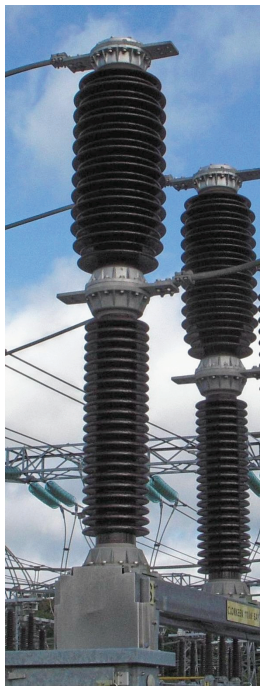




Millstreet Project

Phase Two - Site and Route Corridor Evaluation Report

March 2011
EirGrid plc

Millstreet Project

Phase Two - Site and Route Corridor Evaluation Report

March 2011

EirGrid plc

The Oval, 160 Shelbourne Road, Dublin 4

Mott MacDonald, South Block, Rockfield, Dundrum, Dublin 16, Ireland
T +353 (0)1 2916 700 F +353 (0)1 2916 747, W www.mottmac.com

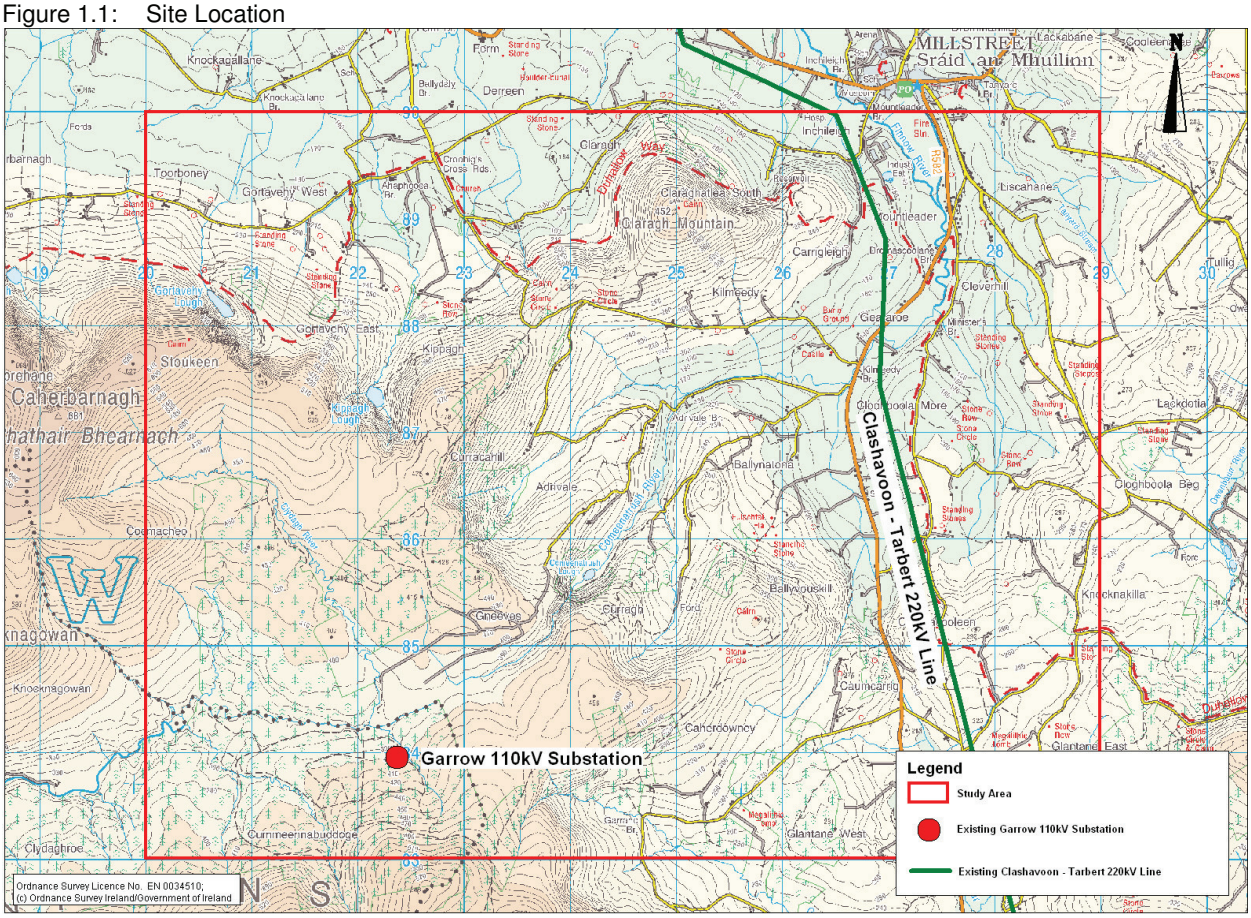
Content

1. Introduction

1.1 Report Context

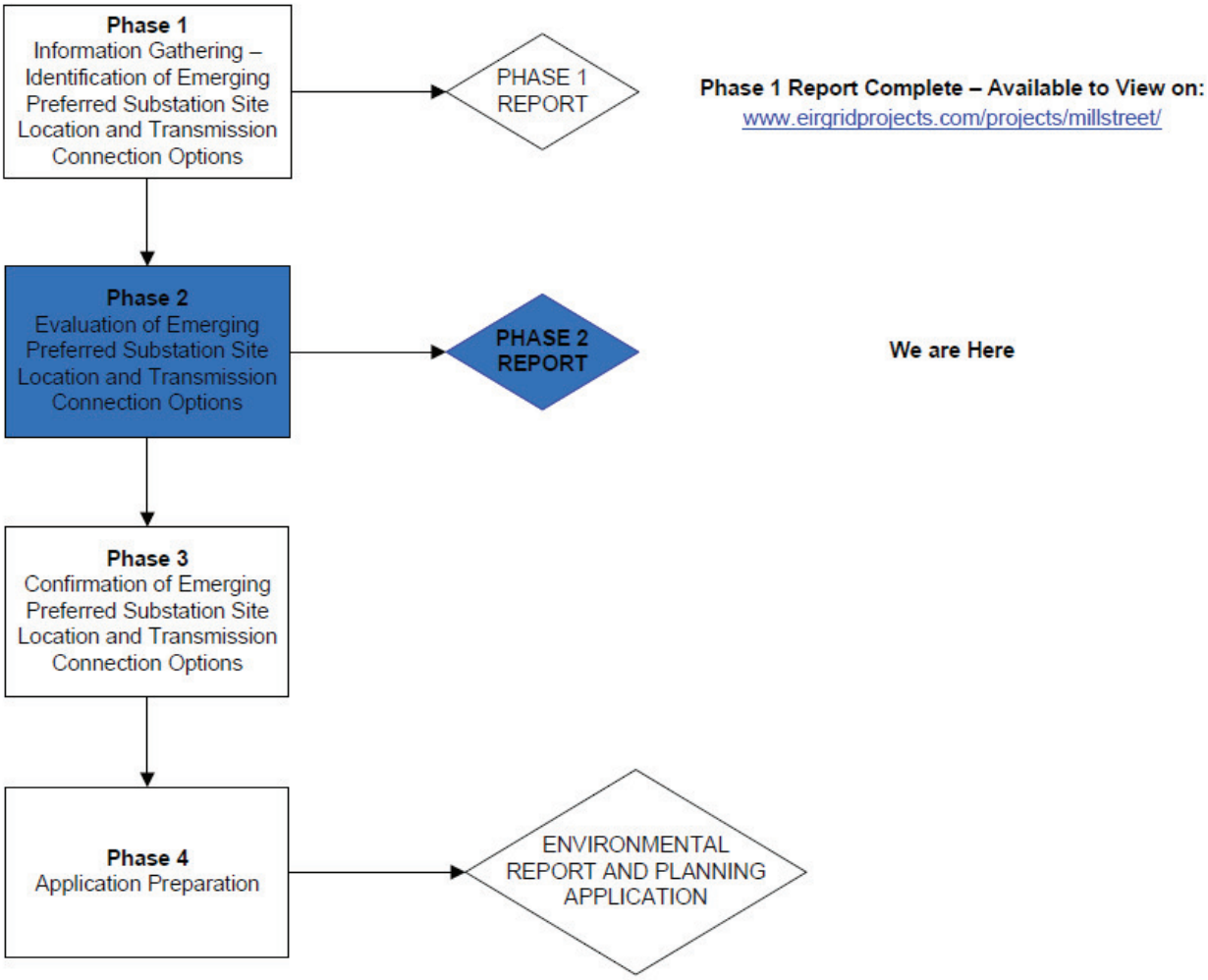
EirGrid has identified the need to develop a new 220/110 kV electrical substation in the vicinity of Millstreet, County Cork. This is required to connect the existing transmission network in the area, specifically comprising connection of the existing 110 kV substation at Garrow, County Kerry and the existing 220 kV Clashavoon to Tarbert transmission line, as illustrated in Figure 1.1 (*Millstreet Project*) below.

Figure 1.1: Site Location



The principal objective of this project is to support and encourage economic growth through the development of the electrical transmission system (specifically the connection of renewable generation capacity in counties Cork and Kerry to the national grid) while having due regard for social and environmental issues. To best achieve this objective this project is being delineated into four distinct information gathering and optioneering phases, as illustrated in the Project Roadmap, included in Appendix A of this report, and summarised in Figure 1.2 (Project Roadmap – Key Phases) below:

Figure 1.2: Project Roadmap – Key Phases



The aim of this *Phase Two Lead Consultant's Site and Corridor Evaluation Report* (Phase Two Report) is to evaluate the emerging preferred options identified in the *Phase One Lead Consultant's Site and Corridor Identification Report* (Phase One Report), and any justifiable modifications to the options, following consideration of all consultation feedback received to date and the iterative engineering design process, in order to identify the preferred site and connection options.

While this report includes a summary of the Phase One Report it is not intended to reproduce the constraints identification and initial evaluation detailed therein. It is therefore recommended that the Phase One Report is reviewed in conjunction with this report in order to obtain detailed information regarding the options under consideration.

The Phase One Report is available to view on the EirGrid projects webpage:

www.eirgridprojects.com/projects/millstreet/

1.2 Purpose of the Report

The Phase One Report referred to above was published in November 2010 and issued for consultation on 2nd December 2010. A list of consultees and a copy of the consultation letters and newspaper advertisement relating to the consultation process are included in Appendix B (Consultation) of this report. Further discussion on the consultation process is included in Chapter 2 (Consultation Summary) of this report.

