

Eoin McCarthy

From: Gareth Rennicks <GRennicks@airspeed.ie>
Sent: 07 November 2016 11:36
To: Eoin McCarthy
Subject: RE: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Eoin

Thanks for the KML. We have no Links within this boundary.

Regards

Gareth

From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 07 November 2016 11:32
To: Gareth Rennicks <GRennicks@airspeed.ie>
Subject: RE: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Gareth,

Please see attached as requested.

Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

From: Gareth Rennicks [mailto:GRennicks@airspeed.ie]
Sent: 07 November 2016 10:55
To: Eoin McCarthy <emccarthy@mccarthykos.ie>
Subject: RE: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Eoin

Would it be possible to send me the site boundary in Google Earth .KMZ or .KML format

Regards

Gareth

From: Eoin McCarthy [<mailto:emccarthy@mccarthykos.ie>]
Sent: 07 November 2016 10:51
To: grennicks@airspeed.ie
Subject: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Gareth,

We are currently carrying out a constraints study on a proposed wind farm site at Ardderroo and adjacent townlands in west Co. Galway, approximately 6km south of Oughterard. The co-ordinates of the approximate centre of the site are E112178, N234085. Please also see attached a PDF of the site location.

Could you please provide Irish Grid co-ordinates for the start and end points of any Airspeed telecom links in the vicinity of the site and the required exclusion buffers on these links.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.



Dublin Office:
15C Magna Drive
Citywest
Dublin 24
T: +353 1 428 7500
F: +353 1 428 7555

Cork Office:
Rubicon Plus
Ardrostig
Bandon Road
Cork
T: +353 21 420 9017

NI Office:
Forsythe House
Cromac Square
Belfast
BT2 8LA
LoCall: 0845 350 2573

Sales: 1890 799 899 | Technical Support: + 353 1 428 7530 | www.airspeed.ie

For information updates, case studies and commentary subscribe today to [Licensed Wireless News](http://www.airspeed.ie) at www.airspeed.ie



Eoin McCarthy

From: Roger Woods <rwoods@bai.ie>
Sent: 12 December 2016 16:54
To: Eoin McCarthy
Subject: RE: 160815 - Ardderroo Wind Farm Scoping Document

Hi Eoin

The BAI does not perform an in depth analysis of the effect of wind turbines on FM networks. However, we are not aware of any issues from existing windfarms into existing FM networks. Also, the proposed windfarm is not located close to any existing or planned FM transmission sites.

We therefore have no issue with the location of the proposed wind farm.

Regards

Roger

Senior Executive Engineer
Broadcasting Authority of Ireland
2-5 Warrington Place
Dublin D02 XP29

Tel: 01 6441200
Fax: 01 6441299

This email and any files transmitted with it are confidential and intended solely for the use of the addressee. If you have received this email in error, please notify the sender or info@bai.ie immediately and delete this email. If you are not the intended recipient, any distribution or copying of this e-mail is strictly prohibited.

Tá an ríomhphost seo agus aon iatán a ghabhann leis rúnda agus is leis an duine sin amháin a bhfuil siad seolta chuige/chuici a bhaineann siad. Muna duitse an ríomhphost seo, ní ceart é a léamh ná a scaoileadh chuig aon tríú páirtí. Iarrtar ort teachtaireacht a sheoladh chuig an seoltóir nó chuig info@bai.ie, agus an ríomhphost seo a scrios.

From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: Wednesday, December 7, 2016 5:29 PM
To: Roger Woods <rwoods@bai.ie>
Subject: 160815 - Ardderroo Wind Farm Scoping Document

Roger,

McCarthy Keville O'Sullivan Ltd. is preparing a planning application and Environmental Impact Statement (EIS) on behalf of Ardderroo Windfarm Ltd. for a proposed wind energy development at Killaguile, Letter, Ardderroo, Uggool and Finnaun, Co. Galway.

In December 2015, An Bord Pleanála (Board) refused planning permission for the proposed Ardderroo Wind Farm development (ABP Ref.07.PA0036) following a recommendation for refusal by the Planning Inspector. The reasons for refusal were that, according to the Board, the ornithology and bat survey data provided in the Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) was inadequate in duration and scope with regard to best international practice and, therefore, there was insufficient information on which to base a robust assessment of the potential impacts on bird and bat species, or to consider the potential impacts on the qualifying interests on several Natura 2000 sites in the vicinity of the proposed development. In general, the planning inspector and the Board concurred with the majority of the findings in the EIS and considered that a wind farm development of the scale

proposed and at this location was acceptable in principal. The underlying reasons for refusal are considered to be of a technical nature related to survey methodologies which can and are being addressed for a new application for the proposed development.

The proposed wind energy project will encompass approximately 29 no. wind turbines with a minimum total output of approximately 65 Megawatts (MW). In this regard, it is intended to submit the planning permission application directly to the Board, under the provisions of Planning and Development (Strategic Infrastructure) Act 2006. The current Strategic Infrastructure Development (SID) thresholds for wind energy set out in the 7th Schedule of the Planning and Development Act 2000, as amended, are 25 no. turbines or 50 MW. An application has been made to An Bord Pleanála seeking a determination in relation to the SID status, or otherwise, of the proposed wind energy development.

As part of the EIA process, we would welcome any comments that you might have in relation to the proposed project, including baseline data, survey techniques or potential environmental effects that should be considered as part of the assessment process and in preparation of the EIS and NIS. In order to facilitate this a Scoping Document providing details of the proposed project, the site of the proposed development and the proposed scope of works has been attached to this email.

If you could return any comments or suggestions at your earliest convenience it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - News - Newsletter Sign Up

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

Eoin McCarthy

From: Patrick Bolton <patrick.bolton@comreg.ie>
Sent: 03 November 2016 09:44
To: Eoin McCarthy
Cc: Tara Kavanagh
Subject: RE: 160815 - Proposed Wind Farm at Ardderroo, Moycullen, Co. Galway
Attachments: Proposed Wind Farm at Ardderroo, Moycullen, Co. Galway.csv

Hi Eoin,

Attached is an excel with the details of operators within 10 Km radius of the coordinates you provided.

Kind regards,

Patrick

From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 03 November 2016 09:31
To: Patrick Bolton <patrick.bolton@comreg.ie>
Cc: Tara Kavanagh <tara.kavanagh@comreg.ie>
Subject: 160815 - Proposed Wind Farm at Ardderroo, Moycullen, Co. Galway

Hi Patrick,

We are currently carrying out another constraints study on a proposed wind farm site in west Co Galway. The coordinates of the centre of the site are E112178, N234085.

Could you please provide a list of all telecom operators that have links within 10km of this point.

I have also attached a site location map.

Kind Regards,
Eoin

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - *News - Newsletter Sign Up*

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

Mr. Eoin McCarthy
McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants
Block 1, G.F.S.C.
Moneenageisha Road
Galway,
H91N8KK



19th December 2016

Re: Ardderroo Windfarm Ltd. proposed wind energy development at Killaguile, Letter, Ardderroo, Uggool and Finnaun, Co. Galway.

Dear Mr. McCarthy,

I refer to your correspondence concerning the above.

If the proposed development will involve the felling or removal of any trees, the developer must obtain a Felling License from this Department **before** trees are felled or removed. A Felling Application can be obtained **from Felling Section, Forest Service, Department of Agriculture, Fisheries and Food, Johnstown Castle Estate, Co. Wexford**, Tel: 053-9160200 or from our website at:

<http://www.agriculture.gov.ie/forestservice/treefelling/treefelling/>

In addition, if the proposed development will involve the felling or removal of any forest area which has benefited from grant-aid paid by the State, the written consent of the Minister must be obtained before a the forest can be removed (*the repayment of all grant monies paid in respect of the area involved may also be required*).

The developer should take note of the contents of **Forest Service Policy on the Granting of Felling Licenses for Wind Farm Development** (copy enclosed).

It should be noted that deforestation is a project to which the provisions of Article 4(2) of the EIA Directive (Council Directive 85/337/EEC) applies, being one of the projects listed in Annex II of that Directive.

Environmental Impact Statement

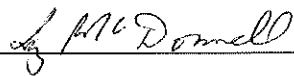
Where the felling of forest areas is proposed, the following information should be provided in the EIS :

- Tree felling is proposed in the next five years.
- Felled areas in the past 4 years in the locality.
- Areas replanted in the past 4 years.
- All areas in receipt of fertiliser in the past 4 years.
- All proposed road developments and standards.
- All drainage works associated with all activities on the site.
- Provision of a Forest Landscape Design Plan for the entire project area by a suitable qualified Landscape Architect with experience in forestry. This plan should take account of the impact of any felling / replanting proposals already licenced in the area and any areas planned to be felled/replanted in the next 5 years.

Potential Impacts/mitigation:

- Data and the proposed
- Data on potential impacts and proposed mitigation and monitoring measures to be adopted in respect of the following:
 - Soil Stability (including landslides)
 - Water Quality (particularly with regard to sedimentation and eutrophication)
 - Landscape
 - Ecology/habitats
 - Monuments
- The Economic impact due to the reduced forest rotation (where applicable) and on planned future rotations.

Yours Sincerely,



Liz McDonnell
Environmental Co-ordination Unit
Climate Change and Bioenergy Division
Department of Agriculture Food and the Marine
Pavilion A
Grattan Business Park
Portlaoise
Co. Laois
R32 K857
057 8689915



Forest Service Policy on the Granting of Felling Licences for Wind Farm Development

[Effective from 3rd June, 2011]

Where a developer intends to construct a wind farm within a forest, or partially within a forest, or that will affect a forest environmentally or that will require tree felling, it is extremely important that the developer consults the Forest Service at the earliest possible stage of the project. This approach may help to develop a collaborative approach that will ensure that all forestry issues are identified and mitigated at the earliest opportunity.

1. Only Limited Felling Licences (LFL) should be applied for and will be issued for wind farms. No General Felling Licences (GFL) will be granted. GFL's carry an obligatory replanting condition, whereas LFL's provide flexibility with regard to the imposition of a replanting condition and the extent of such a condition. Two LFLs must be applied for – 1) to cover the turbine bases, the roads, buildings, etc; 2) to cover the area on which 'turbulence felling' will take place, if required.

NOTE: Where a person intends to fulfil the replanting condition of a Limited Felling Licence by planting an area other than the area felled under the licence, Section 41(1)(a)(i) of the Forestry Act, 1946, stipulates that the licensee must own the alternative site at the date of the grant of the licence.

Turbulence felling is deemed to be felling in the vicinity of the turbines, the purpose of which is to avoid turbulence that can be created by the forest canopy and that can affect the performance and efficiency of the turbines. Turbulence felling may be allowed in certain cases, at the discretion of the Minister and subject to replanting requirements as outlined at section 10 below.

the additional 12 (if granted) and the original 20 hectares will be treated as 32 hectares of turbulence felling. The rules for turbulence felling will then apply to all 32 hectares.

