



An
Bord
Pleanála

Inspector's Report

Development: Construction of wind farm with 7 no. turbines, upgrade of existing forest tracks, provision of new access tracks, 3 no. barrow pits and all other associated works at townlands of Ballyogaha West, Peafield, Portavarrig, Oldcourt, Ballynona North, Walshtown More, Walshtown Beg, Shanavougha, Glenreagh, Glenawillian, Ballyreardon, Ballytrasna, Rathgrie, Oldcourt East, Templenacarriga South, Knockhamouragh, Ballymacsliney, Ballyedmond and Carrigona, County Cork .

Planning Authority: Cork County Council

Planning Authority Reg. Ref.: 15/6587

Applicant: Ardglass Wind Farm Ltd.

Type of Application: Permission

Planning Authority Decision: Grant Permission

Appellant(s): Cllr. Noel Collins, Kevin Deering and Peter Crossan, Shane Murphy, Margaret Glavin, Joanne Corcoran, Edmund Sweeney, Jeremiah O'Donovan, Stephen Doyle, Brain and Kayte Stack, Christy O'Mahony, Dan Buckley, Rick Glavin, Margaret Glavin. Ardglass Wind Farm Ltd.

Observers: Sharon Guiry, Michael Andrade & Cillian, Sophie and Lucas Andrade, Andy Ennis, David Stanton TD, Susan Liddy, Mary Beattie, W.D. Patterson

Dates of Site Inspection: 14th and 15th September 2016

Inspector: Kenneth Moloney

1.0 SITE DESCRIPTION

- 1.1. The appeal site is situated approximately 10 km north of Middleton in an upland undulating rural area. A significant feature of the landscape is the coniferous plantation which covers most of the proposed development site. The proposed development site is also used for agricultural land and this includes grazing cattle.
- 1.2. The overall size of the appeal site is approximately 61 ha (151 acres) and the shape of the appeal site is irregular. In general the appeal site is located between two local roads, i.e. L3601 (Walshtown Road) and L3800 and the highest gradient is 220 OD.
- 1.3. The local area is characterised by sporadic rural housing in particular along the two local roads.

2.0 PROPOSED DEVELOPMENT

2.1 The proposed development is for the construction of 7 no. wind turbines with a maximum blade height of 140 metres and hub height of 83.5 metres. The proposed development also includes the following;

- Upgrade and provision of new tracks
- 3 no. barrow pits
- An electrical substation including a control building
- Welfare facilities
- Fencing and landscaping
- Underground electrical cabling
- Underground grid connection
- Metrological mast up to 90m high
- Signage

2.2 Additional information was sought in relation to the following (1) scale of the proposed development, (2 – 3) photomontages and visual impact, (4 – 5) noise, (6) distance in relation to residential properties, (7) windshields for noise monitoring, (8) heights of turbines, (9) waste streams, (10) waste water treatment facilities, (11) proposed culvert, and (12) heritage bridges.

3.0 PLANNING AUTHORITY'S DECISION

3.1 The Planning Authority decided to **grant** planning permission subject to 52 conditions.

Notable conditions include the following;

- Condition no. 2 – Permission granted for 5 no. turbines. Turbines no. 1 and 2 omitted.

- Condition no. 3 – The period in development maybe carried out is 10 years.
- Condition no. 4 – the operational period of the permission is 10 years.
- Condition no. 38 – Special development contribution of €179,300.00 required.

3.2 Internal Reports: There are no internal reports on the file:

- Area Engineer; - Conditions recommended in relation to (a) sightline provision, (b) construction management plan, (c) special development contribution, (d) road opening licences, (e) road condition surveys and (f) surface water.
- Environmental Report; - There are three separate environmental reports and additional information was sought for (a) noise, (b) surface water / hydrology and (c) waste management.
- Engineering Report – No objections subject to conditions.
- Ecologist – Concludes that the proposed development will give rise to minor to negligible impacts on protected species.
- Archaeologist – No objections subject to conditions.

3.3 Objections A total of 329 no. third party submissions have been received and the issues raised have been noted and considered.

3.4 Submissions: There are submissions from Inland Fisheries Ireland who have no objections subject to conditions. There are also submissions from the Health and Safety Authority and North Lee Environmental Health who both have no objections to the proposed development.

4.0 PLANNING HISTORY

- Permission **refused** (appeal ref. 243630) by An Bord Pleanala for a wind farm development comprising of 11 no. turbines all with a blade height of 156.5. The reasons for refusal related to the adverse impacts that the proposal would have on the visual and residential amenities. Furthermore the Board, in refusing permission, determined that the full direct and indirect environmental impacts of the proposed development were inadequately assessed.

5.0 POLICY CONTEXT

The relevant policy provision for the proposed development is the Cork County Development Plan, 2014 – 2020.

The proposed wind energy development is also guided by national guidelines include the National Spatial Strategy, 2002 – 2020, and the Guidelines for Planning Authorities on Wind Farm Development and Wind Energy Development, 2006.

6.0 DEVELOPMENT PLAN

The operational development plan is the Cork County Development Plan, 2014 – 2020.

Section 9.2 of the Plan advises in relation to wind energy.

Figure 9.3 sets out the Wind Energy Strategy Map for the County and the appeal site is located in an area designated as ‘Open for Consideration’.

7.0 NATIONAL GUIDELINES

The National Spatial Strategy, 2002 – 2020

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

Guidelines for Planning Authorities on Wind Farm Development and Wind Energy Development, 2006

Planning policy guidance is outlined in “Wind Farm Development: Guidelines for Planning Authorities”, 2006. The guidelines offer advice on planning for wind energy through the development plan process and in determining applications for planning permission they are intended to ensure consistency of approach in the identification of suitable locations for wind energy developments and acknowledge that locational considerations are important. These considerations include ease of vehicular access and connection to the electricity grid. It is acknowledged that visual impact is amongst the more important issues to be taken into account when deciding a particular application.

Any wind farm proposal will require an assessment of the possible ecological effects. Consideration should also be given to sensitive habitats and species as well as possible risks to birds including migratory birds. Regard should be had to special areas of conservation and other designated sites. Rural land uses other than housing are generally unlikely

to conflict with wind farm developments. Conditions will generally be required to provide for the decommissioning of wind farms and ancillary developments on site.

Chapter 5 of the guidelines refers to other environmental considerations, including the impact on habitats and bird species, noise and electromagnetic interference. Section 5.3 states that a planning application must be accompanied by information on such issues as slope stability and an assessment of whether the development could create a hazard of bogburst or landslide.

Chapter 6 of the guidelines refers to the assessment of siting and location of such development in terms of aesthetic considerations, landscape sensitivity, spatial extent and cumulative effect, with regard to landscape character types including hilly and flat farmland, mountain moorland and transitional landscapes. The factors to be assessed comprise landscape sensitivity, visual presence of the windfarm, its aesthetic impact on the landscape and the significance of that impact.

8.0 GROUNDS OF THIRD PARTY APPEALS

The following is a summary of the submitted appeals.

Cllr. Noel Collins

- This appeal is on behalf of residents of on the route of the proposed development.
- The guidelines in relation to noise implications are outdated.
- The Irish Renewable Energy action plan lacks proper consultation by the UNECE.

Kevin Deering and Peter Crossan

- It is submitted that the Local Authority has failed to consider the full impacts on landscape and loss of residential amenity.
- It is contended that the reasons for refusal in the previous case are applicable in this instance.
- It is evident that the planning department have concerns in relation to visual impact.
- It is submitted that the reduction of turbines to 5 does not justify the proposed development. It reduces the number of residential properties likely to be impacted upon.
- These five properties are not financially connected to the proposed development.
- It is submitted that given the amount of local submissions that the senior planner is dismissive of the recreational use and appreciation and natural beauty of the area by local people.

Shane Murphy

- The proposed development is industrial in scale and will cause excessive noise.

- The appellant submits that he is on the Autistic spectrum and is sensitive to noise.
- It is submitted that the turbines will have an adverse impact on his residential amenity.
- The developers have not considered background noise at the appellant's property.
- The appellant's house is H19 and it is most significantly affected by turbines T2, and T3, which are 1.5km away.
- This quite rural location is important for the appellant's well being.
- It is submitted that walking in the nearby forest, i.e. Hogan's Wood is an essential amenity.
- The proposal will result in the felling of a substantial number of trees.
- The proposed development is situated in the wrong location given its proximity to residential dwellings.

Margaret Glavin

- The appellant was born and reared in Ardglass (H26B) and now has permission (L.A. Ref. 08/4213) for a house and she wishes to return to the locality.
- It is submitted that should planning permission remain in place for the wind turbines then it is not possible for the appellant to return to the local area due to the loss of residential amenity.
- The proposed development will have a negative impact on established views from the appellant's site.
- It is proposed to finish the rear of the appellant's house in glass however this will not be possible due to shadow flicker associated with the proposed development.
- The proposal will introduce a doubling of noise which is unacceptable.
- The applicant's report indicates a significant impact for H26B and H22. This will have a severe negative impact.

Joanne Corcoran

- The appellant's house is H31 adjacent to noise sensitive location B.
- The appellant's house is the closest to the development at 794m.
- It is contended that existing forestry will not provide adequate screening as there is a small patch of forestry across the road from the existing house which will be harvested within the lifetime of the proposed development.
- There are no conditions in the planning permission about preserving any screening for housing.
- It is requested that a photomontage is made available from the front of the appellant's property.
- It is submitted that the proposal will result in a doubling of noise at the appellant's property which is not acceptable.
- It is submitted that there is a 3 dB difference between the baseline data of Dick Bowdler's interpretation and the interpretation of the developer's baseline data.
- It is noted that the council expert recommended a refusal on the basis of noise which was overturned by the Divisional Manager.

- It is submitted that the planning conditions will not protect the appellant's amenity.
- The W.H.O. has a night time limit of 40 dB and it is contended that this limit should be used to protect amenities.
- It is submitted that the removal of two turbines will significantly improve the appellants position as these two turbines are situated furthest away from her property.

Edmund Sweeney

- The appellant's house is H24 and is located adjacent to the Ardglass Cross Roads.
- The turbines nearest the appellant's house are T5 and T7.
- A residential amenity assessment was carried out on the appellant's property (H24) on behalf of the developer.
- The conifer plantation referred to by the developer which will act as a screening has now been removed due to its potential danger on the existing house.
- The proposal will impact on the appellant's visual amenity and impact on the landscape.
- The proposed wind turbines will have a significant negative impact on the landscape of this quite rural area.
- In all reports the noise is characterised as a low background noise environment.
- The noise limits suggested by the developer will not protect amenities.
- The report by Dick Bowdler confirms that there is an increase of up to 9 dB in the daytime and 13 dB at night above background noise and this is considered unacceptable.
- It is questioned whether the Divisional Manager has the competency to overrule the local authority noise expert.
- The Dick Bowdler report confirms that over 30 houses have a doubling of noise at night and this is a major loss of amenity.
- The planning guidelines suggest that limits must be lower at night time.

Jeremiah O'Donovan

- The appellant's house is H290 and Turbine 6 is closest to this house.
- A residential amenity assessment was not carried out for the appellant's dwelling.
- The appellant's house has clear open views of the proposed turbines.
- The gentle landscape has no way of accommodating the scale of the proposed development.
- It is submitted that Turbine 6 is situated on land that is 60m above of the appellant's dwelling.
- The top of the blade will be 200m above the appellant's dwelling.
- The proposed change to the landscape is negative given the prominence of the proposed development.
- The presence of a rotating blade at speed of 200km / hour is not normal.
- It is submitted that the proposed development, given the noise, will have an adverse impact on the local horse breeding industry.

- It is submitted that no noise survey was carried out adjacent to the appellant's property.
- The Environmental Report on planning recommended refusal. The local area has low background noise.
- Although the number of turbines has been reduced the concentration of turbines has been increased adjacent to the appellant's dwelling.
- It is submitted that the gasline pipes is barely mentioned in the EIS.
- It is contended that Bord Gais are wind farm developers themselves and are unlikely to object to the proposed development.
- It is submitted that a safety risk analysis of the proposed development has not been adequately carried out assessing the impact of the proposed development on the existing gas line pipes.
- It is submitted that the existing distillery warehouses are highly flammable and therefore a high-risk site and turbine files have been documented worldwide. The appeal site is situated within close proximity to an Upper Tier Seveso site which creates a potential hazard.

Stephen Doyle

Site Selection

- The proposed wind farm is of regional strategic importance
- Section 2.9.1. of the EIS confirms that the primary consideration for the current location was the proximity to the grid connection at the Carrigogna substation.
- It is submitted that the presence of a sub-station or a grid connection agreement should not pre-suppose the suitability of any general area for wind energy development.
- The site selection should have regard to relevant policy.
- The EIS fails to consider alternative renewable energy technologies which could avail of grid capacity.
- The subject site is not located within a 'Strategic Search Area' as identified in the County Development Plan, 2009.
- The subject site is located in an area that is 'open for consideration' however over 50% of County Cork is located in areas 'open for consideration'.
- The general policy approach is between areas which are 'optimal for wind farm development' i.e. acceptable in principle and areas that may have potential for wind farm development, subject to addressing environmental issues, i.e. open for consideration.
- It is contended that the applicant has not adequately considered available alternatives in accordance with policy.
- It is contended that the presence of grid connection is not sufficient to justify location. Paragraph 9.3.9 of the County Development Plan, 2014, uses proximity to grid connection as a criterion for site selection.
- The test of whether a wind farm development is suitable within an area designated 'open for consideration' is set out in ED 3-5.
- The site selection is justified on a number of different aspects including population density, elevation and required wind speeds. It is contended

that it is evident that there are other areas with lower population density, and the same in relation to higher elevations and existing wind speeds. These alternative locations are outlined in drawing no. 2220-01, Appendix A.

- The applicant's considerations of alternative sites are deficient on a number of levels and the applicant's do not reference other substation locations.
- It is understood that the applicant's have purchased the capacity at Carrigogna substation and this should not be a consideration for site selection.