This Phase Two Report presents a comparative evaluation of the emerging preferred options, including identification of specific routes for the proposed circuits and confirmation of the siting and design options for the proposed substation. Details of modifications to the route options identified in the Phase One Report as a direct result of consultation responses received and the iterative engineering design process are also provided, as appropriate. Phase Three of the process (i.e. confirmation of the proposal) will be based on consideration of consultation responses received further to issue of this Phase Two Report as well as ongoing project development by EirGrid and their consultants. This proposal will then be progressed to Phase Four, application stage.

1.3 Phase One Report Summary

1.3.1 Phase One Report

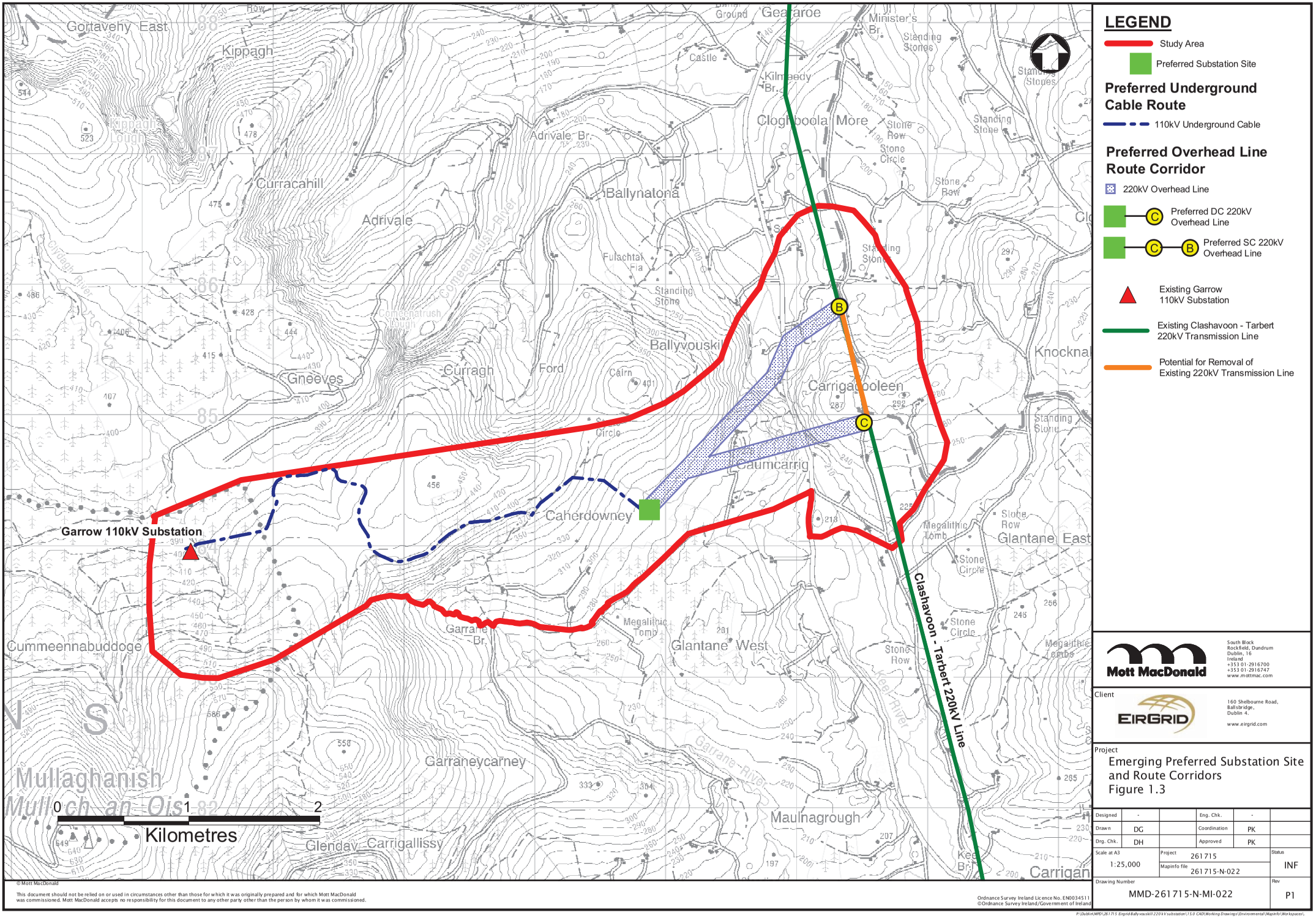
The Phase One Report identified the preferred substation location and connection route options and presented an overview of the relevant environmental and engineering constraints associated with each.

The Phase One Report presented:

- a justification for the project in terms of strategic transmission infrastructure needs
- a study area for the project
- environmental and other constraints within the defined study area
- potential substation site locations and route corridor options for the project within the defined study area
- a comparative evaluation of the various substation site locations and corridor options, having regard to environmental and engineering constraints identified at the time of issuing of the Phase One Report
- an emerging preferred substation site location and emerging preferred 110 kV and 220 kV route corridors for the project, based on an evaluation of options
- details of Phase One consultations

The Phase One Report recommended the siting of the substation in the townland of Caherdowney and identified preferred 220 kV single circuit and double circuit overhead line route options and a preferred 110 kV underground cable route, as illustrated in Figure 1.3 (Emerging Preferred Substation Site and Route Corridors) below. Due to the reduced site footprint, reduced structure height and the opportunity to design the building to integrate into the surrounding landscape, a Gas Insulated Switchgear (GIS) substation design was deemed preferable to an Air Insulated Switchgear (AIS) substation for the proposed development.

In summary the Phase One Report identified an overhead line connection from the new substation to the existing 220 kV Clashavoon-Tarbert transmission line as being the preferred option due primarily to the unacceptable risks to security of supply associated with 220 kV underground circuit failures on power supplies into and out of the Cork region. Environmental constraints, in particular visual impact, ecological habitat and cultural heritage constraints, defined the study area and connection options under consideration. The 220 kV overhead line options available between the new substation and the existing Clashavoon-Tarbert transmission line include both single circuit and double circuit 220 kV lines. Lattice steel towers would be required for both options. The overhead line route corridors presented in the Phase One Report measured 120 metres in width, to allow for two 220 kV single circuit overhead lines to be constructed in parallel along a single corridor; however, it may be necessary to construct two separate 220



LEGEND

- Study Area
- Preferred Substation Site

Preferred Underground Cable Route

- 110kV Underground Cable

Preferred Overhead Line Route Corridor

- 220kV Overhead Line
- Preferred DC 220kV Overhead Line
- Preferred SC 220kV Overhead Line
- Existing Garrow 110kV Substation
- Existing Clashavoon - Tarbert 220kV Transmission Line
- Potential for Removal of Existing 220kV Transmission Line

Mott MacDonald
South Block
Rockfield, Dundrum
Dublin, 16
Ireland
+353 01-2916700
+353 01-2916747
www.mottmac.com

Client
EIRGRID
160 Shelbourne Road,
Ballsbridge,
Dublin 4.
www.eirgrid.com

Project
Emerging Preferred Substation Site and Route Corridors
Figure 1.3

Designed	-		Eng. Chk.	-	
Drawn	DG		Coordination	PK	
Drg. Chk.	DH		Approved	PK	
Scale at A3	1:25,000	Project	261715	Status	INF
		Mapinfo file	261715-N-022		
Drawing Number	MMD-261715-N-MI-022			Rev	P1

P:\Dublin\MPD\261715 Eirgrid-Ballyvouskill 220 kV substation\1.5.0 CAD\Working Drawings\Environmental\MapInfo\Workspaces\

kV single circuit overhead line connections along two separate overhead line corridors. The Phase One Report concluded that a 220 kV overhead line connection along Route Corridor C is preferred overall (refer to Figure 1.3) due it its overall shorter length, low proximity to dwellings and natural screening potential. Although direct impacts can be avoided, Route Corridor C is however considered to have the most significant potential for indirect impacts on the context and setting of the local cultural heritage resource. A second route corridor, Route Corridor B, has been identified as the second preferred 220 kV overhead line connection option for a single circuit connection, if required.

A 110 kV connection is required in order to connect the proposed new substation to the existing 110 kV substation at Garrow, County Kerry. This connection is required to provide access to the transmission network for a number of wind farms in the area. As significant security of supply risks to the national grid do not apply to this 110 kV connection, the Phase One Report concluded that an underground cable connection along the existing network of wind farms and forest access tracks in the area is preferred.

1.3.2 Phase One Appropriate Assessment

Appendix I (Ecology) of the Phase One Report included a screening stage (Stage 1) report, prepared in accordance with the Department of the Environment Heritage and Local Government (DEHLG) guidelines on the requirement for Appropriate Assessment reporting to consider the possible nature conservation implications of any plan or project which may possibly impact a European Designated (Natura 2000) Site which includes Special Protection Areas for Birds (SPA) and / or Special Areas for Conservation (SAC) and / or candidate SAC (cSAC). The report was completed in consultation with the National Parks and Wildlife Service (NPWS) of the DEHLG.

The sites considered in the assessment included designated sites within 10 kilometres of the broader study area, as detailed in Table 1.1 below and illustrated in Figure 1.4 (Millstreet Constraints Map).

