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14th June 2026

The Secretary
An Coimisiún Pleanála
64 Marlborough Street
Dublin 1
D01 V902

Case reference: PAX16.324258

Re: Planning permission for the construction of Tirawley Windfarm consisting of 16 no. wind turbines, a permanent 110kV substation, 110kV underground cable and grid connection, and ancillary development in the townlands of Ballymurphy, Ballynaleck, Barnhill Lower & Upper, Barroe, Billoos, Carn, Carrickanass, Carrowmore, Castlelacken Demesne, and other townlands in County Mayo.

Dear Sir/Madam,

I am writing to formally object to the proposed Tirawley Wind Farm Strategic Infrastructure Development application submitted by Constant Energy Limited.

As a resident of Lissadrone, Ballycastle, and one of the closest residents to the proposed development, I have serious concerns regarding the significant and irreversible impacts this project would have on the local environment, biodiversity, landscape, residential amenity, and the wellbeing of those living in close proximity to the proposed turbines and associated infrastructure.

The proposed development, comprising 16 wind turbines, a permanent 110kV substation, underground cabling, grid connection infrastructure and ancillary works, would introduce substantial industrial-scale development into a sensitive rural area of north Mayo. I believe the application fails to adequately address a number of significant planning, environmental and community concerns and is therefore contrary to the principles of proper planning and sustainable development.

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1.Introduction

My name is Geraldine McManus and I reside at Lissadrone, Ballycastle, County Mayo. My home is identified within the applicant's Environmental Impact Assessment Report (EIAR) as receptor H3 and is acknowledged by the applicant as the closest inhabited dwelling not associated with the proposed development.

According to Table 2.3 of the applicant's EIAR, my dwelling is located approximately 555 metres from Turbine AT08, 601 metres from Turbine AT09 and 676 metres from Turbine AT10. These separation distances place my family and home among those most directly affected by the proposed development.

My partner built our family home in 2009 on land that has been in his family for generations, and we have lived here ever since. We chose this location because of its rural character, tranquillity, environmental quality and strong connection to the local community. Our home occupies an elevated position within the coastal landscape of north Mayo and benefits from extensive panoramic views across the surrounding countryside, coastline and Atlantic seascape. The openness, scenic quality and undeveloped nature of this landscape form an integral part of the character of the area and contribute significantly to the enjoyment and amenity value of our home.

We are now raising our young son in this environment and have a long-term commitment to the area and its future. The landscape surrounding our home is not only important from a residential amenity perspective but also forms part of a wider area of recognised scenic, heritage and tourism value, including its proximity to the Céide Fields, Downpatrick Head, the Wild Atlantic Way and other important recreational and cultural assets that contribute to the unique character of north Mayo.

I am deeply concerned about the potential impacts of this development on my family's residential amenity and quality of life. The likely effects arising from turbine proximity, including noise, amplitude modulation, shadow flicker, visual dominance, landscape change and the cumulative industrialisation of the surrounding area, have not, in my view, been adequately assessed or mitigated by the applicant.

Given the elevated nature of our location, the visual effects of the proposed turbines would be particularly pronounced. The proposed development would introduce large-scale industrial structures into a currently open rural and coastal landscape and would fundamentally alter the views, landscape setting and sense of place that currently characterise our home and its surroundings.

As the closest non-participating occupied dwelling to the proposed wind farm, I believe my home represents a critical test of whether the development can be accommodated without causing unacceptable impacts on residential amenity. The applicant's own assessments identify my property as being among the most affected receptors, yet significant concerns

remain regarding the adequacy of the assessments undertaken and the conclusions reached.

This submission sets out my objections to the proposed development and explains why I believe the application is inconsistent with the principles of proper planning and sustainable development, fails to adequately protect residential amenity, and would result in significant adverse effects on the receiving environment, landscape and local community.

2. Summary of Principal Grounds of Objection

1. Failure to Properly Identify and Engage the Host Community

The application documentation repeatedly describes the project as being located between Ballycastle and Killala, while failing to properly recognise Lacken as the host community in which the development is situated and which will experience the most significant impacts. The consultation process did not adequately engage with affected residents, including the nearest occupied dwelling (H3), which received no direct contact, notification, or meaningful engagement despite being identified as one of the most sensitive receptors.

