

Inspector's Report ABP 314725-22

Development	Change in turbine model and height, relocation of access road, underground cabling and installation of additional cabling, increase in area of hard stand at each turbine, battery storage facility, amendments to substation structure and revised site boundaries.
Location	Derrane & Roxborough. Co Roscommon.
Planning Authority	Roscommon Co. Council.
Planning Authority Reg. Ref.	22363.
Applicant	Peter Gilloly.
Type of Application	Permission.
Planning Authority Decision	To Refuse Permission.
Type of Appeal	First Party
Appellant	Peter Gilloly
Observer(s)	Mark Mahon
	Pat & Eimear Kelly
	Catherine Waldron
	Thomas Garvey

Gerard, Muriel & Liam Ryan David Hickey Dympna Molloy Brandon 'O Brien on behalf of concerned residents

Date of Site Inspection

Inspector

December 21st, 2022.

Breda Gannon.

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1.0 Site Location and Description

- 1.1. The site which is located in the townlands of Derrane and Roxborough lies c 4.5km north of Roscommon town. It lies c 1.4km to the east of N61 which links Roscommon with Boyle to the north. The site is accessed via the L-1805 local road that runs to the north of the site and from there via an agricultural access track.
- 1.2. The area is rural in character and agriculture is the main land use. Residential development consists of rural dwellings and ribbon development along the local road network The site itself is currently in agricultural use and comprises a number of farm buildings and family homes.
- 1.3. The Corbo Bog SAC (Site code 002349) is located c 4.8km to the east. The Derrycann Bog NHA(Site code 000605) is c 2.8km to the north-east. The nearest SPA is Lough Ree SPA (Site code 004064) which is c 9km to the south-east of the site. The River Callows SPA (Site code 004097) lies c 9.3km to the south and Lough Ree SAC (Site Code 000440) is 6km to the southeast.

2.0 Proposed Development

- 2.1. The proposed development as described in the public notices submitted with the application comprises amendments to a previously permitted development (ABP 303677) and for planning permission for a battery storage unit and transformer unit. The amendments to the previously permitted development comprise the following:
 - The erection of 2 no. Enercon E138 turbine models in lieu of the Vensys 121 turbine models agreed with the planning authority. Turbine 1 would have a hub height of 95.53m, a blade diameter of 138m and a blade tip height of 164.65. Turbine T2 would have a hub height of 81m, a blade diameter of 138m and a blade tip height if 150m. The combined output from the turbines would be 4.9MW.
 - The relocation of the previously permitted internal access tracks,
 - Relocation of underground electrical to relocated access road and additional underground cabling to the modular windfarm control room, switch room, ESB modular MV station, battery storage unit and transformer units,

- An increase in the hub height of turbine T1 to 95.53m, increasing the blade tip height from 150m to 164.65m and micro siting of the turbine by 12.75m,
- Increased area of the hardstands associated with each turbine,
- Amended substation structure to incorporate a proposed windfarm control room and switch room and an ESB modular MV substation
- Revised site boundaries.
- 2.2. The application is supported by a letter of consent from landowner.

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to refuse permission for the development for 5 no. reasons which are summarised below:

- The proposed development due to the significant increase in height of Turbine T1 from that previously permitted would be injurious to the visual amenity of the area, contrary to Policy Objective NH10.35 of the development plan and set a precedent for further inappropriate development of this nature.
- There is insufficient evidence to demonstrate that the proposed development by reason of increased height and altered proximity to residential properties would not seriously injure the residential amenities and depreciate the value of property in the vicinity.
- The development if permitted would be contrary to Policy Objective BH9.13 of the development plan which seeks to secure the preservation of all recorded monuments included in the Record of Monuments and Places.
- 4. Significant effects on the Lough Ree SPA and River Suck Callows SPA cannot be ruled out.
- The environmental impacts of the proposed development have not been sufficiently assessed. It is likely that the development exceeds the thresholds for mandatory EIA.

4.0 Planning Authority Reports

4.1. Planning Officer's Report

The Planning Officers report of September 9th 2022 is summarised as follows:

Landscape & Visual amenity - The proposed development is located in an area that has been designated in the Renewable Energy Strategy as a 'less favoured' location for windfarm development in a landscape area categorised as 'High Value'. Planning permission was granted for 2 no. turbines in 2011. Amendments were sought to this permission in 2018 and the planning authority had concerns regarding the visual implications of the turbines at a height of 150m. The current proposal is to further increase the height of T1 by a further 14m. The concerns regarding the impact on the landscape and visual amenities of the area remain, particularly when viewed from the N61.