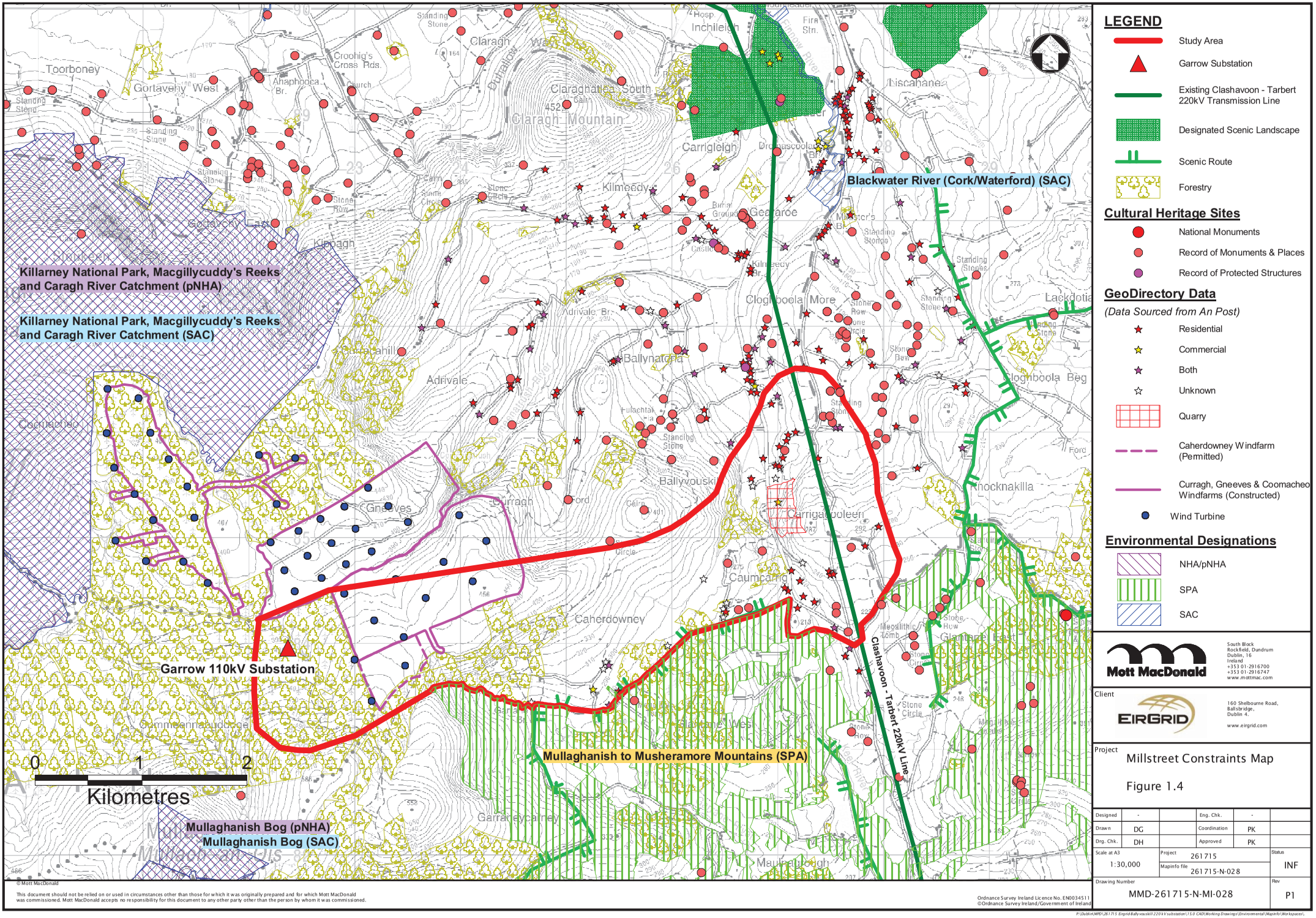
Table 1.1: Relevant Natura 2000 Sites

Name	Designation	Distance from study area (Km)
Mullaghanish Bog	SAC	1.0
St. Gobnet's Wood	SAC	5.3
Killarney National Park, Macgillycuddy'S Reeks And Caragh River Catchment	SAC	1.5
Blackwater River (Cork/Waterford)	SAC	1.5
Mullaghanish to Musheramore Mountains	SPA	0.0 - The boundary of this SPA is located immediately adjacent the southern boundary of the study area.

As detailed in the Phase One Report, the Mullaghanish to Musheramore Mountains SPA (site code 004162) and Blackwater River (Cork / Waterford) (Site code- 002170) were considered to be the only Natura 2000 sites, which may possibly be impacted by the proposed development. The Mullaghanish to Musheramore Mountains SPA has been primarily designated as a foraging and breeding site for the Annex 1 Listed (Birds Directive) raptor species; hen harrier.

The emerging preferred route detailed in the Phase One Report was informed by the presence of breeding and foraging hen harrier in the wider area. It is therefore considered unlikely, based on survey work to date and consultation with NPWS; that any detectable impacts will arise to the hen harrier, from any of the options presented in the Phase One Report.

The report concluded that best practice mitigation during construction should avoid possible direct and indirect impacts to the River Finnow and hence the Blackwater River (Cork/ Waterford) cSAC. Therefore, for Natura 2000 sites detailed, it is considered that there will be no significant negative impacts from the overhead line or underground cable options presented in the Phase One Report. Hence there is no requirement for further stages (Stage 2, 3 and 4) of the appropriate assessment process.



LEGEND

- Study Area
- Garrow Substation
- Existing Clashavoon - Tarbert 220kV Transmission Line
- Designated Scenic Landscape
- Scenic Route
- Forestry

Cultural Heritage Sites

- National Monuments
- Record of Monuments & Places
- Record of Protected Structures

GeoDirectory Data

(Data Sourced from An Post)

- Residential
- Commercial
- Both
- Unknown
- Quarry
- Caherdowney Windfarm (Permitted)
- Curragh, Gneeves & Coomacheo Windfarms (Constructed)
- Wind Turbine

Environmental Designations

- NHA/pNHA
- SPA
- SAC

Mott MacDonald
South Block
Rockfield, Dundrum
Dublin, 16
Ireland
+353 01-2916700
+353 01-2916747
www.mottmac.com

Client

EIRGRID

160 Shelbourne Road,
Ballsbridge,
Dublin 4.

www.eirgrid.com

Project

Millstreet Constraints Map

Figure 1.4

Designed	-		Eng. Chk.	-	
Drawn	DG		Coordination	PK	
Drg. Chk.	DH		Approved	PK	

Scale at A3: 1:30,000

Project: 261715

Mapinfo file: 261715-N-028

Status: INF

Drawing Number: MMD-261715-N-MI-028

Rev: P1

P:\Dublin\MPD\261715 Eirgrid\Ballyvouskil 220 kV substation\1.5.0 CAD\Working Drawings\Environmental\MapInfo\Workspaces\

2. Consultation Summary

2.1 Introduction

EirGrid is committed to engaging in continued open, honest and meaningful consultation throughout all phases of the Project Roadmap (refer to Appendix A). Responses and comments received from stakeholders, including members of the public, during this consultation process will inform optioneering of the project including the transmission route selection process, design of the proposed development and the development of the environmental report.

The Phase One Report referred to in Chapter 1 (Introduction) of this Phase Two Report was published in November 2010. Consultation letters were drafted to statutory and non-statutory consultees on 2nd December 2010 inviting comments on the report. A list of consultees and a copy of the consultation letters and newspaper advertisement relating to the consultation process are included in Appendix B (Consultation) of this report. An advertisement directing the public to and inviting comments on the Phase One Report was also published in the Irish Examiner on 9th December 2010.

The following sections of this report provide a summary of consultations undertaken to date, including consultation feedback on the Phase One Report. Responses to the consultation requests received at the time of writing this report have been included. An assessment of these responses has been provided detailing whether or not the responses received justify modification of the project as described in the Phase One Report i.e. an alternative substation site location and / or alternative route corridors, as appropriate.

This Phase Two Report will also be made available for comment and responses received will be incorporated into the continuing development of the project proposal and planning application, as appropriate.

2.2 Statutory Consultation

Consultation regarding the emerging preferred substation site location and route corridors was conducted with a number of statutory and non-statutory consultees to facilitate input to the optioneering process. Consultation was undertaken through written correspondence (dated 2nd December 2010) and meetings, as detailed below. A link to the project webpage (www.eirgridprojects.com/projects/millstreet/), which presents regular project updates, was also provided.

Table 2.1: Statutory Consultation – Comments on Phase One Report

Consultee	Key Comments on Phase One Report	Modification Justified
Cork County Council - County Manager	No Comments Received	No
Cork County Council - Heritage Section	Visual impact highlighted as important archaeological issue for the project. No direct impacts on cultural heritage sites acknowledged	Yes (see Table 2.2 below - meeting held 7th February 2011)
Cork County Council - Planning Section	Acknowledgement receipt received. No observations in regard to the options presented	No
Cork County Council - Environmental Section	No Comments Received	No
Cork County Council - Roads Section	Acknowledgement receipt received. No observations in regard to the options presented	No
Cork County Council - Millstreet Area Office: Senior Executive Engineer and Executive Engineer)	No Comments Received	No
Kerry County Council - County Manager	No Comments Received	No
Kerry County Council - Heritage Section	No Comments Received	No
Kerry County Council - Planning Section	No Comments Received	No
Kerry County Council - (Environmental Section	No Comments Received	No
Kerry County Council - Roads, Transportation and Safety	No Comments Received	No
DEHLG – National Monuments Service	No Comments Received	Yes (further to meeting of 11th November 2010 - see Table 2.2 below - meeting held 7th February 2011)
DEHLG – National Parks and Wildlife Service (NPWS)	No Comments Received	No
DEHLG – Development Applications Unit (DAU)	No Comments Received	No
Southwest Regional Authority	No Comments Received	No
Inland Fisheries Ireland – Southern Regional Fisheries Board (SRFB)	No Comments Received	No
Inland Fisheries Ireland – South Western Regional Fisheries Board (SWRFB)	Extensive salmonid (non-designated) spawning and nursery areas in upper reaches of Clydagh, Garrane and Keel Rivers. Precautionary measures required. Thrust bore methods for stream crossings recommended. Sediment control measures and surface water diversion and control methods required. Recommended minimum 10 metre buffer zone from water courses, drains and ditches. Construction phase monitoring and specified timing of works recommended	Meeting to be arranged to discuss the proposed drainage design prior to submission of planning application
An Taisce – National Energy Policy Officer	No Comments Received	No
Department of Communications, Energy and Natural Resources (DCENR)	Acknowledgement receipt received. No observations in regard to the options presented	No
Department of Community, Equality and Gaelteacht Affairs	No Comments Received	No
Department of Agriculture, Fisheries and Food	No Comments Received	No
Department of Transport	No Comments Received	No

Consultee	Key Comments on Phase One Report	Modification Justified
Arts Council	No Comments Received	No
Heritage Council	No Comments Received	No
Fáilte Ireland	No Comments Received	No
Health Service Executive – Regional Health Office (Cork)	No observations in regard to the options presented. General queries raised relating to detailed project design, which will be addressed in the environmental report	No
Office of Public Works	No Comments Received	No
National Roads Authority	No observations in regard to the options presented. General EIS guidance provided for projects which may affect the National Roads network	No
Environmental Protection Agency	Acknowledgement receipt received. No observations in regard to the options presented	No
Teagasc	No Comments Received	No
Radiological Protection Institute of Ireland	No Comments Received	No
Commission for Energy Regulation	No Comments Received	No

Consultation with statutory consultees commenced on 9th October 2009 when an introductory meeting was held with Cork County Council regarding the Millstreet Project. A meeting was also held with the Heritage Section of Cork County Council on 17th November 2009 and the Executive Engineer of Cork County Council for the Millstreet Area on 17th August 2010.

EirGrid engaged in initial pre-application consultations with An Bord Pleanála on 22nd December 2009. A further meeting was held with An Bord Pleanála on 22nd November 2010. The project team also met with the Local Conservation Ranger of NPWS on 16th February 2010 and the National Monuments Service of DEHLG on 16th February 2010 and 11th November 2010. A joint meeting was held with the National Monuments Service of DEHLG and Cork County Council's Heritage Officer on 7th February 2011.

A summary of the key issues raised during these meetings is provided in Table 2.2 below.