See the scenarios outlined in section 10 below.

3. As standard, areas cleared for turbine bases, access roads, and any other wind farm related infrastructure must be replaced by replanting at an alternative site. Under the Forestry Act, 1946, the felling licence applicant must own the alternative site at the time the licence is granted. The alternative area will not be eligible for any grants or premiums from the Forest Service.

Please note that any alternative replanting area(s) must be formally approved by the Forest Service before a felling licence is granted. Consequently, in order to avoid any undue delays in the granting of a licence, the proposed alternative replanting site(s) should be submitted for approval as early as possible, ideally at the same time as the felling licence application is submitted.

Approval must be applied for using the Afforestation Scheme application Form (Form 1 - Application for Preplanting Technical Approval). As no grants or premiums are payable on these sites it should be stated on the form that only technical approval and not financial approval is required.

4. In line with general Forest Service policy, where grant-aided forestry is to be used for wind farm development, any grants and premiums that were paid by the Forest Service in respect of the areas felled for the turbine bases, roads, and infrastructure must be refunded. (The refunding of grants applies to the areas licensed under LFL "1" above.)
5. Notwithstanding any requirement for the wind farm developer to produce an Environmental Impact Statement (EIS) in respect of the development and the desirability of scoping the impact of tree felling/replanting proposals in an EIS, when felling licence applications are made, the Forest Service may require the developer to report on the potential loss of soil and biomass CO₂, and the reduction in productivity of the forest area associated with different wind farm, forestry management, and landscape plans. Potential impacts to be reported on and assessed may also include stability of the site,

case of the area to undergo turbulence felling, the requirement will be for replanting on a hectare for hectare basis plus an additional 10% to allow for the increase in soil carbon emissions at afforestation and the loss of potential carbon sequestration due to the proposed method of forest management. See **example 1** below.

However, where the proposed felling is less than 20 hectares (excluding the felling in respect of the bases, roads, buildings, etc.) as stated in section 2 above, there will be no requirement to plant an additional 10% for turbulence felling. See **example 2** below.

Example 1:

In the case of a 200 ha plantation, where say 15 ha will be for turbine placement, other buildings and roads, etc., and 100 ha will undergo turbulence felling, the requirement would be:

- replanting on 15 ha for the turbines, etc.;
- replanting on 100 ha for turbulence felling;
- replanting on 10 ha (10% of 100) for soil carbon emissions at afforestation and the loss of potential carbon sequestration due to the proposed method of forest management.

Total replanting in this example = 125 ha, with 100 being on the site of the turbulence felling; and the 25 ha balance being on alternative land owned by the licence applicant at the time the licence is granted.

Example 2:

In a 200 ha plantation, where say 15 ha will be for turbine placement, other buildings and roads, etc., and an additional felling of say 18 ha (i.e. Less than 20 ha) is sought, the requirement would be:

- replanting on 15 ha for the turbines, etc.;
- replanting on 18 ha for the additional felling;

Total replanting in this example = 33 ha, with 15 ha being on alternative land owned by the licence applicant at the time the licence is granted.



MEETING MINUTES

Project	160815 Ardderroo Wind Farm SID Application
Time & Date	20 th February 2017
Location	NPWS Offices, Galway

Attendance Details

Individual	Company	Abbreviation
Pat Roberts	McCarthy Keville O'Sullivan Ltd.	PR
John Hynes	McCarthy Keville O'Sullivan Ltd.	JH
Alex Ash	McCarthy Keville O'Sullivan Ltd.	AA
Dr. Tom Gittings	Consultant Ecologist/Client ecological representative	TG
Dr Julie Fossitt	NPWS – Dept. Arts, Heritage, Regional, Rural & Gaeltacht Affairs	JF

Item	Description
1.0	<p>Introduction and preliminary discussions</p> <p>PR commenced the meeting with general introductions and brief summary of the proposed agenda to consist of a description of the works undertaken along with the main findings and the assessments undertaken.</p> <p>This was to include discussions surrounding the information that was provided prior to the meeting.</p> <p>JH circulated hard copies of the briefing note that had been prepared and sent in advance of the meeting.</p> <p>JF stated that the advice and correspondence of the department in relation to the previous unsuccessful application was available and should be taken into account in any new proposal, and that it was not intended to provide observations in writing in response to the current scoping request.</p> <p>JF stated that any views or advice provided during the meeting was without prejudice to any future observations or submissions that the Department may make at subsequent stages.</p> <p>JF noted that the previous application was an SID application, and queried whether it had been the subject of an oral hearing.</p> <p>PR stated that this was correct and that in the intervening months (over one year), considerable work had been undertaken to address the issues raised during the previous application. The project team is confident that these issues have been satisfactorily addressed and one of the primary purposes of the meeting is to demonstrate how the</p>

<p>2.0</p>	<p>additional work provides the information necessary to fully assess the impacts of the proposed development on ecology.</p> <p>PR noted that whilst the project was very similar to the previous application significant additional ecological surveys and assessments had been completed particularly in relation to birds and bats.</p> <p>JF Initial comments</p> <p>JF enquired whether official EIA scoping with ABP had been undertaken in line with the provisions for this in planning legislation, i.e. a formal opinion on the information to be contained within the EIS. She also queried whether the opinion of ABP had been sought in relation to the scope of the NIS, and whether that was possible</p> <p>PR responded saying that he was not aware that they had specifically requested the above and thought they were being provided voluntarily but would check.</p> <p>JF asked whether off site compensatory planting was necessary as part of the development.</p> <p>PR replied that it was (about 40ha to be felled) and the replanting lands would be the subject of a separate ecological impact assessment and AA Screening report/NIS specifically undertaken as part of the proposed development and included within (or appended to) the NIS for the windfarm project. The Appropriate Assessment would then be undertaken by ABP as the Competent Authority.</p> <p>JF stated that the impacts must be assessed as part of the EIS and NIS for the project (i.e. no project splitting, and compensatory planting appears to be integral to the proposed development). If there is reliance on the Forest Service's EIAs and/or AAs of the afforestation areas in other locations/counties, then the relevant determinations should be sourced and presented as evidence of that fact in the current application. The impacts of the development, including tree harvesting, also need to be assessed in combination with existing and ongoing forestry operations, and again the Forest Service's decisions and assessments should be taken into consideration and presented as evidence.</p> <p>JF said that if possible, any information from assessments and ongoing surveys and monitoring of forestry operations and adjoining/nearby windfarm developments under construction should be sourced and used to inform the assessment. Plan-level mitigation from the County Development Plan and associated Wind Energy Strategy for a development of this type in this area should also be taken into account</p> <p>JF noted that limestone fill is being used for road building on the neighbouring sites and considered that this was inappropriate for a site that is located on siliceous bedrock</p> <p>PR responded saying that the current proposal will use siliceous rock from identified borrow pits on the site and will not use limestone fill</p> <p>JF advised to follow the relevant legislation where this has updated or altered aspects of guidelines on AA in particular – what is happening is that an NIS is being prepared.</p> <p>PR responded saying that the assessments will follow the relevant legislation but will also follow the necessary guidelines so that the application is not exposed to criticism for either not following the relevant legislation or guidance.</p> <p>3.0 Briefing regarding Flora and Fauna (excl. Birds)</p>
------------	---

JH provided summary of the survey work undertaken in relation to flora and fauna (excl. birds), described the methodologies undertaken and the main findings. JF did not disagree with the information provided but raised questions and made points throughout the briefing. The main points raised are provided below:

JF queried the categorisation of the habitat on the site only as conifer plantation when this occurred on Blanket Bog habitat; this needed to be acknowledged. The presence of trees and drains did not mean that Blanket bog was not there, and it would be possible to restore.

JH responded saying that in most circumstances the habitat had been heavily drained, planted with dense conifers for many years and supported no species that are indicative of Blanket Bog or heath. He did not consider that the majority of the conifer plantation could feasibly be restored to Blanket Bog but in some areas, where the trees had failed, there was some potential for restoration.

JF highlighted the requirement for a baseline assessment of the ecology of the downstream oligotrophic lakes and the watercourses on the site including Slender Naiad habitats

JF advised that account would need to be taken of the potential mobilisation of sediments, nutrients and pollutants associated with woodland felling and construction, and the history of fertiliser application would need to be taken into account. Phosphates mobilise when peats are disturbed

JH highlighted design of the scheme to avoid impacts on any watercourses through buffering and robust measures to avoid run off and pollution. He also described the amount of survey work that had been undertaken, desk study of information held by the IFI, Forest Service and other sources, field surveys including kick sampling and aquatic habitat surveys

JF advised that surveys could not be confined to within the application area only, particularly as sensitive receptors occurred downstream (SAC and Annex I and QI lakes, possible Slender Naiad). She considered it was not possible to mitigate entirely against impacts occurring outside the site boundary owing to peat, drains, previous forestry and disturbance. Habitat and hydro-chemical requirements of Slender Naiad could be used to inform whether targeted surveys are required in lakes.

JF advised that the site specific conservation objectives exist for SAC 002034 and targets and attributes need to be used to guide the details of the ecological assessment and analysis required. She advised that it is important to note whether the conservation objective is to maintain or to restore the favourable conservation condition of a particular QI.

This was noted by the team

JF advised that full details of the surveys that were undertaken to be included in the EIS and NIS but that careful consideration should be given to how the two documents would work in tandem to present all the necessary information without excessive duplication. Scoping the NIS (as opposed to having screening in the NIS) was also discussed

JH confirmed had provided a summary of the surveys undertaken and agreed that the details would be within the EIS.

JH confirmed that the surveys that were undertaken in line with BCT guidelines had revealed low levels of bat activity but nonetheless vegetative connectivity was to be maintained in the development. JH confirmed that Lesser Horseshoe had only occasionally been recorded on the site and that the previously recorded night roost at Letter Lodge was not regularly used and was being retained along with connectivity to it.

It was noted that water quality monitoring was essential before, during and after construction and that automated sondes was advised. The placement and operation of water quality monitoring equipment needs to be included in the application and application area, and ecological assessment.