A comparison of the site layout plans for the parent permission and the current proposal (11/126) indicates that the most northerly turbine (T1) is relocated 20m north of its original position and T2 is moved north by c 25m, which is a substantial deviation from the original permission. It was the planning authority's position that the landscape could not, without adverse visual impact tolerate the amendments proposed previously (18/447), resulting in an increased height of 150m. The current proposal would further increase the height of the turbines, thereby further exaggerating the concerns of the planning authority.

<u>Residential amenity</u> - The shift in location of T1 by c 12.5m will bring the turbine closer to residences along the L-1805-11 than that permitted under 18/447. The shadow flicker study indicates a significant number of the houses in the area will experience shadow flicker. Having regard to the information submitted the planning authority has serious concerns regarding potential impacts on residential amenity associated with shadow flicker and noise.

<u>Archaeology</u> - The development is partly located within Recorded Monuments. Concerns have been raised by the Department of Housing, Local Government and Heritage, who have requested that a revised site layout plan which shows the development outside the protected zone of the recorded monuments. This cannot be done during the course of the application, given the restrictive nature of the red line boundary.

<u>Traffic</u> - It is not expected that the proposed amendments or the addition of a battery storage facility will have a significant impact on traffic in this location, during either the construction or operational stages of the development.

<u>Environmental issues</u> - It is proposed to increase the hard stand areas associated with each turbine. Having regard to the significant increase in land take and the issues raised by the Department of Housing, Local Government and Heritage, it is considered reasonable that an ecological impact assessment be carried out in order to access potential impacts on ecology and to mitigate these effects.

The potential collision risk for birds associated with the increase in turbine height has not been assessed, which is also of relevance in the context of AA Screening.

<u>Other Issues</u> - In assessing the previous application for amendments, the planning authority raised concerns in respect to significant amendments to the red boundary line from that originally proposed. The planning authority considered that the proposal constituted a substantial deviation from the parent permission, but the Board disagreed.

EIAR considerations - The combined output for the 2 no. turbines would be at least 6.4 MW, which is in excess of the 5 MW that triggers the requirement for EIA.

4.2. Other Technical Reports

The **Environment Department** in their report 2/9/22 raised concerns regarding potential noise and shadow flicker impacts. It considered that a noise propagation model should be completed.

The Roads Section raised no objection to the development subject to conditions.

5.0 Prescribed Bodies

5.1. **Department of Housing, Local Government and Heritage**

Nature Conservation

- An up-to-date AA Screening of the whole development should be carried out to assess impacts on Natura 2000 sites.
- An Ecological Impacts Assessment should be carried out pre-construction due to the lapse of time (11 years) from the original permission.
- There is potential for negative impacts on Badger setts and the removal of hedgerows/trees could result in the loss of roost sites and birds nests.
- There is no assessment of the of the collision risk for birds associated with the increased height of the turbine, including those species associated with European sites.

Archaeology

- Turbine T2 has been moved into the area outlining a number of recorded monuments. Under the current proposal the area of ground disturbance within the area of archaeological potential will be increased to provide a wider access road and a larger turbine base. The base of turbine T2 now occupies a considerable amount of the area where the Recorded Monument RO 035-092003 (earthworks) is located.
- The Department recommends pre-development testing where development is proposed within Recorded Monuments.
- The newly aligned and enlarge access route seems to pass very close to Recorded Monument RO 035-092001 (enclosure), The Department would object to any ground disturbance taking place within 20m of its external perimeter. It recommends that a revised site layout plan showing the route of the proposed access route and measurements from its edge should be submitted to facilitate full assessment.

5.2. Irish Aviation Authority

The IAA issued standard type correspondence regarding notification requirements, data on turbine coordinates and obstacle lighting.

6.0 **Planning History**

Details of the planning history related to the **<u>site</u>** are as follows:

- 1. **11/126** Planning permission granted for 2 no. turbines of up to 85m in height and up to 82m rotor diameter and tip height of 126m.
- 18/313 Minor alterations to permission previously granted under Reg Ref 18/313 to provide for relocation and design of substation, internal road access, hardstands and cabling works.
- 18/447 Minor amendments to Reg Ref 11/26 & 18/313 to provide for the relocation of the permitted turbines and associated infrastructure, amendments to the turbine dimensions to allow for an overall tip height of up 150m with maximum total combined output of 4.9MW. The planning authority's decision to refuse permission was overturned at appeal stage (ABP 303677).
- 4. 20/145 Amendments to Reg Ref No 18/313 to provide for the relocation of the permitted substation approximately 810m to the north, omission of access track and underground electrical cabling associated with the permitted turbine, installation of approximately 530m of underground electrical cabling to connect the proposed substation to permitted turbine T1 and all associated access and reinstatement works. The decision to grant permission was upheld in a subsequent appeal (307726).