Table 2.2: Meetings with Statutory Consultees

Consultee	Date of Meeting	Presented Information	Key Comments
Cork County Council - Planning	9th October 2009	General overview of the proposed development - Introductory meeting only	Introductory meeting only. Cork County Council initially indicated that written comment on the proposal would be provided, however, subsequently deemed that this would not be appropriate as project likely to be deemed 'strategic infrastructure' for planning consent purposes.
Cork County Council – Environmental and Heritage Officers	17th November 2009	Preliminary environmental constraints map identifying potential substation site locations	No immediate concerns regarding ecology once located outside designated ecological European Sites. Appropriate Assessment "Test of Likely Significance" required Study area characteristic of Bronze Age settlement with significant archaeological features. Particular attention should be paid to overground structures which could affect the appreciation of the sun movement from stone circles. Project archaeologist should be competent in the assessment of Bronze Age features
Cork County Council - Millstreet	17th August 2010	Environmental Constraints Map illustrating potential substation	No significant issues with development of underground cable along L5226 and

Consultee	Date of Meeting	Presented Information	Key Comments
Area Office: Executive Engineer)		site locations and route corridors	R852. Development along L5226 preferred as significant road improvements works would be required along L5249/L5227. Sight line requirements specified. Further pre-submission consultation on sight lines, site layout and construction compound requested
Cork County Council – Heritage Officer	7th February 2011	Alternative potential tower types and indicative locations along the emerging preferred overhead line route supplemented with a site walkover and a drive around local roads	Cork County Council / DEHLG advised a preferred alternative route which best avoids local cultural heritage sites. Refer to Chapter 3 (Modification to Preliminary 220 kV Tower Locations)
An Bord Pleanála	22nd December 2009	Preliminary environmental constraints map and electronic presentation identifying potential substation site locations	All alternative transmission routes and substation sites considered should be fully detailed and assessed in the environmental report. Construction methodology for substation design AIS/GIS (Air insulated Switchgear/Gas Insulated Switchgear) should only be decided upon once potential impacts fully assessed. Consultation with DEHLG is critical. An Appropriate Assessment is likely to be required[1].
An Bord Pleanála	22nd November 2010	Mapping and electronic presentation presenting preferred substation location and substation design (GIS), transmission connection options and findings of various environmental studies and tests	Further pre-submission meeting planned to discuss proposed substation site location and transmission connections once Phase One consultation complete
DEHLG - NPWS	16th February 2010	Environmental constraints mapping illustrating study area and potential substation site locations, Sites 1-6	NPWS undertook a survey of Sites 1-6 and did not encounter flora/fauna of concern. Much of the land in the study area is improved or rough grassland. Hen Harrier nest sites are located outside of the study area, to the south east. The SPA lands immediately south of the study area boundary are hen harrier forage rather than breeding habitat. Any felled trees should be replanted, although replanting should not be undertaken within the SPA. On 4th April 2010, the project team advised NPWS of subsequent inclusion of substation site 9. NPWS to ground-check site
DEHLG – National Monuments Service	16th February 2010	As above	Major cultural heritage issues not anticipated based on the study area presented. Assessment should focus on bronze age archaeology, potential impacts of the development on sun movements across aboveground structures and visual impacts on sites of cultural heritage significance. Sites to north of L5226 (sites 1 and 2, in close proximity to emerging preferred site 9) identified as preferred from a cultural heritage perspective. Mitigation measures to be agreed pre-submission
DEHLG – National Monuments Service	11th November 2010	Mapping illustrating preferred substation location and transmission connection options. Indicative tower locations	Overhead line preferred to underground cable due to high potential for encountering unrecorded archaeological sites in the area. No objection to the

Consultee	Date of Meeting	Presented Information	Key Comments
		presented illustrating span lengths providing optimum distance from stream in proximity to emerging preferred substation site	emerging preferred 220 kV overhead line route passing above RMP CO047:068 and CO047:069 although a robust justification would be required regarding proximity of preferred 220 kV tower locations to RMP CO047:068 and CO047:069. Photomontages will be required for views to and views from RMP CO047:068 and CO047:069. Pre-construction (rather than pre-submission) trench testing recommended. Mitigation should be agreed and a draft cultural heritage assessment should be provided for review prior to submission
DEHLG – National Monuments Service / Cork County Council Heritage Officer	7th February 2011	Alternative potential tower types and indicative locations along the emerging preferred overhead line route supplemented with a site walkover and a drive around local roads	DEHLG / Cork County Council advised a preferred alternative route which best avoids local cultural heritage sites. Refer to Chapter 3 (Modification to Preliminary 220 kV Tower Locations)

Note: 1 Appropriate Assessment (Stage 1) completed as part of Phase One Report (refer to Section 1.3 Phase One Report Summary)

2.3 Non-statutory Consultation

As detailed in Section 2.2 above, and summarised in Table 2.3 below, a number of non-statutory consultees were invited to comment on the Phase One Report by written correspondence dated 2nd December 2010.

Table 2.3: Statutory Consultation – Comments on Phase One Report

Consultee	Key Comments on Phase One Report	Modification Justified
Timmy Collins (Councillor)	No Comments Received	No
Noel Buckley (Councillor)	No Comments Received	No
Michael Donegan (Councillor)	No Comments Received	No
Gerard Murphy (Councillor)	No Comments Received	No
Batt O'Keefe (Fianna Fáil TD)	No Comments Received	No
Michael Moynihan (Fianna Fáil TD)	No Comments Received	No
Michael Creed (Fianna Gael TD)	No Comments Received	No
Irish Farmers Association	No Comments Received	No
Coillte	No observations in regard to the options presented. Coillte to provide updated estate map along emerging preferred 110 kV overhead line route	No
Bord Gáis Energy	No Comments Received	No
Caherdowney Wind Farm	No Comments Received	No
SSE Renewables	No Comments Received	No
Birdwatch Ireland	No Comments Received	No
Bat Conservation Ireland	No Comments Received	No
Cork County Bat Group	No Comments Received	No
Irish Wildlife Trust	No Comments Received	No
EirCom	No Comments Received	No
Bord Gáis	No Comments Received	No
RTE Transmission Network Limited	No Comments Received	No
Telefónica O2 Ireland Limited	No Comments Received	No

Consultee	Key Comments on Phase One Report	Modification Justified
Vodafone	No Comments Received	No
Meteor Mobile Communications Limited	No Comments Received	No
Geological Survey of Ireland	No Comments Received	No
Irish Aviation Authority	No Comments Received	No
ESB	Acknowledgement receipt received. Meeting held between EirGrid and ESBN to discuss proposals on 8th February 2011. ESBN raised no objections to the options presented	No

The above named councillors and TD's were also invited to the open days discussed below. The project team has also engaged in consultation with Coillte and local wind farm operators regarding use of the existing tracks and roads in the area.

2.4 Public Consultation

EirGrid held public information days in the Castle Hotel, Macroom on 29th and 30th June 2010, and in the Wallis Arms Hotel, Millstreet on 15th September 2010, as described in the Phase One Report. The public information days were aimed at identifying constraints in the project study area and presenting initial project options. Maps illustrating the emerging preferred substation site location and connection options were presented at the second public information day on 15th September 2010.

The Phase One Report was published in November 2010, an advertisement providing a link to the project webpage inviting comments from members of the public on the emerging preferred substation site location and transmission options was published in the Irish Examiner on 9th December 2010. A copy of the advertisement is included in Appendix B (Consultation).

The project team has also engaged in preliminary discussions with landowners along the identified preferred route corridor in order to confirm land ownership, identify any restrictions on access for surveys and record any objections raised to the identified emerging preferred route and or site surveys.

A summary of responses from members of the public to the consultations undertaken to date is provided in Table 2.4 below.

Table 2.4: Public Consultation Responses

Consultation Phase	Comments Received	Action Taken	Modification Justified
Public Information Day June 2010	EirGrid was subsequently contacted by a local landowner interested in selling a site within the study area	Site included in Phase One assessment	Yes – completed as part of Phase One Report
Public Information Day September 2010	No particular issues of concern were raised. No written submissions from members of the public have been received as a result of the public information day	Not Applicable	No
Publication of Phase One Report	EirGrid has been contacted by a number of local residents within the study area with concerns regarding the use of overhead lines. Concerns primarily related to health issues, visual impact and property devaluation. No observations were made regarding the particular options presented in the Phase One Report. Local residents cited their preference for underground cable	EirGrid met with the residents on 27th January 2011. EirGrid has engaged an independent specialist to meet with the residents to discuss EMF (Electric and Magnetic Fields) and associated health concerns	EirGrid to engage in continued consultation with concerned residents regarding the proposed development
Landowner Negotiations (initial engagement)	No objections raised by landowners along the preferred transmission route	Landowner confirmed ownership of land	No

Consultation Phase	Comments Received	Action Taken	Modification Justified
	to the route and / or undertaking of site surveys. Although affected landowners did note that the boundary of a parcel of land is marked incorrectly on the land registry folio map	marked incorrectly on land registry folio map No objections from affected landowners regarding alternative route as presented on 7th February 2011 (further to meeting with DEHLG / Cork County Council) - refer to Chapter 3 (Modification to Preliminary 220 kV Tower Locations)	

2.5 Conclusion of Phase One Consultation

Based on consideration of consultation responses received to date it is not considered necessary to modify the emerging preferred substation site location or the emerging preferred 110 kV underground cable route. However, the emerging preferred 220 kV double circuit overhead line route corridor presented in the Phase One Report warrants further consideration, particularly with regard to potential visual impacts on cultural heritage sites. This is discussed further in Chapter 3 (Modifications to Preliminary 220 kV Tower Locations).

As detailed previously, EirGrid is committed to engaging in continued open, honest and meaningful consultation with stakeholders, including members of the public.

3. Modifications to Preliminary 220 kV Tower Locations

3.1.1 Introduction

As detailed in the Phase One Report, and summarised in Section 1.3 (Phase One Summary) of this report, a 220 kV overhead line connection along Route Corridor C is preferred overall due it its overall shorter length, low proximity to dwellings and natural screening potential. It is also acknowledged that, of the routes considered, Route Corridor C has the most significant potential for impacts on the context and setting of the local cultural heritage resource. This determination is based on the distance of the 120 metre corridor presented in the Phase One Report to cashel (ringfort) sites RMP CO048:068 and RMP CO048:069, located to the west of the R582 Millstreet / Macroom Road.

