An Bord Pleanála

Inspector's Report

PL08.PA0044

Development:	Construction of wind farm comprising 38 wind turbines and all associated site works at townlands in County Kerry and County Cork.
Location:	Grousemount and Barnastooka, Kilgarvan, County Kerry.
Application Type:	Strategic Infrastructure, Section 37E, Planning and Development Act 2000 (as amended).
Planning Authority:	Kerry County Council and Cork County Council
Applicant:	E.S.B. Wind Development Ltd.
Type of Application:	Permission/Approval
Submissions/Observations:	9
Date of Site Inspection:	26th to 30th October 2015
Inspector:	Karla Mc Bride

1.0 INTRODUCTION

1.1 Site and location

The site is located approximately 17km to the NE of Kenmare in County Kerry and approximately 14km to the SW of Ballyvourney in County Cork. The windfarm site is situated within County Kerry although the SE section is located along the border with County Cork. Some of the enabling works including road improvements and grid connection route are located in County Cork. The villages of Kilgarvan and Coolnea are located to the W and E, the surrounding area is sparsely populated with a small number of houses along the local road to the N.

The remote and isolated site comprises two main upland areas which are known as Barnastooka to the W and Grousemount to the E. The surrounding upland wilderness area is located within the upper reaches of the Roughty River Valley which is characterised by extensive areas of peat land, wet heath and rocky outcrops. The site is traversed by a network of streams that drain to the Roughty River which traverses the site from S to N before flowing W to Kenmare Bay. The lands on either side of the river valley slope down from c.500mOD to c.200mOD.

The site is not covered by any sensitive European site designations although it does contain priority habitats and several protected species, and Sillahertane Bog NHA and Ballagh Bog pNHA are located to the E and S respectively, whilst a section of the Roughty River to the NW is a pNHA. The lower reaches of the Roughty River to the N and W contain Freshwater Pearl Mussel populations and the lands to the N contain potential roosting areas for White-tailed Sea Eagle. The site contains Recorded Monuments and features of archaeological interest which range from megalithic standing stones to the remains of Booley houses.

Vehicular access to the site is off the R569 c.5km to the NW of Barnastooka at Morley's Bridge and via the L3021, and off the N22 and via the L3400/L3021 from Ballyvourney to the NE. Pedestrian access to the N section of the site is via steep agricultural tracks and there is no pedestrian access to the S section.

There are a number of permitted windfarms in the wider area including the operational windfarm at Sillahertane to the E of the site which is located within a forestry plantation and the Everwind windfarm to the N.

Photographs and maps in Appendix 1 describe the site and location in detail.

1.2 Pre-Application Consultation

The Board's Notice to the applicants under Section 37B (4) (a), Planning and Development Act 2000 (as amended) confirmed that the proposed development would constitute strategic infrastructure. The records of the pre-application meetings, copied to the applicants, also referred to the following issues as likely to be relevant to the consideration of the application:

- The environmental baseline for assessment should refer to the two previous applications in addition to current surveys for the site and area.
- The EIS should address the issues raised by a recent planning appeal for a windfarm in relation to possible impacts on the White-tailed Sea Eagle.
- The photomontages should allow a determination of the potential different impacts of likely turbine designs (it was indicated that one of three designs are likely to be chosen in the final tender process).
- The visual impact assessment should address views from key way marked walks in the Killarney area, including the former Killarney to Kenmare Road, and from key public viewpoints and peaks, including Torc Mountain.
- A full assessment of the windfarm connection to the national grid.
- Address all likely alternative haul routes for the construction works.
- Any alterations to existing non-public highway construction routes outside the site should address geotechnical issues and the potential for bog slip.
- Liaison with both the NPWS and Inland Fisheries Ireland is required for assessing impacts on watercourses in the area.

1.3 Planning history

1.3.1 Appeal site: Grousemount

Reg. Ref. 03/3524 - Permission *granted* by the Council for a 24 turbine windfarm at Grousemount in the S and SE sections of the subject site along with access tracks and associated site works subject to 20 conditions.

Reg. Ref. 10/1333 - Permission *granted* by the Council for a 24 turbine windfarm at Grousemount in the S and SE sections of the subject site along with access tracks and associated site works. The turbines would have an overall tip height of c.126m comprising an 80-85m hub height and an 82-90m rotor blade diameter. Permission granted subject to 21 conditions.

- Condition no.7 required archaeological pre-development testing of all aspects of the works and a 150m minimum buffer around all RMs.

- Condition nos.10 and 11 required the submission of an updated Transport Study and a Traffic Management Plan.

- Condition no.12 required the details of the exact location of each turbine and the submission of sediment and erosion control plans.

- Condition no. 15 required the engagement of an Environmental Manager to avoid the deterioration of habitats in the Roughty River catchment.

- Condition no.18 required several additional measures to protect watercourses from pollution by sediments.

Reg. Ref.15/0262 – Permission granted by the Council for amendments to the electrical transformer station permitted under Reg. Ref.10/1333 above.

1.3.2 Appeal site: Barnastooka

Reg. Ref. 10/0197 - Permission *granted* by the Council for a 14 turbine windfarm at Barnastooka in the NW section of the subject site along with access tracks and associated site works. The turbines would have an overall tip height of c.125m comprising an 80m hub height and 90m rotor blade diameter. Permission granted subject to 14 conditions.

- Condition no.2 required a separation distance of 2.5 times the blade diameter from adjoining property boundaries.

- Condition no.6 required a 20m fenced off buffer around two site of archaeological interest.

- Condition no.9 required the submission of a Drainage Management Plan.

- Condition no.10 required the engagement of a peat geotechnical engineer for the detailed design stage, and geotechnical services should be retained throughout the construction phase.

Reg. Ref.14/0412 – Permission granted for a temporary met mast at Barnastooka subject to 4 conditions.

Reg. Ref.15/0327 – Permission granted for a site entrance from the L3021, access tracks and up to 3 borrow pits at Barnastooka.

1.3.3 Grid connection:

Ref. EX392 – Kerry County Council determined that the portion of the underground cable connection from the ESB Network's Ballvouskill substation to the Coolmataggart substation constituted exempted development.

Ref. D125.15 – Cork County Council determined that the portion of the underground cable connection from the ESB Network's Ballvouskill substation to the Coolmataggart substation constituted exempted development.

1.3.4 Surrounding area:

The most relevant cases are summarised below.

Reg. Ref.13/790 – Permission *refused* for a 9 turbine wind farm along with access tracks and associated site works at a site c.2km N of the subject site at Meelick, Kilgarvan. Permission was refused for 3 reasons related to visual amenity, impact on the White-tailed Sea Eagle and traffic hazard. This decision was upheld by ABP under PL08.243129 for 2 reasons related to adverse impacts on visual amenity and the White-tailed Sea Eagle.

In particular Reason no.2 stated:

> Given the relatively recent re-introduction of the White-tailed Sea Eagle to Ireland the Board is not satisfied that the proposed development would not negatively impact on this formerly native species which is also a species listed in Annex 1 of the Birds Directive, in view of the proximity of the site to areas known to be important roost sites. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

Reg. Ref. 03/1359 - Permission *granted* for windfarm and site works to the immediate E of the subject site at Sillahertane.

Reg. Ref. 02/0719 - Permission *granted* for windfarm and site works to the immediate N of the subject site.

Reg. Ref. 03/2610 - Permission *granted* for windfarm and site works to the immediate N of the subject site.

2.0 THE APPLICATION

2.1 Documentation

The application documentation includes the following:

- Planning Report
- Planning Drawings
- Environmental Impact Statement

2.2 Development Description

The proposed development would comprise the construction of a 38 turbine wind farm, all associated site and access works including:

- The construction of 38 wind turbines and all associated foundations and hard standing areas, the turbines will have a hub height of up to 80m and a rotor diameter of up to 112m with an overall tip height of up to 126m and the 6 options comprise:

Model	Hub height (m)	Rotor diameter(m)	Overall height (m)
Nordex N80	85	80	125.0
Nordex N90	80	90	125.0
Vestas V90	80	90	125.0
Siemens SWT93	79.5	93	126.0
Siemens SWT101	75	101	125.5
Vestas V112	70	112	126.0

- All associated underground electrical and communications cabling.

- Creation of new site entrance.

- Creation of c.28km of access tracks, including a link track between the two previously permitted wind farms and several river crossings.

- Creation of borrow pits/material repositories.

- Construction of 4 new free standing c. 80m high meteorological masts.

- Associated drainage systems.

- Additional associated and ancillary developments required to facilitate the delivery of wind turbine components include 2 options:

- ***Delivery Route 1:*** Installation of a temporary bridge across the Sullane River in Ballyvourney village (County Cork). This requires a temporary entrance off the N22 and L3400 (both within Ballyvourney village) and public road improvements at locations along the L3400/L3021 towards the site.

- ***Delivery Route 2***: Creation of c.500m of access track within Coillte lands in the townland of Coolknoohil (County Kerry) to link existing tracks located along this delivery route along with a realignment of Everwind site entrance with public road L3021.

- 10 year permission and a 25 year operational life from completion of entire wind farm are sought for the proposed development.

2.3 Related matters

This application represents a revision to and amalgamation of the two previously permitted wind farms on the site which were granted planning permission by Kerry County Council in 2010 and 2012 under:

- ***Reg. Ref. 10/0197***– 10 year permission for 14 wind turbines and associated site development.

- ***Reg. Ref. 10/1333***– 10 year permission for 24 wind turbines and associated site development.

Kerry and Cork County Councils determined that the portions of the proposed grid connection within their jurisdictions constituted exempted development under Ref. EX392 and Ref. D125.15 as summarised in section 1.3.3 above.

2.3.1 Planning Report

The Planning Report describes the proposed development, the project rationale, the consultations undertaken to date and the alternatives considered; it sets the legislative, planning policy and historical context; it summarises the Stage 1 Appropriate Assessment (AA) Screening Report and the Environmental Impact Statement (EIS); and it carries out a general planning assessment of the proposal.

The report states that the project development and consultations process was significantly influenced by the existing planning permissions for wind farms on the site and that the main areas of concern relate to the form and layout of the development and the environmental (EIS) issues.

The report concluded that the proposed development would comply with renewable energy and planning policy, it would not adversely affect amenities (residential, visual or heritage) or give rise to a traffic hazard, and that it would be in accordance with the proper planning and development of the area.

2.5 Environmental Impact Statement (EIS)

The EIS described the site and other windfarms in the area; stated that the proposal would comply with national and local planning and energy policy; considered alternatives; and provided a detailed project description.

The main body of the EIS described the receiving environment; outlined the study methodologies; assessed the potential impacts on the receiving environment under the usual range of headings; proposed mitigation measures for the construction and operational phases; identified cumulative and residual impacts; and assessed interactions.

The EIS was informed by a number of technical appendices contained in Volume 2 and a visual impact analysis contained in Volume 3, and a Non-Technical Summary was provided.

The EIS concluded that advanced technological design and best available control technologies will minimise environmental impacts; the isolated location with a high level of screening will minimise visual impacts; the main identified risks which relate to water quality will be managed by mitigation measures; and the proposed development is supported by Government policy.

The Further Information response did not necessitate any changes to the EIS.

2.6 Appropriate Assessment Screening Report

Two AA screening exercises were carried out for the proposed windfarm and the grid connection.

2.6.1 The Stage 1 Appropriate Assessment Screening Report

The Stage 1 Screening Report for Appropriate Assessment is located in Volume 1, Section 8 of the EIS document.

The Screening Report described the proposed windfarm and the project site, the report confirmed that the proposal would not be located within a European site and that a section of the cable route would run adjacent to a number of European sites. The report identified several European sites within a 15km radius and it listed their qualifying interests and conservation objectives.

The report carried out an assessment of likely effects, either alone or in combination with other windfarms, plans and projects in the area. It described whether such impacts are likely to occur, and whether the predicted impacts are likely to have significant effect on the integrity of the sites.

The potential indirect impacts of the wind farm and cable route are identified as:

- Collision risk, disturbance and displacement of bird species.
- Pollution of watercourses from sediment laden run-off.
- Disturbance to habitats and birds as a result of cable route trenching.

Screening Statement with Conclusions:

The Report concluded that the proposed windfarm and cable connection to the national grid will have no likely significant effects, either alone or in-combination with other plans or projects, on the Qualifying Interests and Conservation Objectives of the European Sites, and that progression to a Stage 2 Natura Impact Statement is not necessary.

The FI response did not necessitate any changes to the AA Screening Report.

3.0 PLANNING POLICY FRAMEWORK

3.1 National Spatial Strategy 2002-2020

The NSS sets out a national planning framework to co-ordinate future development and planning throughout the country in a sustainable manner and it seeks to promote reliable and effective energy systems as key prerequisites for effective regional development.

3.2 National Development Plan 2007-2013

The NDP identifies environmental protection as one of the main considerations in relation to sustainable energy policy.

3.3 South West Regional Planning Guidelines 2010-2022

Objective RTS-09 acknowledges that the region has considerable potential for the generation of electricity from wind and wave energy resources.

3.4 Wind Energy Development Guidelines - Guidelines for PAs, June 2006.

The Guidelines advise that a reasonable balance must be achieved between meeting Government Policy on renewable energy and the proper planning and sustainable development of an area. The information that should be submitted with planning applications includes details of ground conditions; site drainage and hydrological works; size, scale and site layout; natural/cultural heritage; landscape; local environmental impacts; local road network and internal access tracks; cumulative effects; location of quarries to be used as borrow pits during construction; waste disposal and decommissioning.

The impacts of shadow flicker should be addressed. Proposals should not adversely affect designated nature conservation sites. The extent to which birds will be impacted will vary depending on species, season and location and the impacts may be temporary or permanent. The highest standards of siting and design should be expected and particular landscapes of very high sensitivity may not be appropriate for wind energy development.

The Guidelines also provide advice in relation to:- location, siting, scale, spacing, layout and height; cumulative impacts; landscape impacts of construction and associated works; turbine colour, maintenance, transformers and decommissioning; and the likely degree of impact on the landscape.

3.5 Other policy documents

- EU Energy Directives and Roadmaps, and associated national targets for renewable energy by sector.
- National Climate Change Strategy.
- White Paper on Energy 2007
- National Renewable Energy Action Plan 2010
- Strategy for Renewable Energy 2012-2020
- EU Final Draft Guidance (March 2010) Wind Energy Developments and Natura 2000.
- Ireland's Transition to a Low Carbon Energy Future, DCENR, 2015-2030
- Renewable Energy Policy and Development Framework. DCENR, 2016
- Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure, DCENR, 2012
- EU Directives on Flooding and the Water Framework Directive.
- The Planning System and Flood Risk Management, 2009.

3.6 NPWS Nature Conservation designations

The Department of the Environment, Heritage and Local Government is responsible for the designation of conservation sites throughout the country and there are several SPAs, SACs and NHAs located within 15km of the site.

3.7 Appropriate Assessment Guidance for Planning Authorities, 2009.

SAC and SPA sites are subject to the requirements of Article 6(3) of the Habitats Directive in relation to screening for an Appropriate Assessment of the potential impacts of a plan or project, both on their own and/or in combination with other plans or projects in the wider area. Applicants are required to submit a Stage 1 Screening Report and a Stage 2 Natura 2000 Impact Statement to enable the competent authority to carry out the Appropriate Assessment of the proposal where relevant.

3.8 County Kerry Development Plan 2015-2021

Objective EP-11 seeks to implement the Renewable Energy Strategy.

Nature conservation sites: Ballagh Bog, Sillahertane Bog and a section of the Roughty River are NHA or pNHAs.

Heritage: Several Recorded Monuments and sites or complexes of archaeological interest and potential in the wider area with one RM located within the site. No Protected Structures within the site although are some located along the delivery route.

Zoning and Landscape: Site lies within an area of Secondary Special Amenity and within the Roughty River Valley Landscape Character Area.

Views and Prospects: None within the site but several protected views into the site from along the L-3022-21 and the R569 and Molls Gap to the NW.