In the vicinity and of relevance

ABP Ref 243479 – Permission was refused by the Board in June 2015 for 2 no. 2.4MW turbines with hub height of 78.33m and a blade tip height of 119.33 in Rahconnor, Four Mile house, which is c 4km north-west of the subject site. Permission was refused on the ground of insufficient information to assess the impacts on Whopper Swan having regard to the proximity of two Natura 2000 sites (Lough Ree SPA & River Suck SPA) as well as having regard to the ecology of the site and based on information contained in the Screening Report, third party submissions and a submission from the Department of Arts, Heritage and the Gaeltacht.

7.0 Policy Context

7.1. Development Plan

The operative development plan is the **Roscommon County Development Plan 2022-2028**. Chapter 8 (Climate Action, Energy and Environment) supports the generation of electricity from renewable sources, including wind energy. Relevant policy objectives include the following:

CAFE8.3: Support developments and actions that assist in achieving the national targets for energy from renewable energy from renewable resources and reducing greenhouse gas emissions associated with energy production.

CAFE8.5: Facilitate wind energy developments primarily in areas designated in the Renewable Energy Strategy as 'Most Favoured' and secondarily in areas designated as 'Less Favoured' in the Renewable Energy Strategy, subject to normal planning criteria and having regard to the Wind Energy Guidelines (DECLG, 2006) and any update to the Guidelines that may issue during the lifetime of this Plan. This will include consideration of carbon benefit analysis, as appropriate.

CAFE8.6: Facilitate proposals for energy storage systems and infrastructure, which support energy efficiency and reusable energy systems, provided such proposals accord with the principles of proper planning and sustainable development of the area.

Under the **Renewable Energy Strategy**, the proposed site is located in an area identified as 'Less Favoured Area' in terms of wind energy development potential. In these areas

'Wind farm development will be considered, but the sensitivities revealed in these areas would render exploitation more problematic and therefore these areas are less favoured for wind energy development.'

Under the Landscape Character Assessment, the site is located in the 'Roscommon Town and Hinterland' landscape character area, which is identified as

being a 'High Value' landscape (the second highest landscape value designation in the county).

Policy Objective NH10.35 aims to:

Minimise visual impacts on areas categorised within the County Roscommon Landscape Character Assessment including 'moderate value', 'high value', 'very high value' and with special emphasis on areas classified as 'exceptional value' and where deemed necessary, require the use of Visual Impact Assessment where proposed development may have significant effect on such designated areas'.

8.0 The Appeal

8.1. Grounds of Appeal

The appeal is structured to address the reasons for refusal cited by the planning authority.

Reason No 1 - The site is located within the second lowest scenic landscape designation. The photomontages demonstrate that there is insignificant visual impact difference between the permitted and proposed development as a result of the increased blade tip height of T1 and there will be no discernible difference in the visual impact between the permitted and proposed schemes. There will therefore be no adverse landscape and visual impacts to warrant refusal of the application by the Board.

Reason No 2 - Sufficient evidence has been presented in the application which demonstrates that the proposed increase in turbine height and amended location of turbine T1 would not seriously injure the residential amenities and depreciate the value of property in the vicinity due to noise and shadow flicker. Notwithstanding the evidence outlined in the applicant's shadow flicker report, the applicant is open to the inclusion of automated lockdown mechanisms on the wind turbines, to eliminate shadow flicker altogether and would welcome a planning condition to this effect.

As there are no houses within 600m of the turbines, it is submitted that noise will not be an issue associated with the proposed development. Turbine T2 will remain in the same location and T1 will be micro-sited a further 12.75m to the northwest and further away from residential development. It is considered that the previous conclusions on noise by the planning authority and An Bord Pleanala should remain unchanged.

Reason No 3 – The applicant is aware of the archaeological importance of the area in the vicinity of T2. While the turbine location of T2 has not been altered from that permitted (ABP 303677) the area of the hardstand has been increased. The applicant has engaged the services of a licensed archaeologist to fulfil any archaeological requirements as required by the DAU.

The DAU has particular concerns in relation to the protection of Recorded Monument RO035-092001 (enclosure). A 20m buffer exists between the external perimeter of this Recorded Monument and the nearest point of the access road and no ground disturbance will take place within that buffer.

An Archaeological Assessment will be carried out and will fully address any potential threats to cultural heritage and secure the preservation of all archaeological monuments in the vicinity of the development. The applicant would welcome a condition similar to Condition No. 7 imposed by An Bord Pleanala (303677).

Reason no 4 – The applicant engaged JKW Environmental to carry out an Appropriate Assessment Screening Report, which concluded that the project is not likely, alone or in-combination with other plans or projects to have significant effects on any European site in view of their Conservation Objectives.

Reason No 5 – While the specifications of the Enercon E138 confirms a maximum potential output of 4.2MW, the maximum total combined output of the two turbines will not exceed 4.9MW. The applicant would accept a condition restricting the output of the two turbines to 4.9MW.