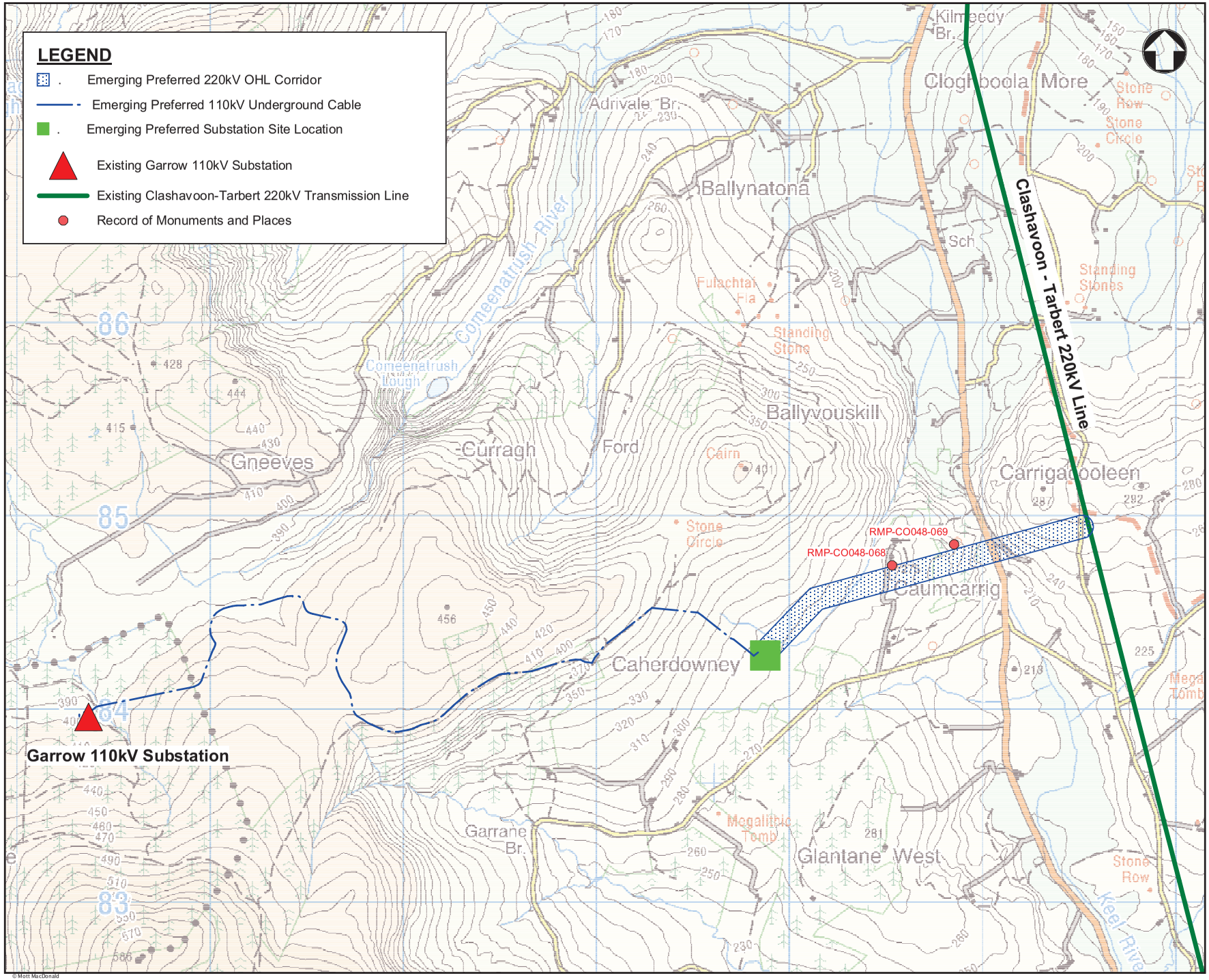
Due to the reduced number of steel towers required, construction of a single line of Double Circuit (DC) towers along Route Corridor C is preferred when compared to the construction of two lines of Single Circuit (SC) steel lattice tower structures along either Route Corridor C, or along Route Corridor B and Route Corridor C. This preferred alignment is illustrated in Figure 3.1 (Preferred Substation Site and Route Corridors).

Consequently the project team developed drawings illustrating preliminary tower locations along Route Corridor C, paying due regard to technical constraints including ground clearances (minimum 8 metres), span lengths between towers (maximum 475 metres) and overall ruling span (spacing between fixed towers). The tower locations were also optimised to ensure a minimum distance of 10 metres from watercourses in the area.

These preliminary tower locations, which passed in close proximity to local cashels CO047:068 and CO047:069, were presented to the DEHLG (National Monuments Service) at a meeting held on 11th November 2010. The DEHLG advised that while they had no significant objections to the preferred route corridor presented, a robust justification would be required if an alternative to the preliminary tower locations in proximity to the cultural heritage sites could not be provided. The DEHLG also advised that a 220 kV overhead line connection, rather than an underground cable connection, would be preferred due to the high potential for encountering previously unrecorded archaeological sites in the area. The majority of the proposed 110 kV underground cable route is proposed to be constructed along previously disturbed ground.

The project team subsequently developed the following alternative alignment options as detailed in Table 3.1 below and presented in Figures 3.2 to 3.5 (Indicative 220 kV Tower Locations).

- Option 1: Includes a suspension tower in proximity to the R582 and two angle (strain) towers. These tower locations were presented to DEHLG on 11th November 2010
- Option 2: Includes an additional suspension tower in proximity to the R582 and two angle (strain) towers
- Option 3: Includes three angle (strain) towers, one of which is located in proximity to the R582
- Option 4: Similar to Option 3 above, however, the route alignment is modified to provide the maximum possible distance between overhead lines and RMP CO047:068. As a consequence of the realignment, one of the above mentioned angle towers is no longer required



Mott MacDonald
South Block
Rockfield, Dundrum
Dublin, 16
Ireland
+353 01-2916700
+353 01-2916747
www.mottmac.com

Client
EIRGRID
160 Shelbourne Road,
Ballsbridge,
Dublin 4.
www.eirgrid.com

Project
Preferred Substation Site and Route Corridors
Figure 3.1

Designed	-		Eng. Chk.	-	
Drawn	DG		Coordination	PK	
Drg. Chk.	DH		Approved	PK	

Scale at A3: 1:6,000
Project: 261715
Mapinfo file: 261715-N-023
Status: INF
Drawing Number: MMD-261715-N-MI-023
Rev: P1

P:\Dublin\MPD\261715 Eirgrid-Ballyvouskill 220 kV substation\1.5.0 CAD\Working Drawings\Environmental\Mapinfo\Workspaces\

LEGEND

- Overhead Line Tower
- 220kV Transmission Line Alignment (Proposed)
- 220kV Clashavoon-Tarbert Transmission Line (Existing)
- 110kV Underground Cable Route (Proposed)
- Record of Monuments & Places
- Substation Site

Mott MacDonald
South Block
Rockfield, Dundrum
Dublin, 16
Ireland
+353 01-2916700
+353 01-2916747
www.mottmac.com

Client

EIRGRID

160 Shelbourne Road,
Ballsbridge,
Dublin 4.

www.eirgrid.com

Project

Option 1
Indicative 220kV Tower Locations
Figure 3.2

Designed	-		Eng. Chk.	-	
Drawn	DG		Coordination	PK	
Drg. Chk.	DH		Approved	PK	

Scale at A3	Project 261715	Status
1:6,000	Mapinfo file 261715-N-024	INF
Drawing Number		Rev
MMD-261715-N-MI-024		P1

P:\Dublin\MP\261715 Eirgrid-Ballyvouskill 220 kV substation\15 © CAD\Working Drawings\Environmental\Mapinfo\Workspaces\...

LEGEND

- Overhead Line Tower
- 220kV Transmission Line Alignment (Proposed)
- 220kV Clashavoon-Tarbert Transmission Line (Existing)
- 110kV Underground Cable Route (Proposed)
- Record of Monuments & Places
- Substation Site

Mott MacDonald
South Block
Rockfield, Dundrum
Dublin, 16
Ireland
+353 01-2916700
+353 01-2916747
www.mottmac.com

Client

EIRGRID

160 Shelbourne Road,
Ballsbridge,
Dublin 4.

www.eirgrid.com

Project

Option 2
Indicative 220kV Tower Locations
Figure 3.3

Designed	-		Eng. Chk.	-	
Drawn	DG		Coordination	PK	
Drg. Chk.	DH		Approved	PK	
Scale at A3	1:6,000	Project	261715		Status
		Mapinfo file	261715-N-025		INF
Drawing Number	MMD-261715-N-MI-025				Rev P1

P:\Dublin\MP\261715 Eirgrid-Ballyvouskill 220 kV substation\15 © CAD\Working Drawings\Environmental\Mapinfo\Workspaces\...

LEGEND

- Overhead Line Tower
- 220kV Transmission Line Alignment (Proposed)
- 220kV Clashavoon-Tarbert Transmission Line (Existing)
- 110kV Underground Cable Route (Proposed)
- Record of Monument & Places
- Substation Site

Mott MacDonald
South Block
Rockfield, Dundrum
Dublin, 16
Ireland
+353 01-2916700
+353 01-2916747
www.mottmac.com