3.9 County Kerry Renewable Energy Strategy 2012

This Strategy identifies appropriate and suitable locations for the development of wind energy with respect to key environmental, landscape, technical and economic criteria which must be balanced.

The site is located within an area that is ***Open for Consideration*** for wind farms and the following objectives apply:

Objective NR7-33: Proposals should demonstrate conformity with existing and approved wind farms to avoid visual clutter and potential cumulative effects.

Objective NR7-34: Projects should be developed in line with the 2006 Guidelines, and those adjacent to European sites should have a buffer zone.

Objective NR7-35: Applications should be accompanied by a NIS if the site is located in close proximity to an SAC or SPA or within an SAC the catchment.

Objective NR7-37: Applications should be accompanied by a technical assessment in relation to the slope stability, landslide susceptibility of the development site and the proposed project.

3.9 County Cork Development Plan 2014-2020

Nature conservation sites: St. Gobnet's Wood SAC and Mullaghanish to Musheramore Mountains SPA are located to the NE of the site.

Heritage: Several sites of interest located to the E along the delivery route including Ballyvourney Bridge which is a Protected Structure and Ballyfinnane Bridge which is of historic interest.

Landscape: Areas of landscape interest located to the S and E of the site.

Views and Prospects: Scenic routes located to the E and S.

Energy:

Policy ED 1-1: seeks to ensure that County Cork contributes to diversity and security of energy supply and to assist in meeting renewable energy targets.

Policy ED 6-1: seeks to facilitate the sustainable development, upgrade & expansion of the electricity grid, storage & distribution network infrastructure.

Policy ED6-2: Consider the feasibility of undergrounding or the use of alternative routes especially in landscape character areas of high sensitivity.

4.0 THE PLANNING AUTHORITY REPORTS

4.1 Kerry County Council

4.1.1 Context:

This report described the site, referred to the previously permitted windfarms on the site, set the policy context, identified heritage sites in the area, and carried out a planning assessment of the proposed development. The application was internally circulated to the County Archaeologist, SEE South and West Municipal District, Executive Ecologist and SEE Water Services. The report is accompanied by recommendations of the Elected Members of the Council who convened on 16th November 2015 to consider the report.

4.1.2 Policy context:

The report concluded that the project would not contravene the current Development Plan, and that the objectives of the Plan and Renewable Energy Strategy support the development of a windfarm at this location.

4.1.3 Planning assessment

Visual impact & landscape: there are protected views and prospects to the site from the L-3022-21 and the R569, and the site is visible from Molls Gap a protected view c.23km to the NW.

- *L-3022-21*: the mountains to the E of the protected view are higher than the elevation of this road and they conceal most of the site and turbines.
- *R569*: most of the site and turbines are screened from view by the height and peaks of Coolnagoppoge along this road to Morley's Bridge.
- *Molls Gap*: the 23km separation distance softens the impact, three of the turbines in the E section are visible but are adjacent to an existing windfarm, and the remaining turbines are partially screened by the elevated topography with only the upper blades of 10 turbines visible.

The most significant visual impact is from within the site itself and at the site entrance off the local road, but with no significant impact on the cultural or economic asset of the County.

Surface water & water quality: the SWMP contains adequate provision to minimise sediment and contaminant run off during the construction phase; the treatment trains and associated SuDS components are adequate to ensure the maintenance of existing water quality.

Flood risk assessment: the increase in surface water runoff will be an additional 3,638m3/month from an existing baseline of 2,666,062m3/month which equates to an additional 117m3/day and an additional 14% above baseline runoff; this will not cause flooding downstream in the Roughty River.

Soils & geology: the Preliminary PSRA is not a detailed geological site investigation; peat depths at specific locations have been ascertained and some exceed 0.5m; it's not clear how the scores were allocated or weighted in the Preliminary PSRA, and a number of slopes face N, NW and NE; further analysis is therefore required in relation to peat and slope stability.

Noise & vibration: no dwellings within 500m of the turbines except for 2 houses associated with the project (T1/2/3/4); the wind farm will operate cumulatively with adjacent windfarms and may exceed noise levels; the EIS recommends a curtailment strategy whereby T1 and T2 will operate in noise reduced mode to reduce levels at one house; the night time strategy involves operating T1-T4, T26-T28 & T36-38 at noise reduced modes or shutting them down to mitigate the effects at 10 houses; this is an acceptable strategy.

Shadow flicker: four dwellings will be affected by shadow flicker and the number of annual hours depends on turbine type but varies from 0.28 -13.15 hours which is less than the recommended 30 annual hours, and the turbines will be preprogramed to take account of this which is acceptable.

Nature conservation & European sites: there are 2xSACs and 2xNHAs within c.5km of the site, the cable route will not have significant effects (S.5 Declaration); additional details and assessment required for the delivery route works (both options) by way of FI; the FWPM report outlined that it would be prudent to undertake a Stage 3 Survey of the Roughty River; regard should be had to the Otter population with pre-construction surveys at watercourses; pre-construction surveys also recommended for Scully's Hawkweed and Bats where any bridge strengthening or similar works are proposed.

Archaeological, architectural & cultural heritage: the standing stone group on the site is a RM (KE09505) and no ground works should take place within 150m, pre-development testing should be carried out under licence and all reports should be submitted to the Council and the NMS.

Residential amenity: no dwellings within 500m of the turbines except for 2 houses associated with the project and no potential for overlooking, overshadowing, less of privacy or property devaluation, and no odours or adverse impacts from noise or shadow flicker subject to mitigation.

Agriculture, forestry and land use: the project will occupy c.3% of the lands and when complete existing agricultural uses will continue as before.

4.1.4 Council response to submissions received by the Board

All concerns noted.

4.1.5 Development contribution Scheme

The Development Contribution Scheme (adopted 2011) should be applied to the proposed development as per the following calculation:

Amenity levy: E1, 000.00c per MW installed

Maximum turbine to be installed – 3.5MW

38 turbines X 3.5MW X E1, 000.00c

= 38 X 3.5 X E1, 000.00c

= E133, 000.00c

4.1.6 Bond

A Bond should be submitted to ensure the integrity of the public road network.

4.1.7 Elected member recommendations

- Welcome the project which would not be visually intrusive.
- Important to protect heritage, amenity, tourism and the WAW.
- The road improvements required to facilitate the project will benefit landowners in the area.
- Project will supplement the landowner's incomes.
- Excess energy should be gifted to local schools and community centres.
- Strict implementation of mitigation measures in relation to noise and shadow flicker required.
- Windfarms are unsightly and cause distress to local people.

The members agreed that the following recommendations be made to ABP:

1. The Applicant should gift excess energy to local schools and community centres by way of a planning condition.
2. The Applicant should make an annual contribution to the local community.
3. The applicant should be required to fully implement the mitigation measures included in S.5.5 and 5.6 of the report.

4.2 Cork County Council

4.2.1 Context

The application was referred to Cork County Council which submitted a detailed response report that raised concerns in relation to the works located within its jurisdiction. This includes part of the grid connection route and Delivery Route Option 1 which requires a temporary bridge over the Sullane River at Ballyvourney, works to Ballyfinnane Bridge and road improvements.

4.2.2 Assessment

Roads & traffic: The report seeks FI in relation to potential impacts on habitats and flooding as a result of the temporary bridge and road improvement works.

Heritage: The County Archaeologist requested the preparation of a heritage report for the Ballyfinnane Bridge prior to works and the submission of a method statement and material specification for the re-instatement works.

Ecology: The applicant should provide ecological and habitat details for the proposed temporary crossing of the Sullane River and road improvements.

Community gain: Adjoining communities in County Cork should be included in any community gain proposals.

4.2.3 Bond

The Area Engineer outlined the requirement for a Bond as follows:

- Removal of the temporary bridge and full re-instatement works: E100,000
- Re-instatement of the original features of the bridge: E 60,000
- Repair or re-instatement of the L-3400: E200,000

4.2.4 Suggested conditions:

1. The developer shall carry out a series of measures to enable the temporary bridge crossing at Ballyvourney.
2. The developer shall carry out a series of measures to enable works to Ballyfinnane Bridge.
3. The developer shall carry out a series of measures to relating to the L-3400.

4.2.5 Elected members

The meeting of the elected representatives of the County held on 23rd November 2015 concluded that the application was acceptable in principle subject to the following concerns:

- Concern amongst the local community especially in relation to the exempted part of the development (grid connection).
- Significant community fund required for local residents.
- Explore other forms of renewable energy such as solar.
- The Flood Study should be for 100 years.
- Note concerns raised by Heritage Officer in relation to the adequacy of the information.
- Inadequate information submitted to demonstrate compliance with EU Habitats, Birds and EIA directives and the proposal therefore contradicts the Development Plan policies which seek compliance with same.

5.0 SUBMISSIONS FROM PRESCRIBED BODIES

5.1 National Parks and Wildlife Service:

5.1.1 White tailed sea eagle:

- The Board should refuse permission notwithstanding the previous permission granted by the Council for two windfarms on the site.
- The windfarm is within the range of the recently re-introduced White-tailed Sea Eagle (Annex 1 species) which became extinct in Ireland over 100 years ago, and it is now re-establishing itself in the wild after a reintroduction programme.
- The programme represents an investment of more than E1.5m and the reintroduction of this species will contribute significantly to meeting the biodiversity target for Ireland and the EU and contribute to tourism.
- The sea eagle is particularly susceptible to collision with turbine blades, 39 deaths were recorded in Norway from such collisions at one large wind farm between 2005 and 2010.

- Three deaths due to turbine collision were recorded in Ireland and all of these fatalities occurred at the adjacent wind farms in 2011 and 2012.

- Agree that the site does not contain suitable breeding habitat however the presence of carcases on the site in 2009 does not correspond with the deaths in 2011 and 2012.

- The absence of trees on the site for night roosts is noted, however eagles roosting in large trees in the valleys will fly upslope to upland wind farms where they are at risk of collision as they soar, and there are large stands of Scots Pine in the valley of the upper part of the Roughty River below the arc of the uplands in which the Grousmount wind farm is proposed.

- The EIS (p.9.34) refers to one eagle sighting over 100 hours of observation which is insufficient evidence to conclude that the site is not well used especially as it lies between likely breeding areas in Kenmare Estuary, Killarney valley, Glengarriff and the Lee Valley.

- The eagle re-introduction programme is at a very critical phase, the production of sufficient wild bred eagles over the next few years will determine the survival of the population and the success of the project, and it is important to control mortality in the early phases.

- Given the risk of collision demonstrated by the previous wind turbine fatalities at adjacent wind farms, the reduction in mortality being critical for the success of the re-introduction project, and the uncertainly as to whether the Roughty Valley will be used by juveniles in the future (as it has been previously), the application is premature and should be refused.

5.1.2 Further information

In the event of FI being requested by the Board in relation to other matters the following information should also be requested:

- *Kerry slug*: suitable habitat may exist in lichen covered rocks in the heathland and grassland, under the woodland canopy in the Cascade Wood and along wooded roadsides; it is not clear if the footprint of the works will involve clearance of road margins and if so then a detailed survey is recommended (in suitable weather conditions) for:

    - Suitable microhabitats along the cable route access tracks within the site and outside if road widening is required, and
    - Kerry slugs within suitable habitats for this species.

The Kerry Slug survey (Appendix F.5) notes the presence this species in the site and a derogation licence should be obtained prior any grant permission.

- *Roughty River pNHA and Hawkweed*: the impact of increased surface water runoff as a result of the proposed road network on Hawkweed should be quantitatively assessed, taking account of predicted increase in summer rainfall as a result of climate change and it is not clear whether:

    - Shading from the proposed bridges would affect the population, and
    - Habitat management could increase potential sites for this species as opposed to the use of seed banks.

- *Sillahertane Bog NHA*: the cable works turbine access tracks are close to this NHA, clarify if these works (which may act as drainage conduits) will affect the hydrology of the bog upslope by tapping groundwater flows which would lead to greater upslope water loss during droughts.

- *Otter*: clarify whether otter breeding or resting places were observed within 50m either side of the road crossings (by cable) or where bridge upgrade is required; and the effects of sedimentation due to peat slip erosion on breeding otters needs to be assessed.

- *Red grouse*: turbine access routes could open up red grouse habitats to disturbance by predators (foxes and dogs); and the potential for increased hooded crow use of the area on red grouse nests should be assessed.

5.2 Inland Fisheries Ireland:

5.2.1 Context:

- The site is located within headwaters of the Roughty River which has productive spawning and nursery habitats for Salmonids and salmon populations, trout and eel present throughout the system; and aquatic systems require protection from water pollution and habitat damage.

- Potential impacts have been assessed and addressed through avoidance and detailed mitigation measures.

5.2.2 IFI now requires a number of additions:

- The sampling regime should provide real time information on water quality and a suspended solids/turbidity analyser should be introduced to provide real time comparative results that can be relayed to supervisory personnel for immediate remedial action.

- Pollution control measures are required to prevent sediment laden runoff from a section of the delivery route (L3021) that runs through a recently felled forest and several small streams also run through this section of the route, and this should be addressed in the SWMP.

- Forestry mound drains and firebreaks can act as conduits for surface water runoff and should be redirected to sediment control facilities.

- Avoid use of sedimentary rocks in road construction (shale) to prevent pollution due to fines washing out into roadside drainage (major source of chronic pollution and difficult to control).

- Any full culverts required on fish bearing waters should insure upstream fish passage at all times, the culvert gradient should be less than 1/200 and oversized by 500mm to allow for countersinking into the stream bed.

- The NRA Water Crossings guidance should be adopted.

- Culverts for field drainage channels and non-ecologically sensitive drainage systems should be oversized, countersunk at 500mm, backwatered and rock protected to prevent down cutting/erosion.

- The entire development should be considered as a single construction sites and drainage water during construction should be registered as trade effluent and a Water pollution licence should be obtained.

5.3 An Taisce:

5.3.1 Aquatic environment:

- Locally affected catchments comprise the Roughty, Sullane and Bohill rivers, the Cappagh W Stream and the Foherish Cathment along with the Red Trench River which flows W through Barnastooka prior to merging with the Roughty river; Grousemount mainly drains to the Roughty while Barnastooka drains to the Red Trench via a dense network of streams.

- Site is located within sections of the river catchments which are classified as having High and Good Status with mainly high water quality status.

- The Roughty River has high biological water quality, and the section within the site has high local value with extensive Brown trout habitat throughout and salmon habitat in the N; FWPM and salmon located downstream of the works; the Red Trench River has high local value with extensive Brown trout nursery habitat and a small salmon population.

- Several small populations of ***FWPM*** downstream in the Roughty and Sullane (including Foherish & Laney tributaries); no juvenile recruitment and evidence of sedimentation and eutrophication in the Sullane and Foherish where the populations are not self-sustaining; and project has potential to cause further deterioration by way of sediment release.

- ***Atlantic salmon*** is present in the Roughty but not the Sullane because of ESB dams on the River Lee (cumulative impact); impacts on water quality will affect salmon, juveniles and spawning grounds through the release of fine sediments, and bare peat soils are very susceptible to erosion.

- ***Other species*** that could be affected include brown trout (water quality) and otter (during construction works, damage to holts and prey reduction).

- ***Potential significant impacts*** include pollution of watercourses from sediments, nutrients, fuels etc., and discharge waters; changes in flow rates; loss of habitat due to culverting or bank/stream alteration; and obstruction to upstream movements due to culverting; any further deterioration in water quality will affect FWPM, salmon, trout and otter.

- All ***mitigation measures*** must be maintained, enforced and monitored throughout the project with regular inputs from the NPWS and IFI; surface water runoff should be high quality; ecologically sensitive water features should be avoided; additional mitigation required for works within 50m of a watercourse; release of fuels should be avoided; silt traps, borrow pits and drains should be properly constructed and monitored; no works during heavy rainfall; and peat re-vegetation should be prioritised.

5.3.2 Terrestrial environment:

- The ***cable route*** is along public roads but passes through the Mullaghanish to Musheramore SPA and St Gobnet's Wood cSAC; protected species include hen harrier, merlin and aquatic species; the harrier population is declining so no works within 500m of nesting pairs until breeding ceases.