The principle of the two turbines and associated infrastructure has been established with An Bord Pleanala's decision to grant permission (ABP 307726). The applicant has conclusively demonstrated that the amendments to that permitted development and the addition of a transformer unit and a battery unit will have no adverse impacts in terms of visual and residential amenities, cultural and natural heritage and that there has been a proper assessment of all potential environmental impacts. The Board is requested to overturn the decision of the planning authority and grant permission for the development.

8.2. Observations

A total of 8 no. observations on the first party appeal were received by the Board. The issues, which are similar to those raised in the objections to the planning authority, are summarised below:

Planning application

This is the fifth in line of four previous valid planning applications. On each of these applications a new and significantly different site is outlined in red on the site layout plan submitted. The current application adds to this list of changing site outlines, with a new and significantly varied site shown in red. Due to the continuing alterations of the site outline there is no clarity on what constitutes the site.

The area of land in the ownership of the applicant varies from application to application. There have been significant increases in the area of land presented to be in the ownership of the applicant from c32.1 ha in the original application to 53 ha in the current proposal. The repeated and consistent varying of the land the applicant identifies as in his ownership is a further example of the confusing and multiplicitous nature of the application process for this development.

The substation has been moved c 810m south of its previous position, which is a significant alteration to the permission granted. There is no reference to the relocation of the substation in the development description.

The current proposal is a major amendment to the original approved permission in terms of the output, structure and height of the project. There is a 31% increase in height of one of the turbines from the original proposal. It is stated in the appeal that T1 is to be located in the lowest area of the site at c 65mAOD. The increase in turbine height was submitted to enable the turbine to maximise wind take , but no wind data analysis was submitted to substantiate this theory. Supplementary information was introduced at appeal stage which did not form part of the planning application.

The number of amendments to the development does not instil any confidence that the development would be executed in a manner that would be compliant with planning conditions or other applicable regulations. There is no information on the proposed grid connection which is an integral part of the proposed development. Reference is made in this regard to *O'Grianna and others v An Bord Pleanala.* With regard to the lack of information provided in the application there is also reference is made to the Derryadd judgement.

The application contains incorrect and misleading information. The applicant fails to correctly identify that the proposal is close to national monuments. It is also stated that the site does not flood. A flood report indicates that the land experiences winter flooding.

Requirement for EIAR

The current application proposed 2 no. turbines with a total output of 4.9MW. It proposes different turbine models than previously proposed which have a minimum output of 3.5MW and a maximum output of 4.2MW. This would result in a minimum combined output of in excess of 5 MW, which triggers the requirement for EIA. Roscommon Co. Council raise concerns regarding the accuracy of the output from the proposed turbines.

Residential Amenity

Good practice states that turbines should be positioned a minimum of 4 times the maximum tip height from the nearest properties. This means that in this case the turbines should be sited a minimum of 660m in the case of T1 (164.65m) and 600m in the case of the T2(150m). Roxborough House and several other properties would fall within the 660 m distance.

Impacts on residential amenity associated with shadow flicker. In the shadow flicker report submitted several properties are in the upper range of 70-84 hours per annum. The shadow flicker report is inaccurate, lacks detail and the map does not identify the dwellings affected. It does not provide an assessment of the impact of the 31% increase in height will have on the local community.

Shadow flicker and noise can no longer be ignored. Reference is made to a settlement in the High Court awarded to three siblings who claimed they had to eave their home as a result of illness allegedly caused by a wind farm 700m from their home in Co. Cork.

Impacts on Protected Structure

Roxsborough House is a protected structure which is structurally sound. It is located within 660m of T2, which will prevent its refurbishment into a family home. The substation is located 330m from the house and proposal would present a fire risk to the house.

Impacts on archaeology

The proposal is not in accordance with the provisions of the development plan as it does not preserve all archaeological monuments and sites close to the site which are protected under the National Monuments Act 1994 and under the Planning and Development Act, 2000.

The development encroaches onto a ringford recognised as a national monument and there are several recorded monuments in close proximity to the development. The propensity of these features indicates that this is a site of significant archaeological interest. A detailed Archaeological Assessment Report should have been submitted with the application.

During the recent archaeological investigations carried out prior to the construction of the N61 Coolteige Road Project a large and previously unrecorded archaeological site was discovered in Ranelagh Td, just 2.3km southwest of the proposed development. The historic maps show that there were direct road links between Raneagh and the development site.

Biodiveristy

There is insufficient information provided to assess the impact of the proposed development on bats and Whopper Swan. There is a flight path for Whooper Swans from Lough Ree SAC to grass fields in Rathconnor. An Bord Pleanala refused permission for a similar development in Rathconnor close to the site (PL20.243479), citing concerns for protected bird species and the nearby Natura 2000 sites.