Visual Impact

- The non-suitability of the subject landscape to accommodate a wind farm development was a critical oversight.
- The non-suitability of the local landscape for wind energy development was illustrated in the planning inspector's report in the previous planning case.
- The local landscape is characterised by elevated areas, fissured by gentle slopes.
- There are 8 no. scenic routes in the local area, one of which dissects the appeal site, i.e. Scenic Route no. 44.
- The landscape is characterised as having high sensitivity to change.
- The recommendations from the draft County Cork Landscape Strategy is to maintain the visual integrity of the area.
- The applicant has made a concerted attempt to justify the proposed development on the basis of the Irish Distillers Limited facility and this is evident in Section 13.5.2 of the EIS.
- The description of the local area as a 'landscape of rural industry' by the developer is unfounded and contrary to the Board's previous assessment.
- The overall reduction in height of wind turbines in relation to the previous scheme is 16.5m. It is noted that this represents only a 10% decrease in scale.
- The blade length of that proposed is identical to that previously proposed. It is contended that given the same height of the blade height that this effectively reduces any mitigation achieved to height reduction.
- The crux of the issue is the scale of the proposed wind farm relative to the established landscape to accommodate same.
- The view of the executive planner is that the reduction in height is not sufficient to address concerns or the previous refusal reasons.
- It is noted that Waterford City and County have concerns with the impacts of the proposed development.
- It is submitted that there is no assessment of the proposed development having regard to the policies and objectives of the Waterford County Council.
- The visual impact will also impact on residential amenity.
- It is submitted that the applicant's residential amenity assessment has a number of weaknesses and these are included in the submission by

Ardglass Wind Turbine Action Awareness Group and this is contained in Appendix E.

- The applicant attempts to downplay the impact of the proposed development on residential amenities beyond 1km from the proposed development. A submission by Forestbird Design, contained in Appendix B, demonstrates that there is sensitivity and residential impact from 1-2km from the proposal.
- This is due to the broad expanse of green ridgelines and also as the significance of intervening vegetation and landform is often reduced within a 1 – 2 km range.
- It is submitted that the proposed development will have a greater impact on residential amenities than alluded to in the submitted documents.
- It is contended that although the reduction of two turbines will lessen the impact on the scenic route and selected residences. The remaining turbines are located in areas where the landscapes are most sensitive.

Noise

- It is contended that the submitted noise assessment is characterised by data and information omissions and inconsistencies.
- The Environment Report of the Local Authority indicates that there is an increase of noise at this location between 10.6-14.4 dB at 6m/s and 10 – 13.5 dB (A) at 7m/s at 7 m/s for 9 no. properties within 1 km of the site. These properties are not financially linked to the proposed development.
- This is a significant increase in noise and the Environment Report concludes that the proposal would be injurious to the amenities of the local area.
- An independent noise assessment has been undertaken by Mr. Dick Bowdler, an acoustic consultant with over 40 years' experience. This report is contained in Appendix B.
- The report concludes that the information available in relation to background noise is unreliable as there is an omission of information on wind shield equipment.
- The use of a 10m high wind mast for determining wind speeds is an inaccurate reflection of wind speeds.
- It is also highlighted that the turbine noise level findings in the EIS do not incorporate a 2 dB uncertainly measure.
- Questions arise in relation to sound power levels identified in the Siemens sheet, which are 1.5 dB less than that presented in the previous application.
- It is contended that the turbine noise could be 1.5 dB higher than those presented in Appendix 5.8.
- It is contended that the applicant has identified 37.5 dB as the lower background noise however if the 3 tests applied in paragraph 3.7 of guidance document ETSU-R-97 it is concluded that 36 dB is more appropriate.
- The independent noise assessment identified that there are 9 no. properties fail to meet the DoEHLG day time limits even if the 37.5 dB level is used.

- If the noise level 36 dB was used then 20 properties would fail to meet the the DoEHLG day time limits.
- The Council's Divisional Manager overruled the Environment's Department recommendation of refusal.
- The executive planner has outlined concerns in relation to the noise survey.
- The independent noise report submits that the justification put forward by the Divisional Manager is based on a very narrow interpretation of the guidelines.
- The BS4142:2014 contends that a difference of around +5dB is an indication of an adverse impact while a difference of +10dB is an indication of a significant adverse impact.
- In the previous case the planning inspector identified that the potential noise increases of between 11.9 – 15.5 dB LA90, 10min would have a significant and negative impact on existing residential amenities in the area.
- It is concluded that the appellant's assessment does not provide an appropriate description of the likely significant effects of the proposed development on the environment due to noise as required with the EU Environmental Assessment Directive 85/337/EC and does not address the requirements in the DoEHLG guidelines to ensure that there is no significant increase in the ambient noise levels.

Ecology

- Ardglass Wind Turbine Action Awareness submission includes the services of a qualified ecologist. The key findings include;
 - There are weaknesses in the survey.
 - Best practice would recommend a further year survey in relation to the SPA.
 - Concerns regarding the presence of a Peregrine falcon at O'Shea's quarry and the barn owl sightings could be addressed by a further survey.
 - A collision risk modelling survey should be completed
 - The visibility of airspace should be considered when assessing collision risk.
 - The 98% avoidance rate should not be presented in isolation of the Collision Risk.
 - The EIS should present peak data for the Golden Plover at Ardglass and compare peak levels at this site nearby close by sites including Cork Harbour.
 - It is submitted that the weakness of the EIS regarding the assessment of impacts on Golden Plover are also present in the NIS and its assessment of adverse effects on Cork Harbour SPA.
 - Ecological impacts resulting from use 'of alternative route' to that assessed in the EIS have not been assessed.

Project justification

- It is contended that the reduction in the number of turbines in addition to proposed mitigation to 'shut-down' turbines to address noise and shadow flicker undermines the operational justification for the proposal.

- It is questionable whether the project in technical terms would provide any substantive benefits given the mitigation measures required such as shut down which would override the benefits.

Other Issues

- The Area Engineer recommends that an alternative route, i.e. L3800 rather than the L3601, be used for construction traffic. However there is no road condition survey or safety survey.

Brain and Kayte Stack

- The appellant's property is H12 and one-third of their landholding is adjacent to this house to the north side of Ardglass crossroads.
- The remainder of the agricultural landholding is directly to the north east of the wind farm development site.
- This is illustrated in the attached map and illustrates that the closest turbine to the appellant's house and agricultural land is T5.
- The appellant's house is slightly 1km from away from the nearest turbine.
- It is submitted that the proposed development amounts to an industrialisation of their amenity and landscape features.
- It is submitted that the appellant's farmyard has sweeping views down the valley and this valley will now be occupied by a proposed wind farm.
- The proposed development will have an negative impact on visual amenity.
- It is submitted that the gasline pipes which runs through the appellant's landholding is barely mentioned in the EIS.
- There is substantial evidence of wind farm hazards e.g. fires.
- There are also no details of low flying helicopters that inspect the wind farm weekly and safety aspects.
- It is contended that the two noise reports are inadequate.
- The first survey did not meet the specifications set out in the standards and the second survey was undertaken as far back as 2014.
- In all reports the noise is characterised as a low background noise environment.
- It is questioned whether the Divisional Manager has the competency to overrule the local authority noise expert.
- The noise limits suggested by the developer will not protect amenities.
- The report by Dick Bowdler confirms that there is an increase of up to 9 dB in the daytime and 13 dB at night above background noise and this is considered unacceptable.
- It is contended that noise exposure to local farmyards has been ignored.
- The local area is renowned for the Golden Plover, Sparrow Hawk and Barn Owl.
- There are no proposals for the protection of these species or is there any outline of the cumulative damage caused would the proximity of three large wind power developments, i.e. Barranafaddock, Ardglass and Cork Harbour.

- The wildlife habitats of other species will also be affected and this includes wild deer and bangers. Should the proposed development proceed then there would be a displacement of these species. These species can carry diseases, such as TB, and these diseases can affect local herds.
- It is submitted that should the development go ahead local residents will be discouraged to set-up homes in their local areas.

Christy O'Mahony

- It is considered that noise level and traffic will be greatly increased resulting in noise pollution.
- There will be high levels of noise during the construction phase.
- The appellant owns a farm in the local area and it is considered that the proposed development will adversely impact on his livestock.
- The disturbance of cattle can lead to the spontaneous abortion of unborn calves.
- It is contended that the presence of a wind farm in this area will devalue properties in the local area.

Dan Buckley

- It is contended that Ireland is already achieving its 2020 Target in relation to wind energy.
- It is submitted that priority for wind energy development should be considered in a national context and proportionality should be given to projects that give the biggest benefits and the least harm.
- It is submitted that in accordance with Met Eireann the average wind speed in the local area is 5 m/s however it is not until a wind speed of 12 m/s is reached that the maximum output is reached.
- The scale of the proposed development is inappropriate.
- It is submitted that the anticipated jobs during construction and operational phase will not be for local residents as such there is no local benefit.
- The local area is a quite rural area.
- The developer identified that there would be a doubling of noise in the local area due to the proposed development.
- It is noted that an independent noise report by Dick Bowdler, outlines that there turbine noises used by the developer is understated.
- There are several houses that will experience noise difference greater than 5 dB.
- It is submitted that the proposed development will have a significant visual impact on house no. 31.
- The Zone of Theoretical Visibility (ZTV) is vast and can be seen from adjoining counties.
- The proposed turbine height is excessive given the undulating rural landscape.
- The alternative sections in the EIS is weak.
- This area in east Cork has one of the fastest growing populations.
- The advanced purchase of the grid connector may be the reason for the location of the wind farm.

- It is submitted that the scale of the proposal is excessive given the landscape of the local area.
- It is submitted that the proposed development is premature until the publication of the new wind farm guidelines.
- There is no request in the planning conditions to monitor the ongoing noise from the proposed development.
- The condition of noise monitoring is ambiguous as it states that noise shall not exceed 37 dB but the baseline noise is 28 dB to 30 dB. It is essentially saying that noise levels cannot exceed 7 dB or 9 dB and the developer cannot not exceed more than 5 dB.

Rick Glavin

- The appellant's dwelling is H26B and H22 is a site with full planning permission.
- It is submitted that given the location of H26B and H22 it will mean that due to shadow flicker that the wind turbines will be stopped for a large part of the day and it is questioned who will monitor this.
- The impact of night time noise will have an adverse impact.
- The proposed development will result in devaluation of property and result in flood risk to properties.
- The proposal will also have complications for insurance and re-mortgaging of property.
- The proposed development will have an adverse visual impact.
- Noise from the proposed development will be excessive and this is evident from the fact that Cork County Council overruled their noise expert.
- All reports on the file refer to low environment noise in the established area.
- The limits suggested by the developer do not protect the local residents.
- The report from Dick Bowdler demonstrates that there is an increase of 9 dB and 13 dB at night above the background noise.
- The layout of the proposed development is not optimised to allow for noise.
- It is submitted that the first survey was not done in accordance with standards.
- Noise has been a consistent issue for the development of wind farms.
- It is questioned whether the Divisional Manager has the adequate expertise to comment on acoustics.
- The report from Dick Bowdler illustrates that over 30 houses have a doubling of noise at night and this is a major loss of amenity.
- The DEHLG guidelines suggests a lower fixed limit of 45 dB(A) or a maximum increase above the background noise of 5db. The planning system can control environmental noise.

9.0 GROUNDS OF FIRST PARTY APPEALS

Condition no. 2

- A report by Stephenenson Halliday that there is a no unacceptable effect on the visual component of residential amenity for individual dwellings or group dwellings.
- It is considered that the inclusion of Turbines no. 1 and no. 2 cause no additional impacts on landscape due to the localised topography and the limited size of the proposed 7-turbine wind farm.
- AWN Consulting commissioned a review and response to the noise conditions and concluded that the proposed wind farm can operate within the limits of the 2006 Wind Farm Planning guidance and there is no noise related reason for the removal of turbines, T1 and T2.
- It is requested that condition no. 2 of the Cork Council's permission is omitted.

Condition no. 8

- An Bord Pleanala is requested to consider the aspect in relation to local road L3601.
- L3601 is considered the ideal route for construction traffic, both for oversized turbine loads and for construction materials transportation with minor accommodation needs.
- Cork County Council's Engineer makes reference to the L3601 as not suitable for construction traffic and cable works but without any justification. This concern was not indicated to the applicant as a further information request.
- The Council consider the L3800 as the preferred route.
- The applicant appraised a number of routes and considers the L3601 as the optimum delivery route.
- It is contended that the local authority has acted ultra virus in imposing condition no. 8 and they do not know whether it can be implemented. There are design capacity issues with L3800 which has not been assessed to confirm its viability as a construction route.

Construction no. 38

- Having regard to the first party appeal in relation to condition no. 8 the applicant respectively requests that condition no. 38 be amended to omit the portion of the special development contribution relating to the upgrade of the L3800. The L3601 is considered the optimum route for construction traffic.
- It is also proposed to condition a bond to assure the re-instatement of public roads as opposed to the special contribution that is proposed by Cork County Council.

Condition no. 44

- The EIS submitted with the planning application has demonstrated that the proposed wind farm can operate within the limits of the 2006 Wind Farm Planning guidance.

- It is contended that Cork County Council has not correctly interpreted the 2006 Wind Farm Planning guidance in imposing condition no. 44.
- It is requested that An Bord Pleanála review this condition and the limits and methodology set out in the statutory wind energy guidelines 2006 are correctly applied similar to other precedent cases.