- The ***wind farm*** site is dominated by wet heath which is in good condition with smaller sections of dry heath (both Annex 1 habitats), and upland blanket bog (Annex 1 Priority habitat) which has been degraded. The works, combined with the degraded state of the blanket bog will give rise to cumulative impacts as and peat lands are vulnerable to collapse due to erosion; and blanket bog must not be impacted, areas of bare peat should be reseeded and unnecessary disturbance should be avoided.

- Breeding birds on the site include Meadow pipit and Skylark; the absence of substantial heather cover makes the site less attractive to Red grouse although those present will be disturbed during construction and by loss of habitat; and risk of collision and bog slippages are problematic; and access tracks across the site will encourage predators such as foxes.

- The project will result in the loss of c.28ha of wet heath and affect the hydrology and ecology of a much larger area.

- *Invasive species* including Japanese knotweed and rhododendron are present on the site and along the cable route; the works may cause the spread of these species along the route and the species should be properly removed and all machinery decontaminated.

5.4 Transport Infrastructure Ireland:

- General matters relating to road safety and capacity are best addressed by the relevant planning and road authority.

- The entrance to the temporary bridge off the N22 should be in accordance with DMRB standards and the boundary should be reinstated within one month of the windfarms completion.

- Developer should be responsible for all costs for works along national roads network by way of a financial contribution condition.

5.5 Irish Water:

- No objection subject to adherence with the EIS mitigation measures.

5.6 Southern Regional Assembly

- Provided information in related to the regional assemblies, but no specific concerns raised in relation to proposed development.

6.0 SUBMISSIONS FROM MEMBERS OF THE PUBLIC

6.1 Tom MacDonnell:

- Not opposed to wind farms but Kilgarvan is a place of unspoiled natural beauty and the area is devoid of manmade objects of massive proportions.

- The views into and across the site from any location in Kilgarvan will be dominated by the turbines and especially those sites on Barnastooka.

- Turbines should not overlook Kilgarvan or Woodville to the SE of the village, or affect other places of historical interest in the area.

6.2 Peter Sweetman & Associates:

- The EIS states that the County Councils declared that the grid connection constitutes exempted development and that the requirement for planning permission does not arise; as the planning application and EIS do not include the grid connection this makes the EIS is invalid.

7.0 FURTHER INFORMATION

7.1 Further information request

The Board requested further information in relation to the following matters:

1. Site suitability Tests
2. White Tailed Sea Eagle Breeding Programme
3. Temporary Bridge - Sullane River at Ballyvourney
4. Kerry Slug
5. Roughty River pNHA & Endemic Hawkweeks
6. Sillahertane Bog NHA
7. Otters
8. Red Grouse
9. Inland Fisheries Ireland
10. Implications of the RFI for the EIS and AA Screening Report

7.2 Further information response

The applicant's response to the FI request is summarised below.

7.2.1 *Site suitability tests*

- The EIS provided a summary of the site investigations and analysis and full details are now provided, and the exact locations of the various elements of the project are as indicated on the planning application.

7.2.2 *White-tailed Sea Eagle Breeding (WTSE) Programme*

- Accept NPWS concerns and that the eagle is sensitive to wind farms especially where eagle breeding territories and turbines co-exist.

- The combined evidence of the site surveys, the WTSE Re-introduction Programme's assessment and the Golden Eagle Trust's assessment of the sites potential indicate that the site is not well used by WTSE.

- The original survey work was undertaken in the winter of 2014/15 and further surveys were carried out in late winter 2015/16 (total of 60 hours over 10 days); one adult was observed flying N along the NE boundary.

- The 2 sightings (3 eagles) observed during a combined total 168 hours over 2 winters indicates that the site is not used on a regular basis and there is no flight path over the site (i.e. between feeding and roost sites).

- The Golden Eagle Trust has not recorded any tagged WTSEs in the area.

- The NPWS objection is based on the precautionary basis due to previous collisions with turbines in 2011 and 2012.

- Between 2007 and 2011, 100 young WTSEs were released from Killarney National park in small groups of 20-25 birds per year, they take 4-6 years to mature although pairs may establish earlier, and low mortality rates are key to establishing a viable wild population.

- Their diet consist of carrion and small to medium sized fish, small birds and mammals, the diet of newly released birds is supplemented in the National Park which encouraged immature birds to persist in the area, the feeding programme has ceased and the birds have since dispersed.

- The last releases were in 2011 and no more are planned.

- There are now c.15 breeding territories at coastal areas and at large lakes in Kerry, Cork Clare and Galway, the WTSE was observed at potential breeding sites in Fermanagh, Longford and Cavan, and there is one definite breeding site at Argyle in Scotland (Irish female & Scottish male).

- There have been 30 WTSE fatalities between 2007 and 2014 mainly related to poisonings but 2 were related to collisions with wind turbines.

- Immature WTSE tend to roost in trees and forestry plantations, and radio monitoring indicates that:

    - They stay within 25km of the release site during the first winter.
    - They then disperse further away.
    - They return to their release sites for their second winter.
    - They then embark on a larger dispersal event (c.100km)in the Spring in search of breeding territories.
    - During the release period (2007-2011) large numbers of immature eagles were concentrated around the National Park area and the numbers have declined since 2013.

- The wind farm site does not contain suitable breeding habitat for WTSE which means that there is no potential for breeding within or around the site, eagles prefer to nest within c.5km of large water bodies with a good source of food, and the nearest site is Lough Guitane c.12km to the NW.

- The presence of immature eagles in the area during 2009/10 was related to the dumping of carcasses near a lake c.1km to the N and the wind farm site does not contain suitable mature trees for roosting or perching.

- There were 3 collisions of immature eagles with nearby turbines in 2011/12, and the Golden Eagle Trust confirmed that there have been no further fatalities since then; the nearest suitable breeding sites are at the Killarney Lakes, Lough Guitane and the Kenmare inlet, c.10km away.

- A summary of recent studies into the impacts of wind farms on WTSE populations in Norway and Scotland indicate that:

    - In Norway, 39 WTSEs were killed by turbines between 2005 and 2010; territories within 500m from the turbines experienced lower breeding success and this effect dropped considerably by 1km; the wider population remained stable; and the study recommended the avoidance of central breeding areas when locating wind farms.

    - In Scotland, WTSEs have been reintroduced in several phases since 1975, the breeding success was initially low but improved to 100 pairs by 2015; the first windfarm fatality occurred in 2014; and the Irish situation is more similar to the Scotland than Norway.

- The following mitigation measures are proposed:

- A Project Ecologist will be employed to report annually, ensure regular checks that no carrion is present and detect any regular temporary frequent use of the site by WTSE.

- Supplement visual monitoring for WTSEs with satellite tagging.

- Implement a potential turbine shut-down system to be managed by the Site Manger and not a remote/mechanised shut down system.

- These mitigation measures will be applied for the first 5 years.

- The proposal will not increase the overall number of consented turbines in the area so an increased risk to WTSEs cannot arise.

7.2.3 *Temporary Bridge - Sullane River at Ballyvourney*

- The c.27m long temporary bridge will span a c.9m wide section of the river c.250m N of the existing bridge, temporary access will be off the N22 and L3400, the pre-engineered modular steel components will be delivered by road to the N bank, and it will be dismantled after c.9 months.

- The habitats and species that could be affected include trees and hedgerows, grassland, the river and drainage channels; and otter, bats and birds (kingfisher & dipper) and no impacts are predicted:

  - ***Otter***: river provides optimum habitat, but no evidence of breeding sites and temporary bridge will not obstruct movement.

  - ***Bats***: one Ash tree has good roosting potential; the riparian tree line is too low to attract bats; all felled trees will be surveyed for bat activity and if found a derogation licence will be sought; tree felling should be completed in time for hibernation; and the stone culverts at the bridge are too low to attract bats but they will be surveyed.

  - ***Birds***: Kingfisher was not sighted during the surveys as the site does not have suitable banks for nesting; the Dipper, which occurs along this section of the river often nests beneath bridges or in crevices in river banks, if noted then works will stop until nesting is complete; no hedge or tree removal during the nesting season.

- The ***Flood Risk*** Assessment assesses flood risk from fluvial, surface water and ground water sources with minimal impacts predicted.

7.2.4 *Kerry Slug*

- A further survey was undertaken at the locations of all the joint bays along the route of the UGC and at the location of road improvement works.

- Kerry Slug is present at 2 locations where road works are proposed and the presence of suitable habitat (but no slugs) was confirmed directly adjacent to the roadside at 5 joint bay locations along the UGC route.

- The works may cause direct disturbance to small areas of habitat which is restricted to roadsides with negligible impact on species distribution subject to mitigation in including species checks and relocation .

7.2.5 *Roughty River pNHA & Endemic Hawkweeds*

- The estimated increases in surface water runoff as a result of the works would have a negligible effect on the winter and summer flood peaks; the calculations do not take account of attenuation within the drainage system.

- Two of the bridge structures (44 & 46) cross parts of the river where hawkweed occurs; these plants will be affected by shade although there are only10 individuals beneath each bridge deck; they have a scattered distribution on bedrock and boulders in the river and do not occur at high densities in any area; preservation in seed banks is appropriate.

- The sites were survey in July 2015 and the survey concluded that there was no shortage of suitable habitats along the river and that habitat management would be difficult as it would require the importation of large boulders which could have adverse effects on aquatic life and fish.

7.2.6 *Sillahertane Bog NHA*

- There will be no tract construction within 100mof the NHA boundary and the nearest turbine will be at least 200m away.

- The Bog is located within a separate sub catchment to the NE, no wind farm infrastructure will be located either up or down gradient of it and there is possibility of potential impacts because of the absence of a connection.

- The borrow pit to the N of T5 has the potential to affect bog hydrology, but it is located more than 100m from the boundary; no impacts are predicted.

7.2.7 *Otters*

- Widespread on the main rivers & streams in the site and along UGC route.
- Otter confirmed on the Bohill River but no evidence of breeding or resting; signs of activity recorded at 4 locations on the Sullane and Roughty rivers.
- No adverse sedimentation impacts subject to EIS mitigation measures.

7.2.8 *Red Grouse*

- The general public will not have unrestricted access as the lands will remain within private ownership.
- Foxes and hooded crows are already widespread and the proposed works would not contribute to an increase in their numbers.

7.2.9 *Inland Fisheries Ireland*

- The monitoring scheme will allow for continuous automated online monitoring of suspended solids at agreed key locations.
- The previously felled area has re-vegetated; disturbance will be limited to the construction corridor along an access track which is of limited extent; and there is an improved agricultural grassland habitat between the former forestry area and the crossing of the Roughty River.
- Mechanical breakdown of rocks and sedimentation are not expected.
- The applicant accepts the IFI recommendations in relation to culverts, river crossings and field drainage.

7.2.10 *Implications of the RFI for the EIS and AA Screening Report*

- Additional surveys undertaken in relation to WTSE, Kerry slug and Otters has increased the baseline information without affecting the conclusions, and it is not necessary to amend the EIS or AA Screening report.

7.3 Responses to Further Information submission

7.3.1 NPWS:

White-tailed Sea Eagle:

- Continue to recommend refusal of permission.
- No evidence that juvenile eagles will not use the wind farm in the future.

- The precautionary principle is based on the fact that 3 eagles were killed by turbines in the adjacent wind farm and the presence of suitable roosting habitat in the Roughty Valley below the proposed wind farm.
- There is no evidence that the eagles were attracted to the area by livestock carrion or that they won't be attracted there again.
- The 2014/16 data is for winter usage; 2 of the fatalities occurred in June.
- The extent of the Golden Eagle trusts tagging programme is unclear.
- No evidence that mortality monitoring was continued after 2012 at the adjacent wind farms and fatalities may have occurred.
- As young dispersing immature eagles are most at risk of collision, then data from 2015/16 may not be representative of the population structure in the region during the lifetime of the wind farm.
- Even though the wind farm is over 10km from potential and actual breeding sites, the 3 previous fatalities occurred within the same range.
- No reference is made to the potential for eagles to breed in the future at Gougane Barra, c.2km to the S of the wind farm.
- The Scottish comparison is irrelevant as 3 fatalities actually occurred at the adjacent wind farm, and the same conditions prevail.
- Unclear if Golden Eagle Trust will be responsible for tagging/ monitoring.
- Shut down-on-demand systems have been used to reduce mortality in migratory routes for eagles and other species in very large windfarms, but it is unclear how their practicality and performance will be policed.

Suggested conditions:

Having regard to the two extant wind farm planning permissions for the site, the NPWS has recommended a number of conditions, in the event that the Board decide to grant permission. The conditions relate to:

- Full implementation of all EIS and FI mitigation measures.
- The mitigation measure should be carried out for the adjacent existing windfarms in the area (defined as a diamond between Kilgarvan, Clonkean, Coolea and Gougane Barra).
- A defined disposal support scheme for farmers with fallen livestock.
- Written confirmation that the WTSE Reintroduction programme will cooperate with that tagging scheme at the developer's expense.

- Annual observations for eagle use at all operational wind turbines.
- Where repeated eagle uses is confirmed, appropriate deterrent measures undertaken at eagle roosts to avoid mortality.
- Bird mortality monitoring of all turbines through the life time of the project.

Roughty River pNHA & endemic hawkweed sites:

- Remain concerned about the impacts on species population as opposed to individual plants; and habitat management is not restricted to the importation of boulders.

Sillahertane Bog NHA, Kerry slug and Otter:

- FI noted and no further comments.

7.3.2 Inland Fisheries Ireland

- Requested that the following conditions be attached:
    - No drainage or other physical interference with the bed or bank of any watercourse without prior consultation with IFI.
    - No pollution of surface waters from contaminated site run-off (suspended solids and/or hydrocarbons).
        - Identify and zone the project for environmental impact in the event of a peat slippage.
        - Prepare a contingency plan should peat movement occur and prepare a plan for the control of silt in the event of peat movement.
    - Apply the following criteria for bridged or culverted watercourses:
        - Free passage of fish must not be obstructed, the original slope of the river should be maintained and bridges are preferable to culverts
        - Consult IFI before work commences and carry out in-stream work in the April – September period

7.3.3 Cork County Council:

- Raised no new issues and the Council are satisfied with the proposals.

7.3.4 Transport Infrastructure Ireland:

- Raised no new issues.

8.0 REVIEW OF ISSUES AND ASSESSMENT

The main issues arising in this case are:

1. Compliance with renewable energy and planning policy
2. Visual impact
3. Movement and access
4. Residential amenity
5. Peat stability
6. Water quality and aquatic ecology
7. Terrestrial ecology
8. Cultural heritage and material assets
9. Grid connection
10. Other issues

- Section 9 of this report deals with Environmental Impact Assessment.

- Section 10 of this report deals with Screening for Appropriate Assessment.

8.1 Compliance with renewable energy and planning policy

The proposed windfarm would be compatible with European, national and regional planning and renewable energy policy as set out in section 2.0 above and it would contribute to the achievement of European and national renewable energy targets.

The 2006 Wind Energy Development Guidelines advise that a reasonable balance must be achieved between meeting Government Policy on renewable energy and the proper planning and sustainable development of an area. Projects should not adversely affect the integrity of European sites or have an adverse impact on birds or give rise peat instability. Projects should not have a significant adverse impact on drainage patterns, cultural heritage, sensitive landscapes, the local road network or residential amenity as a result of noise, shadow flicker or general disturbance. These issues will be addressed in more detail in the following sections.

The proposed development would be compatible with the wind energy policies and objectives of the current Kerry and Cork County Development Plans and Renewable Energy Strategies as it would be located within an area that is Open for Consideration for appropriate wind energy proposals in the current Kerry Development Plan.

8.2 Visual Impact

8.2.1 Project description:

The windfarm project would comprise the construction of 38 turbines, met masts, access tracks, borrow pits and bridges, along with associated road works along the delivery routes, all within a remote upland rural area. The turbines would be mainly located in elevated positions around the perimeter of the site in 4 or 5 clusters.