4.0

Briefing regarding Birds

AA provided comprehensive summary of the survey work undertaken in relation to birds and the main findings. AA explained that following the previous application, a further full year of bird surveying had been undertaken. This had been undertaken following the relevant Scottish Natural Heritage Guidelines (2014). AA noted that overall bird activity had been low at all times and that the results most recent surveys had been very similar to the low activity levels that were previously recorded. JF did not disagree with the information provided but raised questions and made points throughout the briefing. The main points raised are provided below:

JF questioned the robustness of predictions regarding the lack of overflying migratory birds based on the standard limited number of hours of survey data, and the lack of night time surveys, and advised that survey times should sync with known arrival times of key species in Ireland in any given year. Whether there were useful results from radar monitoring of birds in any relevant site was queried

AA responded saying that SNH (2014) guidelines dictate the number and timing of hours on the site necessary to allow a thorough assessment of bird usage. These guidelines were followed and the data gathered will allow a comprehensive assessment of bird activity on the site. AA asked that in the absence of specific guidance relating to Ireland, was SNH (2014) was the most relevant guidance to follow with regard to bird surveying at wind farm sites.

TG noted that there were useful results from radar surveys undertaken at Cork Harbour but that situation had been very different, with very high resident bird populations. The site at Ardderroo had very low resident bird populations and no reason to consider the use of radar monitoring in this case. The SNH guidance only recommends use of radar where high nocturnal activity of important species is likely.

JF stated that when completing an impact assessment for birds, assessment and monitoring results from nearby windfarms should be considered.

AA replied that it would be considered and used in the impact assessment.

It was noted that a viewshed analysis would be required to demonstrate that the bird surveys covered an adequate amount of the site.

AA confirmed that such an analysis had been completed and would be included within the EIS and that coverage of the site was over 90%

JF advised that the cumulative impact on birds of all the windfarms in the area needs to be assessed and that data from the surrounding sites needs to be considered in the assessment.

AA confirmed that the assessment would take into account the cumulative impact of the surrounding wind farms. Data from the surrounding sites would be taken into account where it is available.

5.0

Discussion of the NIS

JH described the rationale used when providing the information necessary to complete an AA Screening and went on to describe the content and structure of the draft NIS.

JF made the following points and comments during the course of the briefing:

JF advised that the legislation was followed with regard to the preparation of the NIS, which was a voluntary NIS in this case. She advised that it was the authority's job to carry out screening and that this did not need to be in the NIS. Screening had various meanings, including the formal sense of 'screening for appropriate assessment' by the authority.

TG noted this and suggested that the decision as to which European Sites and which Qis/SCIs are potentially effected is really an exercise in determining the scope of the NIS rather than an AA Screening.

JF agreed and stated that the NIS should then focus on the Scientific assessment of the potential for the proposed development to result in adverse effects on individual habitats and species.

JF noted that, in relation to Lesser Horseshoe Bat, whilst the proposed development may be within the identified range of 6 km from two European Sites that are designated for this species, she was aware that the population for which the Lough Corrib SAC was designated was not located within this distance and such factors should be taken into account when considering the scope of the scientific assessment and analysis in the NIS.

JH acknowledged that he was aware of this and had included this following the precautionary principle and because the information regarding the population of qualifying interest was not publicly available. He questioned whether this could be confirmed and how would he be able to demonstrate that this was the case.

JF replied that the Site Specific Conservation Objectives for Lough Corrib SAC were due to be published soon and would make this clearer.

6.0

Conclusions

PR asked if any further information regarding either surveys, analysis or reporting was required or were there any further questions.

JF advised that any mitigation needs to be included in detail in the application and if being relied upon to reach conclusions, must be proven to be achievable and likely to be effective in any given scenario it is needed. Proof of effectiveness will be required with examples of where similar techniques have been employed previously.

PR confirmed that MKO are involved during the construction phase of a number of wind farms and are responsible for the implementation of sediment control plans and environmental supervision and monitoring on an ongoing basis. He confirmed that we have confidence in our proposals and will provide evidence of their suitability and effectiveness in the EIS chapter.

PR and JF agreed that draft minutes would be sent to the NPWS in word format for adoption following review and amendment by the agreement of both parties.

|

|

|



An Roinn Ealaíon, Oidhreachta,
Gnóthaí Réigiúnacha, Tuaithe agus Gaeltachta

Department of Arts, Heritage,
Regional, Rural and Gaeltacht Affairs

Our Ref: **G Pre00372/2016** (*Please quote in all related correspondence*)
Your Ref: 160815

25 January 2017

Eoin McCarthy
McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants
Block 1, G.F.S.C.
Moneenageisha Road,
Galway,
H91 N8KK

Via email to emccarthy@mccarthykos.ie

Re: Environmental Impact Statement (EIS) scoping on behalf of Ardderroo Windfarm Ltd. for a proposed wind energy development

A chara

On behalf of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, I refer to correspondence received in connection with the above. Outlined below are heritage-related observations/recommendations of the Department under the stated heading(s).

Archaeology

All proposed development and strategies should be in compliance with the National Monuments Acts 1930 to 2004 and with the national policy on protection of archaeological heritage – 'Framework and Principles for the Protection of the Archaeological Heritage' published in 1999 by the Department of Arts, Heritage, Gaeltacht and the Islands.

General Guidance

1. All areas of archaeological heritage should be addressed where relevant, including;
 - a) Immovable cultural heritage e.g., monuments and ancient field boundaries.
 - b) Underwater cultural heritage such as river fording points, shipwrecks, fish weirs, fish traps and other underwater ruins such as submerged jetties.
 - c) Movable cultural heritage e.g., loose carved stones, sculptures, architectural fragments etc.
2. All proposed development within proximity to archaeological monuments should be subject to appropriate consultation, at the earliest possible stage, with the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

3. All impacts which may impinge on the archaeological heritage should be appropriately assessed by a suitably qualified archaeologist.
4. Where there are no archaeological monuments present but the development is large in scale, e.g., over 0.5 hectares in area and over 1 kilometre in length, it is generally recommended that an archaeological assessment should be undertaken, unless there are substantial grounds to show that it is not necessary. Refer to Framework and Principles for the Protection of the Archaeological Heritage 1999, in particular section 3.6.6 in regard to EIA.
5. Where appropriate, specialists in the field of archaeological heritage should be consulted throughout the process, from design through to implementation.
6. All surveys pertaining to archaeological heritage must be of a high standard in order to allow informed decisions to be taken.
7. All impacts must be assessed, to include ground disturbance, impacts on the setting of the monuments and visual impacts. These should include direct, indirect, temporary and cumulative impacts.
8. Mitigation of impacts, identified through consultation, should be taken into account within the development at the earliest possible stages. Various approaches should be considered, such as avoidance, design modification and relocation where appropriate.

Further information and relevant publications can be obtained on www.archaeology.ie

Architectural heritage and nature conservation observations, if any, will follow in due course.

The above observations and recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by a planning authority, in her role as statutory consultee under the Planning and Development Act 2000, as amended.

You are requested to send further communications to this Department's Development Applications Unit (DAU) at manager.dau@ahg.gov.ie (team monitored); if this is not possible, correspondence may alternatively be sent to:

The Manager
Development Applications Unit (DAU)
Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs
Newtown Road
Wexford
Y35 AP90

Le meas



**Yvonne Nolan,
Development Applications Unit**

Eoin McCarthy

From: Thomas.SHERIDAN@openeir.ie
Sent: 17 November 2016 13:34
To: Eoin McCarthy
Cc: Seamus.OKeeffe@openeir.ie
Subject: RE: 160815 - Ardderroo Wind Farm, Co. Galway
Attachments: ATT00001.txt; ATT00002.htm

Hi Eoin,

I have checked this proposed Windfarm location and I don't expect it to cause any interference to the eir radio network.

Best Regards

Thomas Sheridan 
Network Design Radio Engineer

T: 091 772552 M: 0851742191

thomas.sheridan@openeir.ie 

open eir, Mervue, Galway.

The information in this email is confidential and should not be disclosed to any third party without the express written consent of eircom LTD.

The information given is compiled from records and is believed to be correct but it is subject to verification.

From: O'Keeffe, Seamus
Sent: 16 November 2016 09:20
To: Sheridan, Thomas
Cc: Eoin McCarthy
Subject: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Tom,
Can you look after this wind farm query from Eoin please.

Regards,
Seamus

From: Eoin McCarthy [<mailto:emccarthy@mccarthykos.ie>]
Sent: 07 November 2016 10:40
To: O'Keeffe, Seamus
Subject: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Seamus,

We are currently carrying out a constraints study on a proposed wind farm site at Ardderroo and adjacent townlands in west Co. Galway, approximately 6km south of Oughterard. The co-ordinates of the approximate centre of the site are E112178, N234085. Please also see attached a PDF of the site location.

Could you please provide Irish Grid co-ordinates for the start and end points of any Elr telecom links in the vicinity of the site and the required exclusion buffers on these links.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK

T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

Eoin McCarthy

From: Deirdre Lardner <deirdre.lardner@esb.ie>
Sent: 20 December 2016 15:32
To: Eoin McCarthy
Subject: Ardderroo Wind EIA Scoping
Attachments: Proposed Ardderroo EIA Scoping.pdf; ATT00001.txt; ATT00002.htm

Hi Eoin,

How are you? I got the attached on my desk today. No issues our side. We don't have any telecoms site nearby and are happy enough for the standard condition to account for future transmission equipment

Examples of standard condition:

- Facilities shall be installed at the developers' expense to minimise interference with communications, radio or television in the area. Details of facilities to be installed shall be submitted to and agreed with the planning authority following consultation with the relevant authorities prior to commissioning of the wind turbines.
- Prior to commencement of development, the developer shall agree a protocol for assessing any impact on radio or television or other telecommunication reception in the area. In the event of interference occurring, it shall be the responsibility of the developer to mitigate such interference according to a methodology to be agreed with the planning authority.
- In the event that the proposed development causes interference with telecommunications signals in the area effective measures shall be implemented to minimise such interference. Details of these measures, which shall be at the developer's expense, shall be submitted to, and agreed in writing with, the planning authority prior to commissioning of the turbines, and following consultation with the relevant authorities.

Sounds interesting doing the EIA stuff. Are you very busy? Let me know if you ever need any other info re telecoms.

Also the ComReg site viewer is really handy for locating other operator sites:

<http://siteviewer.comreg.ie/#explore>

Send my regards to your family!

Happy Christmas

<https://www.youtube.com/watch?v=WmLFrKzfulk#St>



Deirdre Lardner | Planning Consultant | ESB Telecoms Ltd | M: +353 83 153 3733

Website www.esbtelecoms.ie

Join us on [LinkedIn](#)

Eoin McCarthy

From: Yvonne Jackson <Yvonne.Jackson@failteireland.ie>
Sent: 19 January 2017 10:28
To: Eoin McCarthy
Subject: RE: 16081 5 - Ardderroo Wind Farm Scoping Document
Attachments: EIS & Tourism Guidelines.pdf

Dear Eoin,

I wish to acknowledge receipt of your e-mail in relation to **160815 – Ardderroo Wind Farm Scoping Document**.