10.0 OBSERVERS

The following is the summary of submitted observations;

Sharon Guiry, Michael Andrade & Cillian, Sophie and Lucas Andrade

- The observers's house is located 868 metres from the proposed development which is one of the closest houses to the development.
- This observation is made in conjunction with the appeals made by Ardglass Wind Turbine Action Awareness Group.
- The developer carried out a residential amenity assessment for the observer's house. It is noted that the developer contends that the observer's property would be screened by mature vegetation however the observer's recreational amenities are not limited to their house and would also include their garden and the drive from their home to work.
- The report from the Executive Planner, dated January 2016, notes that there are a number of houses located in close proximity to the Peafield Cross and Ardglass Cross and along the scenic route south of Peafield Cross where the visual impact will be notable.
- It is contended that permission for this development will change the landscape significantly.
- The noise in all reports is classified as low environment noise.
- The proposed development will result in a major loss of amenity from a noise perspective.
- There is a discrepancy of information in relation to noise.
- It is questioned whether the Divisional Manager has the adequate expertise to comment on acoustics.
- There is no legislation / guideline for the applicant to monitor noise.
- The observer contends that their home would experience about triple the amount of shadow flicker that the WHO deem acceptable.
- The proposed development will have an adverse impact on local animals which are both rare and common.

Andy Ennis

- The observer lives within 3km of the proposed development.
- It is contended that wind energy is less efficient than claimed.
- It is contended that wind is adding complexity and costs to electricity grids. In addition wind energy is creating more expensive less reliable electricity for consumers whilst adversely impacting on the landscape.
- There are also health concerns.
- It is submitted that infrasound is defined as a low frequency sound under 16Hz below the threshold of human hearing. It is submitted that wind farms are notorious for generating these potentially harmful sub-audible frequencies.

David Stanton TD

- Despite the reduction in scale of the proposed development there are still concerns about the visual impact of the proposed development in the East Cork Area.
- There are also concerns with the impacts of the proposed development on lives of local residents such as noise.
- An Bord Pleanála in appeal ref. 246824 has previously stated that the previous development was excessively dominant and visually intrusive.
- The subject area of the proposed development is not contained within a 'Strategic Search Area' for wind energy for Cork County Council.
- It is noted that wind speeds in this area are not the optimum wind speeds for wind energy development and this point is included in the An Bord Pleanála refusal reason.

Susan Liddy

- The observer resides within 3km of the proposed development.
- The observer is concerned with the following issues, (a) noise, (b) shadow flicker, (c) environmental health, in particular water table and wild life, (d) visual impact, (e) health and (f) no consultation.
- It is contended that the subject project would not benefit our community or indeed the country.

Mary Beattie

- Although policy may promote renewable development it adversely impacts on lives.
- The proposed development would have an adverse impact on local families.
- The proposal would have an adverse visual impact and a diverse species of wildlife would also be affected.
- The observer is connected to the objections lodged by Ardglass Wind Turbine Action Awareness Group and Cllr. Noel Collins.
- There are many objections based on noise pollution, shadow flicker, loss of habitat and consequent loss of wildlife.
- The applicant has not demonstrated that access to the site can be accommodated off the L3800.
- The removal of hedgerow or other habitats along the alternative delivery route could result in adverse impacts on flora and fauna including protected species.
- It is contended that the roads and bridges would be unable to take the necessary traffic.
- In relation to noise reference is made of the noise report prepared by Dick Boulder
- There is also the potential for contamination of ground water and there is danger posed by the proximity of gas pipeline.
- The report from the Executive Planner notes that the proposed structures will appear imposing on some existing properties.
- It is submitted that the EIS has failed to make adequate arrangements for the Gloden Plover.

W.D. Patterson

- Although policy may promote renewable development it adversely impacts on lives.
- The proposed development would have an adverse impact on local families.
- The proposal would have an adverse visual impact and a diverse species of wildlife would also be affected.
- The observer wishes to be connected to the objections lodged by Ardglass Wind Turbine Action Awareness Group and Cllr. Noel Collins.
- There are many objections based on noise pollution, shadow flicker, loss of habitat and consequent loss of wildlife.
- The applicant has not demonstrated that access to the site can be accommodated off the L3800.
- The removal of hedgerow or other habitats along an alternative delivery route could result in adverse impacts on flora and fauna including protected species.
- It is contended that the roads and bridges would be unable to take the necessary traffic.
- In relation to noise reference is made of the noise report prepared by Dick Boulder
- There is also the potential for contamination of ground water and there is danger posed by the proximity of gas pipeline.
- The report from the Executive Planner notes that the proposed structures will appear imposing on some existing properties.
- It is submitted that the EIS has failed to make adequate arrangements for the Gloden Plover.

11.0 SECOND PARTY RESPONSES

The following is the summary of a response submitted by the local authority;

Planner's Response

- It is contended that the issues were comprehensively dealt with in the original planning report.
- It is acknowledged that the development will have a visual impact on the landscape however the omission of the two turbines will lessen the visual impact and impacts in relation to noise and residential amenity.
- In relation to condition no. 2 the contents of the revised visual impact assessment have been acknowledged. The revised photomontages are noted.
- It is submitted that the purpose of the omission of Turbines 1 and 2 were to reduce the impact on a number of residential properties at Peafield Cross and Ardfield Cross where the same properties will be impacted by the overall 7 no. turbines.
- It is considered that the removal of T1 and T2 will reduce the visual impact on properties at Peafield Cross and Ardfield Cross.

Road Design Office

- Section 4.1 of the appeal response states that the Engineer has no objection to the construction route. Road Design Office based their assessment on the original planning submission.
- The objection into using the Walshtown Road came from the Middleton Area Engineers Office and can only be addressed by them.

Middleton Area Engineers Office

- Having reviewed the first party appeal, in particular the applicant's undertaking to remedy any damage or deterioration of the L3601 as a result of the proposed development and the willingness to provide a bond in this respect.
- There is therefore no objection to amend the condition that would permit the use of the L3601 as the primary construction delivery route.
- A special development contribution is recommended towards the structural strengthening and resurfacing of the L3601.
- All 9km of the L3601 is in need of strengthening and resurfacing to address long term damage due to the proposed development.
- The majority of the length of the road has been given a Visual Condition Rating (VCR) of 4 – i.e. Structural Distress Present.
- The cost is estimated as 9km x 6m width x €35 / m² = €1,890,000.
- Attributing the same to the L3800 would give a special contribution of €170,000.
- The required works are not covered under the development contribution scheme.
- Given the special development contribution of €170,000 it is considered that a bond to cover cost of repairing acute damage in the amount of €27,000 is appropriate. This allows for 1% of the road surface area to be repaired locally where damaged by inlay at a rate of €50/m².

12.0 FIRST PARTY RESPONSE

The following is the summary of a response submitted by the applicant's agent;

Residential Amenity and Visual Impact

- The proposed development is located in an area designated 'open for consideration' and the Cork County Council is in support of the proposed development.
- The report from the Council's Senior Planner states that he agrees with the Landscape and Visual Assessment Peer Report that the development would modify rather than transform the landscape character.
- The Senior Planner also considers that the quality of the existing landscape is not exceptional.
- It is noted that the open afforested undeveloped character of the site will change to pasture farmland and forestry with wind turbines incorporating the movement of rotating blades.

- It is considered that the proposed development would give rise to a landscape sub-type in the local area without eroding the underlying characteristics of the wider area.
- It is submitted that given the landscape characteristic is medium the effect of the proposed wind farm on the character of this landscape type will potentially be up to a substantial / moderate significant effect within 2 – 3km radius.
- Beyond this range the wind farm will assume a lesser presence.
- The additional landscape effects related to the T1 and T2 would not be significant.
- The scale of the proposed turbines is consistent with the hub height and rotor diameter of other organisational and or consented schemes in Ireland.
- The applicant considers that the site has the capacity to absorb 7 wind turbines.
- The reduction in the scale from 11 to 7 no. turbines has resulted in a significant reduction in the impact of the proposed development.
- It is contended that there are no significant cumulative impacts on Waterford City and County Council.
- The wind energy guidelines recommend a separation distance of 500m between commercial scale wind turbines and residential properties. This separation distance is justified on the basis of visual impact. The proposed development has increased the separation distance to a minimum of 794m from the nearest non-financially involved property. Consideration has also been given to those properties within distances of 2km.
- The properties situated within the 1 – 2km range have views restricted due to the intervening landscape.
- It is submitted that no individual has a right to a view.
- It is contended that changing the view or outlook of a property is not sufficient to merit a refusal.
- It is submitted that the extend of woodland cover provides screening.
- It is submitted that most of the areas plantation woodland are semi-mature with a height of 15 – 20m and phased felling will not take place until commercial maturity.
- It is submitted that in relation to dwelling H31 that future felling of intervening forestry could potentially result in more open views, but removal of forestry would not result in unacceptable effects on residential visual amenity, given the separation distance to the nearest turbines and the oblique, partially screened, views to turbines located to the north of the site.
- The Residential Visual Amenity assessment indicated that views are possible from the east of the site however the wind turbines form a balanced composition which is consistent with the scale of the landscape.
- It is submitted that the visual impact of the proposed development on house no. 8 would be limited due to a screening effect on intervening broadleaf woodland.

- It is submitted that the existing houses west of Peatfield Cross Roads would not be significantly impacted by the proposed development.
- It is considered that the visual impact from view point H291 is not considered significant due to the oblique angles to the north from this two-storey house.
- It is considered that the viewpoint from H12 the turbines will appear set back within an area influenced by plantation woodland and would not be overbearing or unacceptable in terms of effects on residential amenity.
- The intervening landform sets up a partially screened nature of views from house no. 219.
- It is considered that there is a relatively high degree of screening from the Scenic Route towards the proposed T1 and T2.
- The Senior Planner report is noted as it is stated that the Scenic Route is not of a high standard relative to other Scenic Route. It is considered that the area to the north of the Scenic Route should not be considered to be the most sensitive.
- It is considered that given the distance of 1.2km of H12 from the nearest turbine the proposed development would not give rise to an unacceptable visual impact.
- In relation to H19 the proposed wind farm is located at a distance of 1.09km and the upper parts of turbines 3 – 7 would potentially be visible and turbines 1 - 2 would be well screened.
- The opportunity to walk in Hogan's Wood would continue and the views of the turbines would be partially screened.
- Any potential mitigation measures for H22 would be controlled through mitigation measures.
- In relation to H24 it is considered that mature vegetation will screen views.
- H26a is a single storey detached dwelling which appears to be used as a workshop and is located east of the proposed turbines along L-3800.
- Property no. 26b is an unoccupied dwelling located just beyond the 1km study area.
- In relation to H31 there would be phased felling and replanting of this woodland block to ensure long term screening of views from this property.
- Vegetation screening is not the sole mitigation measure. The separation distance of dwellings from the proposed turbines are in excess of 800m and this is for a single dwelling. A second dwelling is located within a 1km distance of the proposed development.
- It is submitted the visuals LVP 11 and LVP 13 to the south of H30 underline the partially screened nature of views experienced from the local road network and this effect would not be overbearing or unacceptable.
- It is submitted that any significant visual impacts would benefit from vegetation screening.
- The key mitigating factors for residential properties are distance, vegetation screening, intervening buildings, the orientation of dwellings, the topography and the separation distance.

- It is acknowledged that turbines will be visible from the windows of some properties within 2km distances however the visual impacts are not considered unacceptable.
- It is concluded that the proposed development would relate well to the local landscape.

Residential Amenity and Noise

- The Wind Farm Guidelines, 2006, state that the daytime noise limit shall be a lower fixed limit of 45 dB (A) or a maximum increase of 5 dB (A) above background noises.
- The guidelines provide a caveat for very quiet areas where the background noise is less than 30 dB it is considered that rather than restrict wind farm development in these areas that wind energy development be limited to an absolute level within the range of 35 – 40 dB.
- The EIS in the noise assessment concluded that the lower daytime threshold limit of 37.5 dB (A) is used and this was adopted having regard to the following;
 - The Wind Farm Guidelines, 2006
 - Cork County Development Plan objective ED 3-1
 - EPA document 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4) which proposed a daytime limit of 45 dB.
 - DEC&LG Review in relation to Noise, Proximity and Shadow Flicker (December 11th 2013). This review proposes a noise limit of 40 dB (A).
 - The EIS assessment considered the following criteria as acceptable.
 - 37.5dB LA9010min for quiet daytime environments less than 30dB
 - 45 dB LA9010min for daytime environments greater than 30 dB or a maximum increase of 5 dB LA9010min above background noise (whichever is higher)
 - 43 dB LA9010min for night time period
- The EIS used the lower baseline noise levels monitored at various monitoring locations.
- The derived noise criteria curves follow best practice guidance in the Irish context in that they consider lower threshold wind speeds when existing background noise is less than 30 dB (A).
- The relevant guidance for the proposed development is the Wind Farm Guidelines, 2006, rather than BS 4142: 2014 document.
- It is submitted that Section 5.5.2 of the EIS deals with the issue of uncertainty.
- The report by Dick Boulder claims that a 3 dB correction should be applied to the predicted calculations to account for the concave nature of the landscape.
- It is considered that guidance is offered in the Institute of Acoustics document 'A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise. It is stated that a correction is required where the ground falls away significantly however it is not considered that this would describe the landscape under consideration.

Perceived Impact on Forest Amenity

- The forest walks will be retained.
- Any views of the turbines will be frequently screened given the established tree cover.
- Future felling may result in additional views of turbines but the forest will be subject to replantation. Felling is an integral part of a commercial forest.
- Proposed access tracks will provide an enhanced amenity to the local area.
- Walking trails commonly use wind farm access trails.

Property Devaluation

- The claims that the proposed development result in property devaluation is contrary to several studies relating to property price appraisals.
- It is submitted that this aspect has been addressed in Section 9.4.1 of the EIS.

Shadow Flicker

- A shadow flicker appraisal was carried out in Chapter 10 of the EIS.
- The Shadow Flicker appraisal related to all buildings within 10 rotor diameters of a proposed turbine. These locations are illustrated in Figure 10.1 of the EIS.
- It is contended that the modelling parameters used were conservative.
- The results from the prediction modelling were reported in EIS Table 10.2.
- It is considered highly likely that the daily guideline limit of 30 minutes per day will be met at these properties.
- A methodology is proposed in Section 10.5 of the EIS whereby a procedure for evaluation of the existing screening of shadow flicker will be undertaken.
- The report from the Senior Planner notes that shadow flicker did not form part of a previous refusal and there are significantly fewer properties effected by Shadow Flicker in the current proposal.
- The applicant is satisfied to comply with condition no. 37 of the Local Authority planning permission.