8.2.2 Locational context:

The c.1465ha site is located to the E of Kilgarvan, W of Ballyvourney, N of Gougane Barra and entirely to the S of the local road (L3021) which provides the only access point to the site. It would be located within an open and remote upland area characterised by mountains that slope down to the Roughty River. There are existing two operational windfarms to the immediate E and N of the site along with several dispersed houses along the local road. The lands are mainly used for seasonal grazing.

8.2.3 Environmental Impact Statement:

Section 12 of the EIS dealt with landscape and potential visual impacts. A Landscape and Visual Impact Assessment (LVIA) was undertaken, the Zone of Theoretical Visibility (ZTV) was established and 24 viewpoints were assessed. These viewpoints represented the local community, the nearest settlements, main transport routes, scenic routes and recreation facilities, and the wider rural environment. The EIS concluded that the natural sense of visual enclosure, limited views into the site from tourist, walking and cycling routes and the position of the turbines below the ridgeline will minimise the visual impact. However the EIS predicted adverse impacts in two small areas to the SE in County Cork. The first is around Ballingeary and Lough Allua which are scenic areas. The second is to S at Coolknoohil in the upper Roughty Valley, which is comprises a number of houses, although the impact would be mitigated by the siting and location of the turbines in distinct groups on individual landform features. The EIS stated that the main area of visual impact would be from the local road and from within the site itself. The EIS did not predict any adverse impacts.

8.2.4 Previously permitted wind farms:

Kerry County Council previously granted planning permission in c.2010 for two separate windfarms on the overall site at Barnastooka and Grousemount and the details are summarised in section 8.2.2 above. Permission was

granted under Reg. Ref. 10/0197 for a 14 turbine windfarm at Barnastooka in the NW section of the site and none of the 14 conditions related to visual amenity. Permission was granted under Reg. Ref. 10/1333 for a 24 turbine windfarm at Grousemount in the S and SE sections of the site and none of the 21 conditions related to visual amenity.

Planning permission is currently being sought to erect 38 turbines on the combined sites at Barnastooka and Grousemount and the comparative dimensions are summarised in the following table.

	Hub height	**Blade diameter**	**Overall height**
Barnastooka	80m	90m	125m
Grousemount	80-85m	82-90m	126m
Proposal	70-85m	80-112m	125-126m

The proposed turbines would be erected at similar locations to the previously permitted turbines at the Grousemount and Barnastooka sites with some small variations and mainly at the same levels with no more than a 2-6m variation. The previously permitted turbines at Grousemount are numbered T1 to T24 and the corresponding turbines currently proposed for this section of the site area numbered G001 to G024. The previously permitted turbines at Barnastooka are numbered T1 to T14 and the corresponding turbines currently proposed for this section of the site area numbered G025 to G038. Any minor differences in location and site levels would have a negligible impact on visual amenity having regard to the large scale of the landscape within which they would be located. The location of the proposed turbines is illustrated on a map contained Appendix 1 of this report.

8.2.5 ***Policy context:***

In relation to the 2015 County Kerry Development Plan, there are protected views and prospects to the site from the local road (L-3022-21) to the NW, the R569 to the W, and from Molls Gap c.23km to the NW which have the potential to be affected. The landscape classification for the area (LCA No. 21) is Upper Roughty River Valley and the lands are identified as being of Secondary Special Amenity. The area has been identified as having some additional capacity for wind development, mainly as extensions to existing projects, and the cumulative effect could be an issue for concern.

In relation to the County Cork Development Plan, there are several Scenic Routes and a protected view located within a 30km radius of the windfarm and the ZTV that have the potential to be affected. These include local scenic roads to the E and S between Coolea and Coom; Lissacresig and the Mouth of the Glen; and Gougane Barra and the Mouth of the Glen. They also include

regional scenic roads to the E and S along the R584 from the Pass of Kelmaneigh to Gougane Barra and Inchigeela and Ballinageary to Kelmaneigh. Views of Lough Allua to the SE and the surrounding mountains are protected from South Lake Road between Inchigeela and Ballingeary.

8.2.6 Assessment:

I surveyed the wind farm site, the surrounding area and wider regional and local road network in Countries Kerry and Cork over a 4 day period in November 2015. I had regard to the EIS visual impact studies which are summarised above and the concerns raised by Kerry County Council and Mr O'Donnell in relation to protected views and prospects, scenic routes, and scenic amenity. I also had regard to the previous decisions by the Council in relation to the previously permitted Barnastooka and Grousemount wind farms.

Wind turbines, by virtue of their nature, height and scale, will have an impact on the landscape. The proposed windfarm would be located within a remote upland area that is far removed from any built up areas, the settlement pattern of one-off houses is mainly dispersed and low density and the mountains themselves provide for a high degree of natural screening. The proposed turbines would be located in clusters which take account of the topographical features of the landscape and they avoid ridgelines. Furthermore, the layout and siting of the turbine clusters would be similar to those previously permitted under Reg. Ref. 10/1097 and Reg. Ref.10/1333.

The proposed windfarm would be highly visible from the local road (L3021) along the N site boundary however the turbines would not be visible from any point to the N of this road as the lands rise up in a northerly direction.

The proposed turbines would not be highly visible from along the R569 Killarney to Kenmare Road to the NW and W as most of the site and turbines are screened from view by Coolnagoppoge Mountain as far W as Morley's Bridge where the local road forms a junction with the R569. Although some of the blade tips would be visible from various vantage points in Kilgarvan to the W, the impact on visual amenity would not be significant.

Some of the turbines would be visible from Molls Gap to the NW along the Kerry Way which includes the scenic route from Killarney to Kenmare. Three turbines in the E section of the site would be located adjacent to Sillahertane windfarm with no additional visual impact anticipated. The remaining turbines would be partially screened by the mountain ranges to the W of the site although the blade tips of several turbines would be visible from Molls Gap. However I am satisfied that the c.25km separation distance between Molls Gap and the site would minimise the visual impact along the Kerry Way.

The proposed turbines would not be highly visible from the protected views or scenic routes to the E and SE of the site in County Cork because of the mountainous topography which would conceal most of the site and turbines from view, and any views into the site from S, including Gougane Barra, would be restricted to the blade tips at the most.

8.2.7 Conclusion:

Having regard to all of the above, I am satisfied that the most significant visual impact would be from within the site itself and from along the local road to the N, and that the proposed development would not adversely affect the visual amenities of the area or interfere with any protected views, prospects or scenic routes in the surrounding area, to any significant extent. The proposed development would not give rise to any significant adverse cumulative impacts in-combination with other windfarms, or plans and projects in the area.

The height and rotor blade dimensions of the proposed turbines would be similar to those of the previously permitted turbines at Barnastooka and Grousemount, and the proposed turbines would occupy similar positions and site levels within the overall windfarm site. Any minor difference would not give rise to a significantly different visual impact when compared to the preciously permitted turbines, especially having regard to the overall scale of the c.1465ha site and the high degree of natural screening from the surrounding mountain ranges.

8.3 Movement and access

8.3.1 *Project description:*

The windfarm project includes three main elements of infrastructure:

- The creation of a new site entrance off the local road (L3021) to the N to serve the combined previously permitted wind farm sites at Barnastooka and Grousemount.

- The creation of c.28km of access tracks which would include:

    - A link track between the two previously permitted wind farms at Barnastooka and Grousemount that would run from NE to SW trough the N section of the site.
    - An almost continuous track around the perimeter of the site that would connect all the elements of the project, starting at the site entrance off the local road (L3021), leading to T25 in the NW section of the site and ending at T1 in the NE section.

- The internal access tracks would require several river crossings.

- Works along the local road network to the N of the site to facilitate the delivery of wind turbine components, and the following options are proposed:

  - ***Delivery Route 1:*** would be off the Killarney to Macroom road (N22) to the NE of the site at Ballyvourney in County Cork and via the local road L3400 (Cork) and L3021 (Kerry) which serves the surrounding farms and forestry plantations, in counties Cork and Kerry. The use of this route would require the installation of a temporary bridge across the Sullane River at Ballyvourney village (County Cork) and the creation of a temporary entrance off the N22 and L3400; and local road and bridge improvements at a series of locations along the L3400/L3021 towards the site. The use of this route would require works to public roads.

  - ***Delivery Route 2***: would be off the N22 directly to the N of the site in County Kerry and via an existing delivery route to the neighbouring Everwind windfarm. This route would require the creation of an additional c.500m of access track within the adjacent site to link the existing windfarm access tracks to the local road (L3021) along with a realignment of existing site entrance with this local road. The use of this route would require works to the public road.

8.3.2 Environmental Impact Statement:

Section 16 of the EIS dealt with roads & traffic and short term impacts were predicted during construction. Under the worst case scenario the EIS predicted 6, 025 HCVs or 12,050 movements over c.18 months with 30 HCVs per day. It estimated that traffic movements would peak on 38 non-consecutive days when concrete is delivered (c.55 deliveries per turbine) and that the turbine components would require 456 deliveries. The EIS stated that the N22 is currently operating under capacity, that it is used mainly by cars and small vans and that any repairs to local roads (at the developer's expense) would benefit the local community. The EIS stated that the underground cable (Exempt development) will be installed along the L11187, N22 and the L3021/L3400 and that this would require c.20HGV movements at each cable work location per day. Traffic control measures and full road closures may be required. The EIS did not predict any adverse impacts.

8.3.3 Previously permitted wind farms:

The previous windfarm planning permissions for this site are summarised in section 8.2.2 above and both windfarms would have required separate access points off the L3021. The Barnastooka permission (Reg. Ref. 10/0197) in the NW section included Condition no.8 which required the submission of a Traffic Management Plan for the written agreement of the planning authority. The Grousemount permission (Reg. Ref. 10/1333) in the S and SE sections of the site included Condition nos. 10 & 11 which required the submission of an updated Transport Study and a Traffic Management Plan.

8.3.4 Assessment:

New site entrance:

The proposed vehicular entrance off the local road (L3021) to the N would serve the entire site. The proposed entrance would be set back from the roadside boundary and the sightlines are adequate in either direction. The proposed arrangements would not give rise to a traffic hazard or endanger the safety of other road users. The proposed entrance would require works to the public road at the developer's expense.

Internal access tracks:

The proposed network of tracks and river crossings would provide access to and between the Barnastooka and Grousemount sites which is acceptable. Issues related to peat stability, water quality and ecology will be addressed in the following sections. The access tracks would be located entirely located within the windfarm site and on lands that within the control of the developer.

Delivery route 1:

The proposed use of the N22 and local road network (L3400 & L3021) via a temporary bridge over the Sullane River to the W of Ballyvourney is considered acceptable. However it is noted that the proposed temporary entrance off the N22 is located along a section of the road which is defined by a solid white line. Temporary traffic management measures should be put in place for the entire duration of the works in order to avoid a traffic hazard. The proposed temporary entrance off the L3400 is located along a relatively straight section of the road which is quite narrow and similar traffic management measures should be put in place.

The proposed road and junction improvements along the local road network are considered acceptable in terms of traffic safety and neither of the county councils objected to the proposed arrangements. However Cork County council did raise concerns in relation to flood risk, water quality and ecology in the vicinity of the temporary bridge, and the potential impact of the road improvement works at Ballyfinnane Bridge which is a heritage feature located along the delivery route. These concerns are noted and issues related to water quality, ecology and heritage will be addressed in the following relevant sections. The proposed road, junction, bridge improvements and temporary bridge would require works to the public road at the developer's expense.

The movement of heavy equipment associated with the proposed windfarm will have an inevitable impact on regional and local road network and the developer should be financially responsible for any repairs to the network following completion of the windfarm. The use of the road network also has potential to cause disturbance to local communities along the delivery route and the developer should ensure that local people and farmers are notified in advance of any plans to transport large loads to the site. These concerns could be addressed by way of planning conditions.

Delivery route 2:

The proposed use and extension of the existing delivery route through the adjacent Evergreen windfarm to the N, and proposed junction improvements with the local road (L3021), are considered acceptable in terms of traffic safety and convenience. However traffic management measures should be put in place at the entrance to the Evergreen site off the N22 to the N and off the local road (L3021) to the S for the duration of the windfarm construction works. The proposed extension of this access track from the Everwind windfarm to the L3021 entrance would require works within the adjacent land which would require the consent of the landowner and to the public road at the developer's expense.

Conclusions:

Having regard to all of the above, I am satisfied that the proposed development would not give rise to a traffic hazard or endanger the safety of other road users, subject to the full implementation of the EIS mitigation measures and compliance with planning conditions. The proposed development would not give rise to any significant adverse cumulative impacts in-combination with other windfarms, the grid connection route or plans and projects in the area.

The previously permitted windfarms at Barnastooka and Grousemount required two separate entrance points off the L3021 to the N of the site whist it is currently proposed to provide a single entrance off this local road to serve the amalgamated windfarm. This represents a significant improvement in terms of traffic safety by reducing the number of traffic manoeuvres and turning points along the local road, and it would require less works to the public road and junctions than under the previous projects.

The previously permitted delivery routes to the two windfarm sites would have been off the R569 Killarney to Kenmare road at Morley's Bridge to the NW of the site. Morley's Bridge is a narrow structure and a heritage feature. The section of the L3021 local road which runs E from this bridge towards the windfarm site is substandard in width and alignment, it rises steeply along some sections and runs through rocky outcrops. The currently proposed delivery route options off the N22 to either the N or NE of the site represent a significant improvement in terms of access, movement and traffic safety.

8.4 Residential amenity

8.4.1 Project description:

The visual impacts have been assessed in section 8.2 above and the traffic impacts have been assessed in section 8.3.This section will deal with the impacts of noise, vibrations and shadow flicker on residential amenity.

8.4.2 Environmental Impact Statement:

Section 6 of the EIS dealt with the human environment, it described the remote nature of the site and low population density along with the employment and financial benefits to County Council.

Section 7 of the EIS dealt with noise and vibration and it concluded that there would be minimal construction and operational noise at noise sensitive locations. The EIS computer modelling took account of neighbouring wind farms (operational and not yet constructed).The model predicted that operational limit values would be exceeded at some noise sensitive locations at certain wind speeds (but by less than 3dB) and that a turbine curtailment strategy would be devised. All of the turbines would be located in excess of 500m from nearby houses.

Section 8 of the EIS dealt with shadow flicker. The EIS computer modelling examined the potential for shadow flicker occurrence at 44 houses and the model took account of neighbouring wind farms (operational and not yet constructed). It concluded that there was potential for shadow flicker effects at

4 houses but the effects were not expected to be adverse subject to mitigation measures which would ensure that the pre-programming of the turbines to prevent operation at times when shadow flicker could cause a nuisance.

Section 13 of the EIS dealt with atmospheric emissions and air quality. It stated that there would be no emissions from the wind farm project, and given the sparsely populated nature of the surrounding area, there would be no adverse impacts on residential amenity from construction or traffic dust. However there would be a negligible loss of carbon sequestration as a result of tree removal along the delivery route.

The EIS did not predict any adverse impacts in relation to human beings, noise and vibration, shadow flicker and air quality.

8.4.3 Previously permitted wind farms:

The previous windfarm planning permissions for this site are summarised in section 8.2.2 above. The Barnastooka permission (Reg. Ref. 10/0197) for the windfarm located in the NW section of the site included Condition no.2 which required a separation distance of 2.5 times the blade diameter from adjoining property boundaries. The Grousemount permission (Reg. Ref. 10/1333) for the windfarm located in the S and SE sections of the site did not contain any specific conditions with respect to residential amenity.

8.4.4 Assessment:

The proposed windfarm will provide significant employment opportunities during the construction phase although post construction employment would be limited to ongoing maintenance and habitat management. The project will give rise to financial benefits by way of commercial rates and the community gain benefits will be assessed in section 8.10 below.

Noise and disturbance – construction phase:

Give the nature and scale of the proposed development, the proposed windfarm will give rise to noise disturbance during the construction phase. This disturbance would mainly relate to the delivery of large components along the local road network, road works which include local road and junction upgrades, and the installation of temporary bridge at Ballyvourney. It would also include excavation and construction works within the site, and the construction of access tracks throughout the site. Although these works would be short term and temporary, they have the potential to adversely affect residential amenities in nearby houses along the local road (L3021) to the N of the site and along the delivery route.