Local farmers are involved in the REAP scheme which rewards farmers for maintaining and enhancing the sustainability of agricultural grasslands, field boundaries and enhancing biodiversity. The proposed turbines will have an adverse effect on wildlife and the environment and the ability of local farmers to engage in such schemes.

Impacts on health

Electromagnetic radiation from the proposed powerlines substation, battery storage unit and MV unit.

Screening Report

The Screening Report constitutes new information and did not form part of the application. It fails to take account of the Turlough located 300m from turbine T2 the presence of a limestone quarry in the neighbouring property and the underground water systems in the area. The site lies above a regionally important karstified aquifer and is classifies as of 'Extreme' vulnerability. An Bord Pleanala refused permission for a similar development c 2.5 km from the site (PL20.243479)

Precedent

Reference is made to a refusal by the Board in respect to an application for 2 No. turbines in Co. Offaly on the basis that the proposed development was note located in an area identified for wind energy development in the development plan (ABP 307647-20). Under the provisions of the current Roscommon Co. Development Plan, the site is located in an area identified as 'less favoured' for wind energy development.

9.0 Assessment

- 9.1. I consider that the main issues that arise for determination by the Board in respect to this appeal relate the following:
 - Principle of the development
 - Requirement for EIA
 - Cultural heritage
 - Residential amenity
 - Landscape and Visual amenity
 - Appropriate Assessment
 - Other matters

1. Principle of the development

This is one of a number of planning applications made on the subject site since the parent permission was originally granted in 2011 (11/126). I note from the Planning Officer's report on the file that at the time a Draft Wind Energy Strategy was being prepared and the site was included as an area 'less favoured' potentially for wind turbines. The planning officer noted that this did not preclude development of wind turbines and recommended that permission be granted on the basis that the proposed development was not inconsistent with the policies of the plan or the Draft Wind Energy Strategy.

All subsequent applications (18/313, 18/447 and 20/145) relate to amendments to the parent permission and were considered acceptable in principle both by the planning authority and the Board.

I note that the parent permission in this case (PD 11/126) included a condition that the proposed development would have a life of 10 years and would expire on January 2nd, 2022. I also note that an extension to the duration of the planning permission was subsequently granted by Roscommon Co. Council for a further five years, which now expires on 02/01/27. A live permission therefore remains on the site for 2 no. turbines and associated infrastructure.

2. Requirement for EIA

Increased turbine tip heights of 150m and a total energy output of 4.9MW on the site was previously accepted by the Board. This was based on the installation of the Vensys 121 turbine model, which according to the manufacturer's technical data sheets, has a rated power output of 2.5MW. The output of the 2 no. turbines permitted by the planning authority and the Board would not therefore exceed 5MW.

Under the current proposal it is proposed to change the turbine model to an Enercon E128 model. Technical data sheets provided by the observers indicate that the nominal power output for the new turbine would range from 3.5 MW/4.2WW. The planning authority raised concerns regarding conflicting information provided by the applicant on the potential output of the new turbine model versus the manufactures specification (Refusal Reason No 5). Both the planning authority and the observers question whether the combined output from the two turbines will exceed the threshold for mandatory EIA.

The European Union Directive 2014/52/EU, amending Directive 2011/92/EU, on the assessment of the effects of certain public and private projects on the environment, requires Member States to ensure that a competent authority carries out an appraisal of the environmental impacts of certain types of projects, as listed in the Directive, prior to development consent being given for the project. The EIA Directive was transposed into Irish law under the Planning and Development Regulations 2001 to 2018. Part 1 of Schedule 5 of the 2001 Regulations, includes a list of projects for which mandatory EIA is required. Part 2 of Schedule 5 provides a list of projects where, if specified thresholds are exceeded, an EIA is required.

Taking the technical specifications for the model proposed, the output from the proposed turbines would a minimum be 7 MW, which exceeds the threshold for mandatory EIA as the development falls within the definition of a project under the EIA Directive as amended by Directive 2014/52 and falls within the scope of Class 3 (j) of Part 2 of the Fifth Schedule of the Planning and Development Regulations 2001, as amended:

Energy Industry

(j) 'Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output of greater than 5 megawatts'

It is argued in the appeal that the maximum output would be controlled by the operator and *'it is not anticipated that the output of the two wind turbines would exceed 4.9 MW'*. The proposal which includes two turbines with the capacity to significant increase the energy generated coupled with battery storage and associated infrastructure is clearly designed to increase the overall output from the development. Therefore, it would appear in the absence of any information to the contrary, that the stated output of 4.9MW is designed to circumvent the need for EIA.

I note that the increase in turbine height is stated to be required to compensate for lower site levels in the location of turbine T1. AS noted by the observers, this is not supported by any evidence on wind speeds despite there being an anemometer on the site.