Safety Concerns

- In relation to concerns that the proposal will have an adverse impact on equine industry. It is considered that there is no scientific evidence to demonstrate that this is the case.
- The Board is referred to appeal ref. 221656 which related to a development of 19 turbines. The Planning Inspector concluded that there is not sufficient evidence to demonstrate that the proposed wind farm would have a significant negative impact on the equine industry.
- In relation to concerns for the existing gas pipeline this is considered in the EIS under Section 4.2.1, Chapter 12 Heritage and Chapter 16 Material Assets.

Ecology

- Details of avian surveys are outlined in Volume 2 of the EIS, Chapter 6 Ecology, Section 6.2.4.1 and Section 2.5.1 of the NIS.
- A single winter transect survey was carried out in January 2012 and two breeding season transects were carried out in June and July 2012 during the breeding periods for birds.
- The EIS included vantage point surveys to evaluate the impact to the target species including golden plover and these are contained in Volume 2 of the EIS, Chapter 6 Ecology, Section 6.2.4.1 and Section 2.5.1 of the NIS.
- The proposed development will involve habitat removal however it is not envisaged that the habitat removal will negatively impact on the habitat available for the Golden Plover.
- In relation to collision risks it is submitted that Golden Plover have been recorded in low numbers for collision fatalities at wind farms.
- Studies have indicated that there is a reduced actual collision mortality during the construction period for Golden Plover.
- It is submitted that an over reliance on the results of collision risk modelling is therefore not recommended, rather empirical studies on actual post construction mortality. This will find more relevant information.
- There is no evidence to suggest that there is high mortality rate for golden plover at post construction stage of the wind turbines. This is confirmed by a study (Krijgsveld) which confirms that there is no significant record of collision fatalities.
- It is submitted that the use of an avoidance rate in collision risk modelling is effectively to make allowance for the likelihood that a high proportion of birds will take some form of avoidance action.
- Winter vantage point survey were completed at the site totalling 36 hours of watches.
- Flocks of Golden Plover were recorded both inside and outside the study area.
- Most Golden Plover were recorded in open agricultural grassland outside the area.
- Golden Plover activity occurred outside the 500m turbine buffer for 96.4% of the time and only 3.6% of time spend inside the 500m buffer.
- The average flock size was recorded as 99 which is well below the threshold importance of this specie.
- A flock of 234 Golden Plover was recorded in an area of improved agricultural land outside the study area. There was a peak recording of a flock of 500 however this is not an average figure and this is well below the threshold of national importance which is 1,200 species.
- The frequency of occurrence of Golden Plover within the study area suggests that they do not use the study area for roosting or feeding during winter months.
- In terms of cumulative impact it is submitted that the majority of habitats on the site are artificial and of low ecological value.

- It is submitted that there are no existing wind farms within 15km of the proposed wind farm. The nearest wind farm is a distance of 18km to the north in Barnafaddock, Co. Waterford.
- The proposed wind farm will not contribute to any in combination impacts on birds given the distances apart.
- Figure 6.2 illustrates the entire ecological study area and a significant area of the greater surroundings visible from vantage point locations.
- There was a lack of siting of the Peregrine Falcon on the site.
- There is no suitable habitat for the Peregrine Falcon in the study area.
- In relation to barn owls the British Barn Owl Trust suggest that wind farms are not a significant threat to the specie.
- Barn owls generally forage 3-4 m above the ground.
- The study area does not offer suitable habitat for badger or deer and as such the proposed development will amount to little impact on these animals.

Flooding

- Any increased run-off from the proposed wind farm is described in Section 8.4.3 of the EIS.
- The study estimated that there would be no rise in the expected 1 to 100-year flood event as a result of the proposed hardstanding areas.

Site Selection

- A full sequential site selection was undertaken for the proposed development.
- The viability of a wind farm development is also a consideration for the proposed development.
- The subject site is also acceptable in environmental grounds.

Addressing previous refusal reasons

- In relation to policy the County Development Plan has been revised and the location of the appeal site is now situated within an area which is 'Open for Consideration' for wind energy development.
- Climate change policies are also placing pressure on governments to provide greener energy developments.
- The Irish Government must meet the objectives of the Paris Climate Change, 2015.
- It is submitted that renewable energy reduces fossil fuel imports, reduces CO2 emissions and does not add to consumers bills.
- It is submitted that policy context has shifted since the last planning application.
- The quantum of residential development within 1km of turbine has reduced by 63%.
- The tip height of the turbine has reduced by 16.5m from 156.5m to 140m.
- It is submitted that mitigation measures in relation to bats have been detailed in the Construction and Environment Management Plan.

- The application documentation includes a Stage 2 NIS which has been carried out to address potential impacts on Cork Harbour SPA and Great Island Channel cSAC.
- The submitted NIS demonstrates that the proposed development will have no adverse impacts on the conservation objectives of any Natura 2000 site.
- The Planning Authority confirmed their approval of the ecological appraisal.

13.0 THIRD PARTY RESPONSES

Margaret Glavin

- It is submitted that the promoters of the proposed development are acting unfairly to local residents.
- This respondent is elderly and it was her dream to relocate home to Ardglass to site H22.
- It is considered out of the question now due to noise and shadow flicker.

Shane Murphy

- The observer resides in H19 and the noise levels from the proposed development would be intolerable.
- It is contended that the refusal reasons in the previous decision by An Bord Pleanala have not been addressed.
- The observer has been diagnosed as being on the Autistic spectrum and is sensitive to noise and the proposed development will have an adverse impact on the observer's quality of life.
- It is submitted that the observer's health is a fundamental right and that the observer needs to live in his home so as to secure that his future is secure. Should the turbines go ahead this will not be possible.
- It is submitted that the destruction of the forest is inevitable.
- It is noted that the developer intends to access the site at Peafield Cross. There have been several accidents at Peafield Cross Roads and it is a dangerous place to be moving heavy loads.
- It is submitted that all the access roads are unsuitable.
- It is contended that the proposed development would have a devastating impact on the quality of life and would have a major loss of amenity.
- The proposed development will have an adverse impact on sleep.

Jeremiah O'Donovan (two separate responses)

- There is inadequate screening provision.
- The height and scale of the proposed turbines will interfere with bloodstock.
- There will be an adverse impact on residential amenities in terms of noise.
- The respondent whose property is H-290 contends that he will have full view of the proposed weather mast, turbine no. 4 and on even higher ground turbine no. 7.

- It is questioned why was the weather mast omitted from the photomontages.
- The submitted photomontage H205 is a concern as image outlines that the weather mast is taller than the two adjacent wind turbines however in reality it is shorter than the two aforementioned turbines.

Dan Buckley

- it is submitted that the applicant's argument in relation to screening is not considered adequate as any existing forestry will be harvested.
- It is also submitted that the existing mast in the forest has been erased in all submitted photomontages.
- This structure, which is 72m high, would provide a valid visual reference point.
- It is contended that the scale of the submitted photomontages is out of scale.
- The proposed 140m high masts are 2.2 km long and have a hugely negative impact on the landscape and an adverse impact on the East Cork Landscape.
- It is contended that the proposed development is disproportionate to the landscape.
- It is submitted that local residents are already trying to sell their homes.
- In relation to noise it is accepted that the local area is classified as a low environment noise.
- The limits set by the developer will not protect the residents.
- The respondent argues that the proposed development will result in a doubling of noise at his property which is unacceptable.
- The report prepared by Dick Bowdler confirms that both the 5 no. and 7 no. turbines as proposed would exceed the noise limits in the guidelines.
- There is a 3 dB difference between Dick Bowdler's interpretation of the baseline data and that of the developer and the further information did not address this discrepancy.
- The report from the Environment Section states that it has not been adequately demonstrated that the proposed development will not adversely impact on residential amenities.
- It is contended that a 10 dB increase would be considered as a doubling of loudness.
- It is noted that each noise survey prepared by the applicant illustrates that there will be noise implications for local residents.
- The increase in noise levels will be a major loss of amenity.
- The EPA Guidance NG4 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4).
- This EPA guidance indicates that 10 dB increase / decrease in sound level equates to a doubling or halving of noise.
- The WHO recommends a night time noise limit of 40 dB.
- The Divisional Manager overruled the Engineer's recommendation as he considered that the omission of two turbines no. 1 and no. 2 would reduce the noise load and lessen the visual impact.

- It is considered that a 10 dB increase in noise on the current level is significant.
- It is considered that the Divisional Manager's recommendation for ignoring the noise expert is unjustified.
- It is considered that there are discrepancies in how the developer interprets the noise, i.e. 3 dB to low.
- It is submitted that the planning conditions will not protect residents.
- The current Wind Energy Guidance in low noise environments recommend a delta increase less than 5 dB.

Rick Glavin

- The respondent contends that Turbines no. 1 and no. 2 are totally visible from his property i.e. H26B and H22. It is considered that these turbines will only increase noise and shadow flicker.
- In relation to condition no. 8 the opinion of the local engineer is worth considering.
- In relation to condition no. 44 it is submitted that the proposed development will result in a significant increase in noise levels.
- It is contended that the proposed development will result in property devaluation of 80% to 90%.

Ardglass Wind Turbine Action Awareness Group

This submission outlines details of the site context, the proposed development, the planning history, the current planning policy and an assessment. The following is a summary of the response to the first party appeal.

Landscape and Visual Impact

- The appeal submission outlines in detail the position of the subject site and that the landscape is unsuitable for the proposed development.
- This view was strongly supported by An Bord Pleanala.
- It is submitted that the first party appeal attempts to circumvent the previously expressed views of the Board.
- It is noted that the Executive Planner, in her report, questions whether the receiving environment has the capacity to absorb the proposed development and concluded that the proposed development did not address the concerns of the previous application.
- It is submitted that all issues in relation to visual impact are addressed in the third party appeal by the respondent.
- It is submitted that the conclusions of the applicant's visual impact assessment are at odds with the decision of An Bord Pleanala and Cork County Council.
- The submitted photomontages VH12, VH219 and VH291 illustrate the characteristic features of the landscape that include by bands of woodland rolling across an open landscape.
- The Planning Inspector in the previous application stated that having regard to the gentle hilly, low lying, open and exposed nature of the landscape that it is considered that the turbines will be highly visible.

- It is submitted that the weather mast on the site provides an important context. The height of this mast is just over half of the height of the proposed turbines.
- It is contended that the reduction in height of the proposed wind turbines, compared to the previous proposals, is negligible, and that the overall scale of the proposed development is broadly similar to the previous proposal. This view was also supported by the Executive Planner.
- It is submitted that this proposal is not consistent with Chapter 6 of the National Wind Farm Guidelines, 2006.
- The existing landscape lacks any discernible features and the presence of a large rural population reduces the ability to accommodate development of a scale and nature proposed.
- The applicant's assertion that the visual effects of the proposed development will be localised is unfounded. This is evident by the submission by Waterford and City Council. It is acknowledged that there is significant area of theoretical visibility into County Waterford.
- In relation to impacts on residential amenity the applicant did not respond to the local authority's request for additional information in relation to residential amenity.
- The applicant's residential assessment concludes that no less than 12 no. houses are located within 1km of the proposed development and that these properties will experience a significant impact or potentially significant impact. However when you consider the number of houses beyond 1km the impact is substantial.
- It is submitted that the applicant's reference to UK criteria whether the proposed wind turbines are acceptable has no precedent or context in the current application.

Noise

- It is submitted that the applicants appeal in relation to condition no. 2 focuses solely on landscape and visual impacts to justify the approval of Turbines no. 1 and no. 2.
- No justification is set out demonstrating that the two additional turbines will not exacerbate noise conditions.
- It is submitted that the noise assessment contains many discrepancies.
- The submitted noise assessment was unable to satisfy the Environment Section of the Local Authority.
- There is an absence of any substantive argument on whether 7 turbines will have a greater impact on properties than 5 turbines.
- The report from Mr. Dick Boulder confirm that should the lower noise limit of 37.5 dB be applied as proposed by the applicants, then the addition of two turbines would mean that 9 properties would fail to meet the 2006 guidelines rather than 4.
- Should the lower limit of 36 dB be used then 20 properties would fail to meet the guidelines as opposed to no. 7 properties arising from the additional turbines. It follows that the additional of 2 extra turbines will not give rise to amplified noise impacts.

- It is submitted that this is a low rise noise environment and consensus has been established on that front.
- It is submitted that there is no substantive difference in noise impacts between 5 and 7 turbines. The applicant argument that the Council has mis-interpreted the 2006 guidelines is without foundation.

Traffic Access

- It is submitted that the road L3601 as known by local knowledge is in poor condition.
- The narrow pavement width, vertical and horizontal curvature, and, the fragile nature of the old stone bridges on the route are the main reasons for its unsuitability.
- It is submitted that the applicant considered alternatives and this included L7831. The L7831 benefits from a better condition and a wider carriageway than L3601.
- It is submitted that the applicant has not considered a delivery route using the M8 motorway, exiting at junction 15 which is 14.4km from Ardglass Cross Road and there is a direct route along the L3800.
- This route is the most advantageous in terms of widest carriageway and best surfaced routes and it is the shortest distance between the site and the motorway.
- It is submitted that the applicant has not considered access to the site exiting the R626 at Rathcormac, and proceeding along the R628 to its junction with the L3800 and this would result in a travel distance of just 7.7km on the L3800 and the remainder on regional roads.
- It is concluded that the applicant considers that L3601 as the optimum solution without considering viable alternatives.

14.0 ASSESSMENT

The main issues to be considered in this case are: -

- 14.1 Principle of Development
- 14.2 Appropriate Assessment Screening
- 14.3 Appropriate Assessment
- 14.4 Environmental Impact Assessment
- 14.5 Impact on Residential Amenities
- 14.6 Condition no. 2
- 14.7 Condition no. 8
- 14.8 Condition no. 38
- 14.9 Condition no. 44

14.1 Principle of Development

- 14.1.1 There is a positive presumption in favour of alternative energy projects including renewable energy and this is acknowledged at National, Regional and Local levels. This is also reflected in the DOEHLG 'Wind Energy Guidelines', 2006, and in policies of the Cork County Development Plan, 2014 - 2020.