Client

EIRGRID

160 Shelbourne Road,
Ballsbridge,
Dublin 4.

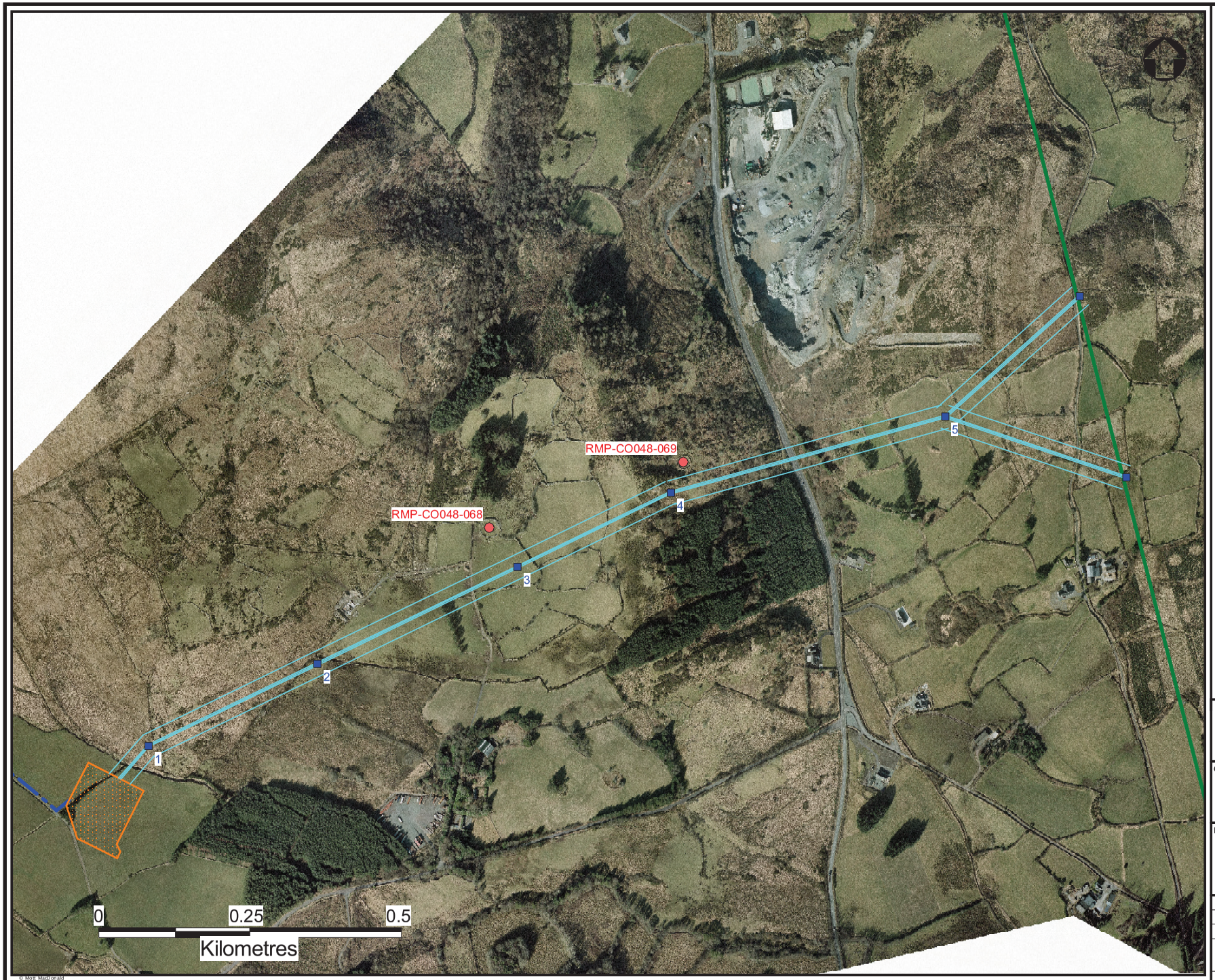
www.eirgrid.com

Project

Option 3
Indicative 220kV Tower Locations
Figure 3.4

Designed	-		Eng. Chk.	-	
Drawn	DG		Coordination	PK	
Drg. Chk.	DH		Approved	PK	
Scale at A3	1:6,000	Project	261715		Status
		Mapinfo file	261715-N-026		INF
Drawing Number	MMD-261715-N-MI-026				Rev P1

P:\Dublin\MPD\261715 Eirgrid-Ballyvouskill 220 kV substation\15 0 CAD\Working Drawings\Environmental\Mapinfo\Workspaces\...



LEGEND

- Overhead Line Tower
- 220kV Transmission Line Alignment (Proposed)
- 220kV Clashavoon-Tarbert Transmission Line (Existing)
- 110kV Underground Cable Route (Proposed)
- Record of Monuments & Places
- Substation Site

Mott MacDonald
South Block
Rockfield, Dundrum
Dublin, 16
Ireland
+353 01-2916700
+353 01-2916747
www.mottmac.com

Client

EIRGRID

160 Shelbourne Road,
Ballsbridge,
Dublin 4.

www.eirgrid.com

Project

Option 4
Indicative 220kV Tower Locations
Figure 3.5

Designed	-		Eng. Chk.	-	
Drawn	DG		Coordination	PK	
Drg. Chk.	DH		Approved	PK	
Scale at A3	1:6,000	Project	261715		Status
		Mapinfo file	261715-N-027		INF
Drawing Number	MMD-261715-N-MI-027				Rev P1

P:\Dublin\MP\261715 Eirgrid-Ballyvouskill 220 kV substation\15 © CAD\Working Drawings\Environmental\Mapinfo\Workspaces\...

Table 3.1: Alternative Tower Options

Option	Number of Towers	Indicative Average Tower Height (metres)	* Indicative Distance from RMP CO047:068 (metres)	* Indicative Distance from RMP CO047:069 (metres)
Option 1	6	40	34	43
Option 2	7	40	51	94
Option 3	6	40	98	41
Option 4	5	41	80	49

Notes: * From centre of tower to edge of cashel

Two of the existing 220 kV SC suspension towers on the existing Clashavoon – Tarbert 220 kV line will also be replaced with 220 kV SC angle towers to allow the new 220 kV DC overhead line to be connected.

While the replacement of suspension towers with angle towers, as detailed above, provide a fixed point allowing for increased distances to be gained from the aforementioned cultural heritage sites it should be noted that they tend to have a wider base width when compared to a suspension tower, although they are generally marginally smaller in height. Comparative photos of typical 220 kV DC angle and suspension towers are provided in Figures 3.6 and 3.7 below. An image of a 220 kV SC angle tower is also provided in Figure 3.8 for illustrative purposes.

Figure 3.6: Typical 220 kV DC Angle Tower

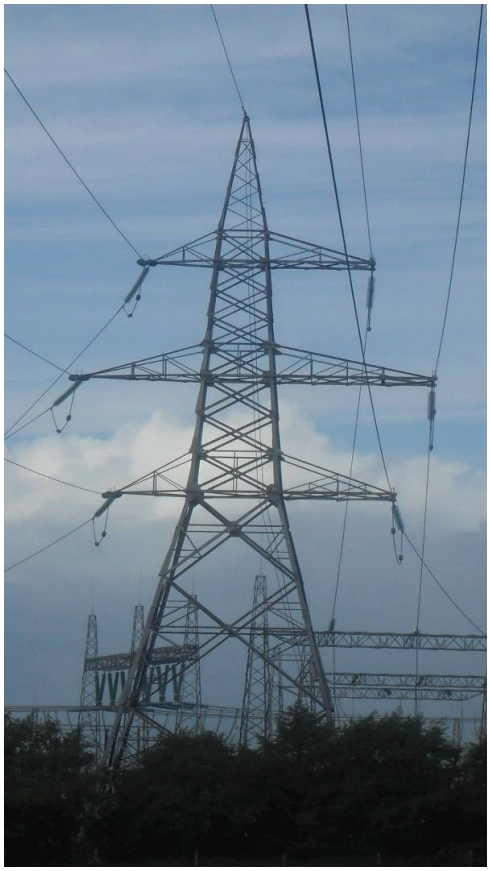


Figure 3.7: Typical 220 kV DC Suspension Tower

Figure 3.8: Typical 220 kV SC Angle Tower

These four options were presented to the DEHLG (National Monuments Service) and Cork County Council (Heritage Officer) on 7th February 2011. A site walkover and a drive around local roads with potential views of the local cultural heritage sites were also undertaken. Further to the site walkover it was acknowledged that RMP CO047:068 is better preserved than RMP CO047:069 and, although not easily directly accessible, views of the site could be gained from a tertiary road, the L5227 which runs to the east of the R582. Views of the local cultural heritage sites could not be gained from the R582. Photographs of RMP CO047:068 are included in Appendix C (Photos) of this report.

DEHLG (National Monuments Service) and Cork County Council (Heritage Officer) have advised that Option 4, as presented in Figure 3.5, would be preferred from a cultural heritage perspective. It was also observed that while Option 3 provides a comparatively greater distance between the proposed towers and RMP CO047:068, the positioning of the towers may necessitate the passing of overhead lines above the cultural heritage site.

The following sections present the environmental consultant's evaluations of the four alternative options under consideration, as illustrated in Figures 3.2 to 3.5.

3.2 Environmental Consultant's Review of Options 1- 4

It is considered that the key environmental disciplines which could potentially be significantly impacted by the alternative 220 kV tower options detailed above are limited to cultural heritage, landscape and visual and flora and fauna. The specialist environmental consultant's evaluations of Options 1- 4 are detailed below.

3.2.1 Cultural Heritage

In concurrence with the opinion of the DEHLG (National Monuments Service) and Cork County Council (Heritage Officer), it is considered that Option 4 is preferred from a cultural heritage perspective based on the comparative potential direct and indirect impacts that all four options would have on the context and setting of the two cashel sites.

The determining factors in adopting Option 4 are that this option has fewer towers and that the alignment and associated wirescape will be located further to the south of the cashels. The net effect of this will significantly reduce the potential for any direct impacts on the sites. For technical reasons in order to achieve this buffer, both towers 4 and 5 will be of the angle (strain) type. These towers are typically larger in scale and therefore more visible resulting in an increase in the potential indirect impacts on the context and setting of the two cashels and other sites in the wider landscape. On balance, it is considered that Option 4 affords the optimal protection for the recorded monuments in the immediate area and is recommended as the preferred option.

3.2.2 Landscape and Visual

The options under consideration have been assessed from a landscape and visual perspective.

- Option 1: This option consists of 6 towers including a suspension tower in proximity to the R582 and two angle (strain) towers. The suspension tower will be prominent in views from the R582 and also located in views from local residential properties.

- Option 2: This option consists of 7 towers including an additional suspension tower to that required in Option 1 in proximity to the R582 and two angle (strain) towers.

- Option 3: This option consists of 6 towers including three angle (strain) towers, one of which is located in proximity to the R582. The angle (strain) towers are generally smaller in height than the suspension towers and therefore will be slightly less prominent from the R582 and local residential properties when compared to Options 1 and 2.

- Option 4: This option is similar to Option 3 but has fewer towers at 5 in total. The towers are also located further from the R582 reducing potential visual impacts from the road and local residential properties.

On balance the preferred option in landscape and visual terms is Option 4. Option 4 has the least number of towers and the towers are in less prominent locations. Further, as confirmed by the Cultural Heritage section, Option 4 has least impact on visitor amenity associated with the two cashel sites on the hillside west of the R582. Option 2 is the least preferred as it has the most towers and includes towers that are in proximity to the R582 and local residential properties to the east of the road. Options 1 and 3 are similar in terms of potential landscape and visual impacts although Option 3 does have a slightly lower angle (strain) tower near the R582 instead of the suspension tower required for Option 1.

3.2.3 Flora and Fauna

The following habitat classifications are based on A Guide to Habitats in Ireland (Fossitt, 2000). All habitats detailed are of local (rather than national/international) significance.

All options: Tower 1 is located in acid grassland / cutover bog mosaic at least 10 metres from a watercourse on the eastern boundary of the substation site.

Options 1 to 3 inclusive: Tower 2 is located in an area of scattered gorse scrub and semi improved acid grassland. This habitat is considered to be of low to moderate conservation value and breeding birds will require consideration in this area. Option 4: Tower 2 is located in improved rush dominated grassland of low conservation value though breeding birds will require consideration in this area.

Options 1 to 3 inclusive: Tower 3 is located within acid grassland habitat on all options (moderate conservation value). Tower 3 also lies adjacent to a stream which is a tributary of the Finnow River. Breeding birds and disturbance (pollution etc) to riparian/ aquatic receptors will require consideration in this

area. Option 4: Tower 3 is located in an area of improved grassland which is considered to have a low ecological value.