The applicant's reliance on a single public information event in June 2023, advertised primarily through a newspaper notice and relating to an earlier project design, did not provide the community with a meaningful opportunity to understand or influence the final 16-turbine proposal. This raises concerns regarding compliance with the principles of early, transparent and effective public participation reflected in national guidance, the Aarhus Convention, and the Environmental Impact Assessment process.

2. Unacceptable Impact on Residential Amenity

The proposed turbines would have a profound and long-term impact on my family home and residential environment. The applicant's own visual assessments identify my property as a highly sensitive receptor, yet the conclusions significantly understate the lived experience of the development.

The turbines would be visible from multiple aspects of the home, including principal living areas, bedrooms, and external amenity spaces, creating an enclosing and dominant industrial presence within what is currently a quiet rural coastal landscape. The scale, proximity, movement, and cumulative visibility of the turbines would fundamentally alter the character of the home environment and result in an unacceptable loss of residential amenity.

3. Deficiencies in Visual and Landscape Assessment

The submitted photomontages and visual assessments do not adequately represent the true scale and cumulative nature of the proposed development. Static images fail to reflect the dynamic experience of residents and visitors who would experience turbine movement, lighting, and extensive visibility across multiple viewpoints.

Particular concern arises in relation to the impact on the highly sensitive landscapes of North Mayo, including the wider setting of the Céide Fields, Downpatrick Head, the Wild Atlantic Way, local walking routes, and other important heritage and tourism assets. The proposal would introduce industrial-scale structures into an internationally recognised scenic landscape and would undermine the environmental and tourism value of the area.

4. Concerns Regarding Noise Assessment and Protection of Residents

The EIAR noise assessment contains significant inconsistencies regarding the identification of monitoring locations and receptors. The baseline noise survey did not include H3, despite it being the closest occupied non-participating dwelling and one of the receptors most likely to experience operational turbine noise.

There are serious concerns that monitoring locations were not representative of the quiet northern rural environment where the nearest turbine clusters are located. The use of locations associated with financially involved landowners, unoccupied properties, and locations influenced by existing road traffic raises doubts regarding the reliability of the baseline dataset and the validity of the operational noise predictions.

5. Shadow Flicker, Health and Quality of Life

The proposed development would expose nearby residents, including my household, to potential shadow flicker impacts and other effects associated with the proximity of multiple large-scale turbines. The assessment relies heavily on operational mitigation measures and does not provide sufficient certainty that residential amenity, health, sleep, and quality of life will be adequately protected throughout the lifetime of the development.

6. Cumulative Impacts and Wider Environmental Effects

The assessment does not adequately consider the cumulative effects of this proposal in combination with existing, approved and proposed energy developments within North Mayo. The cumulative industrialisation of the landscape, combined with impacts on noise, visual amenity, recreation, tourism, and community identity, has the potential to fundamentally alter the character of the receiving environment.

7. Conflict with Planning Policy

It is submitted that the proposed development conflicts with the objectives of the Mayo County Development Plan, relevant national guidance, and the fundamental planning requirement to balance renewable energy development with the protection of residential amenity, landscape quality, environmental heritage, and the rights of existing communities.

Conclusion

While renewable energy plays an important role in addressing climate change and supporting national energy policy, such development must be located and designed in a manner that protects the rights, health, wellbeing, and living environment of existing communities.

In this case, the evidence presented demonstrates that the Tirawley Wind Farm proposal would impose a disproportionate burden on nearby residents, particularly those living closest to the turbines, and would result in significant and irreversible impacts on residential amenity, landscape character, environmental quality, and the identity of the Lacken community.

For the reasons outlined throughout this submission, it is respectfully submitted that the proposed development has not demonstrated that it represents proper planning and sustainable development and that **An Coimisiún Pleanála should refuse permission for the proposed Tirawley Wind Farm development.**

PART 1 - CONSULTATION

3. Omission of Lacken from the Application

The project website and accompanying Planning Statement describe the site as being “located between Ballycastle and Killala village in the north of County Mayo.”

However:

- Nowhere in these public-facing materials is Lacken referenced, despite the fact that the proposed turbines are located within the Lacken Parish area
- This omission fails to accurately identify the host community and materially understates the true location of the development
- It creates a misleading impression that the development is located between two settlements, rather than within a distinct and established rural community.

Lacken is not merely “between” Ballycastle and Killala. It is a defined rural community with its own identity, residents, amenities, and heritage, and it will experience the primary visual, environmental, and social impacts of the proposed development.