14.1.2 The Cork County Development Plan, 2014 – 2020, sets out policy and objectives in relation to On-Shore Wind Energy development. Figure 9.3 of the County Development Plan is the Wind Energy Strategy Map and the appeal site is located within an area that is designated ‘Open for Consideration’. The relevant policy provision is therefore Policy Objective ED 3-5 of the County Development Plan. This policy states that commercial wind energy is open for consideration in these areas where proposals can avoid adverse impacts on;

- residential amenity
- urban areas
- Natura 2000 sites
- Architectural and Archaeological Heritage
- Visual Quality of the landscape

14.1.3 In developing wind farms the level of gaseous emissions is reduced in the short and long term and this assists in meeting national targets for renewable energy. The National Spatial Strategy, 2002 – 2020, recognizes the importance of renewable energy as it is stated that the aim should be to ensure that resources such as energy is used in sustainable ways. In terms of regional policy I would refer the Board to the South West Regional Planning Guidelines, 2010 – 2022. Paragraph 5.6.32 of these Guidelines refers to renewable energy and it is stated that it is an objective to ensure that future strategies and plans for the promotion of renewable energy development and associated infrastructure development in the region will promote the development of renewable energy resources in a sustainable development. As such the proposed development offers a sustainable energy solution in accordance with current international, national, regional and local policies.

14.1.4 In developing wind farms the level of gaseous emissions is reduced in the short and long term and this assists in meeting national targets for renewable energy. The National Spatial Strategy, 2002 – 2020, recognizes the importance of renewable energy as it is stated that the aim should be to ensure that resources such as energy is used in sustainable ways. In terms of regional policy I would refer the Board to the South West Regional Planning Guidelines, 2010 – 2022. Paragraph 5.6.32 of these Guidelines refers to renewable energy and it is stated that it is an objective to ensure that future strategies and plans for the promotion of renewable energy development and associated infrastructure development in the region will promote the development of renewable energy resources in a sustainable development. As such the proposed development offers a sustainable energy solution in accordance with current international, national, regional and local policies.

- 14.1.5 However while such a development for renewable energy is acceptable in principle given its location, regard has to be had to its environmental sustainability. Other issues such as the visual impact on the landscape taking into account the siting, scale and layout of the proposed wind farm development, impact on local residents and the amenities of the area including noise and shadow flicker, environmental issues including impact on the ecology, cultural heritage and accessibility/traffic and drainage issues need to be taken into account.
- 14.1.6 The planning history is also a relevant consideration. In the previous development on the subject site planning permission was refused by the Board for 11 no. turbines (appeal ref. 243630). In this previous proposal for 11 no. turbines the proposed blade height (tip height) was 156.5 m high. In the current proposal before the Board the blade height is 140 metres. In the previous proposal, similar to the current proposal, it was proposed that the wind farm would be connected to the national grid at the Middleton substation. The Board in refusing permission for the previous proposal considered that the proposed wind farm development by reason of the open and exposed nature of the landscape and given the proximity to noise sensitive receptors considered that the proposal would be seriously injurious to visual and residential amenities of the area. The Board also decided that there was an inadequate description of direct and indirect environmental effects of the proposed development, in particular in relation to ecology and noise.
- 14.1.7 It is my view based on the policies of the County Development Plan, the national guidelines and the planning history of the subject site and having regard to the revised proposal that the principle of the subject development would be acceptable provided that it does not adversely impact on the amenities of the area which are generally protected by County Development Plan policies and objectives. In conclusion therefore I would consider that the principle of the proposed wind farm is acceptable provided the proposed development would not adversely impact on the environment and amenities of the area.

14.2 Environmental Impact Assessment

- 14.2.1 The application is accompanied by an environmental impact statement and there is a non-technical summary document.
- 14.2.2 I am of the opinion that the EIS is detailed and complies with statutory requirements, i.e. Article 94 and Schedule 6 of the Planning and Development Regulations, 2001, as amended, and the EPA Guidelines as they relate to the Environmental

Impact Assessment. In general the information provided is considered to be relatively clear and precise.

- 14.2.3 In accordance with the requirements of Article 3 of the European Directive 85/337/EEC, as amended by Council Directives 97/11/EC and 2003/35/EC, the environmental impact statement submitted by the applicant is required to be assessed by the competent authority. In this assessment the direct and indirect effects of the proposed development need to be identified, described and assessed in an appropriate manner, in accordance with Articles 4 to 11 of the Directive.

Human Beings, fauna and flora

- 14.2.4 In relation to direct and indirect impacts to **human beings** the proposed development will result in employment opportunities during the construction stage however this will be temporary in nature. The EIS estimates that the proposed development will give rise to 29 construction jobs such as technical consultants, contractors and tradespeople. This will give rise to short-term positive benefits. This employment creation during the construction stage may have spin-off implications for the local economy. The development during the operational stage will result in permanent employment opportunities for 2 – 3 persons for maintenance positions. These employment levels will make a positive contribution to the local economy and the overall economic impact is therefore a net-benefit.
- 14.2.5 The construction phase of the proposed development will directly impact on the local road network which will have an indirect impact on human beings. In relation to traffic these impacts are largely temporary in nature although there will be some permanent traffic to and from the site and I will examine this further below. The proposed development will also result in the creation of dust, noise, shadow flicker and visual impacts which will all have implications for residents located within the vicinity of the proposed development.
- 14.2.6 In relation to the Shadow Flicker I would note that the DOEHLG 'Wind Energy Guidelines', 2006, recommends that '*shadow flicker at neighbouring offices and dwellings within 500m should not exceed 30 hours per year or 30 minutes per day*'. The guidelines state that '*at distances greater than 10 rotor diameters from a turbine, the potential shadow flicker is very low*'. The EIS estimates the rotor diameter is 1,130 metres and provides a map, i.e. Figure 10.1, which illustrates the number of residential properties within 1,130 metres of the proposed turbines and there are currently 20 houses within this area. There are 10 houses in which shadow flicker will have implications for and Table 8.2 of the EIS outlines the predicted

shadow flicker values for these 10 houses. I would note that for 9 of the 10 houses that shadow flicker will exceed 30 minutes per day however 4 of these properties are commercially involved in the proposed development. I would note that all of the 9 properties are situated at distances exceeding 500m from the proposed turbines.

- 14.2.7 The predicted maximum shadow flicker for house no.s 7, 11, 14 and 20 is between 31 and 33 minutes and the minimum distance is 868m from the proposed turbines. It is expected that house no. 31 will exceed the maximum daily guideline for shadow flicker by 6 minutes. This property is located 794m from the proposed turbines. The shadow flicker implication for house no. 31 is an issue, however should planning permission be granted with a condition for the omission of T1 and T2 then it is an isolated issue as shadow flicker will be reduced for house no.s 7, 11, 14 and 20.
- 14.2.8 I would note the proposed primary mitigation measures, which include screening and the installation of blinds, would reduce the impact of Shadow Flicker on the aforementioned properties. The applicant has also outlined that turbines can be programmed to stop operating at times where it is anticipated that the relevant guideline limits may be exceeded. Overall I would consider having regard to the separation distances and the proposed mitigation measures that the shadow flicker impacts on the local residential amenities are generally acceptable.
- 14.2.9 In relation to noise implications there will be noise generation at construction and operation stage however the construction noise will be temporary in nature.
- 14.2.10 The construction activities likely to generate the most noise are those associated with excavation, piling of turbine bases and traffic associated noises. The proposed development involves the construction of 3 no. barrow pits and this may involve the rock breaking and/or rock blasting. These latter two construction activities have the potential to create short-term significant noise impacts. The operational noise which will include aerodynamic noise and mechanical noise from the gearbox and generator. The mechanical noise emanating from wind turbines has generally reduced due to technological improvements however aerodynamic noise is generally referred to as the 'swish' of the turbine blades and has the potential to adversely impact on the established residential amenities.
- 14.2.11 Table 9.1 of the EIS sets out all buildings within a 2km radius of the proposed development. I would note from this table that no property is less than 500 metres from the proposed development. However there are a number of properties located

between 500m and 1km of the proposed development and these include;

- H-2 (950m from the nearest turbine)
- H-4 (997m from the nearest turbine)
- H-7 (871m from the nearest turbine)
- H-8 (984m from the nearest turbine)
- H-11 (870m from the nearest turbine)
- H-14 (869m from the nearest turbine)
- H-16 (586m from the nearest turbine)
- H-18 (673m from the nearest turbine)
- H-20 (935m from the nearest turbine)
- H-21 (973m from the nearest turbine)
- H-28 (756m from the nearest turbine)
- H-30 (633m from the nearest turbine)
- H-31 (794m from the nearest turbine)

14.2.12 I would note that properties no. H-16, H-18 and H-30 are commercially involved with the proposed wind farm development. The Ministerial guidelines recommend that noise is unlikely to be a significant problem where the distance from the nearest turbine to any noise sensitive property is more than 500 metres. In the previous proposal before the Board there were 35 properties situated within the 1km radius of the proposed development and as such on this basis the current proposal is considered an improvement.

14.2.13 The EIS includes a noise model which estimates the noise implications of the proposed development. In preparing the noise model the applicant derived a maximum day-time and night-time noise limit. The maximum day-time noise limit was 37.5 dB and the maximum night time limit is 43 dB. The outcome of the noise modelling is concluded in Table 5.15 of the EIS and generally the predicted noise levels indicate that all locations are within the relevant night-time and day-time limits and therefore no undue impacts on established residential amenities are likely. However a significant issue was raised by the Environment Section, in their report, from the Local Authority, and also raised in a number of submissions. This issue relates to the impact of the proposed development in relation to the lowest background established noise.

14.2.14 In relation to low background noise levels this can be an issue in rural areas given that the established low background noise is usually below background noise levels in urban areas or in areas zoned for development. In rural areas low background noise levels are usually breached significantly by passing traffic or farm machinery. The current proposal is likely to considerably exceed the low background noise levels and the Wind Energy Guidelines has acknowledged this outcome as an issue in

general with wind farm developments. The Wind Energy Guidelines outline that a maximum increase in sound of 5 dB above background noise levels in very quiet areas will unduly restrict wind energy development. I would accept this argument and the Guidelines recommend that in very quiet areas, i.e. where the background noise level, is less than 30 dB that the wind energy development noise is limited to a range of 35 – 40 dB. The applicant recommends that an upper noise limit of 37.5 db is used which in my view is reasonable.

- 14.2.15 I acknowledge the report from the Environment Section of the Local Authority who recommends a refusal on the basis that noise emanating from the proposed development will be injurious to established residential amenities. The Environment Report essentially considers that the noise levels in the predicted noise model and illustrated in Table 5.15 of the EIS will in some cases be in excess of 5 dB and 10 dB of the established low background noise level. Whereas I would concur with the report from the Environment Section and acknowledge that in some cases the proposed development would amount to an increase of 10 dB which is significant in acoustic terms as this amounts to doubling of the loudness in a noise sensitive location. However I would not concur with the recommendation of refusal by the Environmental Section as I would consider that a refusal on this basis would go against the advice of the National Guidelines which I have referred to above and would essentially make wind energy developments unviable in a large proportion of rural areas where they might be otherwise considered suitable. I would be of the view to favour the advice offered in the Wind Energy Guidelines and also I would acknowledge the assertion in the guidelines that distances greater than 500m are unlikely to be a concern.
- 14.2.16 The proposed mitigation measures include a noise survey to be completed by a qualified acoustic expert and based on the findings of a noise survey a set of measures will be drawn up in agreement with the Local Authority. I would consider, having regard to the proposed mitigation measures as outlined in Section 5.6.2 of the EIS, that the overall noise implications from the proposed development would not adversely impact on the amenities of the area.
- 14.2.17 Additionally, given the possibility of a construction site for the proposed development the proposal will have health and safety implications for human beings, such as construction workers. However I would note the mitigation measures as set out in Section 9.5.4 of the EIS and I would consider them adequate.

- 14.2.18 In assessing the impact on human beings I would conclude that the most significant impacts of the proposed development would be noise generation and visual impact.
- 14.2.19 In relation to the proposed grid connection route I would consider that the construction phase of this development will have implications for human beings in terms of traffic disruption and noise generation. In terms of traffic disruption the proposal will involve the installation of cables along the public road as indicated in Figure 2.1 of the EIS. It proposed to reduce the public road down to one lane during construction and where the public road is narrow traffic diversions will be used. I also noted from my two site inspections that the public roads, the subject of the grid connection, has limited traffic and is not a main route across the county. There will be no operational impact on human beings in relation to traffic as the grid connection cable will be laid underground. In relation to noise I would acknowledge based on the submitted documentation that houses situated in close proximity will experience noise impacts however these impacts will be temporary in nature. I would not consider that there would be any significant cumulative impacts on human beings in relation to noise and traffic owing to the installation of the grid connection.
- 14.2.20 In relation to **fauna and flora** it is important to note that the subject site is not within nor does it adjoin a Natura 2000 site. However there are designated Natura 2000 sites located within close proximity to the appeal site and this includes The Blackwater SAC, the Great Channel SAC and the Cork Harbour SPA.
- 14.2.21 In relation to **flora** the submitted EIS outlines that the main habitats on the development site comprise of conifer plantation, artificial surfaces, improved agricultural grassland and scrub, earth banks and wet heath and hedgerows. The EIS estimates the proposed development will amount to the removal of 33.5 ha of conifer plantation and the removal of 4.73ha of improved agricultural grassland. There are several watercourses which drain westwards and although they may provide habitat for some species any potential pollution of these watercourses may also have impacts for species downstream. A tributary of the Templeboden River flows through the subject site however the EIS states that although the habitat has the potential to act as a spawning habitat for salmonids that salmonid densities are likely to be low. The EIS concludes that without mitigation measures the impacts on the watercourses would be moderate. Overall I would conclude having regard to the receiving environment which has limited flora habitats that the proposed development will not have an adverse impact on flora of any significance and in reaching this conclusion I would also have regard to the

mitigation measures proposed as set out in Section 5.6.2 of the EIS.