However it is noted that the surrounding area is sparsely populated and the impacts would be short term and temporary. These concerns could be addressed by way of conditions which place restrictions of delivery times and hours of construction. It is noted that the EIS noise control and monitoring measures are adequate. Local residents should be notified in advance of any major construction works including any blasting or mechanical extraction that may take place at the borrow bits, and of the transport of large pieces of plant and equipment along the local road network.

Noise and vibration - Operational phase:

There are no dwellings located within 500m of the proposed turbines except for 2 houses that are located in the vicinity of T1, T2, T3 &T4, and the owners of these houses would be beneficiaries of the project. The proposed windfarm would be located adjacent to an existing windfarm to the E at Sillahertane and when both projects are operating together, operational noise could exceed acceptable night time noise levels. It is noted that the EIS recommends a curtailment strategy whereby T1 and T2 would operate in noise reduced mode to reduce levels at one of the nearby houses. It is further noted that the EIS also recommends a night time curtailment strategy whereby T1-T4, T26-T28 & T36-T38 would either operate at noise reduced modes or be shut down completely at night to mitigate the effects at several other houses in the area. This is considered to be an acceptable strategy and no further planning conditions are required.

Shadow flicker:

Although there are several houses located to the N of the proposed turbines, none are located within 500m of any structure. None of these houses are likely to be significantly affected by shadow flicker in the morning or evening given their orientation relative to the turbines, taken in conjunction with the substantial separation distances. Although two houses are located within the 500m buffer, it is noted that these belong to landowners who would be beneficiaries of the project. However the EIS mitigation measures related to pre-programming of turbines would prevent operation at times when shadow flicker could cause a nuisance. Any disturbance by way of in-combination impacts with the neighbouring windfarms could be addressed by condition.

Dust emissions:

The proposed excavation and construction works could also give rise to dust emissions although it is not anticipated that this would have an adverse impact on residential amenity having regard to the sparsely populated nature of the surrounding area and the separation distances between the proposed

works and neighbouring houses. However stringent compliance with best construction practices would minimise any potential impacts.

Other issues:

The proposed wind farm would contribute to the achievement of national targets to reduce greenhouse gas emissions. Although there would be some loss of carbon sequestration capacity as result of peat extraction and localised tree felling, this is considered to be acceptable when balanced against the overall renewable energy benefits.

8.***4.5 Conclusions:***

Having regard to all of the above, I am satisfied that the proposed development would not adversely affect residential amenities or air quality to any significant extent as a result of noise, vibration, shadow flicker or dust emissions, subject to the full implementation of mitigation measures and planning conditions. The proposed development would not give rise to any significant adverse cumulative impacts in-combination with other windfarms, the grid connection route or plans and projects in the area.

The location of the proposed turbines would be similar to those of the previously permitted turbines at Barnastooka and Grousemount. Although a small number of turbines would occupy slightly different positions, this would not give rise to a significantly different impact on residential amenity in relation to noise, shadow flicker and general disturbance. However the currently proposed delivery route options off the N22 to the N or NE of the site and the single site entrance to the windfarm would cause less traffic and traffic related disturbance than the previously permitted windfarms. This would represent a significant improvement, having regard to the small number of houses located along the currently proposed delivery routes when compared to the number of houses located along the previously permitted route.

8.5 Peat stability

8.5.1 Project description:

The windfarm project would comprise extensive excavation works associated with the construction of the turbines, met masts, access tracks, borrow pits and river crossings within a predominantly peatland environment.

8.5.2 Environmental Impact Statement:

Section 14 of the EIS dealt with geology, soils and peat stability and several desktop studies, field surveys and site suitability tests were undertaken, and a Peat Stability Risk Assessment (PSRA) was carried out. The other relevant sections of the EIS (10, 11 & 15) which dealt hydrology, hydrogeology, water quality and aquatic ecology are dealt with in section 8.6.2 below.

Section 14 of the EIS described the ground conditions as consisting of peat over glacial till over sandstone and siltstone bedrock and there is no evidence of bog slides or peat in stability within the site. The EIS survey works included c.256 trial pits along the access tracks and rotary boreholes at the turbine locations, borrow pits and substation and the results indicate a peat depth of less than 1m at 80% of locations across the entire site. The EIS states that the access tracks and turbines locations will be excavated to a width of 7m and a diameter of 15m respectively to provide c.450, 000 m_3 of spoil.

The EIS contains detailed design and construction mitigation measures to protect water quality and a spoil management strategy to manage peat storage and prevent peat slides. The PSRA concluded there is a low risk of peat failure following the implementation of mitigation measures. Appendix H1 contains a High Level Review of PSRA which concluded that the basis of the proposed mitigation measures are adequate and in line with best industry practice, however the implementation of some of the measure would have to be teased out during the design stage, and overall the PSRA is adequate. The FI response provided extensive site specific details of the site suitability tests.

No significant adverse impacts predicted subject to mitigation measures.

8.5.3 Previously permitted wind farms:

The previous windfarm planning permissions for this site are summarised in section 8.2.2 above. The Barnastooka permission (Reg. Ref. 10/0197) included Condition no.9 which required the submission of a Drainage Management Plan. The Grousemount permission (Reg. Ref. 10/1333) included Condition no.12 which required details of the exact location of each turbine and the submission of sediment and erosion control plans.

8.5.4 Assessment:

The proposed windfarm would be located within an upland area on both sides of the Roughty River which is a typical glacial valley, the lands slope down towards the river and the slopes are N, E and W facing. The proposed turbines would be located at levels that vary between 306mOD and 493mOD.

The lands have mainly been used for livestock grazing. Peat depths across most of the site are generally less than 1m but with some localised deeper pockets (up to 3m) to the W and bedrock is exposed in several places to the S. The peat is mainly underlain by purple siltstone and fine sandstone of the Bird Hill Formation with a small section to the N underlain by cross bed sandstone and siltstone of the Slaney Sandstone Formation. Site gradients vary between 3 to 7 degrees although some of the access tracks would be located at gradients of up to 10 degrees. It is noted that there is no history of landslides or peat slippages in the immediate area and that none of the neighbouring windfarms to the N (Everwind) or E (Sillahertane) have given rise to peat slippages however there have been two recorded landslides within 10km of the site in recent decades.

The proposed works would require the excavation and movement of substantial quantities of peat (c.450, 000m^3) which would be stored in a number of borrow pits around the site or used to re-instate the landscape. These excavation and movement works have the potential to affect peat hydrology and drainage patterns in the area. The unregulated excavation and construction works, particularly on steep slopes, N facing slopes, and in areas of deep peat could also give rise to peat instability and slippage, with resultant serious adverse impacts on water quality and ecology.

An extensive range of site suitability tests were undertaken at the site of the various project elements including the turbine locations, borrow pits and access tracks and a total of 256 trial pits were excavated across the site. The results indicate a relatively shallow peat depth across the entire site with average depths of less than 1.0m at 80% of locations, ranging from c.0.5m to c.1.7m. The remaining 20% of the site located in the S (Grousemount) section would have peat depth between 1.7m and 3.0m.

Peat depths at the turbine locations were recorded as less than 1m for c.80% of the locations and less than 0.5m at more than half of the turbine locations. However the peat depth at T22 in the SW (Barnastooka) section is c.2.2m and the ground slope is 0 to 7degress and N facing. Peat depths at the access track locations were also recorded as less than 1m for c.80% of the locations and less than 0.5m at more than half of the tracks. However there are two pockets of deep peat in the NW (Barnastooka) section of the site where depths of between 2.2m and 2.4m were recorded at the access track to T30 and along the main track in the vicinity of T24 and T35. Peat depths at most of the borrow pits are less than 1m except for BP-A and BP-C in the NW (Barnastooka) section where depths of 1.m and 1.3m were recorded respectively.

The test results also indicate that the peat is located over soft to firm sandy gravelly silt in almost of the trial pits, the thickness varied from 0.2m to 2m and ground water was observed at c.30% of the pits. The slope angles at the turbine locations would mainly range from 3 to 7 degrees whilst the slopes at several of the access tracks would be up to 10 degrees. All of the project elements would be located more than 200m from watercourses (except for the river crossings).

The Peat Stability Risk Assessment (PSRA) which was based on the Scottish Executive document, rates the risk of instability with reference to four categories which range from Insignificant, Significant, Substantial to Serious. The PSRA assessed the risk of instability by reference to several accumulated factors including peat depth, slope angle, slope orientation, vegetation cover and proximity to watercourses. The results indicate a substantial risk of instability at 23 locations and a significant risk at 57 locations out of a total of 106 areas including turbine locations, access tracks and borrow pits. It is noted that none of the risks were rated as Serious. Following the implementation of the mitigation measures the PSRA risk rating was reduced to insignificant at all locations throughout the site. The suite of EIS mitigation measures include detailed design and construction measures for all project elements across the entire site and a spoil management strategy to manage peat storage and prevent peat slides. The mitigation measures would be applied at the preliminary design stage, detailed design stage and construction stage, and subject to ongoing monitoring.

Having regard to all of the above, I am satisfied that the applicant carried out an extensive range of site suitability tests which were used to inform the general location of the proposed turbines, borrow pits and access tracks. I am satisfied that the results of the PRSA are robust and that the proposed works would not give rise to peat instability or slippage, subject to the stringent implementation of the EIS mitigation measures and on-going site inspections and monitoring.

Kerry County Council raised concerns that the PSRA was not a sufficiently detailed geological site investigation and that peat depths at specific locations may have been extrapolated. The applicant addressed this concern by way of the FI submission of the background technical reports to the PRSA and Kerry County Council raised no further concerns.

8.5.5 Conclusions:

Having regard to all of the above, I am satisfied that the proposed development would not have a significant adverse affect on soils, geology or peat stability subject to the full implementation of the mitigation measures.

The proposed development would not give rise to any significant adverse cumulative impacts in-combination with other windfarms, the grid connection route, or plans and projects in the area.

The location of the proposed turbines and project elements would be similar to those of the previously permitted turbines at Barnastooka and Grousemount. Although a small number of turbines and borrow pits would occupy slightly different positions, this would not give rise to a significantly different impact on peat stability, subject to the mitigation measures.

However there would be a more extensive network of access tracks throughout the site and additional borrow pits at Barnastooka under the current proposal in comparison to the previously permitted windfarms at Grousemount and Barnastooka. This would result in more extensive excavation works which could give rise to an additional potential risk of peat instability and slippage in comparison to the previously permitted developments. However the proposed mitigation measures would serve to minimise any adverse impacts and reduce the risk of peat slippage.

8.6 Water quality and aquatic ecology

8.6.1 Project description:

The proposed project would comprise extensive excavation works associated with the construction of the turbines, access tracks, borrow pits, bridges and met masts within the site, as well as road improvements along the delivery routes.

8.6.2 Environmental Impact Statement:

Sections 10, 11 and 15 of the EIS dealt with water quality, aquatic ecology and hydrology and several desktop studies and field surveys were undertaken. Section 14 of the EIS which dealt with geology, soils and peat stability are summarised in section 8.5.2 above.

Windfarm site:

The EIS describes the site as being located within the SWRBD, it is drained by the Roughty River via a network of c.50 watercourses and it flows through the site to Kenmare Bay c.20km to the SW. There are no direct hydrological links with any European sites within a 15km radius although the Sillahertane Bog and Ballagh Bog NHAs are located nearby. The EIS had regard to EPA water quality reports. A range of investigations were undertaken including biological, chemical and electrofishing surveys, and habitat and ecological

assessments for Salmonid, Lamprey and Freshwater pearl mussel. It stated that most tributaries are of high local importance while the main channel of the Roughty River is of regional importance, with several Freshwater pearl mussel populations located downstream of the works.

The EIS states that the project works will occupy 3% of the overall area with a predicted increase in runoff over baseline conditions of c.0.23% which it does not consider to be significant. It predicts that there is potential for water pollution from suspended solids as a result of the excavations, with possible significant long term aquatic effects.

The EIS proposes a range of mitigation, avoidance, inspection and monitoring measures as part of a Construction and Environment Management Plan (CEMP) and Surface Water Management Plan (SWMP). It states that the erosion and sediment control measures will be in place and functioning before works commence. There will be no adverse impacts on Freshwater pearl mussel populations, river crossings will not inhibit fish movements, and the works will be monitored by an Ecologist. There will be no works located up or down gradient of the nearby Sillahertane Bog or Ballagh Bog and it predicts that there will be negligible impacts on groundwater and wells in the area.

No significant adverse impacts predicted subject to mitigation measures.

Grid connection route:

Section 11 of the EIS dealt with the cable route (Exempt development) which traverses two main river catchments (Roughty to W and Sullane to E). EIS field surveys were undertaken at each of the c.147 small watercourse crossings to assess water and habitat quality and a temporary, localised and minor reduction in habitat quality in some watercourses is predicted with no significant adverse impacts predicted for protected species

EIS conclusions:

The EIS predicted minimal habitat loss and disturbance within the windfarm site and along the delivery routes. It did not predict any adverse impacts on watercourses, water quality, fisheries, or aquatic life including freshwater pearl mussel, subject to mitigation measures. It did not predict any adverse impacts for European sites or areas of nature conservation interest in the wider area.

Previously permitted wind farms:

The previous windfarm planning permissions for this site are summarised in section 8.2.2 above. The Barnastooka permission (Reg. Ref. 10/0197) included Condition no.9 which required the submission of a Drainage Management Plan. The Grousemount permission (Reg. Ref. 10/1333) included Condition no.12 which required details of the exact location of each turbine and the submission of sediment and erosion control plans and Condition no.18 which required several additional measures to protect watercourses from pollution by sediments.

8.6.3 Assessment:

Kerry County Council, NPWS, IFI and An Taisce raised concerns in relation to the impact of the proposed works in general and suspended solids in particular on water quality in watercourses. The excavation works and movement of large quantities of peat to the on-site borrow pits have the potential to release fine sediments into the network of watercourses that traverse the site via surface water runoff. The unregulated release of sediments could have an adverse long term impact on water quality and aquatic ecology, including fisheries and the Freshwater pearl mussel populations in the River Roughty downstream of the proposed works. Accidental fuel spillages from storage areas, machinery and vehicles also have the potential to contaminate surface water. Road improvement works along the delivery routes also have the potential to release sediments into nearby watercourses and cause disturbance to wildlife.

The potential impact of the proposed works on geology, soils and peat stability are dealt with in section 8.5 above.

Windfarm site:

The EIS proposed a suite of mitigation measures to prevent water pollution (including silt traps, sediment ponds and buffer zones around watercourses), a series of avoidance measures as part of a Construction Environmental Management Plan (CEMP), a Surface Water Management Plan (SWMP), along with ongoing site inspections, a maintenance plan for on-site drainage and water quality monitoring. The erosion and sediment control measures will be operational before construction works commence and the works will be monitored by an on-site Ecologist on a regular basis.

Kerry County Council was satisfied that the proposed measures would minimise sediment and contaminant run off during the construction phase and that the measures are adequate to ensure the maintenance of existing water quality within the Roughty River. However the Council raised some concerns in relation the potential impacts on FWPM populations downstream of the proposed works in the Roughty River and otter populations who forage for food along the extensive network of streams, and requested that additional pre-construction surveys be undertaken.

It is noted that the applicant has undertaken extensive ecological surveys of the overall windfarm site and the watercourses and that on-site drainage and water quality will be subject to ongoing inspections and monitoring. The EIS surveys did not record the presence of any FWPM populations in the section of the Roughty River that flows through the site. The surveys recorded the presence of 2 and 12 individuals in the Roughty River c. 2km and c.4km respectively downstream of the proposed works. Larger populations of 256 and 399 individuals were identified in a section of the Roughty River close to Kilgarvan and c.5km and 7km downstream of the proposed works. Having regard to the substantial separation distance between the project site and the nearest FWPM population, the layout and siting of the project elements which would not be located in close proximity to any watercourses, and subject to the strict implementation of EIS mitigation measures, I am satisfied that the proposed works would not have a significant adverse impact (by way of smothering) on this species or the food supply for otters.