3. Cultural Heritage

Potential impacts on the archaeological resource have been raised by the planning authority (Reason for Refusal No 3), the Department of Housing, Local Government and Heritage and by the observers. I note that in previous proposals on the site no significant impacts on archaeological sites were identified, subject to mitigation. The main difference between the current and previous application relates to the size of the turbine base and wider access road associated with Turbine T2, which means that the works encroach into the area defining an enclosure which is a recorded monument.

The Department of Housing, Local Government and Heritage identifies 4 no. Recorded Monuments on the site. These include the following:

- RO 035-092001 (enclosure)
- RO 035-092002 (enclosure)
- RO 035-092003 (earthworks)
- RO 039-087 (earthworks)

The Department notes that the base for Turbine T2 occupies a considerable amount of the area where Recorded Monument RO 035-092003 (earthworks) is located and that the newly enlarged access route seems to pass very close to Recorded Monument RO 035-092001 (enclosure). While pre-development testing and archaeological assessment is considered adequate for the remaining three recorded monuments, the Department objects to any ground disturbance taking place within 20m of the outer perimeter of the enclosure (RO 035-092001). It states that further information is required before a decision is made, including a revised site layout plan showing measurements to the external perimeter of the recorded monument.

While it is stated in the grounds of appeal that a buffer zone of over 20m exists between the nearest point of the access road and the outer perimeter of the enclosure, this has not been demonstrated. The applicant states that a licensed archaeologist has been appointed to fulfil any archaeological requirements and it unclear why no effort has been made by the applicant to address the Departments concerns. I would therefore conclude that there are outstanding issues regarding the assessment of potential impacts on the archaeological resource.

Potential impacts on Roxborough House, a Protected Structure have been raised in the submissions. Similar issues were raised in previous appeals and it was concluded that the proposed turbines would not result in significant effects on the character or setting of the protected structure. I do not consider that the relocated position of the turbines or the increase in the height of Turbine T1 will magnify effects to any significant extent. I

consider that the concerns raised by the observers that the presence of the turbines would prevent the return of the structure into habitable accommodation are unfounded.

4. Residential Amenity

The main issues raised in relation to potential impacts on residential amenity are associated with shadow flicker, noise and visual impact. Visual impact is considered in under Landscape and Visual Impact below.

A shadow flicker analysis was submitted with the application, and this confirms that in a worst-case scenario, there is potential for some properties to experience shadow flicker which is excess of the limits set out in the current 2006 Wind Energy Development Guidelines. I not that the Draft Revised Wind Energy Development Guidelines 2019 recommends that shadow flicker should not occur at any property. The applicant has committed to the installation of a shadow flicker prevention system which will turn off the turbines when shadow flicker is likely to occur. Subject to this mitigation measure, which can be addressed by condition should the Board be minded togrant permission for the development, no significant effects are likely to occur which would impact on the residential amenity of residential property.

The parent permission included a noise limit consistent with the wind energy guidelines 2006, which was repeated by the Board in subsequent decisions (303677 & 307726). The turbines were noted to be 500m away from residential property. There is no baseline data on the existing noise environment. The current proposal is to change the turbine model, which is capable of a higher output and may result in changes to the noise environment. There is also additional ancillary infrastructure and a battery storage facility, all of which have the potential increase noise, which I consider warrants full assessment to determine the potential for significant effects on residents in the vicinity of the site. I note that the Environment Section raised issues in this regard.

5. Landscape & Visual Amenity

There is no change in the landscape designation that applies to the subject site under the recently adopted Roscommon County Development Plan 2022-2028. The site remains within the 'Roscommon Town and Hinterland' landscape character area which is identified as 'High Landscape Value'. There are no scenic routes in the vicinity and Scenic View V16, V17 and V18 are in the general of the site. Both the planning authority and the Board in considering previous applications on the subject site concluded that the development of 2 no. turbines was appropriate in this landscape character area.

The question that arises in whether the changes proposed as part of the current application, including the increase in height of Turbine T1 and its altered position and the provision of the battery storage units and additional infrastructure would magnify effects.

A series of photomontages were produced from various locations and at varying distances from the site which suggest that the amendments to the previously permitted development will be barely discernible. From my inspection of the area, I would accept that views of the turbines will be most prominent in the immediate vicinity of the site but these views will be interrupted by buildings and landform. There will also be views in the wider area including along the N61 travelling north from Roscommon town, where there are scenic views. The views will also be intermittent curtailed by undulating topography and where the turbines are visible, it will be against the backdrop of Slieve Bawn, on which there are existing turbines, albeit at a significant distance. While I acknowledge the 'high' sensitivity of the landscape and Policy Objective NH10.25 to minimise visual impacts, I am also mindful that the principle of the development has been established and the increased height of turbine T1 will not significantly magnify the visual effects.