14.2.22 In relation to **fauna** I acknowledge that a mammal and bird survey was undertaken. There were no recordings of target species within the ecology study area which were identified as Hen Harrier, Black-tailed Godwit, Curlew and Dipper from any of the bird surveys contained in the EIS. In addition the closed canopy landscape and the improved agricultural land is not suitable habitat for hen harriers. Golden Plover, which are a qualifying interest in the Cork Harbour SPA, were identified as using the local area adjacent to the development site however they were recorded outside the 500m turbine buffer zone and the average flock size was recorded as generally small. The Kestrel, which is an Annex I specie, also was recorded flying in the area and the proposed development will reduce the habitat area available to the Kestrel. There is no suitable habitat within the proposed development site for the Peregrine Falcon. Peregrine Falcon's preferred habitats are cliffs, quarries and man-made structures. The EIS notes that there was no evidence of buzzards flying over the site but may fly over from time to time. In relation to bats there is potential, without mitigation measures, for significant negative impacts. Construction impacts on bats are generally thought to occur through habitat removal and subsequent loss of foraging and / or roosting areas, and disturbance during the construction period. However mitigation measures such as hedgerow and tree line replanting will ensure that the impact on habitat removal on foraging bats will be short-term in duration. In addition the planned timing in relation to the removal of hedgerow and tree lines will ensure that there are minimal impacts on bats and birds. In relation to potential impacts during the operation phase I would note that the survey within the EIS recorded six bat species within the ecology study area. However of these species five are low flying bats and the potential for collision with the proposed turbines, during operation stage, is not likely. The final species is the Leisler's bats and they have higher flight heights and are therefore a risk of collision with the proposed turbines. However the EIS notes that there is no evidence to demonstrate Leister's bats mortality due to wind farms. I would consider that the scale of the wind farm is relatively small and there is adequate spacing between turbines which will allow flights for Leister's bats. The EIS survey identified some mammals in the ecology study area and these species included rabbit, fox, deer, red squirrel, Irish Stout and Irish Hare. Of these mammals the red squirrel and the Irish Hare are of most concern as they are protected. EIS survey had no sightings of badgers or otters.

14.2.23 The Local Authority Ecologist has prepared a report assessing the proposed development and I would have regard to her

conclusions. In relation to birds the Ecologist acknowledges that some birds were recorded on the site. Although these birds are not identified as qualifying interests in the Cork Harbour SPA, but would be vulnerable to impacts of wind farms. However the Ecologist concludes that given the low occurrence of these recorded birds and the abundance of alternative habitat in the immediate area for these birds they are not under threat from the proposed development. The Ecologist considers that the mitigation measures within the EIS will adequately address concerns in relation to the bat population and that the proposed development would not give rise to any significant impacts to other fauna species.

14.2.24 I would acknowledge that the proposed development will result in the loss of habitat however I would also note that in the immediate vicinity of the appeal site and adjoining lands to the subject site there is adequate replacement habitat available. I would conclude that the mitigation measures would adequately address any concerns in relation to fauna.

14.2.25 In relation to fauna the proposed grid connection will involve underground cabling and therefore is unlikely to have any adverse impacts on local fauna. In relation to flora the installation of the cables is predominately taking place on roads, and therefore this component is unlikely to have any significant impacts. There is a small section of the grid connection along existing forest tracks and this will have an insignificant impact on flora. I would not consider this would have a significant effect. On the basis of the information available I would note consider that there would be any significant cumulative impacts on flora and fauna in relation owing to the installation of the grid connection.

Soil, water, air, climate and the landscape

14.2.26 In relation to **soil** a direct impact of the proposed development is the removal of soil as part of the site clearance and for laying foundations for the proposed turbines. The proposed development includes three barrow pits. There are also activities associated with disposal of soils, contaminated materials and bedrock, and also the compaction of soil due to construction vehicles. The contamination of soil could be caused during construction stage by hydrocarbon leaks. A hydrocarbon leak would have negative short-medium term moderate impact on the vegetation and earth materials on-site and down gradient of the development site. On-site mobile equipment will require regular refuelling from a fuelling station. The proposed construction activities will involve rock breaking and/or rock blasting which may impact on soil structure.

- 14.2.27 In relation to slope stability the EIS conducted a site walkover and a desktop study to determine the depth of peat on the development site.
- 14.2.28 I would note that the Scottish Executive's 'Peat Landside Hazard and Risk Assessment', 2006, (usually referred to in Irish Wind Farm developments) recommends that Peat Stability Assessment is not necessary when peat depths are less than 0.5 metres. The EIS site walkover did not determine any evidence of peat deposits or peat bog on the site, only peaty topsoils were encountered locally. The submitted EIS has stated that peat depths at the appeal site in all turbine locations and along access tracks is less than 0.5m I would consider based on the information available that slope stability is not an issue for the proposed development.
- 14.2.29 In relation to groundwater vulnerability the EIS walkover survey determined that the subsoil thickness on the site is generally considered to be less than 5m resulting in a high vulnerability status. However the EIS states that the overburden deposits of till have a generally low permeability and may therefore prevent the free-movement of surface water to the underlying ground water.
- 14.2.30 In relation to operational impacts these are largely limited and will mainly be confined to accidental leaks or maintenance traffic accessing the site.
- 14.2.31 The mitigation measures for the construction phase and the operation phase are outlined in Section 7.4 of the E.I.S. The E.I.S. predicts that there will be no significant residual impacts to soils at both construction and operational phase. I would concur with the findings of the E.I.S. that no residual impacts to soils would occur based on the mitigation measures proposed.
- 14.2.32 In relation to **soil** a direct impact of the proposed grid connection construction would be the removal of soil as part of the site clearance and for the installation of cables. The depth of the proposed trenches is approximately 950mm deep and the soil removed will mainly be used for infill after laying of cables. Overall I would not consider any residual impacts on soil due to the proposed grid connection.
- 14.2.33 In relation to **hydrology** and **hydrogeology** I have outlined the surface water and ground water catchment above. Having regard to the proposed development and in specific the construction phase I would acknowledge that there is potential for surface water pollution due to unmanaged erosion / sediment deposition and suspended solids to watercourses. There is also potential for adverse impacts on surface water due to accidental

spillage of oil / fuel pollution and potential for alteration to the subsurface hydro-geological patterns. The EIS outlines that the main risk to groundwater at the development site would be from hydrocarbon spillage during construction.

- 14.2.34 In relation to flood risk it is my view that the EIS has adequately demonstrated that peak flow runoff will be negligible and therefore the impact from the proposed wind farm would be minimal on existing surface water flows.
- 14.2.35 I would consider that the mitigation measures outlined in Section 8.7 are comprehensive would adequately protect surface water and ground water from any potential impacts associated with the proposed development.
- 14.2.36 In relation to **hydrology** the impacts from the construction of the grid connection may include water quality impacts at river/stream crossings along route sections that are close to watercourses. I would acknowledge that impacts could potentially occur at stream crossing locations where open trench work is proposed. However I would consider that the mitigation measures would adequately address concerns in relation to hydrology and that the construction of the grid connection would not result in any significant cumulative impacts.
- 14.2.37 In relation to **air quality and climate** I would consider that potential impacts would occur during construction including potential for short-term dust impacts due to excavation, loading and unloading of aggregates, construction and traffic sources. Dust emissions arise when particulate matter becomes airborne making it available to be carried downwind from the source. It is noted that some residential properties are located in a relatively close distance to the grid connection cable route and these distances are situated a minimum of 12m. There are also some properties located within 30m of the proposed turbine delivery route and this may also give rise to dust emissions. There may be some residual construction impacts on air quality however this will be short-term in nature. Overall impacts on climate due to the proposed construction are generally minor given the overall scale of the proposal. Overall impacts to the climate during operation is generally positive as there is an overall reduction in carbon emissions. I would consider that the mitigation measures as outlined in Section 15.5.1 of the EIS would ensure that the construction impact would not have a significant impact. Therefore the construction of the proposed wind farm and its generation of electricity in lieu of fossil fuels generated electricity would have an overall positive impact on climate.

- 14.2.38 In relation to **air and climate** and having regard to the available information I would not consider that the proposed grid connection would result in any additional implications for air and climate.
- 14.2.39 In considering implications for **landscape** it is relevant to have regard to the established landscape character and also the policy provisions in relation to the receiving landscape.
- 14.2.40 I would note from a visual observation of the area and the information on the file that the immediate vicinity of the appeal site is characterised by upland rural countryside and a significant feature of the landscape is the coniferous plantation which is situated on a local plateau. There is also sporadic rural housing located in the local area. In terms of policy provisions I would note that Figure 9.3 of the Cork County Development Plan, 2014 – 2020, is the Wind Energy Strategy Map and the appeal site is located within an area that is designated ‘Open for Consideration’. The relevant landscape policy provision in the County Development Plan is ‘Policy GI 7:2 Scenic Routes’ and this policy states it is an objective to *‘protect the character of those views and prospects obtainable from Scenic Route and in particular stretches of scenic routes that have very special views and prospects identified in this plan’*.
- 14.2.41 There are two designated scenic routes, in accordance with the provisions of the County Development Plan, located within the general locality of the proposed development. These Scenic Routes include S44 ‘Road between Ardglass and Monaleen Bridge’ and S43 ‘Road between Leamlara and Midelton’.
- 14.2.42 The local authority in their assessment of the proposed development considered that the development as proposed would have visual impacts on the established landscape. The Area Planner’s report acknowledges that the local landscape is High Sensitivity and that the proposal would effectively dissect a designated Scenic Route. This is essentially the case as two turbines, i.e. T1 and T2 are situated north of S44 and the remainder of the proposed development is situated to the south of S44. The Area Planner considers that the overall scale of the proposal is significant and that there is no doubt that the proposal will impact on the immediate and wider landscape. Cork County Council considered it appropriate to request additional information requiring the applicant to reduce downwards the scale of the proposed development to allow the landscape accommodate the proposal.
- 14.2.43 I would note that the report from the Senior Planner of Cork County Council concluded that the proposed development is not consistent with the national guidelines. In the interest of

clarification the DOEHLG 'Wind Energy Guidelines', 2006, state *'that turbines should relate in terms of scale to landscape elements and will therefore tend not to be tall. An exception can be considered on a high ridge or hilltop of relatively large scale'*. The Senior Planner's report considers that given the significant height, i.e. 140m, and the nature of this generally flat landscape without significant screening features, that the development does not satisfy the guidelines.

- 14.2.44 In relation to location the Guidelines advise generally that consideration shall be given to;
- Sitting turbines on lower ground or some cases on ridges and hilltops
 - prominent landcover and structures to provide a counter balance
 - avoiding full visual exposure of turbines from viewing locations
- 14.2.45 The receiving landscape is generally flat and I would concur with the view that there is limited ability within the established landscape to absorb significant development given the landscape nature.
- 14.2.46 In response to the request for further information to address concerns in relation to the scale of the proposed development the applicant submitted a response which comprised of a 'Landscape and Visual Assessment Peer Review' prepared by Stephenson Halliday (Environmental and Landscape Planning). In brief the conclusions of this independent review established that the findings of the EIS Landscape Visual Impact Assessment regarding landscape and visual effects remain valid. In addition the 'peer review' considered that there is capacity within the established landscape to absorb the proposed development. Finally it was stated that the large scale, open and exposed nature of the site provides few cues to the scale of the turbines, so minor reductions in height would be less noticeable.
- 14.2.47 The local authority in response to the additional information submission considered that the overall scale was unacceptable and that the removal of Turbines T1 and T2 would be required to address concerns in relation to adverse visual impacts on the local landscape. Therefore planning permission was granted with a condition (i.e. condition no. 2) to remove T1 and T2.
- 14.2.48 In terms of considering the precedent of the previous decision (appeal ref. 243630) I have reviewed the planning inspector's assessment as this assessment was the basis of the Board's decision to refuse permission. I would note that the planning

inspector's assessment raised concerns in relation to the actual number of turbines and their respective height. The current proposal before the Board has potentially addressed this concern with the reduction in the number of turbines and also the reduction in their height. Although the Senior Planner of Cork County Council, considers that given the nature of the landscape, that a reduction in height from 156.5m to 140m is not going to have a significant impact in terms of visual impacts. I would concur with this view. The Planning Inspector, in her assessment, noted that the proposed development is located in an area where there is a population concentration and the visual impact of the proposal will be present on the scenic routes. The Planning Inspector considers that the proposed development fails to consider the advice of the guidelines on spatial layout. The Planning Inspector's overall conclusion was that the established landscape could not accommodate the proposed development and at a local level the impact would be significant and negative and that a grant of permission would set an undesirable precedent for other such development.

- 14.2.49 In relation to Scenic Route S44 and in accordance with Volume Two: 'Heritage and Amenity' of the Cork County Development Plan, 2014 – 2020, the views being protected are the '*views of hills and rural landscape*'. This Scenic Route covers part of the Walshtown Road to Peatfield Cross Road and then covers the road from Peatfield Cross Roads to Ardglass Cross Roads. The final stretch of this Scenic Route is from Ardglass Cross Roads to the townland of Gurteen.
- 14.2.50 On the basis of a visual observation of the local area I would consider that the Scenic Route along Walshtown Road would be impacted by the proposed development, in particular by turbines T6, T4 and T3. Although there is a small stretch of forested land along this road and this would restrict views from the Scenic Route to the proposed development. However north of this forested area views of the proposed development open up and views of the proposed development would be significant from the Scenic Route. Overall there would be a material visual impact from the scenic route to the proposed development along this stretch of the public road.
- 14.2.51 In an eastern direction from Peatfield Cross Road the visual impact from the Scenic Route is limited due to the presence of forestry in close proximity to the public road. However beyond this small forested area and further along the road in an eastern direction views towards the proposed development open up. There is a low-rise hedgerow along the roadside boundary however the hedgerow is generally deciduous in parts and walkers and cyclists along this route will experience visual impacts of the proposed development given the height of these

turbines and their relative distance to the Scenic Route. As the road rises in an eastern direction and the hedgerow lowers there will be a significant visual impact for drivers as they look southwards and northwards towards the proposed development. As the road approaches Ardglass Crossroads there is forested land either side of the public road and this would restrict views towards the proposed development and therefore the proposed development would have no impact on the Scenic Route. However beyond these forested lands and on the approach to Ardglass Crossroads the views open up again and the proposed development will impact on the Scenic Route. On the stretch of Scenic Route between Ardglass Crossroads and the townland of Gurteen there is a mix of forested land and grazing land adjoining the road side boundary however I would consider the impact of the proposed development on this stretch of Scenic Route is less significant given the greater separation distance to the proposed development and also given the undulating landscape in the foreground.