The NPWS and the County Councils did not raise any further concerns in relation to water quality and aquatic ecology following the submission of further information.

Inland Fisheries Ireland (IFI) noted that the Roughty River has productive spawning and nursery habitats for Salmonids, and that salmon, trout and eel are present throughout the system. The IFI was satisfied that the potential impacts have been identified, assessed and addressed through avoidance and detailed mitigation measures. However IFI requested that measures be put in place to ensure the maintenance of water quality and the protection of aquatic ecology. These measures are summarised in section 5 above and mainly relate to the implementation a sediment monitoring regime. The IFI also requested that the conditions summarised in section 7 above be attached in relation to: - prior consultation with the IFI, control of contaminated site run-off, the preparation of a contingency plan in the event of peat movement, the free passage of fish and maintenance of river slopes, and the timing of in-stream works. Implementation of the EIS mitigation measures and adherence to best construction practices and relevant guidance would address these concerns, and no additional planning conditions are required.

The proposed works have the potential to adversely affect water quality, fisheries and aquatic wildlife including FWPM by way of the uncontrolled release of fine sediments and hydrocarbons to surface water during the construction phase. However I am satisfied that, subject to the stringent implementation of all of the EIS mitigation measures including ongoing inspections and monitoring, in combination with the additional conditions recommended by the IFI, the proposed windfarm would not have a significant adverse impact on water quality, fisheries or aquatic ecology.

Delivery routes:

Delivery route 1 would use the existing local road network off the N22 Killarney to Macroom Road at Ballyvourney to the NE of the windfarm site whist Delivery route 2 would mainly utilise the existing access route off the N22 to the N of the windfarm site through the neighbouring Everwind windfarm . The grid connection route (Exempt development) would also mainly run along the local road network.

Delivery route 1 would require a number of road, junction and bridge improvements along with the installation of a temporary bridge over the Sullane River at Ballyvourney, whilst and the grid connection route would require the culverting of c.150 small watercourses, most of which do not support fish life. The works associated with the road, junction and bridge improvements, including the temporary bridge over the Sullane River, have the potential to release sediments and hydrocarbons into the watercourse with resultant adverse impacts on water quality, fisheries and aquatic ecology. However I am satisfied that the EIS mitigation measures will protect the watercourses from pollution and contamination.

The IFI raised several concerns in relation to the need for additional pollution control measures for a section of the delivery route that runs S off the L3021 through a recently felled forest area. However this concern in combination with the other water quality issues raised by the IFI in relation to the proposed road, bridge and junction works are similar to those addressed above in relation to the overall windfarm site with respect to protecting water quality from contamination. The IFI also recommend the adoption of the NRA's guidance on Water Crossings on National Road Scheme which would serve to prevent sediment laden runoff entering small streams in the vicinity of proposed road works. I am satisfied that the full implementation of the EIS mitigation measures and strict adherence to best construction practices and relevant national guidelines would address these concerns in relation to protecting water quality and no additional planning conditions are required.

8.6.4 Conclusions:

Having regard to all of the above, I am satisfied that the proposed development would not have a significant adverse affect on water quality, fisheries, ecology or Freshwater pearl mussel populations, subject to the full implementation of the proposed mitigation measures and adherence to all relevant guidance and best practice. The proposed development would not give rise to any significant adverse cumulative impacts in-combination with other windfarms, the grid connection route, or plans and projects in the area.

The location of the proposed turbines and project elements would be similar to those of the previously permitted turbines at Barnastooka and Grousemount. Although a small number of turbines and borrow pits would occupy slightly different positions, this would not give rise to a significantly different impact on water quality and aquatic ecology, subject to mitigation.

However there would be a more extensive network of access tracks and river crossings under the current proposal in comparison to the previously permitted windfarms at Grousemount and Barnastooka. This would be most evident in the S section where the access tracks would extend around the perimeter of the site, and in the N section where a new access track would run from NE to SW, both of which would connect the Grousemount and Barnastooka sites to facilitate their amalgamation. This would result in more extensive excavation works and release of fine sediments which could give rise to additional potential impacts on water quality and aquatic ecology. However the proposed mitigation measures, which include silt traps, surface water attenuation areas and buffer zones around water courses, would serve to minimise any adverse impacts.

8.7 Terrestrial ecology

8.7.1 Project description:

The windfarm project would comprise the works associated with the construction of the turbines, met masts, access tracks, borrow pits and river crossings along with the works associated with the delivery routes including the construction of a temporary bridge over the Sullane River at Ballyvourney.

8.7.2 Environmental Impact Statement:

Section 9 of the EIS dealt with terrestrial ecology within the windfarm site and along the delivery routes and grid connection route (Exempt development). Several desktop studies and field surveys were undertaken to inform the

conclusions of the EIS and additional surveys were carried out under FI. The EIS did not predict any adverse impacts subject to mitigation measures.

Windfarm site:

The site is not located within or adjacent to any European sites although there are a number of NHAs and pNHAs nearby including the Roughty River, Sillahertane Bog and Ballagh Bog. The site is dominated by wet heath on sloping terrain over relatively shallow peat cover, with small sections of blanket bog (priority habitat) on deeper peat at higher levels which have been affected by cutting and seasonal livestock grazing, and sections of the lower reaches along the Roughty river are used for grazing.

The EIS and FI response identified the following areas of potential concern:

- The EIS states that site does not contain suitable nesting or roosting sites for the ***White-tailed Sea Eagle*** and no adverse impacts are predicted. The FI response included additional survey information which confirmed that the site is rarely used by this species however additional mitigation measures will be put in place to monitor the usage of the site by this species. No adverse impacts are predicted.

- The ***Red grouse*** population would be disturbed during the construction phase however the EIS predicts that they will habituate after the works are complete. No adverse impacts are predicted.

- The EIS identified several other ***bird species*** that use the site including Meadow pipit and Skylark. No adverse impacts are predicted

- ***Otter*** is located along several watercourses in the area however the EIS surveys did not uncover any evidence of breeding activity. No adverse impacts are predicted.

- The ***Kerry slug*** is present within the overall windfarm site and any specimens present during construction will be removed and relocated by a specialist. No adverse impacts are predicted.

- The three rare species of ***Endemic hawkweed*** located along the watercourses would be affected by the river crossings by way of habitat loss, disturbance and overshadowing by bridge structures, and the EIS predicts a 3% loss of habitat. Mitigation measures including seed collection. No adverse impacts predicted.

Delivery route 1:

The works associated with the temporary bridge over the Sullane River to the NE of the site at Ballyvourney would require the removal of trees and hedgerows and works to the river banks. The EIS and FI response identified the following areas of potential concern:

- Although the ***Kingfisher*** occurs along the Sullane River the EIS surveys did not record any present in the vicinity of the proposed works and no adverse impacts are predicted.

- The existing bridge over the Sullane River has ***Bat*** roosting however the EIS states that the nature of the riparian habitats have limited foraging value. Mitigation measures include surveying trees prior to felling and removing/relocating any specimens to more suitable locations. No adverse impacts are predicted.

- ***Otter i***s known to use watercourses in the area including the Sullane River however the EIS and FI surveys did not uncover any evidence of breeding activity with no adverse impacts predicted.

Grid connection route:

The EIS states that the cable route (Exempt development) would be mainly located along public roads and it runs adjacent to the St Gobnet's Wood SAC, Mullaghanish Bog SAC and NHA, and the Mullaghanish to Musheramore Mountain SPA. The excavation works have the potential to affect Kerry slug and Otter, and Hen harrier which is the qualifying interest for the SPA.

EIS conclusions:

The EIS predicted minimal habitat loss and disturbance within the windfarm site and along the delivery route. The EIS did not predict any adverse impacts for birds, bats, otter, Kerry slug or endemic hawkweeds, subject to mitigation measures. The EIS did not predict significant adverse effects for any European sites, Priority habitats, NHAs, pNHAS or any other areas of nature conservation interest in the wider area.

8.7.3 Previously permitted wind farms:

The previous windfarm planning permissions for this site are summarised in section 8.2.2 above and one of the conditions related to terrestrial ecology.

8.7.4 Assessment:

The overall windfarm site is not covered any sensitive European site designations however there a number of SACs, SPAs and NHAs in the wider area. These include St. Gobnets Wood SAC and NHA, Mullaghanish to Musheramore Mountains SPA and Mullaghanish Bog SAC and NHA to the NE along the grid connection route. The Sillahertane Bog NHA and Ballagh Bog pNHAs are located to the E and SW of the site respectively. A section of the Roughty River downstream of the proposed works is a pNHA and this river drains into Kenmare Bay SAC to the SW.

The predominant habitat type at the windfarm is Wet Heath (Annex 1 habitat) over peat and this covers most of the Grousemount and Barnastooka sites. There are several very small unconnected sections of Blanket Bog (Priority Annex 1 habitat) located in the S section of the site along with small areas of inland cliff. Several protected animal species are known to frequent the site (including White-tailed sea eagle, Red grouse, Meadow pipit, Skylark, Otter and Kerry slug) whist three rare species of Endemic Hawkweed occur on boulders along the banks of the Roughty River.

The temporary bridge across the Sullane River would be located in close proximity to Ballyvourney Bridge which has roosting and nesting potential for Bats and Dippers, and the riparian river banks may provide foraging habitat for Bats, Otters, Kingfishers and Dippers. The grid connection route (Exempt development) passes through St. Gobnet's Wood SAC and NHA, in close proximity to Mullaghanish Bog SAC and NHA, and Mullaghanish to Musheramore Mountain SPA. This SPA is used by Hen harriers for nesting and foraging, and the lands along the cable route contain Kerry slug habitat.

The proposed works have the potential to cause habitat loss and disturbance and to Annex 1 habitats and disturbance to several protected species within the windfarm site, and some of the project elements would be located in close proximity to Sillahertane Bog NHA and Ballagh Bog pNHA to the E and SW.

Windfarm site:

The site mainly comprises *Wet heath* over peat with some small discreet sections of *Blanket bog* and the proposed excavation and construction works will result in an inevitable loss of a proportion of these habitats.

Wet heath, which is an Annex 1 habitat, covers an extensive part of the c.1465ha site, however when this area is compared to the scale and extent to the of the project area, there will be a minimal loss of habitat. One of the main characteristics of Wet heath is its capacity to store large quantities of water even at higher ground and the removal of sections of this habitat could have

an adverse impact on surface water run-off rates during and after construction. However the EIS mitigation measures have been designed to take account of this issue and I am satisfied that adequate water management and attenuation measures will be put in place.

Several small remnants of ***Blanket bog***, which is an Annex 1 Priority habitat, are located in the S section of the c.1465ha site. Some of these areas have been degraded by peat cutting and seasonal livestock grazing, and most of them would be largely unaffected by the proposed works, particularly along the SE and S site boundaries. Blanket bog also has the capacity to store large quantities of water. The removal of sections of this habitat could have an adverse impact on surface water run-off rates during and after construction although this would be addressed by EIS mitigation measures. Any interruptions to water supply to this habitat as a result of nearby works could affect the quality of the habitat and the plant and animal species that depend on it, both directly and indirectly. Some of these species could be Protected species and/or a Qualifying Interests for a further afield SPA, such as Hen harrier. However having regard to the fragmented nature of this habitat, the location of the remnants relative to the proposed works, and the EIS mitigation measures, I am satisfied that the proposed development will not have a significant adverse impact on this Priority Annex 1 habitat or the species that depend on it either directly or indirectly in the wider area.

The recently re-introduced ***White-tailed Sea Eagle*** is known to fly over the site. The NPWS has raised serious concerns in relation to the impact of the proposed windfarm on the breeding programme which is based in the Killarney National Park to the N of the site, and has seen a significant number of birds released in to the wild over the past decade. The NPWS is particularly concerned about three eagle fatalities in the area that were the result of collisions with wind turbines on the neighbouring windfarm at Sillahertane, which was possibly related to the presence of animal carcasses in the area. It is noted that the eagle breeding and release programme is at a stage where it is no longer necessary to provide food for juveniles and that the carcasses were probably related to fallen livestock.

The applicant submitted details, by way of FI, of White-tailed Sea Eagle surveys which were undertaken at windfarms in Scotland and Norway. These studies concluded that this species was largely unaffected by the turbines, with the exception of a small number of fatalities in the early days of operation. The applicant also submitted details of additional eagle surveys conducted at the proposed windfarm site. The contents of these surveys and studies are noted.

The White-tailed Sea Eagle has a substantial catchment that includes the entire west of Ireland and extends into Northern Scotland and Scandinavia. Although it is possible that mature birds could return to this part of Cork and Kerry to breed, NPWS is satisfied that the windfarm site does not contain suitable nesting habitat for the eagle. I am satisfied that members of this species are unlikely to establish a breeding territory in the vicinity of the site.

The Board recently refused permission from a windfarm c.2km to the N of the site under PL08.243129 because of the presence of roosting eagles nearby. Although there is some roosting potential in the lower reaches of the Roughty River valley, most of the trees have recently been felled. There is a possibility that the eagles would soar up from the river when hunting for food, however this species prefers to fish in large water bodies such as lakes and seas rather than small rivers. The main attraction to the area is therefore likely to be from recently deceased livestock, and measures should be put in place to monitor fatalities and manage the expedient removal of livestock carcasses.

The EIS and FI submission proposed several mitigation measures to protect White-tailed Sea Eagles which may fly over the site. These included electronic tagging and monitoring, visual inspections, regular site inspections for animal carcasses and turning off turbines if eagles are observed in the area. The NPWS acknowledged that two extant permissions exist for 38 wind turbines at similar positions to those currently proposed within the site, and recommended that a number of conditions be attached to any grant of planning permission. However it should be noted that some of these conditions are not specific to the application site, and as they relate to a much larger area located between Killarney National Park and Gougane Barra, and it would be extremely difficult for the planning authority to enforce them. Furthermore, the suggested conditions may not comply with the tests for the imposition of conditions set out in the Development Management Guidelines.

Other suggestions relate to a disposal support scheme for farmers with fallen livestock, the use of electronic monitoring scheme at the developer's expense, maintaining a record of annual observations for eagle use at all operational wind turbines, and bird mortality monitoring of all turbines through the life time of the project. In the event that repeated eagle use is confirmed, appropriate deterrent measures should be undertaken at eagle roosts to avoid mortality. Most of these suggestions could be addressed by way of planning conditions, some of which may require the written agreement of the planning authority.

Red grouse, *Meadow pipit, Skylark* and several other species of birds are known to use the overall lands for nesting, roosting or foraging and the proposed project will undoubtedly cause a disturbance during the construction phase and some temporary species displacement may occur. However, bird

surveys at windfarm sites indicate that most species gradually habituate to the works and the operational turbines and I am satisfied that there would be no significant adverse long term impacts. The proposed network of tracks has the potential to make the site more accessible to hill walkers although the lands will remain in private ownership. I am satisfied that there will be no significant change to the use of the site by foxes and other predators of Red grouse.

Otter is known to frequent the Roughty River and its tributaries although the extensive EIS ecological surveys of the site did not uncover any evidence of breeding activity. However the area around any proposed river crossings should be re-examined for activity prior to the commencement of works.

The lands may contain suitable habitat for *Kerry slug*. The area around the project elements should be re-examined by an Ecologist for the presence of this species immediately prior to the commencement of works. Any specimens should be removed and relocated to a similar suitable undisturbed habitat nearby, subject to a Derogation Licence from the NPWS.

The three rare species of *Endemic Hawkweed* which grow on boulders along the banks of the Roughty River pNHA are unique to the area and several individuals will be affected by at least two of the proposed river crossings. Impacts would include the loss of individual specimens as a result of the works, overshadowing by the structures and potential increases in surface water runoff. By way of mitigation, the EIS proposed that the seeds should be collected for preservation in a seed bank, as the importation of boulders to create replacement habitats could give rise to other adverse impacts along the watercourse. The NPWS are not entirely satisfied with this seed collection proposal and have requested that other options be explored. However, having regard to the small number of sites affected, on balance I am satisfied that the proposed works will not give rise to any long term significant adverse impacts at population level, and that no other measures are required. The extensive suite of EIS mitigation measures including the attenuation ponds would ensure that the three species of Hawkweed would not be adversely affected by additional surface water runoff as a result of the proposed works.