The substation and battery storage units single storey structures and their location towards the rear of the site ensures that their visual impact will be minimal with greatest visible from the local roads to the west.

6. Biodiversity

The potential for impacts on local biodiversity including whopper swan and bats is raised in the submissions. The AA Screening report states that a mammal survey was completed on September 16th, 2022 and no mammals were recorded. Mapping from the National Biodiversity Data Centre shows records of badger within the 1km polygon surrounding the site. No signs of badger was recorded and no setts identified during the walkover survey. The submission from the Department of Housing, Local Government and Heritage refers to potential impacts on badger setts. Should the Board be minded to grant permission for the development, I consider that this matter can be adequately addressed by condition. It is acknowledged that the site is likely to be used by foraging bats. There are farm buildings close to the site boundary but these are assessed as not providing suitable roost potential. There are several mature trees within the field boundaries which could provide suitable roosting potential. It is unclear if the proposed development would necessitate the removal of these trees, but I consider that this matter can be addressed by condition should the Board be minded to grant permission for the development.

The proposal will involve minimal land take and having regard to the abundance of similar habitat in the vicinity, I do not consider that the proposal, irrespective of the marginal increase in land take associated with the proposed amendments, would significantly impact on local biodiversity. I consider that the observers concerns that the proposal would impact on the ability of local famers to engage with sustainable agricultural practices and the REAP scheme are unfounded.

While I note the reference to a previous decision by the Board to refuse permission for 2 no. turbines to the north of the site (ABP Ref. 243479) on the grounds of insufficient information on file to assess the impacts on Whooper Swan, planning permission exists for 2 no. turbines on the subject site.

7. Appropriate Assessment

The Board concluded in its determination of previous applications on the site that the proposed development, individually and in combination with other plans or projects would not be likely to have a significant effect on any European Site.

The current proposal will result in an increase in the height of turbine T1 by c15m to 164.65. The height of Turbine T2 will remain at 150m. There will also be increases in the hardstand areas, additional infrastructure and alterations to the access track. The Department of Housing, Local Government and Heritage considered that the Appropriate Assessment Screening Assessment carried out by the Board in 2019 was out of date and that an up-to-date screening assessment should be carried out for the entire development.

The planning authority carried out a Screening for Appropriate Assessment and concluded that due to the increase in turbine height and in the absence of a bird collision survey and details of bird flight paths, significant effects on the integrity of Lough Ree SPA and River Suck Callows SPA cannot be ruled out.

A Screening Report for Appropriate Assessment prepared by JKW Environmental is submitted in support of the appeal. It identifies 10 no. European sites within the zone of influence (15km) of the proposed development. Table 5.1 of the report provides details of the European sites, their qualifying interests and describes the potential impact of the development on these sites. The majority (8 no.) are excluded for significant effects on the basis of lack of connectivity and distance, which I consider is reasonable.

The report concluded that it is not possible to rule out potential significant effects on the remaining 2 no. European sites Lough Ree SPA (Site Code:004064) and River Suck Callows SPA (Site code: 004097) due to potential disturbance/displacement effects. Details of the European sites, their qualifying interests, conservation objectives and the distance to the development site are set out below.

European site (SAC/SPA)	Qualifying Interests	Distance	Conservation Objectives
Lough Ree SPA (Site code 004064)	 Little Grebe Whooper Swan Wigeon Teal Mallard Shoveler Tufted Duck Common Scoter Goldeneye Coot Golden Plover Lapwing Common Tern Wetlands and Waterbirds 	C 8.5km south-east	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. To maintain or restore the favourable conservation condition of the wetland habitat of Lough Ree SPA as a resource for the regularly occurring migratory birds that utilise it

European site (SAC/SPA)	Qualifying Interests	Distance	Conservation Objectives
River Suck Callows SPA (Site code 004097)	 Whopper Swan Wigeoan Golden Plover Lapwing Greenland White-fronted Goose Wetlands and Waterbirds 	c9.3km south	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. To maintain or restore the favourable conservation condition of the wetland habitat of Lough Ree SPA as a resource for the regularly occurring migratory birds that utilise it

Assessment of Likely Significant Effects

The construction phase will not result in any works or landtake within the SPA's which would result in habitat loss, damage or fragmentation. Due to the significant distance between the development site and the SPA's there will be no disturbance of species listed as qualifying interests due to construction. The potential for direct effects is therefore ruled out, which I consider is reasonable.