I have attached a copy of Fáilte Ireland's Guidelines for the treatment of tourism in an EIS, which we recommend should be taken into account in preparing the EIS.

Yours sincerely,

Yvonne

Yvonne Jackson

Investment and Innovation | Fáilte Ireland | Áras Fáilte | 88/95 Amiens Street | Dublin 1

T: 01 8847224

W: www.failteireland.ie



From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 07 December 2016 17:33
To: Yvonne Jackson
Subject: 16081 5 - Ardderroo Wind Farm Scoping Document

Yvonne

McCarthy Keville O'Sullivan Ltd. is preparing a planning application and Environmental Impact Statement (EIS) on behalf of Ardderroo Windfarm Ltd. for a proposed wind energy development at Killaguile, Letter, Ardderroo, Uggool and Finnaun, Co. Galway.

In December 2015, An Bord Pleanála (Board) refused planning permission for the proposed Ardderroo Wind Farm development (ABP Ref.07.PA0036) following a recommendation for refusal by the Planning Inspector. The reasons for refusal were that, according to the Board, the ornithology and bat survey data provided in the Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) was inadequate in duration and scope with regard to best international practice and, therefore, there was insufficient information on which to base a robust assessment of the potential impacts on bird and bat species, or to consider the potential impacts on the qualifying interests on several Natura 2000 sites in the vicinity of the proposed development. In general, the planning inspector and the Board concurred with the majority of the findings in the EIS and considered that a wind farm development of the scale proposed and at this location was acceptable in principal. The underlying reasons for refusal are considered to be of a technical nature related to survey methodologies which can and are being addressed for a new application for the proposed development.

The proposed wind energy project will encompass approximately 29 no. wind turbines with a minimum total output of approximately 65 Megawatts (MW). In this regard, it is intended to submit the planning permission application directly to the Board, under the provisions of Planning and Development (Strategic Infrastructure) Act 2006. The current Strategic Infrastructure Development (SID) thresholds for wind energy set out in the 7th Schedule of the Planning and Development Act 2000, as amended, are 25 no. turbines or 50 MW. An application has been made to An Bord Pleanála seeking a determination in relation to the SID status, or otherwise, of the proposed wind energy development.

As part of the EIA process, we would welcome any comments that you might have in relation to the proposed project, including baseline data, survey techniques or potential environmental effects that should be considered as part of the assessment process and in preparation of the EIS and NIS. In order to facilitate this a Scoping Document providing details of the proposed project, the site of the proposed development and the proposed scope of works has been attached to this email.

If you could return any comments or suggestions at your earliest convenience it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

Privileged, confidential and/or copyright information may be contained in this E-Mail.

This E-Mail is for the use of the intended addressee. If you are not the intended addressee, or the person responsible for delivering it to the intended addressee, you may not copy, forward, disclose or otherwise use it or any part of it in any way whatsoever. To do so is prohibited and may be unlawful.

If you receive this E-Mail by mistake, please advise the sender immediately by using the REPLY facility in your E-Mail software and delete all associated material immediately.

Eoin McCarthy

From: Yvonne Jackson <Yvonne.Jackson@failteireland.ie>
Sent: 19 January 2017 10:28
To: Eoin McCarthy
Subject: RE: 16081 5 - Ardderroo Wind Farm Scoping Document
Attachments: EIS & Tourism Guidelines.pdf

Dear Eoin,

I wish to acknowledge receipt of your e-mail in relation to **160815 – Ardderroo Wind Farm Scoping Document**.

I have attached a copy of Fáilte Ireland's Guidelines for the treatment of tourism in an EIS, which we recommend should be taken into account in preparing the EIS.

Yours sincerely,

Yvonne

Yvonne Jackson

Investment and Innovation | Fáilte Ireland | Áras Fáilte | 88/95 Amiens Street | Dublin 1

T: 01 8847224

W: www.failteireland.ie



From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 07 December 2016 17:33
To: Yvonne Jackson
Subject: 16081 5 - Ardderroo Wind Farm Scoping Document

Yvonne

McCarthy Keville O'Sullivan Ltd. is preparing a planning application and Environmental Impact Statement (EIS) on behalf of Ardderroo Windfarm Ltd. for a proposed wind energy development at Killaguile, Letter, Ardderroo, Uggool and Finnaun, Co. Galway.

In December 2015, An Bord Pleanála (Board) refused planning permission for the proposed Ardderroo Wind Farm development (ABP Ref.07.PA0036) following a recommendation for refusal by the Planning Inspector. The reasons for refusal were that, according to the Board, the ornithology and bat survey data provided in the Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) was inadequate in duration and scope with regard to best international practice and, therefore, there was insufficient information on which to base a robust assessment of the potential impacts on bird and bat species, or to consider the potential impacts on the qualifying interests on several Natura 2000 sites in the vicinity of the proposed development. In general, the planning inspector and the Board concurred with the majority of the findings in the EIS and considered that a wind farm development of the scale proposed and at this location was acceptable in principal. The underlying reasons for refusal are considered to be of a technical nature related to survey methodologies which can and are being addressed for a new application for the proposed development.

The proposed wind energy project will encompass approximately 29 no. wind turbines with a minimum total output of approximately 65 Megawatts (MW). In this regard, it is intended to submit the planning permission application directly to the Board, under the provisions of Planning and Development (Strategic Infrastructure) Act 2006. The current Strategic Infrastructure Development (SID) thresholds for wind energy set out in the 7th Schedule of the Planning and Development Act 2000, as amended, are 25 no. turbines or 50 MW. An application has been made to An Bord Pleanála seeking a determination in relation to the SID status, or otherwise, of the proposed wind energy development.

As part of the EIA process, we would welcome any comments that you might have in relation to the proposed project, including baseline data, survey techniques or potential environmental effects that should be considered as part of the assessment process and in preparation of the EIS and NIS. In order to facilitate this a Scoping Document providing details of the proposed project, the site of the proposed development and the proposed scope of works has been attached to this email.

If you could return any comments or suggestions at your earliest convenience it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

Privileged, confidential and/or copyright information may be contained in this E-Mail.

This E-Mail is for the use of the intended addressee. If you are not the intended addressee, or the person responsible for delivering it to the intended addressee, you may not copy, forward, disclose or otherwise use it or any part of it in any way whatsoever. To do so is prohibited and may be unlawful.

If you receive this E-Mail by mistake, please advise the sender immediately by using the REPLY facility in your E-Mail software and delete all associated material immediately.

Guidelines on the treatment of tourism in an Environmental Impact Statement

1. Introduction

Tourism is a significant component of the Irish Economy – estimated to employ approximately 205,000 people – and contributing €6.6 billion in spending to the economy in 2014. The environment is one of the main resources upon which this activity depends – so it is important that the EIS evaluates whether and how the interacting impacts of a project are likely to affect tourism resources.

The purpose of this short note is to provide guidance on how these impacts can be assessed through the existing EIA process. Undertaking an EIA is governed by the EIA Advice Notes published by the EPA. These Advice Notes contain detailed guidance on how to describe and evaluate the effects arising from a range of projects, including tourism projects.

These guidelines were written with the assistance of Conor Skehan, Head of Department of Environment and Planning, Dublin Institute of Technology.

2. Tourism and the Environment

There are two interactions between tourism and the environment.

1. Impacts caused by Tourism Projects
2. Impacts affecting Tourism (e.g. the quality of a destination or a tourism activity)

Impacts caused by Tourism Projects

Tourism projects can give rise to effects on the environment. These are specifically dealt with under a number of Project Types in the Advice Notes, specifically:

12 TOURISM AND LEISURE

- a. Ski-runs, ski-lifts and cable-cars where the length would exceed 500 metres and associated developments. Project Type 20
- b. Sea water marinas where the number of berths would exceed 300 and fresh water marinas where the number of berths would exceed 100. Project Type 10

c. Holiday villages which would consist of more than 100 holiday homes outside built-up areas; hotel complexes outside built-up areas which would have an area of 20 hectares or more or an accommodation capacity exceeding 300 bedrooms. Project Type 28

d. Permanent camp sites and caravan sites where the number of pitches would be greater than 100. Project Type 28

e. Theme parks occupying an area greater than 5 hectares. Project Type 29

Figure 1 The Advice Notes contain detailed descriptions on how to describe and evaluate the effects arising from a range of tourism projects.

Impacts affecting Tourism

Environmental effects of other projects on tourism are not specifically addressed in the Advice Notes. Taking account of the significance of tourism to the Irish economy a specialist topic of 'Tourism' has been prepared to facilitate a systematic evaluation of effects on this sector within the format laid down for other parts of the Environmental Impact Statement.

It is not intended that the assessment of effects on tourism should become a separate section of the Impact Statement, instead it is intended to become a specialist sub-section of the topic 'Human Beings' which is currently described in Section 2 of the Advice Notes

3. Tourism in the Existing Environment

Introduction

Visitor attitude surveys reveal that the following factors – in order of priority – are the reasons that tourists visit and enjoy Ireland:

- Beautiful scenery
- Friendly & hospitable people
- Safe & Secure
- Easy, relaxed pace of life
- Unspoilt environment
- Nature, wildlife, flora
- Interesting history & culture
- Plenty of things to see and do
- Good range of natural attractions

It is noteworthy that over half of the factors listed are environmental and that all others are related to the way of life of the people. The following describes how these factors are considered within an EIS, set out under EIA topic headings, and how they interact with tourism.

Beautiful scenery

This is covered in the '*Landscape*' Section. Particular attention needs to be paid to effects on views from existing purpose-built tourism facilities, especially hotels, as well as views from touring routes and walking trails. It is important to note that there appears to be evidence that the visitor's expectations of 'beautiful' scenery does not exclude an admiration of new modern developments – such as windfarms – which appear to be seen as indicative of an modern, informed and responsible attitude to the environment.

Friendly & hospitable people

This is not an environmental factor though it is indirectly covered under the '*Human Beings*' section of the EIS. The principal factor is the ratio of visitors to residents. This is of less significance in areas with long-established patterns of tourism.

Safe & Secure

This is not an environmental issue – though some of the factors that are sometimes covered under the heading of '*Human Beings*' – such as social inclusion or poverty – can point to likely effects and interactions.

Easy, relaxed pace of life

This is not an environmental issue though it is partially covered under '*Human Beings*' – see comments above.

Unspoilt environment

This is covered under the sections dealing with '*Landscape*', '*Flora*' and '*Fauna*' and to a lesser extent under emissions to '*Water*' and '*Air*'. In some instances traffic congestion, especially in rural areas, can be an issue, this is usually covered within '*Material Assets*'.