- 14.2.52 In terms of assessing the overall impact of the proposed development on S44 I would note the conclusions of the applicant and Cork County Council.
- 14.2.53 In relation to S44 the applicant has concluded that there would be significant effects for road users however it is considered that there is a sufficient amount of screening available for a designated Scenic Route. The applicant concludes that the proposed development would have no adverse impact on views of the wider landscape in part limiting the effect of the proposed development on the enjoyment of those using the Scenic Route.
- 14.2.54 The applicant also attributes weight on the comments by Cork County Council's Senior Planner who stated that this particular Scenic Route (S44) is not of exceptional quality in comparison with other scenic routes within the county and the proposal will not have an unduly negative impact in overall terms of the route. The Senior Planner also considered that impacts on residential amenity on this part of the route will be limited and that the proposal will provide for close up views of wind energy development for those who consider this aspect interesting.
- 14.2.55 Overall having regard to the above analysis I would consider that the proposed development would have a material impact on the current views enjoyed by the Scenic Route, S44, for drivers, cyclists and walkers and as such I would consider that the proposed development would impede these views. In emphasising this point I would have regard to the document entitled 'Volume 2: Appendix 2 Upland LVP Visualisations' and in particular I would have regard to submitted photomontages LVP2, LVP3, 7b, 11d(i) and 12c. The proposed development

would therefore, in my view, be contrary to the provisions of the Cork County Development Plan, 2014 – 2020, in particular Policy GI 7 – 2, which aims to protect and maintain these views. I would consider that the proposal would be visually obtrusive and would adversely impact on the visual amenities of the area.

- 14.2.56 In relation to S43 and in accordance with Volume Two: 'Heritage and Amenity' of the Cork County Development Plan, 2014 – 2020, the views being protected are the '*views of hills and rural landscape*'. This Scenic Route is located along the R626 between Carrigogna and Lisgould and this area is strongly characterised by its location within a river valley and therefore the topography. As such given the established topographical characteristics I would note that views from the Scenic Route beyond the river valley are limited and furthermore I would acknowledge that either side of the Scenic Route is heavily forested or consists of mature vegetation. The proposed development will have no visual impact on this Scenic Route.
- 14.2.57 In relation to the construction of the grid connection I would consider that the impacts on the landscape would be temporary in nature and overall would be negligible. I would not consider, on the basis of the scale of the grid connection cable construction that it would result in any significant cumulative impacts.

Materials assets and cultural heritage

- 14.2.58 In relation to **material assets** the proposed development will result in traffic generation during both the construction stage and the operational stage.
- 14.2.59 The EIS includes a traffic survey of existing traffic and this is set out in Table 11.2 of the EIS. I would note that the L3601 has an average annual daily traffic of 1,079 vehicles and the traffic count locations are outlined in Figure 11.2 of the EIS. The construction phase of the proposed development will result in a significant increase in traffic although this is temporary in nature. On the basis of the submitted EIS the construction traffic is outlined in different phases. Firstly infrastructure felling which is anticipated to be carried out over a 6-week period will culminate in daily traffic movements of 48 vehicles. In relation to turbine component delivery it estimated that 98 vehicle movements will be required to deliver the turbines to the development site. The EIS anticipates that the wind farm construction will take approximately 10 – 12 months and the traffic will amount to 72 vehicles per day. In relation to turbine foundation construction the EIS estimates that this will require 152 vehicle movements and will occur over a short period. The EIS estimates that the overall construction traffic will result in a 9% increase on the

current traffic levels on the L3601. The cable route construction is anticipated to take approximately 4 months and this will result in traffic disruption.

- 14.2.60 Once operational it is intended that the development will be unmanned and will be remotely monitored. It is anticipated that the maintenance operation will amount to two vehicles per day.
- 14.2.61 I note the reports from the Area Engineer and overall he is satisfied with the proposed traffic impacts of the proposed development. The Area Engineer however outlines concerns in relation to structural integrity of existing roads and bridges due to the construction traffic however these issues have been adequately addressed. Overall I would consider on the basis of the information in the EIS that the construction related traffic is temporary in nature and not significant in percentage terms and would be acceptable.
- 14.2.62 In relation to the grid connection route the traffic generation is generally small scale and with appropriate traffic management in place it will not result in significant traffic congestion. In relation to the cumulative impact with other permitted or proposed wind farms in the local area I would consider that the grid connection route is more remote than the actual wind turbine delivery route and as such the cumulative impact will be negligible.
- 14.2.63 In relation to **cultural heritage** there is a total of 10 recorded archaeological monuments located within the wind farm study boundary. These sites range from standing stones to fulachta fia, however the two fulachta fia within the study area could not be identified in a survey undertaken in 2000 due to dense undergrowth. There are also three recorded archaeological monument sites identified within 50m of the proposed cable route and a further three recorded archaeological monuments identified within 50m of the proposed turbine delivery route which includes a kiln-lime and a vernacular house. There are no protected structures located within the wind farm study boundary and there are no NIAH structures located within 1.3km of the wind farm study area.
- 14.2.64 I would note that the County Archaeologist, in her report, has no objections to the proposed development and considers that the archeological heritage assessment in the EIS adequately demonstrates that there will be no direct impacts on the 10 archaeological sites identified within the development boundary. The County Archaeologist concludes that any grant of permission shall include condition in relation to archaeological monitoring. In addition the County Archaeologist recommends a condition is imposed to ensure that the structural and heritage integrity of bridges identified in Chapter 12 of the EIS along the

Turbine Delivery Route shall engage a qualified engineer to assess potential impacts.

- 14.2.65 I would consider that all recorded archaeological monuments and structures identified in the EIS are located at an adequate distance from the proposed development and as such no significant impacts are likely. This is also the conclusion of the EIS however there is the potential during the construction stage of the proposed development impacting on unknown archeological environment.
- 14.2.66 The proposed cable route crosses the NIAH structure Bealaghanaffrin Bridge. In relation to cultural heritage I would note that the EIS provides a comprehensive assessment of archaeological and architectural features adjacent to the proposed grid connection route and concludes that there will be no significant effects on cultural heritage. I would note that the County Archaeologist concludes with this conclusion.

The interaction between the factors mentioned in the first, second and third indents

- 14.2.67 In my opinion the following interactions are relevant;
- Human beings / landscape – the proposal will be visible from adjoining areas.
 - Human beings / noise and traffic – the proposed development will generate additional traffic primarily during construction stage including the provision of the grid connection. During the operation phase the proposed development will increase noise above established background levels.
 - Human beings / air quality – the proposal will have air implications during construction period,
 - Flora & fauna / landscape – the proposed development in terms of the works will result in a material alteration to the landscape.
 - Soil / water – the removal of soil for site excavation purposes may result in increased run-off with implications for receiving waters.
- 14.2.68 I would consider that the interaction of the impacts does not lead to significant environmental impacts beyond those identified for each of the individual environmental topics.

14.3 Appropriate Assessment Screening

14.3.1 The purpose of the Appropriate Assessment Screening is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone or in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site's conservation objectives. The 'Appropriate Assessment of Plans and Projects in Ireland' Guidelines for Planning Authorities, 2009, recommend that if the effects of the screening process are 'significant, potentially significant, or uncertain' then an appropriate assessment must be undertaken.

14.3.2 The following is a list of protected sites within 10km radius of the subject appeal site;

Site	Code	Distance	Conservation Interest
Great Island Channel SAC	004162	10km South	<ul style="list-style-type: none"> - Mudflats and sandflats - Atlantic Salt Meadows
Blackwater River SAC	002170	4.5km – 5.5km North West	<ul style="list-style-type: none"> - Freshwater pearl mussel - White-clawed crayfish - Sea lamprey - Brook lamprey - River lamprey - Twaite shad - Atlantic salmon - Estuaries - Mudflats and sandflats - Perennial vegetation of stony banks - Salicornia - Atlantic sea meadows - Otter - Mediterranean salt meadows - Killarney fern - Water courses of plain to montane levels - Old sensible oak woods - Alluvial forests
Cork Harbour SPA	004030	10 -13km South	<ul style="list-style-type: none"> - Little Grebe - Great Crested Grebe - Cormorant - Grey Heron - Shelduck - Wigeon - Teal - Pintail - Shoveler - Red-breasted Merganser - Oystercatcher - Golden Plover - Grey Plover - Lapwing - Dunlin - Black-tailed Godwit - Bar-tailed Godwit

			<ul style="list-style-type: none"> - Curlew - Redshank - Black-headed Gull - Common Gull - Lesser Black-backed Gull - Common Tern - Wetland and Waterbirds
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14.3.3 In order to establish the impact of the proposed development it is necessary to examine the source-pathway-receptor model.

Source

14.3.4 The proposed development will amount to two potential sources of impact namely the construction phase and the operational phase. The construction phase is outlined in Section 1.1 of the submitted 'Appropriate Assessment Screening Report and NIS'. It is evident from Section 1.1 that there is significant construction and excavation works required in order to implement the proposed development. It is proposed to erect 7 no. turbines with a tip height of 140m (5 no. turbines were permitted by Cork County Council). The proposal also involves the construction and excavation of 3 no. borrow pits, the construction of foundations and hardstanding areas in respect of each turbine, new internal tracks and the upgrade of existing access tracks on the appeal site.

14.3.5 In relation to the construction phase I would acknowledge that it is possible for any excavation works or construction works to have an adverse impact on local watercourses due to surface water run-off which may in turn impact on the catchment of a designated site. I would also consider that any additional surface water run-off may also have implications for flood risk in the local area which in turn can have adverse implications for ecology. During the operation phase there is also the potential, although less likely, that there will be an increase in surface water run-off to the Owennacurra catchment from a storm event due to a change in land use and the proposed increase in impermeable ground conditions.

14.3.6 In relation to the construction phase a potential impact is the release of silt-laden run-off, or pollutants such as hydrocarbons and concrete into habitats. In addition, I would note that increased sediment can occur from personnel and traffic activities passing close to watercourses and this can result in migration of silt-laden run-off into watercourses. Increased sediment in watercourses can smother riverbeds and have a negative impact on aquatic species. I would also note that run-off sediments can also increase the level of nutrients in receiving watercourses. An increase in nutrients can potentially result in

the enrichment and eutrophication of the affected watercourses and catchment areas further downstream and consequently would have an adverse impact on water quality.

- 14.3.7 Other potential impacts may arise due to accidental spillages into water courses during the construction phase. This can include the spillage of oil, fuel and/or hydrocarbons.
- 14.3.8 The sources of pollution outlined above may have implications for the Blackwater SAC and the Great Island Channel SAC depending on whether a pathway will provide a link from the source to the receptor.
- 14.3.9 In relation to the Cork Harbour SPA I would acknowledge that the operational phase of the proposed development, and specifically collision, with turbines is a potential impact for the conservation interest of this SPA. Potential collisions would occur should birds from the Cork Harbour SPA regularly use flight paths over the proposed wind farm site or birds regularly occur within the proposed wind farm site.

Pathway

- 14.3.10 The second issue to consider is whether there is an ecological connectivity between the proposed development site and any Natura 2000 designated site, either SAC or SPA. In relation to the SPA the key issue is whether there is demonstrable evidence that birds designated in the SPA of conservation interest use the appeal site as a flight path or regularly use the site as a habitat. Should that be the case then it is likely that the proposed development will undermine the SPA's Conservation Objective and therefore the proposal is likely to have a significant effect on that designated site.
- 14.3.11 In terms of pathways from watercourses towards designated SAC's it is important to note that the general topography of the site where turbines T1 and T2 are proposed falls in gradient from the appeal site in a western direction. In accordance with the O.S. Discovery Series map no. 81 there is a small watercourse situated between the location of the proposed turbine T1 and T2 and this watercourse travels in a western direction to meet the Templebodan River. The Templebodan River forms part of the River Bride Catchment which is a sub catchment of the River Blackwater SAC. However it is my opinion, based on local gradients, that the point where the local watercourse enters the Templebodan River, the river flows away from the SAC and towards Middleton. As such there is no potential pathway from the proposed development site to the River Blackwater SAC and therefore I would recommend that this SAC is screened out. The Ecologist of the Local Authority

also concurs with the conclusions to screen out potential for the proposed development to give rise to negative impacts on the River Blackwater SAC.

- 14.3.12 In addition to the above I would note from O.S. Discovery Series map no. 81 that there are several watercourses situated in close proximity to the proposed turbines T3, T4, T5, T6 and T7. These watercourses flow both in a western direction towards the Templebodin River and in an eastern direction towards the River Dungourney. Again I would consider having regard to the local topography that the general flow of these rivers is in a southern direction away from the River Blackwater SAC. Accordingly there is no potential pathway from the proposed wind farm development to the River Blackwater SAC.
- 14.3.13 In relation to the Great Island Channel SAC (Site Code 004162) I would acknowledge that there is a pathway from this SAC to the proposed development site. This pathway or hydrological link originates from small watercourses which are located adjacent to the proposed development and which flow towards the Templeboden River and the River Dungourney. The Templeboden River forms part of the Owenmacurra catchment which in turn flows into Cork Harbour. The River Dungourney flows directly into Cork Harbour.
- 14.3.14 In considering a pathway to the Cork Harbour SPA I have noted above that the distance from the proposed development works to the SPA is over 13km which is significant and it is uncertain at this screening stage whether birds in the designated SPA would use the appeal site or whether the appeal site is used as a flight path.