The *Sillahertane Bog NHA and Ballagh Bog pNHA* to the E and SW would not be affected by the proposed works as the project elements would be located downhill of these sites, and the mitigation measures at the nearest turbines and access tracks would ensure the protection of bog hydrology and habitat quality.

Delivery routes:

Kingfisher and Dipper are known to occur along the section of the Sullane River affected by the proposed temporary bridge crossing to the W of Ballyvourney Bridge. The EIS ecological surveys did not uncover any evidence of breeding Kingfishers or Dippers in the vicinity. This section of the river bank does not contain suitable nesting habitat for Kingfisher, however Dippers often nest beneath bridges or in crevices in river banks. By way of mitigation, Ballyvourney Bridge and the river banks will be re-examined for the presence of nesting Dippers prior to the commencement of works. If any evidence of nesting activity is noted then works should cease until nesting is complete and no riparian hedges or trees should be removed during the nesting season.

Otter is known to use the Sullane River and this section of the river provides optimum habitat although the EIS ecological surveys indicate that there is no evidence of breeding activity. However the area around the temporary bridge should be re-examined for activity prior to the commencement of works. I am satisfied that the temporary bridge will not obstruct movement and the riparian habitat should be reinstated after the temporary bridge is removed. This could be addressed by way of a planning condition

The area has potential for *Bats* although there are no known roosts in the vicinity, and the stone culverts at Ballyvourney Bridge and the riparian tree line are probably too low to attract them. However the EIS ecological surveys identified one Ash tree with good roosting potential. By way of mitigation, all felled trees will be surveyed for bat activity and if found a derogation licence will be sought, and tree felling should be completed in time for hibernation. The riparian vegetation along the riverbank should be reinstated after the temporary bridge is removed in the interest of ecological continuity and to ensure that a continuous strip of vegetation is provided along the riverbank in the event the area might be used by foraging bats. This could be addressed by way of a planning condition.

Grid connection route:

The underground cable route (Exempt development) would be mainly located along existing roads, one of which runs in close proximity to St. Gobnet's Wood SAC, Mullaghanish Bog SAC and NHA, and the Mullaghanish to Musheramore Mountain SPA and the lands along part of the route contain suitable habitat for Kerry Slug which is a Protected Species.

A large section underground cable connection route in County Cork would be located along an existing local road that runs NE from Ballyvourney to the Macroom Road and the substation. This narrow rural road provides access to existing farms, forestry plantations and wind farms, and it runs in close proximity to the NW boundary of the *Mullaghanish to Musheramore Mountain SPA* which supports *Hen harrier* as its Qualifying Interest. The EIS ecological surveys indicate that the nearest Hen harrier nest is located a substantial distance from the local road and the underground grid connection cable route. The SPA is also located a substantial distance from the proposed windfarm. Having regard to the scale of the works, the character and usage of the local road, and the substantial separation distance to any known Hen harrier nest, I am satisfied that the proposed cable works would not have a significant adverse effect on this European site, its Qualifying Interests or Conservation Objectives either on its own or in combination with the proposed windfarm, or any other plans or projects in the wider area.

The *Mullaghanish Bog SAC* and NHA is located to the NW of the local road and it supports *Blanket bog* as its Qualifying Interests. There is no direct connection between the cable route works which would be located down slope of the SAC.

St. Gobnet's Wood SAC is located along the Ballyvourney section of the same local road and it supports *Old Sessile Oak Woods* as its Qualifying Interest which would not be affected by the proposed cable works

The EIS and FI ecological surveys indicate the presence of *Kerry slug* and suitable Kerry slug habitat in the vicinity of some of the joint bays along the cable route. Any specimens will be relocated to a similar suitable undisturbed habitat under the supervision of an Ecologist and subject to a Derogation Licence from NPWS. I am satisfied that this species will not be adversely affected by the cable works.

8.7.5 Conclusions:

Having regard to all of the above, I am satisfied that the proposed development would not have a significant adverse affect on any sensitive habitats, protected species or areas of nature conservation interest within the site or the surrounding area subject to the full implementation of mitigation measures and planning conditions. The proposed development would not give rise to any significant adverse cumulative impacts in-combination with other windfarms, the grid connection route, or plans and projects in the area.

The location of the proposed turbines and project elements would be similar to those of the previously permitted turbines at Barnastooka and Grousemount. Although a small number of turbines and borrow pits would occupy slightly different positions, this would not give rise to a significantly different impact on terrestrial ecology, subject to mitigation.

However under the current proposal, the more extensive network of access tracks in the S section where the track would extend around the perimeter of the site, and in the N section where a new access track would run from NE to SW, to connect the Grousemount and Barnastooka sites. This would result in additional excavation works that could give rise to additional potential impacts on terrestrial ecology in relation to habitat loss and disturbance to species. It is noted that the White-tailed sea eagle did not feature as a concern during the assessment of the previously permitted windfarms in c.2010.

8.8 Cultural heritage and material assets

8.8.1 Project description:

The windfarm project would comprise excavation works associated with the construction of the turbines, access tracks, borrow pits and met masts within the site which is known to contain archaeological heritage, along with works along the delivery routes which include a number of heritage features.

8.8.2 Environmental Impact Statement:

Section 18 of the EIS dealt with cultural heritage and several detailed field studies of the overall site and along the cable route were undertaken. There is one Recorded Monument and several sites of archaeological interest within the overall site but none were identified within the project area. There are several other sites of interest located outside the windfarm site and the EIS identified a further 36 sites of archaeological potential during fieldwork. Most sites of archaeological interest within the windfarm site are located more than 100m from the various project elements. The Recorded Monument will be protected by a 150m buffer zone another 5 sites that are located close to the proposed works will be protected by 20m buffer zones. The EIS concluded that none of the sites would be adversely affected by the proposed works.

The EIS did not identify any protected structures within the site but it did refer to several interesting ruins in the locality. The EIS identified 2 protected structures and 10 structures of note in the vicinity of the cable route (Exempt development) however it concluded that proposed works would not cause any adverse impacts to any of these structures.

Section 17 of the EIS dealt with material assets. The site is not located within a significant tourism area and research indicates that windfarms do not adversely affect tourism. Although a section of the Kerry Way is located is c.25km to the NW, its tourism potential would not be affected by the proposed turbines. The EIS concluded that the wind farm project will contribute to energy supply, there would be no interference with air traffic, and no electromagnetic interference is expected.

The EIS did not predict any adverse impacts subject to mitigation measures.

8.8.3 Previously permitted wind farms:

The previous windfarm planning permissions for this site are summarised in section 8.2.2 above. The Barnastooka permission (Reg. Ref. 10/10/0197) in the NW section of the site included Condition no.6 which required a 20m fenced off buffer around two site of archaeological interest. The Grousemount permission (Reg. Ref. 10/1333) for the in the S and SE sections of the site included Condition no.7 which required archaeological pre-development testing of all aspects of the works and a 150m minimum buffer around all Recorded Monuments.

Planning permission is currently being sought to erect 38 turbines along with met masts, borrow pits, access tracts and associated site works on the combined sites at Barnastooka and Grousemount. The proposed turbines, borrow pits and some of the access tracks would be located at similar locations to the previously permitted works. However the new access track off the local road to the N, which would serve both sections of the site and traverse the site from NE to SW, is a new and not previously considered element of the project. There would also be a more extensive network of access tracts that would extend around the outer perimeter of the overall site to connect the Barnastooka and Grousemount sites to the S.

8.8.4 Assessment:

Archaeology:

There are several Recorded Monuments and sites of archaeological interest located within the windfarm site at Grousemount and Barnastooka, and the surrounding area, and it is likely that the site may also contain as yet undiscovered artefacts. The Recorded Monument (KE09505) in the E section of the Grousemount site comprises a group of standing stones, and there are several features of interest within the Barnastooka site. There are no identified monuments or sites of interest located along the delivery routes.

Kerry County Council requested that no ground works should take place within 150m of the standing stone group RM (KE09505), that pre-development testing should be carried out under licence, and that all reports should be submitted to the Council and the National Monument Service.

The proposed development would not have a significant impact on the archaeological heritage of the area subject to the provision of a 150m buffer around the Recorded Monument within the Grousemount site and the provision of a 50m buffer around any sites of interest within the Barnastooka site. Compliance with standard archaeological conditions in relation to site investigation, recording and monitoring in respect of the overall lands should also be required by way of a condition. This is particularly important with the respect to the newer elements of the proposed development, such as the additional access tracks, that were not previously assessed under the Grousemount and Barnastooka applications. Furthermore, conditions similar to Condition no.6 of the previous Barnastooka permission (but with a larger 50m buffer zone) and Condition no.7 of the previous Grousemount permission (with the same 150m buffer zone) should also be also be attached.

Protected structures:

There are no protected structures located within the windfarm site or the surrounding area although there are several interesting features within the site, including the remnants of seasonal Booley Huts. However there are a number of Protected Structures located along the local road and the grid connection route (Exempt development) in County Cork. These include the stone bridge at Ballyfinnane and two structures along the cable route. There are also several features of interest located along the delivery route and care should be taken to ensure that no damage occurs to buildings and structures in the wider area.

Cork County Council raised particular concerns in relation to Ballyfinnane Bridge which is located along Delivery route 1 which runs NE to Ballyvourney. The County Archaeologist requested the preparation of a heritage report prior to the works commencing and the submission of a method statement and material specification for any re-instatement works. This issue could be addressed by way of a planning condition.

The protected structure at Morleys Bridge to the W and Ballyvourney Bridge to the E of the site will not be affected by the proposed development.

Material assets:

The proposed windfarm would not have any adverse impacts on tourism as the site does not form part of any tourist trail or the Kerry Way, and although the Roughty River is used for kayaking the impact of the works on recreation, post construction, would not be significant. The proposed windfarm would not have a significant impact on aviation subject to compliance with standard aviation conditions. There would be no significant impacts from electromagnetic interference given the sparsely populated nature of the area. The operational windfarm project will contribute to the provision of renewable energy and contribute to a reduction in greenhouse gas emissions.

8.8.5 Conclusions:

Having regard to all of the above, I am satisfied that the proposed development would not adversely affect cultural heritage or material assets to any significant extent, subject to the full implementation of the archaeological mitigation measures and planning conditions. The proposed development would not give rise to any significant adverse cumulative impacts in-combination with other windfarms, the grid connection route, or plans and projects in the area.

The location of the proposed turbines and project elements would be similar to those of the previously permitted turbines at Barnastooka and Grousemount. Although a small number of turbines and borrow pits would occupy slightly different positions, and there would be a more extensive network of access tracks around the perimeter and across the site, this would not give rise to a significantly different impact on cultural heritage or material assets, subject to mitigation.

8.9 Grid connection

Cork and Kerry County Councils determined that the works associated with the grid connection route are exempt development. I am satisfied that the applicant has submitted sufficient information with the planning application, EIS, AA Screening Report and FI response to enable the Board to undertake a cumulative impact assessment of any significant adverse impacts on the environment, and likely significant effects on European sites, of the overall windfarm development in-combination with the grid connection route, other windfarms, and plans or projects in the area. I am also satisfied that the grid connection works do not require a Stage 2 Appropriate Assessment.

8.10 Other issues

Flood risk: The developer has addressed this issue in relation to the windfarm site, the delivery routes and the temporary bridge over the Sullane River at Ballyvourney (refer to sections 8.3 and 8.5 above) and I am satisfied that the proposed development would not give rise to a flood risk.

Suggested conditions: The conditions suggested by the County Councils, the NPWS and IFI have been addressed the relevant sections of this report.

Community benefit: The developer should enter into negotiations with Kerry County Council and Cork County Council in relation to securing benefits for the local communities who live in the vicinity of the proposed development. This issue could be addressed by way of a planning condition.

Financial contributions and bonds: The standard development contribution and bond conditions should be attached for both Kerry County Council and Cork County Council.

9.0 ENVIRONMENTAL IMPACT ASSESSMENT

9.1 Compliance with Articles 94 and 111 of the Planning and Development Regulations 2001, as amended

The application is accompanied by an EIS, as required for any application made under Section 37A. The EIS is laid out as follows:

- Non-Technical Summary
- Main Statement
- Photomontages
- Technical Appendices

I have reviewed the application documentation, including the EIS, the written submissions, and the legislative requirements in terms of Environmental Impact Assessment. In particular, I note the requirement of Article 94 of the Planning and Development Regulations 2001, as amended that the EIS shall contain the information specified in paragraph 1 and paragraph 2 of Schedule 6 of the Regulations.

The EIS describes the proposed development, including information on the site and the project size and design. A description of the main alternative studied by the developer and alternative locations considered, is provided and the reasons for the preferred choice. The impact of the proposed development was assessed under all the relevant headings with respect to human beings; noise; shadow flicker; terrestrial ecology; aquatic ecology; landscape; geology and soils; hydrology and hydrogeology; roads and traffic; air and climate; material assets; and cultural heritage; interactions of impacts: and along with a summary of the mitigation measures. The content and scope of the EIS is considered to be acceptable and in compliance with Planning Regulations. No likely significant impacts were identified in the EIS.

With regard to the requirements of Article 111 of the regulations, I consider that the submissions are generally in accordance with the requirements of Article 94 of the Planning and Development Regulations 2001, as amended. In-combination effects with other plans and projects in the area are not considered likely to be significant.

9.2 Likely significant effects arising from the proposed development

Section 8.0 of this report identifies and describes the main likely significant effects arising from the proposed development and section 8.0 should be considered in conjunction with the following environmental impact assessment which identifies and summarises the likely significant effects, proposed mitigation measures and residual impacts following mitigation.

Impacts: Human Beings	Mitigation measures
Health and safety: On-site accidents and off-site traffic accidents.	Health & Safety plan for construction phase and no public access to the site.
Residential Amenity: Construction activity could potentially impact on surrounding residential amenities by area with minor visual, noise and shadow flicker intrusion.	Compliance with all relevant standards & guidelines for noise, vibration, dust & shadow flicker.
Tourism Impacts: The visual impact of the proposed turbines could have an adverse impact on views from Kilgarvan and Molls Gap to the NW	None proposed.
Residual Effects: There will be some increase in noise emissions during the construction and operational phases however predicted levels are within guidance limit values and residual impacts are not predicted to be significant. The visual impact of the proposal could have a minor adverse impact on tourism.	

Impacts: Landscape & visual	Mitigation measures
Scale, height and extent of visibility: The turbines will visible from Kilgarvan and from further NW at Molls Gap.	No realistic measures given the scale & height of the turbines and their location on an elevated upland site.
Impact on landscape character: Potential impacts when viewed from outside the immediate area to the W & NW and minor impacts when viewed from inside or nearby.	As above
Residual Effects: Impacts predicted to be moderate to the W and NW.	

Impacts: Ecology	Mitigation
Fisheries & aquatic life: Potential pollution of watercourses by suspended solids & building materials released during construction, from potential peat slippage during and after construction. Potential pollution of watercourses by suspended solids during grid connection cabling works. Loss of endemic hawkweed at certain river crossing locations. Potential collision impacts for WTSE	Suite of measures including buffer zones around water courses; silt traps; settlement lagoons; compliance with EU, EPA, NRA & IFI standards for water quality; construction practice methodologies; and monitoring. Suite of mitigation measures Seed collection Mitigation measures include regular visual inspections, electronic tagging & monitoring, and a livestock carcass disposal plan.
Residual Effects: None predicted following mitigation and some localised **l**oss of hawkweed in some bridge locations.	