Nature, wildlife, flora

This is principally covered under the headings of '*Flora*' and '*Fauna*' and to a lesser extent by '*Landscape*', '*Water*' and '*Air*'. The principal issues being to avoid any effects that might reduce the health or extent of the habitats. This can occur either directly, by impinging on the site, or indirectly, through emission, that can affect the natural resources, like clean water, which the habitat depends on. It also considers effect on physical access to and visibility of these sites. Occasionally there are concerns about the disturbance or wear and tear of visitor numbers to such sites.

Interesting history & culture

This is principally covered under '*Cultural Heritage*' and, to a lesser extent, under '*Human Beings*'. The principal issues being to avoid damage to sites and structures of cultural, historical, archaeological or architectural significance – and to their contexts or settings. It also considers effect on physical access to and visibility of these sites. Occasionally there are concerns about the wear and tear of visitor numbers to such sites.

Plenty of things to see and do.

This is not an environmental issue though it is partially covered by the 'Human Beings' section, where the tourism resources of an area are described and assessed.

Good range of natural attractions

This is covered by the 'Landscape', 'Flora', 'Fauna', and 'Cultural Heritage' sections of the EIS.

4. Project factors affecting Tourism

Introduction

Tourism can be affected both by the structures or emissions of new developments as well as by interactions between new activities and tourism activities – for example the effects of high volumes of heavy goods vehicles passing through hitherto quiet, scenic, rural areas. Tourism can be affected by a number of the characteristics of the new project such as:

- New Developments
 - Social Considerations
 - Land-uses and Activities
-
- *New Developments* - will the development stimulate or suppress demand for additional tourism development in the area? If so, what type, how much and where? Marinas, golf courses, other major sporting facilities as well as theme parks and larger conference facilities can all stimulate the emergence of new accommodation, catering and leisure facilities often within an extensive area around a new primary visitor facility. Extensive urbanisation and large scale infrastructure as well as certain processing and extractive industries all have the potential to suppress demand for additional tourism – but usually only in the immediate locality of the new development. It should be noted however, that some types of new or improved large scale infrastructure – such as roads – can improve the visitor experience – by increasing safety and comfort or can convey a sense of environmental responsibility – such as wind turbines.
 - *Social Consideration* - will the development change patterns and types of activity and land use? Will it affect the demographics, economy or social dynamics of the locality?
 - *Land-use* - will there be severance, loss of rights of way or amenities, conflicts, or other changes likely to ultimately alter the character and use of the tourism resources in the surrounding area?

Existing Tourism

In the area likely to be affected by the proposed development, the following attributes of tourism, or the resources that sustain tourism, should be described under the following headings.

Note that the detailed description and analysis will usually be covered in the section dealing with the relevant environmental topic – such as '*Landscape*'. Only the relevant finding as to the likely significance to, or effect on, tourism needs to be summarised in this section.

Context

Indicate the location of sensitive neighbouring tourism resources that are likely to be directly affected, and other premises which although located elsewhere, may be the subject of secondary impacts such as alteration of traffic flows or increased urban development. The following should be noted in particular:

- Hotels, conference centres, holiday accommodation – including holiday villages, holiday homes, and caravan parks.
- Visitor centres, Interpretive centres and theme parks
- Golf courses, adventure sport centres and other visitor sporting facilities
- Marinas and boating facilities
- Angling facilities
- Equestrian facilities
- Tourism-related specialist retailers and visitor facilities
- Historic and Cultural Sites
- Pedestrian, cycling, equestrian, vehicular and coach touring routes

Indicate the numbers of premises and visitors likely to be directly affected directly and indirectly.

Identify and quantify, where possible, their potential receptors of impacts, noting in particular transient populations, such as drivers, walkers, seasonal and other non-resident groups.

Describe any significant trends evident in the overall growth or decline of these numbers, or of any changes in the proportion of one type of activity relative to any other.

Indicate any commercial tourism activity which likely to be directly affected, with resultant environmental impacts.

Character

Indicate the occupations, activities or interests of principal types of tourism in the area. – Where relevant, describe the specific environmental resources or attributes in the existing environment which each group uses or values; where relevant, indicate the time, duration or seasonality of any of those activities. For example describe the number of guides, boats and anglers who use a salmon fishery and the duration of the salmon season as well as the quantity and type of local accommodation that is believed to be used by the anglers.

Significance

Indicate the significance of the principal tourism assets or activities likely to be affected. Refer to any existing formal or published designation or recognition of such significance. Where possible provide an estimate of the contribution of such

tourism activities to the local economy. For instance refer to the number of annual visitors to a tourism attraction or to the grading of a hotel.

Sensitivity

Describe any significant concerns, fears or opposition to the development known to exist among tourism interests. Identify, where possible, the particular aspect of the development which is of concern, together with the part of the existing tourism resource which may be threatened. For instance describe the extent of a potential visual intrusion onto a site of historic significance which is the main local tourist attraction.

5. Impacts on Tourism

"Do Nothing" Impact;

Describe how trends evident in the existing environment will continue and how these trends will affect tourism.

Predicted impact;

- Describe the location, type, significance, magnitude/extent of the tourism activities or assets that are likely to be affected.

- Describe how the new development will affect the balance between long-established and new dwellers in an area and its affect on the cultural or linguistic distinctiveness of an area. For example describe the effect of a new multi-national population required for an international call-centre located in a Gaeltacht area.

- Describe how changes in patterns of employment, land use and economic activity arising from the proposed development will affect tourism, for example, illustrating how a new industrial development will diversify local employment opportunities thereby reducing the area's unsustainable over-reliance on seasonal tourism.

- Describe the consequences of change, referring to indirect, secondary and cumulative impacts on tourism; Examples can include describing how the new development may lead to a reduced assimilative capacity for traffic or water during the peak of the tourism season or how new urbanism combined with existing patterns of tourism may lead to unsustainable levels of pedestrian traffic through a sensitive habitat.

- Describe the potential for interaction between changes induced in tourism and other uses that may affect the environment – for instance increasing new tourism-related housing affecting water resources or structures

- Describe the worst case for tourism if all mitigation measures fail.

6. Mitigating adverse impact on Tourism

Describe the mitigation measures proposed to:

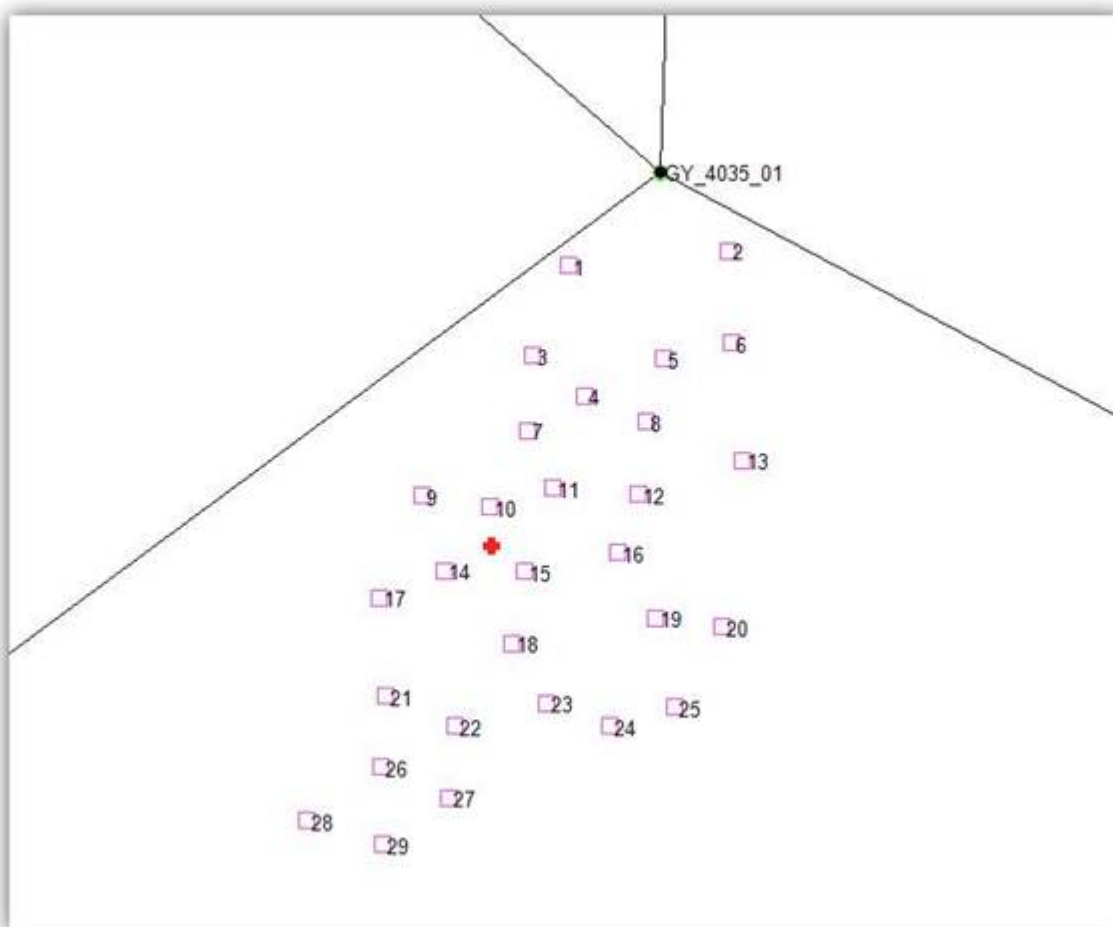
- *avoid* sensitive tourism resources – such as views, access, and amenity areas including habitats as well as historical or cultural sites and structures.
- *reduce* the exposure of sensitive resources to excessive environmental burdens arising from the development's emissions or volumes of traffic [pedestrian and vehicular], and/or losses of amenity arising from visually conspicuous elements of the development – for example by prioritizing visual screening of views from a hotel towards a quarry.
- *reduce* the adverse effects to tourism land uses and patterns of activities – especially through interactions arising from significant changes in the intensity of use or contrasts of character or appearance – for example by separating traffic routes for industrial and tourism traffic.
- *remedy* any unavoidable significant residual adverse effects on tourism resources or activities, for example by providing alternative access to tourism amenities – such as waterways or monuments.

Eoin McCarthy

From: John Bagnall <John.Bagnall@mosaicnet.ie>
Sent: 13 December 2016 14:24
To: Eoin McCarthy
Cc: 'Merriman, Myles (Meteor)'; 'David.Humphreys@meteor.ie'; James Brennan; WindFarmsDG
Subject: RE: FW: 160815 - Ardderroo Wind Farm, Co. Galway
Attachments: T Layout V1 - 160815 - 2015.09.22.xls

Eoin,

There are no turbine locations specified in the official scoping document but I do see you have included the Meteor transmission path buffer zones in the document. We have no new or other planned links in the area and are happy with the development to proceed.