The failure to identify Lacken as the host community diminishes the visibility of the community most directly affected by the proposal and creates a misleading impression regarding the location and receiving environment of the development.

Additional Points

- Local amenities such as St. Patrick’s College, Saint Patrick’s Church, and the Fáilte Rooms are incorrectly identified as dwellings in Figure 2.3, which is factually inaccurate and further demonstrates a lack of proper recognition of the community;
- The EIAR states that the developer engaged with “local community groups” (Chapter 1.11.1), however:
 - No community groups within Lacken Parish appear to have been identified or consulted
 - This raises serious concerns as to the accuracy of the applicant’s claims regarding engagement
- The references to “community investment” (Chapters 2.12.1 and 2.12.2) are unclear, given that the documentation does not clearly identify the community to which these measures relate.

Recognition of the host community is fundamental to fair public participation and proper environmental assessment. The absence of any clear identification of Lacken as the principal receiving community may have affected the transparency of the public consultation process and the ability of affected residents to recognise Lacken’s central role and the overall impact of the proposed development within their local area.

4. Observation – Public Consultation and Community Engagement

4.1. Applicant's Claims

The EIAR states (Chapter 1.11.1) that:

- Direct public consultation was undertaken with residents in the area;
- Door-to-door engagement took place with locals in the vicinity of the Proposed Development;
- Community groups were contacted with the aid of a local representative; and
- A Public Information Day was advertised in advance through local media and community channels.

4.2. Actual Experience as the nearest inhabited dwelling to the development

It is submitted that the extent of consultation undertaken with those residents identified by the applicant as the most sensitive receptors does not demonstrate the level of engagement described within the EIAR and Community Engagement Report.

My home is identified in the EIAR as H3, the closest inhabited dwelling not associated with the development, located 554 metres from turbine AT08. However, this statement fails to acknowledge that turbine AT09 is located 601 metres from my dwelling and turbine AT10 is located 676 metres away, as identified in Table 2.3 of the EIAR.

Despite being one of the nearest occupied dwellings to the proposed development, I received no direct contact from the applicant or its representatives.

There was

- no door-to-door visit,
- no leaflet drops,
- no letter,
- no telephone contact
- no engagement of any kind.
- The EIAR refers to community engagement being undertaken with the assistance of a local representative; however, no such representative was ever identified to me or, to my knowledge, to members of the local community.

This lack of engagement is particularly concerning given that my dwelling is specifically identified as a sensitive receptor and is affected by issues assessed within the EIAR, including noise impacts, shadow flicker and visual impacts.

The Public Information Day took place on 6 June 2023 at the Ballina Manor Hotel. To my knowledge, this event was advertised only once in a local newspaper. The applicant's suggestion that the event was promoted through wider community channels is not reflected in my experience or that of other local residents. There was no leaflet distribution, no direct notification to affected households, no community meetings and no meaningful effort to ensure that those most affected by the development were informed.

In fact, the information day only came to the attention of members of our community the day before the event through informal local communication rather than through any direct action by the developer.

Given the scale of the proposed development and the proximity of a number of residential receptors, it is questionable whether reliance on a single newspaper advertisement was sufficient to ensure effective engagement with those most likely to experience significant environmental effects. Many residents do not purchase local newspapers, and modern consultation practice would reasonably be expected to include direct communication with affected households, particularly those located closest to the proposed turbines.

I therefore consider the applicant's claims regarding effective public consultation to be unsupported by my direct experience as one of the nearest residents to the proposed development. The absence of meaningful engagement with those most affected undermines confidence in the Community Engagement Report, the EIAR and the applicant's assessment of impacts on the Lacken community.

Furthermore, the Community Engagement Report Appendix 1.6 submitted with the application indicates that consultation consisted primarily of a single Public Information Day held in June 2023. No evidence has been provided of ongoing engagement, newsletters, household notifications, community liaison activities or further consultation as the project evolved. This is despite significant changes to the project design between the information event and the final application now before the Board.

It is particularly difficult to reconcile the applicant's statement that door-to-door engagement occurred with the fact that the closest occupied non-participating dwelling, identified throughout the EIAR as receptor H3 and acknowledged as among the most affected residential receptors, did not receive any direct engagement, notification or consultation from the applicant.