Impacts: Geology & soils, hydrogeology & hydrology	Mitigation
Excavations: of turbine bases, access tracks & borrow pits, and the disposal of a significant amount of peat could have potential impacts on water quality, fisheries and aquatic life (including FWPM) and site stability (peat slippage). *Ground and surface water contamination*: Leakage & spillages from construction vehicles and fuel stores & peat storage areas.	Suite of measures including timing and sequencing of works; on-site drainage; buffer zones, silt traps, interceptors & settlement ponds; water treatment; approved storage & disposal sites; best construction practice methodologies; adherence to peat management plan; & ongoing inspection & monitoring. Buffer zones around watercourses; suite of measures as above; bunding; & adherence to best construction practices
Residual Effects: Residual impacts not predicted to be significant subject to the implementation of mitigation measures.	

Impacts: Air, climate, noise & shadow flicker	Mitigation measures
Residential noise impacts: Potential for negative noise impacts on residential amenities from construction activities and minor intrusion during operational phase. *Dust emissions*: Dust and air quality issues from the construction phase. *Increased emissions*: Traffic volumes during construction have the potential for local air quality impacts. *Shadow flicker*: Potential minor disturbance at some houses. *Electromagnetic interference:* Minor potential for impacts on TV reception.	Compliance with guidance for noise and dust control during construction & operation; maximum feasible distance from houses; phasing and timing of construction works and deliveries; compliance with standard construction management measures; phased delivery of components; noise and dust monitoring. Pre-programming proposed. None proposed.
Residual Effects: Residual impacts are not predicted to be significant.	

Impacts: Material assets & cultural heritage	Mitigation measures
Forestry: Potential impacts related to clear felling on surface water runoff, water quality and wildlife (aquatic life & fisheries) *Features of archaeological interest*: Potential impacts on RMs & unrecorded artefacts within the site.	Refer to previous tables for ecology, geology, soils, hydrology and hydrogeology. Compliance with relevant guidelines. 50m to 150m buffer around RMs, advance testing, appointment of archaeological consultant & on-going monitoring.
Residual Effects: Residual impacts are not predicted to be significant.	

Impacts: Roads and traffic	Mitigation
Impact on local road network: Potential for short term disruption during road & junction upgrades and temporary bridge installation, and during construction and deliveries	Compliance with Council and NRA requirements in relation to road improvements permits and licences.
Road safety: Potential for short term disruption during construction.	Consult with local community prior to turbine delivery; sequencing of deliveries; use of appropriate vehicles.
Residual Effects: None predicted.	

Summary of Interactions

Human Beings:

- Noise & shadow flicker
- Air Quality & climate
- Landscape & visual amenity
- Material Assets (electromagnetic interference)
- Road and traffic (safety & disturbance)

Landscape & visual

- Human Beings (visual amenity)

Ecology (terrestrial & aquatic):

- Hydrology (water quality & fisheries)
- Human Beings
- Material assets (tree felling)
- Landscape (visual amenity)
- Soils & geology (siltation and water quality)

Geology, Hydrogeology & Hydrology:

- Air quality
- Ecology (terrestrial & aquatic)
- Human beings

Air, Climate, Noise and Shadow Flicker

- Roads & traffic (noise, emissions & dust)
- Human Beings (noise, emissions & dust)

Material Assets & Cultural Heritage:

- Human Beings
- Landscape (visual)
- Roads and traffic (disturbance & safety)

Roads & Traffic:

- Noise, air quality & climate
- Human beings (road safety & disturbance).

9.3 Conclusions regarding the acceptability or otherwise of the likely residual effects identified

The main environmental assessment of the proposed development is set out Section 8.0 of this report and it outlines the potential adverse impacts of the proposed works and it describes the mitigation measures. It concludes that there would not be any significant adverse impacts on the receiving environment or surrounding area after the mitigation measures are implemented and any residual impacts are not predicted to be significant.

10.0 SCREENING FOR APPROPRIATE ASSESSMENT

10.1 Compliance with Articles 6(3) of the EU Habitats Directive

The application was accompanied by a Stage 1 Screening Assessment report for the proposed windfarm and grid connection. This report described the site, and the proposed works, and identified the European sites within a 15km radius of the proposed works that had the potential to be affected by the proposed developments. The report listed the qualifying interests and conservation objectives for each site, identified the potential sources of direct or indirect impacts on these sites via the Source-Pathway-Receptor model. The report concluded that proposed windfarm and grid connection will have no significant effects on the Conservation Objectives or Qualifying Interests of any European Sites and that progression to a Stage 2 NIS is not necessary.

The potential indirect impacts identified in the report relate to:

- Transport of pollutants in surface water flowing into the SAC/SPA via on-site tributaries (windfarm and grid connection).

- Impacts on qualifying species outside the SAC/SPA but which are connected to the European sites, such as Salmon, FWPM and otter.

- Possible interference with flight lines of, or habitats used by bird species associated with the SPA or possible collision of birds from the SPA with the turbines.

Screening report assessment and conclusions:

The Report concluded that the windfarm will not have any likely significant effects, either alone or in combination with other plans or projects, on the Qualifying Interests and Conservation Objectives of the European Sites, and that progression to a Stage 2 Natura Impact Statement is not necessary.

10.2 Discussion:

The proposed windfarm development would not be located within an area covered by any sensitive European site designations however there are a number of SACs and SPAs located within a 15km radius of the proposed works and the proposed grid connection would run in close proximity to three sites. The NPWS Conservation Objectives and Qualifying Interests for the relevant sites are summarised below:

European site	Conservation objective	Qualifying interest
Killarney National Park SAC Site code: 000365	To maintain or restore the favourable conservation condition of Annex I habitat(s) and/or Annex II species	Extensive list of habitats & species
Kenmare River Bay SAC Site code: 002158	To maintain or restore the favourable conservation condition of Annex I habitat(s) and/or Annex II species for which the SAC has been selected.	Extensive list of habitats & species including Otter
Mullaghanish to Musheramore Mountains SPA (GCR) Site code: 004162	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	Hen harrier
Mullaghanish Bog SAC (GCR) Site code: 001890	To maintain or restore the favourable conservation condition of Annex I habitat for which the SAC has been selected.	Blanket Bog
St Gobnet's Wood SAC (GCR) Site code: 000106	To maintain or restore the favourable conservation condition of Annex I habitat for which the SAC has been selected	Old Sessile Oak Wood

Killarney National Park SAC: This European site is located to the NW of the windfarm site. As there is no apparent direct link between the proposed development and this SAC, it is unlikely that this site and its Qualifying Interests or Conservation Objectives would be affected by the works.

Kenmare Bay SAC: This European site is located to the SW of the site. The windfarm site is connected to this SAC via the Roughty River which flows through the windfarm site, however the separation distance are substantial (in excess of 20km) and it is unlikely that this European site and its Qualifying Interests or Conservation Objectives would be affected by the works.

Mullaghanish to Musheramore Mountains SPA: This European site is located to the NE of the windfarm site and along the grid connection route (Exempt development). The separation distance between the windfarm site and the nesting Hen harriers is substantial and it is unlikely that this European site and its Qualifying Interests or Conservation Objectives would be affected by the works.

Mullaghanish Bog SAC: This European site is located to the NE of the windfarm site and to the NW of along the grid connection route (Exempt development). As the GCR works would be located down slope of this SAC it is unlikely that this European site and its Qualifying Interests or Conservation Objectives would be affected by the works.

St Gobnet's Wood SAC: This European site is located to the NE of the windfarm site and to the W of along the grid connection route (Exempt development) and it is unlikely that this European site and its Qualifying Interests (Old Sessile Oak Woods) or Conservation Objectives would be affected by the works.

10.3 Conclusions:

Having regard to all of the above, I concur with the conclusions reached by the Applicant in the Stage 1 Screening Report that the proposed windfarm would not have a likely significant effect on the Qualifying Interests or Conservation Interests of any European Sites, either on its own or in combination with other plans and projects, including the grid connection route and that progression to a Stage 2 Natura Impact Statement is not necessary.

11.0 RECOMMENDATION

I recommend that planning permission should be granted for the proposed development for the reasons and considerations set down below, subject to compliance with the attached conditions and in accordance with the following Draft Order.

REASONS AND CONSIDERTIONS

Having regard to:

a. the national targets for renewable energy contribution of 40% gross electricity consumption by 2020,

b. the “Wind Energy Development Guidelines - Guidelines for Planning Authorities”, issued by the Department of the Environment, Heritage and Local Government in June, 2006,

c. the policies of the planning authority as set out in the Kerry County Development Plan (2015-2021),

d. the policies of the planning authority as set out in the Cork County Development Plan (2014-2016),

e. the proximity and availability of a grid connection to serve the proposed development,

f. the distance to dwellings or other sensitive receptors from the proposed development,

g. the good transport access, and

h. the submissions made in connection with the planning application,

it is considered that, subject to compliance with the conditions set out below, the proposed development, individually or in combination with other plans or projects would not have any significant adverse impacts on the environment; be likely to have a significant effect on any European sites, in view of the site’s Conservation Objectives; would not have an unacceptable impact on the landscape; would not seriously injure the visual or residential amenities of the area or of property in the vicinity; and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Environmental Impact Assessment:

The Board agreed with the environmental impact assessment carried out in the Inspector's report and the Inspector's conclusion that the proposed development would not have any significant adverse impacts on the environment, subject to the implementation of the mitigation measures contained in the Environmental Impact Statement.

In completing the environmental impact assessment, the Board accepted and adopted the assessment carried out in the Inspector's report in respect of the potential impacts of the proposed development on the environment.

The Board was satisfied that the proposed development would not have a significant adverse impact on the environment and that the proposed development, by itself or in combination with other plans or projects, including the grid connection, would not have a significant adverse impact on the environment.

Screening for Appropriate Assessment:

The Board agreed with the screening for appropriate assessment carried out in the Inspector's report and the Inspector's conclusion that the proposed development would not have any likely significant effects on any European sites, their conservation objectives or qualifying interests.

In completing the screening for appropriate assessment, the Board accepted and adopted the assessment carried out in the Inspector's report in respect of the likely significant effects of the proposed development on any European sites.

The Board was satisfied that the proposed development would not have any likely significant effects on any European sites and that the proposed development, by itself or in combination with other plans or projects, including the grid connection route, would not have a likely significant effect on any European sites.

CONDITIONS

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 1st day of April, 2016, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.
   Reason: In the interest of clarity.

2. The period during which the development hereby permitted is constructed shall be 10 years from the date of this order.
   Reason: In the interests of clarity.

3. This permission shall be for a period of 25 years from the date of the first commissioning of the wind farm.
   Reason: To enable the planning authority to review its operation in the light of the circumstances then prevailing.

4. The developer shall ensure that all construction methods and environmental mitigation measures set out in the Environmental Impact Statement and associated documentation are implemented in full, save as may be required by conditions set out below.
   Reason: In the interest of protection of the environment.

5. The following design requirements shall be complied with:

   (a) The wind turbines including masts and blades, and the wind monitoring mast, shall be finished externally in a light grey colour.
   (b) Cables within the site shall be laid underground.
   (c) The wind turbines shall be geared to ensure that the blades rotate in the same direction.
   (d) No advertising material shall be placed on or otherwise be affixed to any structure on the site without a prior grant of planning permission.

   Reason: In the interest of visual amenity.

6. The following shadow flicker requirements shall be complied with:

   (a) Cumulative shadow flicker arising from the proposed development shall not exceed 30 minutes in any day or 30 hours in any year at any dwelling.
   (b) The proposed turbines shall be fitted with appropriate equipment and software to control shadow flicker at dwellings.
   (c) Prior to commencement of construction, a wind farm shadow flicker monitoring programme shall be prepared by a consultant with experience of similar monitoring work, in accordance with details to be submitted to the planning authority for written agreement. Details of monitoring programme shall include the proposed monitoring equipment and methodology to be used, and the reporting schedule.

   Reason: In the interest of residential amenity.

7. In the event that the proposed development causes interference with telecommunications signals, effective measures shall be introduced to minimise interference with telecommunications signals in the area. 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.

   Reason: In the interest of protecting telecommunications signals and of residential amenity.

8. Details of aeronautical requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Prior to commissioning of the turbines, the developer shall inform the planning authority and the Irish Aviation Authority of the as constructed tip heights and co-ordinates of the turbines and wind monitoring masts.

   Reason: In the interest of air traffic safety.

9. Prior to commencement of development, a transport management plan for the construction stage shall be submitted to, and agreed in writing with, the planning authority. The traffic management plan shall incorporate details of the road network to be used by construction traffic, including over-sized loads, and detailed arrangements for the protection of bridges, culverts or other structures to be traversed, as may be required. The plan should also contain details of how the developer intends to engage with and notify the local community in advance of the delivery of oversized loads.

   Reason: In the interest of traffic safety.

10. The developer shall retain the services of a suitably qualified and experienced Ecologist to undertake pre-construction surveys at the various project elements, including any river crossings, immediately prior to commencing work in order to check for the presence of protected species in the vicinity. Any specimens should be removed and relocated to a similar, suitable, undisturbed nearby habitats under the direct supervision of the Ecologist and subject to a Derogation Licence where required.
Reason: In the interest of protecting ecology and wildlife in the area.

11. The vegetation along the banks of the Sullane River and the hedgerows along the N22 and R3400 in the vicinity of the proposed works shall be re-instated following the removal of the temporary bridge structure.
Reason: In the interest of protecting ecology and wildlife in the area.

12. The developer shall retain the services of a suitably qualified and experienced bird specialist to undertake appropriate annual bird surveys of this site. Details of the surveys to be undertaken and associated reporting requirements shall be developed following consultation with, and agreed in writing with, the planning authority prior to commencement of development. These reports shall be submitted on an agreed date annually for five years, with the prior written agreement of the planning authority. Copies of the reports shall be sent to the Department of Arts, Heritage and the Gaeltacht
Reason: To ensure appropriate monitoring of the impact of the development on the avifauna of the area.

13. The developer shall retain the services of a suitably qualified and experienced bird specialist with respect to White-tailed sea eagle, to undertake appropriate monthly surveys of this site. Details of the surveys to be undertaken, associated reporting requirements and contingency plan in the event that this species is observed to use the windfarm site, shall be developed following consultation with, and agreed in writing with, the planning authority prior to commencement of development. These reports shall be submitted on an agreed date annually for the full duration of the windfarm project, with the prior written agreement of the planning authority. Copies of the reports shall be sent to the Department of Arts, Heritage and the Gaeltacht.
Reason: To ensure appropriate monitoring of the impact of the development on the White-tailed sea eagle in the area.

14. The developer shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.
Reason: In the interest of the proper planning and sustainable development of the area

15. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall –

    (a) Notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
    (b) Employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
    (c) Provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

    In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.
    Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

16. All Recorded Monuments within the site shall be protected by a 150m buffer zone and all identified features of archaeological interest within the site shall be protected by a 50m buffer zone.
    Reason: In order to protect the archaeological heritage of the site.

17. The developer shall retain the services of a suitably qualified and experienced conservation/heritage consultant to carry out a complete survey of Ballyfinnane Bridge in County Cork before works commence. The developer shall submit a method statement and material specification for the re-instatement works which should be carried out to the best conservation standard. A timeframe for the works shall be agreed with the planning authority and the details shall be kept as a public record
    Reason: In order to conserve the heritage of the area.

18. Prior to the commencement of development, two separate community gain proposals shall be submitted to planning authorities for Kerry and Cork County Councils for their written agreement.
    Reason: In the interest of the proper planning and sustainable development of the area.

19. On full or partial decommissioning of the wind farm, or if the wind farm ceases operation for a period of more than one year, the wind monitoring mast, the turbines concerned and all decommissioned structures shall be removed, and foundations covered with soil to facilitate re-vegetation, all to be complete to the written satisfaction of the planning authority within three months of decommissioning or cessation of operation.
Reason: To ensure satisfactory reinstatement of the site upon full or partial cessation of the project.

20. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to Kerry and Cork planning authorities, to secure the satisfactory reinstatement of the site and delivery route upon cessation of the project, coupled with an agreement empowering the planning authorities to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authorities and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.
Reason: To ensure satisfactory reinstatement of the site.

21. The developer shall pay to the planning authorities of Kerry and Cork County Councils a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authorities may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authorities and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.
Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

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Karla Mc Bride
Senior Planning Inspector
17th June 2016