Kind regards,
John

From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 08 December 2016 08:11
To: John Bagnall
Cc: 'Merriman, Myles (Meteor)'; 'David.Humphreys@meteor.ie'; James Brennan; WindFarmsDG
Subject: RE: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Hi John,

Further to our previous emails regarding the proposed Ardderroo Wind Farm development, please see attached the official scoping document providing details of the proposed project, the site of the proposed development and the proposed scope of works has been attached to this email.

If you require any further information, please do not hesitate to contact me.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

From: Eoin McCarthy
Sent: 14 November 2016 10:19
To: John Bagnall <John.Bagnall@mosaicnet.ie>
Cc: Merriman, Myles (Meteor) <myles.merriman@meteor.ie>; David.Humphreys@meteor.ie; James Brennan <James.Brennan@mosaicnet.ie>; WindFarmsDG <windfarmsdg@mosaicnet.ie>
Subject: RE: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Hi John,

Please see proposed turbine co-ordinates attached.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

From: John Bagnall [<mailto:John.Bagnall@mosaicnet.ie>]
Sent: 14 November 2016 09:32

To: Eoin McCarthy <emccarthy@mccarthykos.ie>

Cc: Merriman, Myles (Meteor) <myles.merriman@meteor.ie>; David.Humphreys@meteor.ie; James Brennan <James.Brennan@mosaicnet.ie>; WindFarmsDG <windfarmsdg@mosaicnet.ie>

Subject: RE: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Eoin,

Meteor have four transmission paths within the vicinity of the proposed windfarm that may be at risk. Could you please send on the proposed turbine locations for further analysis.

Transmission path end points;

TXN Path1; GY_4035 E113649 N 237196 to GY_4036 E105731.7 N 244318.9

TXN Path2; GY_4035 E113649 N 237196 to GY_4046 E101555.3 N 244318.9

TXN Path3; GY_4035 E113649 N 237196 to GY_9096 E132100 N226990

TXN Path4; GY_4035 E113649 N 237196 to GY_1578 E114578 N 254559

Please be advised that my checks are for the Meteor network only.

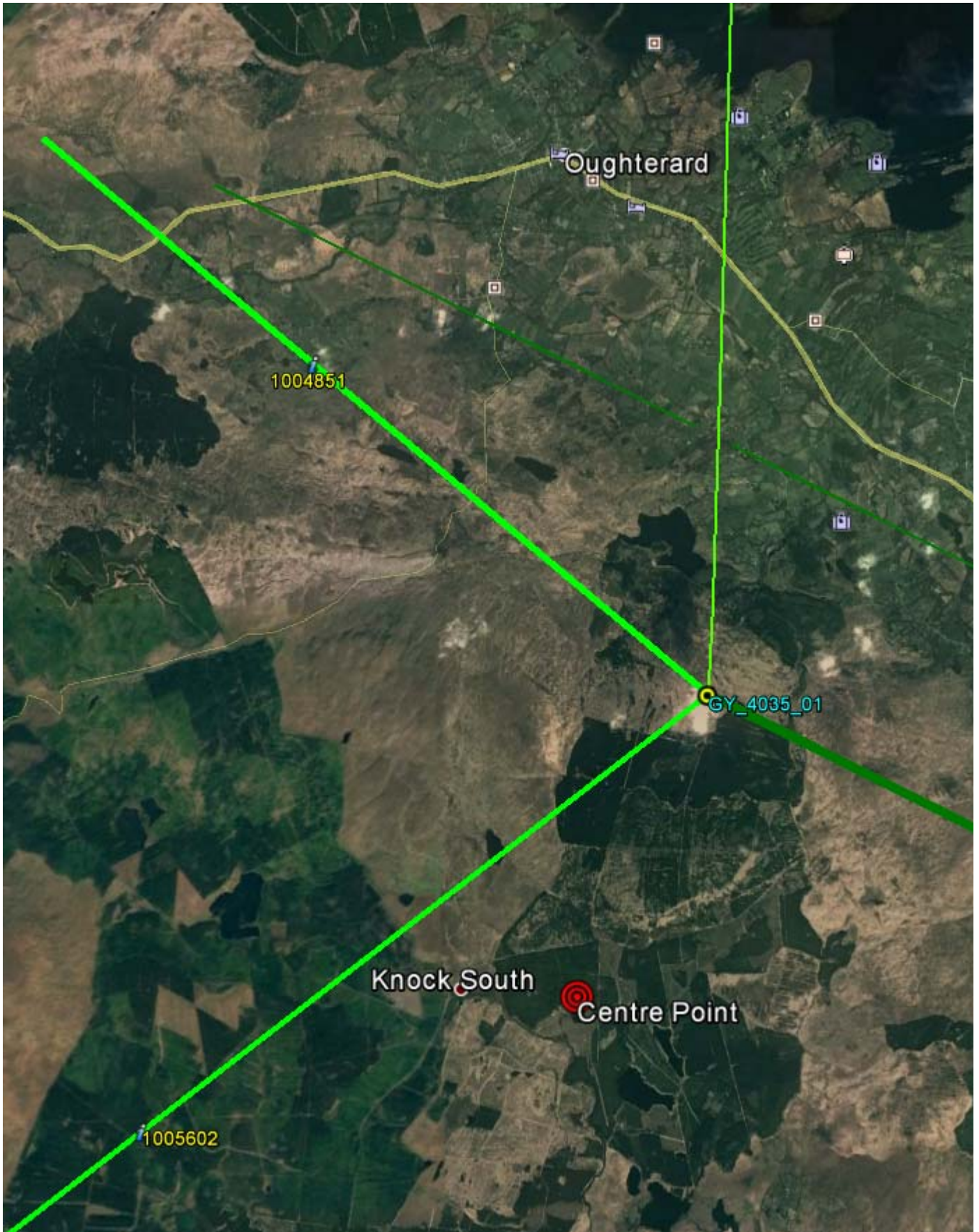
Kind regards,

John Bagnall | Mosaic

Transmission Design & Engineering

3rd Floor, 5 Harbourmaster Place, IFSC, Dublin 1.

M +353 (0)85 1053746 | E john.bagnall@mosaicnet.ie



From: James Brennan
Sent: 11 November 2016 18:10
To: WindFarmsDG
Cc: John Bagnall; Alan Hutchinson; Gerry Callan; Merriman, Myles (Meteor); David.Humphreys@meteor.ie
Subject: RE: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Lads,

Can you revert to David & Myles on this please?

Thanks,
James.

Phone: 083 4869777

From: James Brennan
Sent: 07 November 2016 18:13
To: WindFarmsDG
Cc: John Bagnall; Alan Hutchinson; Gerry Callan; Merriman, Myles (Meteor)
Subject: Fwd: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Fyi

From: Myles.Merriman@meteor.ie <Myles.Merriman@meteor.ie>
Sent: Monday, November 7, 2016 1:46:00 PM
To: James Brennan
Cc: David.Humphreys@meteor.ie
Subject: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Hi James,

Can you pass this on to the wind farm team?

I can't remember the email address!

Thanks,

Myles

From: Humphreys, David (Meteor)
Sent: 07 November 2016 12:51
To: Merriman, Myles (Meteor)
Subject: FW: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Myles,

Can you assist with the below request?

Regards,

David
085 171 5401

From: Eoin McCarthy [<mailto:emccarthy@mccarthykos.ie>]
Sent: 07 November 2016 11:16
To: Humphreys, David (Meteor)
Subject: 160815 - Ardderroo Wind Farm, Co. Galway

Hi David,

We are currently carrying out a constraints study on a proposed wind farm site at Ardderroe and adjacent townlands in west Co. Galway, approximately 6km south of Oughterard. The co-ordinates of the approximate centre of the site are E112178, N234085. Please also see attached a PDF of the site location.

Could you please provide Irish Grid co-ordinates for the start and end points of any Meteor telecom links in the vicinity of the site and the required exclusion buffers on these links.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

Meteor Mobile Communications Limited trading as Meteor.
Registered Office: 1 Heuston South Quarter, St. Johns Road, Dublin 8, Ireland.
Registered in Ireland: 282645

DISCLAIMER: This email and its attachments contain confidential information and may be legally privileged. The message is intended only for the addressee(s) stated above. If you are not the named addressee(s) or intended recipient please do not use, copy, disseminate or disclose the information to anyone. If you have received this email in error please immediately notify the sender at Meteor and delete the material from any system and destroy any copies.

Eoin McCarthy

From: Matthew Craig <matthew.craig@2rn.ie>
Sent: 01 November 2018 11:16
To: Eoin McCarthy
Cc: Johnny Evans; Michael Watson
Subject: RE: 160815 - Ardderroo Wind Farm 2RN Protocol Agreement

Hi Eoin,

The Turbine sites are only a cause for concern for us for Saorview viewers to the north west of the site receiving from Maghera.

As this area is remote and has a very low population density, the number of viewers effected, if there was any impact would be low.

Matthew Craig

Project Engineer
Projects and Coverage Planning
2RN
Block B, Cookstown Court, Old Belgard Road, Tallaght, Dublin 24, Ireland
D24 WK28
Phone: + 353 (0) 1 2082261
Mobile: + 353 (0) 87 7509955

From: Eoin McCarthy <emccarthy@mccarthykos.ie>
Sent: 19 October 2018 15:38
To: Matthew Craig <matthew.craig@2rn.ie>
Cc: Johnny Evans <Johnny.Evans@2rn.ie>; Michael Watson <mwatson@mccarthykos.ie>
Subject: RE: 160815 - Ardderroo Wind Farm 2RN Protocol Agreement

Hi Matthew,

That coordinate has been corrected now. Updated form attached.

Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - *News - Newsletter Sign Up*

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

From: Matthew Craig <matthew.craig@2rn.ie>
Sent: 19 October 2018 15:33
To: Eoin McCarthy <emccarthy@mccarthykos.ie>
Cc: Johnny Evans <Johnny.Evans@2rn.ie>; Michael Watson <mwatson@mccarthykos.ie>
Subject: RE: 160815 - Ardderroo Wind Farm 2RN Protocol Agreement

Hi Eoin,

Could you please check the X coordinates for the turbine 8?

Regards

Matthew Craig

Project Engineer
Projects and Coverage Planning
2RN
Block B, Cookstown Court, Old Belgard Road, Tallaght, Dublin 24, Ireland
D24 WK28
Phone: + 353 (0) 1 2082261
Mobile: + 353 (0) 87 7509955

From: Eoin McCarthy <emccarthy@mccarthykos.ie>
Sent: 19 October 2018 13:38
To: Matthew Craig <matthew.craig@2rn.ie>
Cc: Johnny Evans <Johnny.Evans@2rn.ie>; Michael Watson <mwatson@mccarthykos.ie>; windfarms@2rn.ie
Subject: RE: 160815 - Ardderroo Wind Farm 2RN Protocol Agreement

Hi Matthew,

Please see attached completed details form and accompanying site location map.