Indeed, it was only upon the formal lodgement of the planning application with An Coimisiún Pleanála, and upon review of the Environmental Impact Assessment Report, that my family became fully aware of the extent to which our home would be affected by the proposed development. The applicant's own assessments revealed that our dwelling would experience significant visual effects, be exposed to predicted operational noise levels close to applicable limits, and be subject to potential shadow flicker impacts.

Had meaningful engagement occurred at an earlier stage, particularly with those residents identified by the applicant as the most sensitive receptors, we would have had the opportunity to understand the likely effects of the proposal, raise concerns, and participate meaningfully in the evolution of the project design before the final application was submitted.

4.3 Deficiencies in Consultation Process

4.3.1 Late and Inadequate Notification

The applicant's Community Engagement Report confirms that the only publicly advertised consultation event was a Public Information Day held on 6 June 2023.

The report indicates that this event was advertised through a single notice in the *Western People* newspaper. No evidence has been provided of any leaflet drop, direct household notification, community newsletter, social media campaign, public notices within the locality, or other measures designed to ensure that affected residents were informed of the event.

Many residents do not purchase local newspapers and, in the absence of any additional notification measures, awareness of the event was inevitably limited.

For a development of this scale and significance, affecting residents living within close proximity of the proposed turbines, reliance upon a single newspaper advertisement cannot reasonably be regarded as meaningful community engagement.

4.3.2 Consultation on an Earlier and Materially Different Design

The Public Information Day held in June 2023 related to an earlier version of the project.

The information boards presented at that event referred to a substantially different turbine layout from the development now before the Board. The current application proposes a 16-turbine development following significant revisions to the design.

No evidence has been provided that the revised proposal was subsequently presented to the public, nor that any further consultation was undertaken following these changes.

As a result:

- The public was not afforded an opportunity to engage with the final development proposal;
- Residents were not given an opportunity to comment on the revised layout;
- The applicant has not demonstrated how community views influenced the final design of the project.

Accordingly, the consultation process did not allow the community to participate meaningfully in the evolution of the development now under consideration.

4.3.3 Lack of Meaningful Engagement

The documentation submitted in appendix 1.6 does not demonstrate a structured or comprehensive community engagement process.

In particular, there is no evidence of:

- A Community Liaison Strategy;
- Ongoing consultation throughout the project design process;
- Multiple consultation events or engagement formats;
- Direct engagement with the nearest affected residents;
- Adequate notification periods;
- A functioning project website providing ongoing project information;
- Clear evidence showing how community feedback influenced the final design;
- Identification of the "local representative" referred to by the applicant.

The applicant also appears not to have engaged with important community assets and amenities within the area, including St Patrick's College, the Lacken Sensory Garden and other community facilities likely to be affected by the development.

The absence of a functioning and informative project website is particularly noteworthy. During the scoping process (Appendix 1.3), the Health Service Executive recommended the development of a dedicated project website to facilitate public consultation and provide access to project information, correspondence, maps, updates and documentation. However, to the best of my knowledge, the project website did not contain meaningful project information during the pre-application consultation period and did not provide local residents with an effective means of understanding or engaging with the proposed development as it evolved. Information only became available when the planning application was lodged. As a result, the website did not perform the consultation and information-sharing role envisaged by the HSE recommendations or the Code of Practice for Wind Energy Development in Ireland.

The Public Information Day held in June 2023 related to an earlier iteration of the project. The application currently before the Board proposes a revised 16-turbine layout. No evidence has been provided demonstrating that this revised proposal was the subject of further public engagement. Accordingly, it is unclear how affected communities were afforded an opportunity to understand or comment on the final development proposal prior to its submission.

The overall consultation process appears to have been limited to a single information event and falls significantly short of the level of engagement claimed within the EIAR and Community Engagement Report.

4.4. Conflict with Policy and Legal Requirements

4.4.1 Wind Energy Development Guidelines (2006)

These requirements have not been met in this case. The Wind Energy Development Guidelines (2006) state that consultation should occur at an early stage, be meaningful in nature, and provide opportunities for local communities to influence the design and layout of proposed developments.

For the reasons set out in Sections 4.2 and 4.3, the consultation undertaken in this case does not appear to satisfy these principles. The process was limited in scope, relied primarily on a single Public Information Day, and did not provide affected residents with a meaningful opportunity to influence the development prior to the submission of the application.

4.4.2 Failure to Meet Community Engagement Principles in the Draft Revised Wind Energy Development Guidelines (2019)

Although not formally adopted, the Draft Revised Wind Energy Development Guidelines (2019) were expressly referenced by the Applicant as informing its approach to community engagement.