Options 1, 2 and 3: Tower 4 is located in improved grassland of low conservation value. Option 4: Tower 4 is located in a mosaic of scrub/ heath considered to be of moderate to high conservation value.

Options 1-3; An area of gorse dominated scrub, considered to be of moderate to high ecological value, will be impacted by Tower 5. Breeding birds will require mitigation consideration in this area. Option 4: Tower 5 is located in improved agricultural grassland of low conservation value.

Option 1, 3 and 4; Tower 6 is located in improved agricultural grassland of low conservation value. Option 2; Tower 6 is located in a stand of mature non-native conifer trees (low to moderate conservation value).

Option 2: Tower 7 is located in improved agricultural grassland of low conservation value.

A summary evaluation of ecological features at each tower location and option is detailed in Table 3.2 below.

Table 3.2: Summary Ecological Evaluation Options

	Option 1	Option 2	Option 3	Option 4
Tower 1	Moderate	Moderate	Moderate	Moderate
Tower 2	Low - Moderate	Low - Moderate	Low - Moderate	Low
Tower 3	Moderate	Moderate	Moderate	Low
Tower 4	Low	Low	Low	Moderate - High
Tower 5	Moderate - high	Moderate - high	Moderate - high	Low
Tower 6	Low	Low - Moderate	Low	NONE
Tower 7	NONE	Low	NONE	NONE

Note: 'None' implies 'Not Applicable', i.e. Option 2 only includes 7 towers. Option 4 comprises 5 towers only

Evaluation of Options

Option 4 is the preferred option as it has the least number of towers (5) and therefore has the least direct impact to existing habitats along Route Corridor C. Option 4 also has the lowest potential impact to key ecological receptors (see Table 3.2 above).

Options 1 and 3 have 6 towers each and potentially a relatively similar ecological impact, though it is noted that Option 3 has an angle tower, with a larger site footprint than a suspension tower, at Tower 5 (moderate to high value ecological receptor), and therefore a slightly larger direct impact to Option 1.

Option 2 is the least preferred option as it contains 7 towers and therefore has the largest direct impact on existing habitats along Route Corridor C. It also has the highest potential impact to key ecological receptors (see Table 3.2 above).

3.3 Summary Conclusion

The evaluation undertaken by the cultural heritage, landscape and visual and flora and fauna specialists concurs with the opinion of the DEHLG (National Monuments Service) and Cork County Council (Heritage Officer) i.e. Option 4 is preferred.

Of the four options considered, Option 4 offers the least number of towers while allowing a greater distance to be maintained from the proposed wirescape and local cultural heritage sites RMP CO047:068 and RMP CO047:069.

4. Conclusion

4.1 Conclusion

The Phase One Report presented Site 9, in the townland of Caherdowney, as the emerging preferred site for the proposed substation. The Phase One Report also identified an overhead line connection from the new substation site to the existing 220 kV Clashavoon-Tarbert transmission line as being the preferred option and concluded that a 220 kV overhead line connection along Route Corridor C is preferred overall. In addition, the Phase One Report concluded that a 110 kV underground cable connection along the existing network of wind farms and forest access tracks in the area is preferred.

Arising from the completion of Phase One and Phase Two of this project, and the associated stakeholder consultation, it is considered that the project configuration in terms of the emerging preferred substation site location (Site 9), the emerging preferred 110 kV underground cable route and the emerging preferred 220 kV DC overhead line route corridors (as presented in the Phase One Report) are appropriate to be brought forward to the next stage of evaluation. The next stages of project development and evaluation are set out in Chapter 5 (Next Steps).

However, modification to preliminary 220 kV tower locations along Route Corridor C is considered to be justified based on feedback received from DEHLG (National Monuments Service) and Cork County Council (Heritage Officer) in order to increase the separation distance of the proposed towers from local cultural heritage sites to limit, as far as practicable, the potential for indirect cultural heritage impacts. As discussed in Chapter 3 (Modifications to Preliminary 220 kV Tower Locations) a tower alignment which maintains the greatest distance from local cultural heritage sites with the minimum number of towers proposed is preferred.

In summary, based on responses received to date, the preferred options identified in the Phase One Report remain unchanged i.e. preferred substation location at Site 9 with a 110 kV underground cable connection to the existing 110 kV substation at Garrow and a 220 kV DC overhead line connection to the existing 220 kV Clashavoon – Tarbert transmission line. A 220 kV DC tower alignment which maintains the greatest distance from local cultural heritage sites with the minimum number of towers proposed is preferred. These preferred options are illustrated in Figure 4.1 (Preferred Options).

5. Next Steps

5.1 Introduction

This section outlines the subsequent tasks to be undertaken in accordance with the Project Roadmap presented in Appendix A of this report.

5.2 Phase Two Consultation

EirGrid intends to engage in further consultation on the content of this report with key stakeholders, including landowners and members of the public, prior to the development of the ER and submission of the application for the proposed development i.e. Phase Four of the Project Roadmap.

Consultation on this report will follow a similar format to that undertaken as part of the Phase One Report consultation, as described in Chapter 2 (Consultation Summary).

5.3 Phase Three – Confirmation of the Development

EirGrid has commenced initial engagement with landowners, as described in Chapter 2 (Consultation Summary) of this report and detailed under Phase Three of the Project Roadmap.

The development will be confirmed further to ongoing consultation and engagement with key stakeholders, including landowners and members of the public, on the content of this report. The findings of this consultation and engagement process will be described in the ER to be submitted as part of the planning application (Phase Four).

5.4 Phase Four – Application Preparation

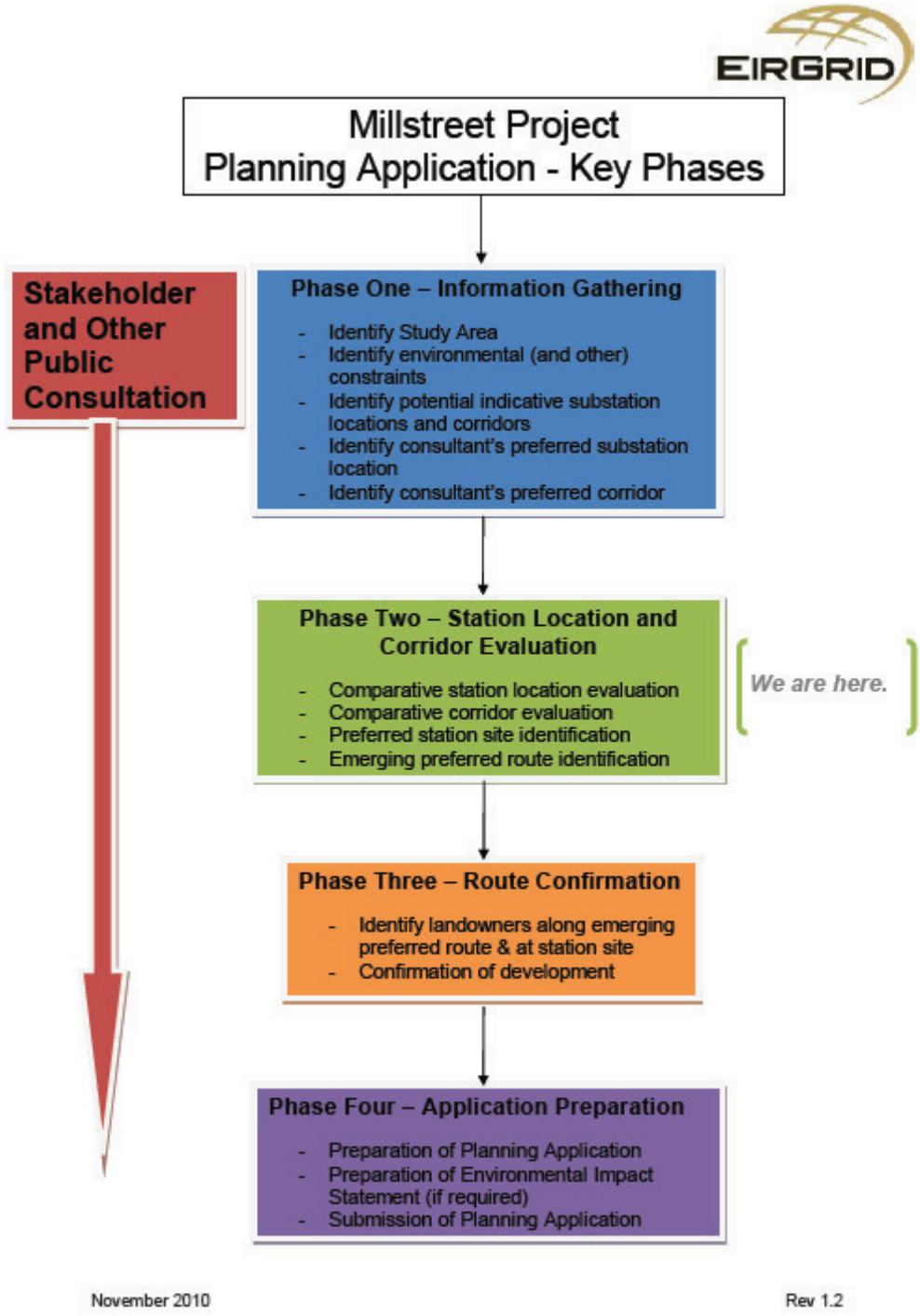
Further to pre-application consultation meetings with An Bord Pleanála it is currently considered that the proposed development constitutes strategic infrastructure and that an application would therefore be made directly to An Bord Pleanála under section 182A of the *Planning and Development (Strategic Infrastructure) Act 2006*, which amends the *Planning and Development Act 2000*.

It is currently anticipated that the planning application, supported by an environmental report, will be lodged with An Bord Pleanála in Q2 2011. Once the application has been lodged, members of the public will have a minimum period of six weeks of the public notice in which to submit comments to An Bord Pleanála regarding the proposed development. Regular updates on the project can be obtained by visiting the project webpage:

www.eirgridprojects.com/projects/millstreet/.