If you have any queries, please do not hesitate to give me a call.

Kind regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - News - Newsletter Sign Up

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

From: Matthew Craig <matthew.craig@2rn.ie>
Sent: 19 October 2018 13:04

To: Eoin McCarthy <emccarthy@mccarthykos.ie>
Cc: Johnny Evans <Johnny.Evans@2rn.ie>; Michael Watson <mwatson@mccarthykos.ie>
Subject: RE: 160815 - Ardderroo Wind Farm 2RN Protocol Agreement

Hi Eoin,

Please find attached a blank Windfarm Details form.
I have also attached your original form for reference.

Regards

Matthew Craig

Project Engineer
Projects and Coverage Planning
2RN
Block B, Cookstown Court, Old Belgard Road, Tallaght, Dublin 24, Ireland
D24 WK28
Phone: + 353 (0) 1 2082261
Mobile: + 353 (0) 87 7509955

From: Eoin McCarthy <emccarthy@mccarthykos.ie>
Sent: 19 October 2018 10:49
To: Johnny Evans <Johnny.Evans@2rn.ie>
Cc: Michael Watson <mwatson@mccarthykos.ie>
Subject: 160815 - Ardderroo Wind Farm 2RN Protocol Agreement

Hi Johnny,

The attached protocol agreement was provided by 2RN in March 2017 for the proposed Ardderroo Wind Farm located in West Galway. Since March 2017 there have been some amendments to the proposed layout and site boundary. Could you please send on a blank information form so that we can apply for an updated agreement prior to lodging the application for the wind farm.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

2rn Disclaimer: The information in this e-mail is confidential and may be legally privileged. It is intended solely for the addressee. Access to this e-mail by anyone else is unauthorised. If you are not the intended recipient, any disclosure, copying, distribution, or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. Please note that emails to, from and within 2rn may be subject to the Freedom of Information Act 2014 and may be liable to disclosure

2rn Disclaimer: The information in this e-mail is confidential and may be legally privileged. It is intended solely for the addressee. Access to this e-mail by anyone else is unauthorised. If you are not the intended recipient, any disclosure, copying, distribution, or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. Please note that emails to, from and within 2rn may be subject to the Freedom of Information Act 2014 and may be liable to disclosure

2rn Disclaimer: The information in this e-mail is confidential and may be legally privileged. It is intended solely for the addressee. Access to this e-mail by anyone else is unauthorised. If you are not the intended recipient, any disclosure, copying, distribution, or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. Please note that emails to, from and within 2rn may be subject to the Freedom of Information Act 2014 and may be liable to disclosure

2rn Disclaimer: The information in this e-mail is confidential and may be legally privileged. It is intended solely for the addressee. Access to this e-mail by anyone else is unauthorised. If you are not the intended recipient, any disclosure, copying, distribution, or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful. Please note that emails to, from and within 2rn may be subject to the Freedom of Information Act 2014 and may be liable to disclosure

Eoin McCarthy

From: Gerry Callan <Gerry.Callan@mosaicnet.ie>
Sent: 07 November 2016 18:36
To: anthony.malone@bt.com; Alan Hutchinson
Cc: Eoin McCarthy; WindFarmsDG
Subject: Re: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Eoin,

I've analysed this proposed Windfarm Development at Ardderroo, Co. Galway, on behalf of the 3 network (incl. the legacy O2 network).

I can confirm that this development should have no impact on the existing 3/O2 transmission network. Based on the centre point provided our closest link is 3.4km north-east of this location and doesn't traverse the development area. Our next closest link is 5.9km South of the centre point.

When you have specific coordinates for the proposed turbines, do please let us know so we can undertake a more extensive analysis, however at this point in time we have no immediate concerns about this development.

Best wishes,

Gerry Callan,
3/Mosaic,
3rd Floor, 5 Harbourmaster Place,
IFSC, Dublin 1.
Tel: 086 3884246
Remedy: Tech-Netshare-ANCO-Dimension-Trans_Eng

From: anthony.malone@bt.com <anthony.malone@bt.com>
Sent: 07 November 2016 13:50
To: Gerry Callan; Alan Hutchinson
Cc: emccarthy@mccarthykos.ie
Subject: RE: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Gerry,

[Can you take a look at this for Eoin please](#)

Regards,
Anthony Malone
Transmission Operations Engineer
BT Ireland, Unit 2, Dundrum Business Park, Dundrum, Dublin 14
Mob: +353 (0)83 3704878
Landline: 01 432 6058

From: Anthony Malone [mailto:Anthony.Malone@three.ie]
Sent: 07 November 2016 13:43
To: Malone,A,Anthony,HQE3 R <anthony.malone@bt.com>
Subject: FW: 160815 - Ardderroo Wind Farm, Co. Galway

From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 07 November 2016 11:22
To: Anthony Malone
Subject: 160815 - Ardderroo Wind Farm, Co. Galway

Hi Anthony,

We are currently carrying out a constraints study on a proposed wind farm site at Ardderroo and adjacent townlands in west Co. Galway, approximately 6km south of Oughterard. The co-ordinates of the approximate centre of the site are E112178, N234085. Please also see attached a PDF of the site location.

Could you please provide Irish Grid co-ordinates for the start and end points of any Three Ireland telecom links in the vicinity of the site and the required exclusion buffers on these links.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

This e-mail message (including any attachment) is intended only for the personal use of the recipient(s) named above. This message is confidential and may be legally privileged. If you are not an intended recipient, you may not review, copy or distribute this message. If you have received this communication in error, please notify us immediately by e-mail and delete the original message.

Any views or opinions expressed in this message are those of the author only.

Three Ireland (Hutchison) Limited is a company registered in Ireland with company number 316982. Registered Office 28/29 Sir John Rogerson's Quay, Dublin 2, Ireland. Three Ireland Services (Hutchison) Limited is a company registered in Ireland with company number 234895. Registered Office 28/29 Sir John Rogerson's Quay, Dublin 2, Ireland.

Furthermore, this message (including any attachment) does not create any legally binding rights or obligations whatsoever, which may only be created by the exchange of hard copy documents signed by a duly authorized representative(s) of Three Ireland (Hutchison) Limited or Three Ireland Services (Hutchison) Limited.

This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

Eoin McCarthy

From: Gavin Byrne <gavin.byrne@netshare.ie>
Sent: 10 January 2017 14:48
To: Eoin McCarthy
Subject: RE: 160815 - Ardderroo Wind Farm Scoping Document

Hi Eoin,

Please see below

A-End Site ID	A-End Site Name	A-End Latitude	A-End Longitude	Easting	Northing
GYINV	Inverin	53.26943572	-9.470389079	101946	225323
GY112	Buffy Meteor	53.37811167	-9.298238556	113651	237196
GYADC	Ashford Castle	53.53450516	-9.284723314	114864	254584
GYTBY	Tonabrockey	53.29159385	-9.110978186	125963	227357

Regards,

Gavin Byrne BE, MSc, MIEI
Transmission Planning & Strategy Engineer
Netshare Ireland
Iveagh Building, The Park, Carrickmines, Dublin 18

mobile: +353 87 6448159
email: gavin.byrne@netshare.ie



From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 10 January 2017 14:00
To: Gavin Byrne <gavin.byrne@netshare.ie>
Subject: RE: 160815 - Ardderroo Wind Farm Scoping Document

Hi Gavin,

Would you have the co-ordinates the A and B locations in Irish Grid?

Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - *News - Newsletter Sign Up*

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

From: Gavin Byrne [<mailto:gavin.byrne@netshare.ie>]
Sent: 29 December 2016 10:54
To: Eoin McCarthy <emccarthy@mccarthykos.ie>; David Powders <david.powders@netshare.ie>
Cc: Kevin O'Neill <kevin.oneill@netshare.ie>; Ulrich Philipps <ulrich.philipps@netshare.ie>; Deirdre McDermott <deirdre.mcdermott@netshare.ie>; Darragh Dennehy <darragh.dennehy@netshare.ie>; Brian McHugh <brian.mchugh@netshare.ie>
Subject: RE: 160815 - Ardderroo Wind Farm Scoping Document

Hi Eoin,

Please see below. There are potentially three impacted radiolinks, impacting up to 5 locations. I have included the link information for each of the potentially impacted links, including GPS co-ordinates, bearings, Frequency bands hop distance. Unless you can provide detailed, per turbine co-ordinates for the proposed development, I cannot provide you with a detailed analysis of this development or state if it will or will not impact on the Vodafone Network.

What I can say at this stage, is that all of the impacted sites are very remote and therefore important locations, including:

Inis Mór GYKRN, Ashford Castle GADC, Inveran TG4 Studio GY578, Inverin GYINV, Bruffy GY112.

Due to the remote nature of these locations, and the terrain in the Connemara region, Line of Site (LOS) options are extremely limited.

Therefore, I would ask that you please send further information detailing the precise proposed turbine locations in Irish Grid Easting/Northing and/or WSG84 GPS, the precise dimensions for each turbine, including Hub height, Rotor Diameter and base diameter of the hub, so that we can satisfy ourselves as to the true impact this development may or may not have on the Vodafone Network.

Radiolink ID	A-End Site ID	A-End Site Name	A-End Latitude	A-End Longitude	A-End Bearing	B-End Site ID	B-End Name
GY112GYINV_S0	GYINV	Inverin	53.26943572	-9.470389079	43.35	GY112	Bruffy
GYTBYGY112_S0	GY112	Bruffy Meteor	53.37811167	-9.298238556	127.65	GYTBY	Tonal
GY112GYADC_S0	GYADC	Ashford Castle	53.53450516	-9.284723314	182.95	GY112	Bruffy



Regards,

Gavin Byrne BE, MSc, MIEI
Transmission Planning & Strategy Engineer
Netshare Ireland
Iveagh Building, The Park, Carrickmines, Dublin 18

mobile: +353 87 6448159
email: gavin.byrne@netshare.ie



NetShare Ireland

The Future of Mobile Networks

From: Eoin McCarthy [<mailto:emccarthy@mccarthykos.ie>]
Sent: 08 December 2016 09:28
To: David Powders <david.powders@netshare.ie>
Cc: Gavin Byrne <gavin.byrne@netshare.ie>
Subject: 160815 - Ardderroo Wind Farm Scoping Document

Hi David,

McCarthy Keville O'Sullivan Ltd. is preparing a planning application and Environmental Impact Statement (EIS) on behalf of Ardderroo Windfarm Ltd. for a proposed wind energy development at Killaguile, Letter, Ardderroo, Uggool and Finnaun, Co. Galway.