Receptor

- 14.3.15 The qualifying interests of the Great Island Channel SAC (Site Code 004162) are listed in the Table above and they include mudflats, sandflats and atlantic salt meadows. The Conservation Objective for this SAC is to maintain and restore favourable conservation status of the habitats and species. The Table above also outlines the qualifying interests for the Cork Harbour SPA and the Conservation Objective is to maintain and restore favourable conservation status of the habitats and species.

AA Screening Conclusions

- 14.3.16 In relation to the River Blackwater SAC this designated is located upstream of the appeal site and some 8.5km north. I would consider that in the absence of any pathway it is reasonable to conclude that the proposed development works on the appeal site would not be likely to have significant effects

on the River Blackwater SAC (Site Code 002170) in view of the sites conservation objectives.

- 14.3.17 The qualifying interests of the Great Island Channel SAC (Site Code 004162) are listed in the Table above. The Ecologist of the Local Authority concluded that negative impacts on water quality caused by the development could have the potential to have adverse consequences for habitats for which the SAC is designated including in particular mudflats. I have considered the local surface water catchment above and I would concur with the Local Authority Ecologist. In relation to the Cork Harbour SPA I would consider that there is sufficient evidence within the EIS to demonstrate that the proposed development has the potential during the operation phase, to give rise to negative impacts on Golden Plover, which are a qualifying interest within the Cork Harbour SPA.
- 14.3.18 In conclusion therefore I would consider that it is evident from the assessment above that it cannot be certain that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on the Great Island SAC (Site Code 004142) and Cork Harbour SPA (004030), in view of the sites conservation objectives and a stage 2 AA is required.
- 14.3.19 In relation to the proposed grid connection and having regard to the proposed route and the nature of the works, which are temporary, I would conclude on the basis of the assessment above that it cannot be certain that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on the Great Island SAC (Site Code 004142). I would also consider that given the nature of the works proposed to install the grid connection that it would not be likely to have significant effects on the River Blackwater SAC (Site Code 002170) and the Cork Harbour SPA (004030).

14.4 Appropriate Assessment

- 14.4.1 The submitted NIS in relation to the Great Island Channel SAC identified potential hydrological connections from the proposed development site to the designated sites. I have described these hydrological linkages above in the AA Screening. In considering the potential impacts I would consider it important to note the distances involved from the proposed development site to the Great Island Channel SAC. The proposed development site drains westwards towards the Owenacurra River which is some 17km from the Great Island Channel SAC. I would consider this a significant distance having regard to the nature of the potential impacts.

- 14.4.2 The NIS concludes that the watercourses to the east of the proposed development which drain to the Dungourney River are outside the footprint of the proposed development and therefore no impact on the designated site is anticipated via this pathway. I would concur with this conclusion having regard to the location of these watercourses in relation to the proposed development.
- 14.4.3 In relation to mitigation measures to address any potential impacts from the Owenacurra River I would note that the NIS sets out a comprehensive range of mitigation measures. These mitigation measures are set out in Table 5.1 of the NIS and relate to mitigation measures prior to construction, during construction, site compound measures, during operation and during decommissioning phase. These mitigation measures are generally best practice and in my view are comprehensive and I would consider that they adequately address any concerns in relation to impacts on surface water discharge and potential adverse impacts on the Great Island Channel SAC.
- 14.4.4 The NIS included a bird survey which identified that Golden Plover use the appeal site. In considering the potential impact of the proposed wind farm on the Golden Plover population I would acknowledge that the NIS had regard to the vantage point surveys carried out as part of the survey work. This survey work generally concluded that Golden Plover were generally not present within the 500m turbine buffer zone of the proposed development. It was also concluded that although some Golden Plover populations were recorded outside the 500m buffer zone distance that the flock sizes recorded within the development study boundary were relatively low compared to average flock sizes of Golden Plover. The NIS concluded that the probability of collision was low and that the impact of the proposed development on the Golden Plover population within the Cork Harbour SPA is not considered significant. I would note the Ecologist of Cork County Council concurs with these conclusions. The Ecologist concludes that given the scale of the proposed development, the relatively small proportion of the overall population of Golden Plover specie occurring near the site, the low proportion of this population occurring within 500m of the proposed turbines and the lack of suitable habitat within in the wind farm development site and the abundant of available habitat elsewhere. On the basis on the information available I would concur with both the conclusions of the NIS and the Local Authority Ecologist.
- 14.4.5 I would consider it reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of European site

no.s 004162 (Great Island Channel SAC) and site no.004030 (Cork Harbour SPA), or any other European site, in view of the site's conservation objectives.

- 14.4.6 In relation to the grid connection route I would consider that having regard to the documentation on the file and the nature and scale of the proposed development works, and mitigation measures, that the construction of the grid connection, individually or in combination with other plans or projects would not adversely affect the integrity of the European site no. 004162 (Great Island Channel SAC) in view of the site's conservation objectives.

14.5 Visual Impacts on Residential Amenities

- 14.5.1 In relation to visual impacts on residential properties I would note that Table 9.1 of the EIS outlines all buildings within a 2km radius of the proposed development. I would note that there is a significant amount of properties within this 2km radius. I would also note from Table 9.1 that no residential property is less than 500 metres from the proposed development. However there are thirteen residential properties located between 500m and 1km of the proposed development. I have outlined these properties above in my EIA and their respective distances to nearest turbines.
- 14.5.2 I would note that both the Area Planner and the Senior Planner have raised concerns in relation to the visual impact of the proposed development on selected residential properties.
- 14.5.3 In considering the visual impacts of the proposed development I would generally accept, based on a visual observation of the area, that the proposed development will have a significant visual impact on some established residential properties. This would include residential properties located in the vicinity of Peafield Cross, south of Peafield Cross along the the L3601 (Walshtown Road). In some instances the visual impact of the proposed development would be from base to tip as the landscape has an openness character with very limited landcover to counterbalance any visual impacts. Although I have noted above that none of the residential properties are located within a 500m radius of the proposed turbines I would consider that the nature of the receiving landscape given its openness without any landcover ensures that the benefit of the 500m distance is diminished.
- 14.5.4 The Senior Planner of Cork County Council notes that the proposed development will have a significant visual impact on several properties however it is argued that should a condition to

remove T1 and T2 be imposed in a grant of permission then the visual impact on H7, H11, H14, H20, H21 will be reduced.

14.5.5 I would acknowledge that condition no. 2 of the Local Authority permission which involves the removal of T1 and T2 would reduce the visual impact of the proposed development for properties located to the north of the proposed development. I have reviewed the submitted 'Residential Visual Amenity Assessment' and also based on a visual observation of the area I would conclude notwithstanding the omission of turbines T1 and T2 that the proposed development would have an adverse visual impact for a number of residential properties. The proposed development, in my view, based on a visual observation of the area and documentation on the file, would have an adverse visual impact in particular on H31 which is situated along the Walshtown Road and also properties identified as H14, H20, H21 which are all located in the vicinity of Peafield Cross Roads. In addition the proposed development would impact upon residential property H26A. All these properties are located within the 1km range of the proposed development. There are also some properties located within the 1km to 2km range and I would consider, based on a visual observation of the area and the information available on the file, that the proposed development would have an adverse impact on their established visual amenities. These properties include H267, H290, H292 and H284 as identified in the submitted Landscape and Visual Assessment Peer Review and given their respective location and absence of significant landscape features.

14.5.6 Overall I would consider, notwithstanding the omission of Turbine no. 1 and Turbine no. 2, that the proposed development would be seriously injurious on established residential amenities having regard to its scale, proximity to residential properties and the absence of any mitigating landcover or landscape features.

14.6 Condition no. 2

14.6.1 In general I have considered the merits of condition no. 2 in my assessment under landscape above. Condition no. 2 relates to the omission of turbines T1 and T2 from the proposed development. Both T1 and T2 are situated north of the Scenic Route S44 and I have outlined above that these turbines, in addition to the proposed turbines south of the S44, would have an adverse material impact on Scenic Route 'S44'. I would therefore support this condition, should the Board favour granting permission. However I have concluded that the omission of T1 and T2 is not sufficient to reduce to overall adverse visual impact on S44 which is a designated Scenic Route and the adverse impact would be contrary to a policy

objective, i.e. Policy GI 7:2, of the County Development Plan which sets out to protect this scenic route.

14.7 Condition no. 8

- 14.7.1 Condition no. 8 specifically states that the construction traffic for the proposed development shall not use the L3601 (Walshtown Road) and shall use an alternative route.
- 14.7.2 The first party appeal argues against this condition and maintains that L3601 is the optimum delivery route.
- 14.7.3 The Middletown Areas Engineers Office responds specifically to condition no. 8. The MAEO acknowledges that the applicant is prepared to provide a bond in the event of any deterioration of the L3601 as a result of the proposed development. This bond will be used to remedy any structural damage to the L3601 should it be required. The Area Engineer, in his response, has estimated that the bond would amount to €27,000. The Special Development Contribution recommended is €170,000.
- 14.7.4 I would recommend to the Board that condition no. 8 is revised to allow, as proposed by the applicant, that the L3601 is used for construction traffic. In addition I would recommend to the Board that a condition is imposed requiring the applicant to provide a bond to the amount of €27,000 to cover any deterioration of the public road shall it be required. Condition no. 38 deals specifically with the Special Development Contribution.

14.8 Condition no. 38

- 14.8.1 The applicant argues that a bond should replace the special development contribution required in condition no. 38.
- 14.8.2 The Middletown Areas Engineers Office, in their response submission, argues that a bond shall be required to address any acute road repairs from the proposed development and in addition a special development contribution shall be required. The MAEO submits that the special development contribution shall be required towards the cost of structural strengthening and resurfacing of the L3601 to address the long term damage that will occur from the use of this route. The MAEO submits that the entire 9km stretch of the L3601 is in need of strengthening and resurfacing with an overall estimated cost of €1,890,000. The MAEO recommend a 9% figure of €170,000 as the special development contribution for the proposed development.
- 14.8.3 Section 48 (1) (c) of the Planning and Development Act, 2000 (as amended) states that *'a planning authority may, in addition to the terms of a scheme, require the payment of a special*

contribution in respect of a particular development where specific exceptional costs not covered by a scheme are incurred by any local authority in respect of public infrastructure and facilities which benefit the proposed development'.

- 14.8.4 Therefore the significant issue, in my view, is whether the proposed development will require the local authority to provide public infrastructure and facilities which are specific and exceptional and not covered by the general scheme.
- 14.8.5 Section 7.12 of the Development Management Guidelines, 2007, sets out guidance in relation to financial contributions. These guidelines advise in relation to special development contributions that the basis for the calculation of the contribution should be explained in the planning decision and how it is apportioned to the subject development. I would consider that this level of information has been adequately provided by the local authority. The guidelines further advise that circumstances that might warrant the attachment of a special contribution condition would include where costs are incurred directly, as a result of, or in order to facilitate, the development in question are attributable to it. However the guidelines advise that in circumstances where the benefit of the specified works are more widespread, i.e. likely to benefit other lands then it is advisable to revise the general development contribution scheme.
- 14.8.6 I would conclude that works for which the special development contribution is sought are specific and, in my view, relate specifically to the proposed development. Accordingly I would recommend to the Board that a condition requiring a special development contribution to the amount of €170,000 is imposed on any grant of permission.

14.9 Condition no. 44

- 14.9.1 Condition no. 44 relates to a noise condition that limits the amount of noise from the proposed development at noise sensitive receptors.
- 14.9.2 Essentially condition no. 44 states that the maximum noise at noise sensitive receptors shall not exceed 37 dB (A), (LA90, 10 mins) or a maximum increase of 5 dB (A) above background noise (LA90, 10 mins).
- 14.9.3 The first party appeal submission requests that the Board review this condition and revise the condition so that it is similar to previous and precedent conditions used by An Bord Pleanala and recommended in the DOEHLG 'Wind Energy Guidelines', 2006.

- 14.9.4 I would acknowledge that condition no. 44 has no distinction between day-time and night-time noise limits. This is important as the Wind Energy Guidelines refer to 45 dB (A)¹⁰ as the lower fixed limit or a maximum increase of 5 dB above the background noise at nearby sensitive locations. The Guidelines refer to low noise environments, where background noise is less than 30 dB (A) it is recommended that the development noise be limited to an absolute level within the range of 35 – 40 dB (A). Condition no. 44 refers to 37 dB (A) which is the average of the recommended range.
- 14.9.5 I would recommend to the Board that condition no. 44 is revised to include a day-time limit of 45 dB (A) and a night time limit of 37 dB (A).

15.0 RECOMMENDATION

I have read the submissions on the file, visited the site, had due regard to the development plan and all other matters arising. I recommend that planning permission be refused for the reason set out below.

REASONS AND CONSIDERATIONS

Having regard to the following;

- a. Policy Objectives GI 7-2 and ED 3-5 of the Cork County Development Plan, 2014 – 2020
- b. the location of the proposed wind turbines situated on an open pleateau without any landcover or significant landscape features,
- c. the Wind Energy Guidelines - Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in June, 2006
- d. the scale and height of the proposed turbines,
- e. the planning history of the subject site,

it is considered that the proposed development would seriously injure the visual and residential amenities of the area, set an undesirable precedent for other such development and would be visible from a designated Scenic Route, i.e. S44, which is an objective to protect in accordance with the County Development Plan and would therefore the proposal would be contrary to Policy GI 7-2 'Scenic Routes' of the Cork County Development Plan, 2014 – 2020. The proposed development would seriously injure existing residential amenities in the local area and would therefore be contrary to Policy WD 3-5 of the Cork County Development Plan, 2014 – 2020. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

Kenneth Moloney
Planning Inspector
20th October 2016