Appendices

Appendix A. Project Roadmap


EIRGRID
Millstreet Project
Planning Application - Key Phases
Stakeholder and Other Public Consultation
Phase One – Information Gathering
- Identify Study Area
- Identify environmental (and other) constraints
- Identify potential indicative substation locations and corridors
- Identify consultant's preferred substation location
- Identify consultant's preferred corridor
Phase Two – Station Location and Corridor Evaluation
- Comparative station location evaluation
- Comparative corridor evaluation
- Preferred station site identification
- Emerging preferred route identification
We are here.
Phase Three – Route Confirmation
- Identify landowners along emerging preferred route & at station site
- Confirmation of development
Phase Four – Application Preparation
- Preparation of Planning Application
- Preparation of Environmental Impact Statement (if required)
- Submission of Planning Application
November 2010
Rev 1.2

Appendix B. Consultation

B.1. Phase One Consultation – Consultee List

Name	Title	Organisation
Mary Sleemen	Heritage Officer	Cork County Council
Sharon Casey	Heritage Officer	Cork County Council
Catherine Desmond	Archaeologist	National Monuments Service, Department of the Environment, Heritage & Local Government
Barry O'Donoghue	Conservation Ranger	NPWS, Department of the Environment, Heritage & Local Government
Jervis Good	Divisional Ecologist	NPWS, Department of the Environment, Heritage & Local Government
Mr John McAleer	Director	South-West Regional Authority
Timmy Collins	Councillor	-
Noel Buckley	Councillor	-
Michael Donegan	Councillor	-
Gerard Murphy	Councillor	-
Batt O'Keefe	TD	Fianna Fáil
Michael Moynihan	TD	Fianna Fáil
Michael Creed	TD	Fine Gael
John O'Neill	Director of Services (Planning)	Cork County Council
Louis Duffy	Director of Services (Environmental)	Cork County Council
Patricia Power	Director of Services (Roads)	Cork County Council
Martin Riordan	County Manager	Cork County Council
Martin Corcoran	Senior Executive Engineer	Cork County Council
Pat O'Sullivan	Executive Engineer	Cork County Council
Michael McMahon	Director of Services (Planning)	Kerry County Council
Oliver Ring	Director of Services (Environmental)	Kerry County Council
Charlie O'Sullivan	Director of Services (Road Transportation & Safety)	Kerry County Council
Michael McMahon	Director of Services (Heritage)	Kerry County Council
Cathy Fisher	Heritage Officer	Kerry County Council
Tom Curran	County Manager	Kerry County Council
Des Johnson	Director of Planning	An Bord Pleanála
The Manager ?	-	Development Applications Unit, Department of the Environment, Heritage & Local Government
Patricia O'Connor	Senior Fisheries Environmental Officer	Inland Fisheries Ireland (SWRFB)
Andrew Gillespie	Environmental Fisheries Officer	Inland Fisheries Ireland (SRFB)
		Coillte
Liam O'Sullivan		Bord Gáis Energy
		Caherdowney Windfarm Limited
Peter Cunningham	Development Co-ordinator	SSE Renewables
Elizabeth Muldowney	National Energy Policy Officer	An Taisce
-	-	Irish Farmer's Association
-	-	Birdwatch Ireland
-	-	Bat Conservation Ireland
-	-	Irish Wildlife Trust

Name	Title	Organisation
Conor Kelleher	-	Cork County Bat Group
Ms Tracey Hall	-	Department of Communications, Energy and Natural Resources
-	An Stiúrthóir,	Department of Community, Equality and Gaeltacht Affairs
-	-	Department of Agriculture, Fisheries and Food
-	-	Department of Transport
-	-	The Arts Council
-	-	The Heritage Council
-	Environment and Planning	Fáilte Ireland
-	-	Health Service Executive
Mr Ger Crowley	-	Regional Health Office (HSE)
-	-	Office of Public Works
-	-	National Roads Authority
-	-	Environment Protection Agency
-	-	Teagasc
-	-	Radiological Protection Institute of Ireland
-	-	Commission for Energy Regulation
-	-	Eircom
-	-	Bord Gáis
-	-	RTE Transmission Network Limited
-	-	Telefónica O2 Ireland Limited
-	-	Vodafone
-	-	Meteor Mobile Communications Limited
-	-	Geological Survey of Ireland
-	-	Irish Aviation Authority

B.2. Newspaper Advertisement

Proposed Millstreet – Electrical Reinforcement Scheme

EirGrid is the state-owned independent electricity Transmission System Operator (TSO) and Market Operator (MO) in Ireland. It is EirGrid's role to deliver quality connection, transmission, and market services to electricity generators, suppliers and customers utilising the high voltage electricity system.

In this capacity, EirGrid is proposing to develop a new 220/110 kV electrical substation in the area of Millstreet, County Cork. The new 220/110 kV substation will connect the existing transmission network in the area, specifically the existing 110 kV substation at Garrow, County Kerry and the existing 220 kV Clashavoon to Tarbert transmission line.

In this regard, the project team has now identified an emerging preferred site location for the proposed substation and 110kV and 220kV connection route options. A report that describes the proposals for the development and the substation site and route corridor selection process is now available to view/ download from the following website:

www.eirgridprojects.com/projects/millstreet/phaseonereports/

EirGrid would like to invite you to submit views and comments regarding the proposals currently under consideration. Feedback regarding the proposals can be submitted by email, letter or telephone to the address below no later than Friday 7th January 2011 at 5.00pm.

Millstreet Project Manager
EirGrid Plc
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4

Email: millstreet@eirgrid.com
Telephone: +353 (0)1 702 6642

EIRGRID

EIRG064_160x3_Exam.indd 1 06/12/2010 11:22:58

B.3. Consultation Letters

Address Line 1
Address Line 2
Address Line 3
Address Line 4

Date

Name,

EirGrid is the state owned independent Transmission System Operator (TSO) and Market Operator (MO) in Ireland. It is EirGrid's role to deliver quality connection, transmission, and market services to electricity generators, suppliers and customers utilising the high voltage electricity system.

In this capacity, EirGrid is proposing to develop a new 220/110 kV electrical substation in the area of Millstreet, County Cork. The new 220/110 kV substation will connect the existing transmission network in the area, specifically comprising connection of the existing 110 kV substation at Garrow, County Kerry and the existing 220 kV Clashavoon to Tarbert transmission line.

In this regard, the project team has now identified an emerging preferred site location for the proposed substation and 110 kV and 220 kV connection route options. A copy of the report that describes the proposals for the development and the substation site and route corridor selection process is enclosed for your information. Additional copies are available to view/download from the following website:

www.eirgridprojects.com/projects/millstreet/phaseonereports/

EirGrid would like to invite you to submit views/comments regarding the proposals currently under consideration. Feedback regarding the proposals can be submitted by email, letter or telephone to the address below no later than **Friday 7th January 2011** at **5.00pm**.

In the meantime, if you would like to discuss the project or to meet with a member of the project team, please contact us by either telephone or email.

Yours sincerely,

Edel Campbell

Edel Campbell
Senior Project Engineer
Transmission Projects

EIRGRID

☎ +353 (0)1 702 6642
✉ millstreet@eirgrid.com

The Oval 160 Shelbourne Road
Ballsbridge Dublin 4

160 Bóthar Shíol Bhroin
Droichead na Dothra Baile Átha Cliath 4

TELEPHONE +353 (0)1 677 1700
FAX +353 (0)1 661 5375
E-MAIL info@eirgrid.com

Address Line 1
Address Line 2
Address Line 3
Address Line 4

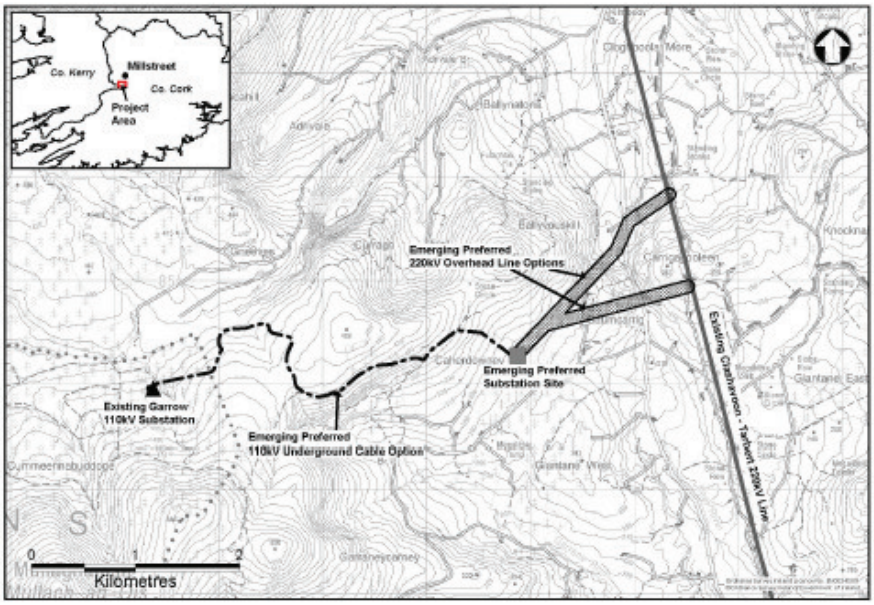
Date

Name,

EirGrid is the state owned independent Transmission System Operator (TSO) and Market Operator (MO) in Ireland. It is EirGrid's role to deliver quality connection, transmission, and market services to electricity generators, suppliers and customers utilising the high voltage electricity system.

In this capacity, EirGrid is proposing to develop a new 220/110 kV electrical substation in the area of Millstreet, County Cork. The new 220/110 kV substation will connect the existing transmission network in the area, specifically comprising connection of the existing 110 kV substation at Garrow, County Kerry and the existing 220 kV Clashavoon to Tarbert transmission line.

In this regard, the project team has now identified an emerging preferred site location for the proposed substation and 110 kV and 220 kV connection route options, as illustrated below.



The Oval 160 Shelbourne Road
Ballsbridge Dublin 4

160 Bóthar Shíol Bhroin
Droichead na Dothra Baile Átha Cliath 4

TELEPHONE +353 (0)1 677 1700
FAX +353 (0)1 661 5375
E-MAIL info@eirgrid.com

A report that describes the proposals for the development and the substation site and route corridor selection process is now available to view/download from the following website:

www.eirgridprojects.com/projects/millstreet/phaseonereports/

EirGrid would like to invite you to submit views/comments regarding the proposals currently under consideration. Feedback regarding the proposals can be submitted by email, letter or telephone to the address below no later than **Friday 7th January 2011** at **5.00pm**.

In the meantime, if you would like to discuss the project or to meet with a member of the project team, please contact us by either telephone or email.

Yours sincerely,

Edel Campbell

Edel Campbell
Senior Project Engineer
Transmission Projects

EIRGRID

+353 (0)1 702 6642
millstreet@eirgrid.com

The Oval 160 Shelbourne Road
Ballsbridge Dublin 4

160 Bóthar Shíol Bhroin
Droichead na Dothra Baile Átha Cliath 4

TELEPHONE +353 (0)1 677 1700
FAX +353 (0)1 661 5375
E-MAIL info@eirgrid.com

Appendix C. Photos

Photo C.1: Image to northeast from RMP CO047:068 (Ringfort)

Photo C.2: Image to east from RMP CO047:068 (Ringfort)