In December 2015, An Bord Pleanála (Board) refused planning permission for the proposed Ardderroo Wind Farm development (ABP Ref.07.PA0036) following a recommendation for refusal by the Planning Inspector. The reasons for refusal were that, according to the Board, the ornithology and bat survey data provided in the Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) was inadequate in duration and scope with regard to best international practice and, therefore, there was insufficient information on which to base a robust assessment of the potential impacts on bird and bat species, or to consider the potential impacts on the qualifying interests on several Natura 2000 sites in the vicinity of the proposed development. In general, the planning inspector and the Board concurred with the majority of the findings in the EIS and considered that a wind farm development of the scale proposed and at this location was acceptable in principal. The underlying reasons for refusal are considered to be of a technical nature related to survey methodologies which can and are being addressed for a new application for the proposed development.

The proposed wind energy project will encompass approximately 29 no. wind turbines with a minimum total output of approximately 65 Megawatts (MW). In this regard, it is intended to submit the planning permission application directly to the Board, under the provisions of Planning and Development (Strategic Infrastructure) Act 2006. The current Strategic Infrastructure Development (SID) thresholds for wind energy set out in the 7th Schedule of the Planning and Development Act 2000, as amended, are 25 no. turbines or 50 MW. An application has been made to An Bord Pleanála seeking a determination in relation to the SID status, or otherwise, of the proposed wind energy development.

As part of the EIA process, we would welcome any comments that you might have in relation to the proposed project, including baseline data, survey techniques or potential environmental effects that should be considered as part of the assessment process and in preparation of the EIS and NIS. In order to facilitate this a Scoping Document providing details of the proposed project, the site of the proposed development and the proposed scope of works has been attached to this email.

If you could return any comments or suggestions at your earliest convenience it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

IMPORTANT NOTICE: This e-mail message is intended to be received only by persons entitled to receive the confidential information it may contain. E-mail messages to clients of Eudokia Limited T/A Netshare Ireland may contain information that is confidential and legally privileged. Please do not read, copy, forward, or store this message unless you are an intended recipient of it. If you have received this message in error, please forward it to the sender and delete it completely from your computer system.

Eoin McCarthy

From: Thomas Barry <Tom.Barry@TETRAIRELAND.IE>
Sent: 26 January 2017 13:42
To: Eoin McCarthy
Subject: RE: 160815 - Ardderroo Wind Farm Scoping Document

Eoin,

The development as proposed does not present any coverage concerns for TI. However there may be an impact of radio link services provided to us by eir.

Can you please ensure that the proposal is reviewed by eir.

Regards,
Tom

1	112864	236426
2	114215	236527
3	112543.5	235674.9
4	112978.2	235326.4
5	113650	235628
6	114228	235747
7	112494	235043
8	113487.3	235096.3
9	111589	234513
10	112171	234406
11	112702	234554
12	113413.3	234488
13	114300.9	234762.5
14	111768	233875
15	112446	233855
16	113240	234006
17	111224	233665
18	112332	233255
19	113550	233444
20	114099	233365.1
21	111259	232831
22	111835	232570
23	112616	232750.6
24	113136	232548.7
25	113688.5	232693.5
26	111205	232239
27	111778	231971
28	110573	231801
29	111208	231589

From: Eoin McCarthy [mailto:emccarthy@mccarthykos.ie]
Sent: 13 January 2017 10:10

To: Thomas Barry
Subject: RE: 160815 - Ardderroo Wind Farm Scoping Document

Hi Tom,

Please see attached the coordinates of the currently proposed turbine locations.

The proposed rotor diameter is 126m, the max hub height is 93.5m.

Regards,
Eoin

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - *News - Newsletter Sign Up*

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

From: Thomas Barry [<mailto:Tom.Barry@TETRAIRELAND.IE>]
Sent: 09 January 2017 08:21
To: Eoin McCarthy <emccarthy@mccarthykos.ie>
Subject: RE: 160815 - Ardderroo Wind Farm Scoping Document

Eoin,

Can you provide the turbine locations in easting/northing please, also size of turbine column & blade.
I'll arrange to have reviewed and get back to you.

Regards,
Tom

From: Eoin McCarthy [<mailto:emccarthy@mccarthykos.ie>]
Sent: 06 January 2017 18:42
To: Thomas Barry
Subject: 160815 - Ardderroo Wind Farm Scoping Document

Tom,

McCarthy Keville O'Sullivan Ltd. is preparing a planning application and Environmental Impact Statement (EIS) on behalf of Ardderroo Windfarm Ltd. for a proposed wind energy development at Killaguile, Letter, Ardderroo, Uggool and Finnaun, Co. Galway.

In December 2015, An Bord Pleanála (Board) refused planning permission for the proposed Ardderroo Wind Farm development (ABP Ref.07.PA0036) following a recommendation for refusal by the Planning Inspector. The reasons for refusal were that, according to the Board, the ornithology and bat survey data provided in the Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) was inadequate in duration and scope with regard to best

international practice and, therefore, there was insufficient information on which to base a robust assessment of the potential impacts on bird and bat species, or to consider the potential impacts on the qualifying interests on several Natura 2000 sites in the vicinity of the proposed development. In general, the planning inspector and the Board concurred with the majority of the findings in the EIS and considered that a wind farm development of the scale proposed and at this location was acceptable in principal. The underlying reasons for refusal are considered to be of a technical nature related to survey methodologies which can and are being addressed for a new application for the proposed development.

The proposed wind energy project will encompass approximately 29 no. wind turbines with a minimum total output of approximately 65 Megawatts (MW). In this regard, it is intended to submit the planning permission application directly to the Board, under the provisions of Planning and Development (Strategic Infrastructure) Act 2006. The current Strategic Infrastructure Development (SID) thresholds for wind energy set out in the 7th Schedule of the Planning and Development Act 2000, as amended, are 25 no. turbines or 50 MW. An application has been made to An Bord Pleanála seeking a determination in relation to the SID status, or otherwise, of the proposed wind energy development.

As part of the EIA process, we would welcome any comments that you might have in relation to the proposed project, including baseline data, survey techniques or potential environmental effects that should be considered as part of the assessment process and in preparation of the EIS and NIS. In order to facilitate this a Scoping Document providing details of the proposed project, the site of the proposed development and the proposed scope of works can be downloaded via the Dropbox link below.

<https://www.dropbox.com/s/rv5n3ggtd8dg359/160815%20-%20EIA%20SD%20-%202016.12.06%20-%20F2.pdf?dl=0>

If you could return any comments or suggestions at your earliest convenience it would be much appreciated. If you require any further information, please do not hesitate to contact me.

Kind Regards,

Eoin McCarthy B.Sc. (Env.)
Project Environmental Scientist

McCarthy Keville O'Sullivan Ltd.
Planning & Environmental Consultants

Block 1, G.F.S.C. Moneenageisha Road, Galway, H91N8KK
T: (091) 73 56 11 || F: (091) 77 12 79 || E: info@mccarthykos.ie || W: www.mccarthykos.ie

Subscribe to our monthly email newsletter at: www.mccarthykos.ie - **News - Newsletter Sign Up**

Registered in Ireland No. 462657

This email and any attached files or emails transmitted with it are confidential and intended solely for the use of the individual(s) or entity to whom it is addressed. If the reader is not a representative of the intended recipient(s), any review, dissemination or copying of this message or the information it contains is prohibited. If you have received this email in error please notify the sender of the email and delete the material from any computer. McCarthy Keville O'Sullivan Ltd. does not represent or warrant that any attachment hereto is free from computer viruses or other defects. The opinions expressed in this e-mail and any attachments may be those of the author and are not necessarily those of McCarthy Keville O'Sullivan Ltd.

Mr. Eoin McCarthy
McCarthy Keville O'Sullivan Ltd
Block 1, G.F.S.C.
Moneenageisha Road
Galway



Dáta | Date
15 December 2016

Ár dTag | Our Ref.
TII16-96326

Bhur dTag | Your Ref.
160815

Re: EIA Scoping Document for Proposed Ardderroo Wind Energy Development, Co. Galway

Dear Mr. McCarthy,

Thank you for your letter of 15 December 2016 regarding the above. The position in relation to your enquiry is as follows.

Transport Infrastructure Ireland (TII) wishes to advise that it is not in a position to engage directly with planning applicants in respect to proposed developments. TII will endeavour to consider and respond to planning applications referred to it given its status and duties as a statutory consultee under the Planning Acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidelines as outlined in the Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012). Regard should also be had to other relevant guidance available at www.tii.ie.

TII notes the proposed site accesses the local road network prior to accessing the N59, national secondary road.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals following the examination of any valid planning application referred.

With respect to Environmental Impact Statement (EIS) scoping issues, the recommendations indicated below provide only general guidance for the preparation of EIS, which may affect the National Roads Network.

The developer should have regard, *inter alia*, to the following;

- Consultations should be had with the relevant Local Authority/Roads Design Office with regard to locations of existing and future national road schemes,
- TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development, i.e. N59,
- The developer should assess visual impacts from existing national roads,

- The developer should have regard to any EIS and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should in particular have regard to any potential cumulative impacts,
- The developer, in conducting Environmental Impact Assessment, should have regard to TII Publications,
- The developer, in conducting Environmental Impact Assessment, should have regard to TII's Environmental Assessment and Construction Guidelines, including the *Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes* (National Roads Authority, 2006),
- The EIS should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see *Guidelines for the Treatment of Noise and Vibration in National Road Schemes* (1st Rev., National Roads Authority, 2004),
- It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads. TII's TTA Guidelines (2014) should be referred to in relation to proposed development with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of the TII TTA Guidelines which addresses requirements for sub-threshold TTA,
- The designers are asked to consult TII Publications to determine whether a Road Safety Audit is required,
- In the interests of maintaining the safety and standard of the national road network, the EIS should identify the methods/techniques proposed for any works traversing/in proximity to the national road network,
- In relation to haul route identification, the applicant/developer should clearly identify haul routes proposed and fully assess the network to be traversed. Separate structure approvals/permits and other licences may be required in connection with the proposed haul route and all structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed,
- In relation to cabling and potential connection routing, the scheme promoter should note locations of existing and future national road schemes and develop proposals to safeguard proposed road schemes and in the context of existing national roads, should be aware that separate approvals may be required for works traversing the national road network. TII requests referral of any agreements between the local authority and the scheme promoter related to national roads.

Notwithstanding, any of the above, the developer should be aware that this list is non-exhaustive, thus site and development specific issues should be addressed in accordance with best practise.

I hope that the above comments are of use in your scoping process.

Yours sincerely,



PP Michael McCormack
Senior Land Use Planner