arise in relation to any of these elements. In particular, accessing finance for the wind farm can be a particularly lengthy process, which can incur significant delay to the overall programme. Ample time has to remain on a planning permission to give financial institutions comfort that delays don't render the planning permission void.

The developer has thus sought to align the permission for the wind farm and the substation, to allow adequate time to ensure that each can be completed, within the permission period.

Six (6) copies of each of the attached documents and this letter are provided, as requested.

We would appreciate if you could send us an acknowledgement of receipt of this further information.

Cont'd...

If you have any queries on any of the above, please do not hesitate to contact me.

Yours faithfully,

Clodagh O'Donovan.

Clodagh O'Donovan
for and on behalf of **Fehily Timoney & Company**

CC: Mr. William O'Connor, Enerco Energy Ltd., Lissarda Business Park, Lissarda, Co Cork.

Encl.

Appendix 8

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This time I ask you this special favour (mention favour). Take it, dear Heart of Jesus and place it within your own broken heart, where your Father sees it. Then in his merciful eyes it will become your favour, not mine. Amen.

Say this prayer for three days, promise publication and favour will be granted, no matter how impossible. Never known to fail.
P.C.

G.N.

Prayers

THE MIRACLE PRAYER -
Dear Sacred Heart of Jesus, in the past I have asked you many favours.

This time I ask you this special favour (mention favour). Take it, dear Heart of Jesus and place it within your own broken heart, where your Father sees it. Then in his merciful eyes it will become your favour, not mine. Amen.

Say this prayer for three days, promise publication and favour will be granted, no matter how impossible. Never known to fail.
P.C.

Plannings

Cork County Council-
Gearóid Hayes & Associates, Ltd., Consulting Engineers and Planning Consultants, 13, Oliver Plunkett Street, Bandon, Tel: 023 8844399 intends to apply for Permission to construct dwelling-house & associated site works at Kildarra, Bandon on behalf of Graham & Jacqui Beamish. The planning application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy, at the offices of the Planning Authority, County Hall, Carrigrohane Road, Co. Cork, during its public opening hours and that a submission or observation in relation to the application may be made to the authority in writing on payment of the prescribed fee within the period of 5 weeks beginning on the date of receipt by the Planning Authority of the application.

Herlihy for the construction of Agricultural Slatted Cattle Shed and all associated site works at Derry, Rosscarbery, Co. Cork. The planning application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy at the offices of the Planning Authority, Norton House, Skibbereen, Co. Cork, during its public opening hours and a submission or observation in relation to the application may be made to the Authority in writing on payment of the prescribed fee within the period of 5 weeks beginning on the date of receipt by the Authority of the application.

Cork County Council-
Arran Windfarm Ltd intend to apply for permission for the construction of an electricity substation compound, this application is intended to replace the substation already granted permission under PL04.219620 (05/5907) and subsequently extended under 11/6605. The electricity substation layout includes 3 no. control buildings, associated electrical plant and equipment, security fencing and ancillary works at Barnadivane (kneeves), Tarelton, Co. Cork. This application is seeking a 10-year planning permission. The planning application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy, at the offices of the planning authority during its public opening hours and a submission or observation in relation to the application may be made to the authority in writing on payment of the prescribed fee within the period of five weeks beginning on the date of receipt by the Planning Authority of the application.

Comhairle Chontae Chorcaí-
Tá Údarás na Gaeltachta ag lorg cead ar Chomhairle Chontae Chorcaí chun athchóiriú a dhéanamh ar aonad tionsclaíoch éadrom Aonad 1G ar Pháirc Ghnó Údarás na Gaeltachta, Drom an Ailigh, Béal Átha an Ghaorthaidh. Is féidir an t-iarratas pleanála a iniúchadh nó a

Appendix 9

Copy of DoEHLG Circular Letter PD 3/08




Comhshaol, Oidhreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government

Circular Letter PD 3/08.

16 July, 2008.

To all County and City Managers.

Wind Energy Development – Planning Permission and Grid Connections

Dear Manager,

I have been asked by the Minister to bring to your attention the issue of the expiration of planning permissions granted in respect of wind energy developments in advance of grid connections being secured. The development of renewable energy sources, together with measures aimed at a reduction and a more efficient use of energy, are priorities, nationally and at European level, on both environmental and energy policy grounds.

Policy Context
The Government has set ambitious targets for the uptake of renewable energy. The Government has committed in the Energy White Paper to a target of 33% of all electricity to be derived from renewable energy sources by 2020 with wind energy providing a pivotal contribution to that target.

The National Development Plan also contains commitments in relation to the enhanced uptake of renewable energy as a means of enhancing security of energy supply, tackling climate change and supporting sustainable development. The Department of the Environment, Heritage and Local Government underpinned its support for wind energy development in the Wind Energy Guidelines for Planning Authorities in June 2006. These Guidelines underline the need for a "plan-led" approach to wind and other renewable projects and offer advice to planning authorities on planning for wind energy through the development plan process and in determining applications for planning permission.

Sequencing and Grid Connections
The Department is aware of difficulties regarding sequencing between the expiration of planning permissions and the timing of grid connections, which have resulted in a number of instances of the expiration of planning permissions in advance of grid connections having been secured. Often in these circumstances, an application for an extension of permission, provided for under section 40 of the Planning and Development Act 2000, will be made in advance of such expiration.

Substantial Works
A number of projects have reached the end of the first stage (*i.e. laying of turbine base slabs and road access into the site*) but, because of grid delays, then have difficulties securing the requisite funding to complete development to a level that would qualify as substantial.

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It appears that planning authorities have taken differing approaches to the issue when applications are made for an extension of planning permission. Some authorities require access roads only, others require roads and turbine bases, while others require roads, bases and turbines on site.

Facilitating Applications for an Extension of Planning Permission
A number of developments may be affected by this issue in the coming months. Given the wider importance of renewable energy generation in terms of addressing climate change, ensuring security of supply, and the promotion of sustainable development, and more particularly from a planning perspective, in light of the publication of the Wind Energy Guidelines and the recent exempted development regulations for certain renewable technologies, it is important that developments that already have been assessed by planning authorities or the Board, and have the required permissions in place, be facilitated in so far as possible.

New Applications for Wind Energy Developments
Finally, the Department's Wind Energy Guidelines recommend that where appropriate planning authorities consider granting permission for a duration longer than 5 years, for example to ensure that permission does not expire before a grid connection is granted. However, it is the responsibility of the applicant in the first instance to request such longer durations in appropriate circumstances. Authorities are reminded of the powers currently available to them under Section 41 of the 2000 Act to specify a period of more than 5 years during which permission is to have effect. This provision could be a means of providing the necessary flexibility, in respect of new developments, and having regard to the nature and extent of the relevant development, to allow for proper sequencing of permissions and grid connections.

Should you have any further queries please do not hesitate to contact either myself, or Ms. Emer Connolly (01-8882905).

Your cooperation in this matter is very much appreciated. A copy of this circular has also been forwarded to Directors of Planning Services and Borough and Town Clerks.

Yours sincerely,

George Burke
Principal
Planning and Urban Policy

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Direct line 01-8882793

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