There is potential for indirect ex-situ displacement effects associated with the loss of foraging habitat where the presence of the turbines causes birds to avoid the site and its surrounds. The Screening Report states that the site was surveyed (September 16th, 2022) for suitable foraging/breeding habitat for SCI species for Lough Ree SPA and the River Suck Callows SPA and that no suitable habitat was identified on the site. The

report also refers to refers to Scottish Natural Heritage (2016)¹ which lists core foraging range from various species, including Golden Plover, Whopper Swan and Greenland White-fronted Goose. The site is stated to lie outside the core foraging area for these species. In its previous determination of applications on this site the Board accepted that the potential for significant effects on qualifying interests of the SPA's did not arise. There will be negligible loss of foraging habitat associated with the proposed amendments to the scheme, which would give rise to significant effects on the SCI associated with the SPA's.

The Department of Housing, Local Government and Heritage notes the absence of an assessment of collision risk for bird species that use the site. It also refers to the collision risk associated with SCI species for which Lough Ree SPA and the River Suck Callows SPA are selected. I note that the Board in its determination of previous applications on the site, did not raise any specific issues with regard to the potential collision birds for using the site.

The applicant's Screening Report states that the majority of the SCI species for both Lough Ree SPA and the River Suck Callows SPA are small waterbirds and wintering waders that do not forage over great distances and as such are not considered to be at risk from collision with the turbines. It is acknowledged that both Whopper Swan and Greenland White-fronted Goose do forage at a distance from their winter roosts site.

The report refers to Scottish Natural Heritage which sets avoidance rates for species such as geese as up to 99.8% and avoidance rates for all species of swan is 99.5%. Having regard to the rates, I would accept that the amendments to the permitted development on the site including the relocated position of turbine T1 and its increased height will not result in any increased risk of collision for these species.

The Screening Report also considers cumulative effects, and it is considered that there are no plans or projects that could act in combination with the proposed development to result in cumulative effects.

There is an extant permission on the site for 2 no. turbines and associated infrastructure. There will be negligible loss of foraging area associated with the amendments proposed which would give rise to significant effects on SCI species associated with Lough Ree SPA or the River Suck Callows SPA. Similarly, having

¹ SHG (2016) Assessing Connectivity with Special Protection Areas

regard to the Scottish Natural Heritage information regarding collision risk to geese and Greenland white-fronted goose, I do not consider that the amendments proposed would result in significant effects on the qualifying interest of either of the SPA's.

I would therefore conclude that the proposed development is not likely to result in significant effects on the qualifying species of Lough Ree SPA (Site code: 004064) River Suck Callows SPA (Site code: 004097) in view of their conservation objectives.

7. Other Matters

Regarding potential impacts on human health, it is generally accepted that the operational stage of a windfarm has the potential to impact on the human environment arising from shadow, flicker, noise and visual impacts, which are considered above.

While I accept that considerations regarding site boundaries and land ownership gives rise to confusion I am mindful that similar matters have been addressed as part of previous Board decisions, and I do not considered it necessary to revisit these matters.

Should the Board conclude that the development requires EIA, the environmental impacts of the grid connection route must be considered as part of the overall development (*O'Grianna and others v An Bord Pleanala*)

The observers refer to flooding in the area and the potential for increased flooding arising from the increase in hard stand areas. Photographs of flooded lands are attached to the submission made by Brandon O Brien, on behalf of local residents but areas are not identified. Issues have also been raised regarding the potential for groundwater contamination as the site is underlain by a regionally important karstified aquifer with an 'Extreme' Vulnerability rating. These matters, which were not raised in previous applications require further assessment.

10.0 Conclusion and Recommendation

10.1. Having regard to the extant permission on the site, I consider that the development is acceptable in principle. The change in the turbine model will have an increased output and in the absence of any evidence to the contrary and having regard to the technical data for the proposed turbine model, the amendments to the proposed development would result in an output of greater than 5MW which triggers the requirement for EIA,

- 10.2. I consider that the Board should refuse to grant permission for the proposed development on the basis that the effects of the development on the environment have not been properly assessed,
- 10.3. On the basis of the above assessment, I recommend that the Board Refuse to Grant Permission for the proposed development for the Reasons and Considerations set out below.

11.0 Reasons and Considerations

The Board is not satisfied on the basis of the information submitted in support of the application and the appeal that the proposed amendments to the development permitted for two no. turbines and associated development under planning Reg Ref No 11/126, involving a change in turbine model, which would result in a combined output that exceeds the threshold for mandatory Environmental Impact Assessment within the scope of Class 3 (j) of Part 2 of the Fifth Schedule of the Planning and Development Regulations 2001, as amended, being an installation for the harnessing of wind power for energy production (wind farm) having a total output of greater than 5 megawatts. The Board is not therefore satisfied that that the effects of the development on the environment have been properly assessed. The proposed development would, therefore be contrary to the proper planning and sustainable development of the area.

Breda Gannon Senior Planning Inspector

22nd December, 2022