The Guidelines promote early, transparent and ongoing engagement with local communities throughout the evolution of a project. They emphasise the importance of providing multiple opportunities for participation and demonstrating how community feedback has informed project design.

The consultation process described in Sections 4.2 and 4.3 falls substantially short of these principles. In particular, there is no evidence of ongoing engagement following the June 2023 Public Information Day, no consultation on the revised development layout, and no clear demonstration that community feedback influenced the final proposal.

4.4.3 Failure to Address Scoping Recommendations on Public Consultation

During the EIAR Scoping process, both the Health Service Executive (Environmental Health Service) and the Department of Public Health highlighted the importance of meaningful community consultation and engagement in relation to the proposed development.

The Health Service Executive specifically stated that (Appendix 1.3):

- Early and meaningful public consultation with the local community should be carried out;
- All parties affected by the proposed development should be fully informed of what the proposal entails, particularly in relation to potential impacts on surrounding areas;
- Sensitive receptors and stakeholders should be identified;
- Members of the public should be given sufficient opportunities to express their views on the proposed development;
- A Community Liaison Officer should be considered;
- A dedicated project website should be developed; and
- The EIAR should clearly demonstrate the link between public consultations and how those consultations influenced the decision-making process.

The Department of Public Health similarly advised that consultation with local communities should be undertaken, particularly given the potential impacts associated with visual effects, noise, shadow flicker, recreational amenities, community identity and cultural resources.

The consultation process ultimately undertaken appears inconsistent with these recommendations. As outlined in Sections 4.2 and 4.3, no evidence has been provided of ongoing engagement, direct consultation with affected households, operation of a Community Liaison Officer, or any clear link between consultation feedback and project design changes.

Furthermore, while Appendix 1.6 summarises issues raised during the Public Information Day, the Applicant has not demonstrated how concerns raised by local residents influenced the final design of the project, notwithstanding the specific recommendation from the Health Service Executive that the EIAR should clearly demonstrate the relationship between consultation feedback and project decision-making.

The consultation process undertaken therefore appears inconsistent with the recommendations provided during the scoping process by both the Health Service Executive and the Department of Public Health. These recommendations were intended to ensure meaningful public participation and to assist in identifying and addressing potential impacts on affected communities at an early stage of project development.

Accordingly, the Board should have regard to the extent to which the Applicant has addressed these scoping recommendations when assessing the adequacy of the consultation process and the overall quality of the Environmental Impact Assessment

4.4.4 Aarhus Convention

The Aarhus Convention establishes rights relating to access to information and public participation in environmental decision-making.

Article 6 requires that participation occur at an early stage, while options remain open, and that public observations are genuinely considered during decision-making.

For the reasons set out in Sections 4.2 and 4.3, it appears that affected residents were not afforded a meaningful opportunity to participate in the development of the final proposal. In particular, the public was not consulted on the revised turbine layout that forms the basis of the current application, and no evidence has been provided demonstrating how public feedback influenced the final design.

Accordingly, the consultation process appears inconsistent with the principles of early and effective public participation reflected in the Convention.

4.4.5 Code of Practice for Wind Energy Development in Ireland – Guidelines for Community Engagement (2016)

The Code of Practice for Wind Energy Development in Ireland envisages a significantly more extensive consultation process than that undertaken by the Applicant. The Code refers to the appointment of a Community Liaison Officer, ongoing engagement throughout project development, a dedicated project website, regular newsletters, a Community Liaison Strategy, letter drops and house-to-house contact within affected communities.

The Applicant's own Community Engagement Report demonstrates that consultation consisted primarily of a single Public Information Day advertised through one newspaper notice. As outlined in Sections 4.2 and 4.3, no evidence has been provided of the broader engagement measures envisaged by the Code.

In these circumstances, the Applicant's assertion that it 'adhered to the guidance set out in the Code of Practice' is not supported by the evidence presented within Appendix 1.6 of the applicants EIAR.

4.4.6 Environmental Impact Assessment Directive (2014/52/EU)

The Environmental Impact Assessment Directive (2014/52/EU) recognises the importance of public participation in environmental decision-making and seeks to ensure that the public is informed and afforded an opportunity to participate effectively in projects likely to have significant effects on the environment.

The Directive emphasises transparency, public access to environmental information and the ability of the public to participate in the assessment process before decisions are made.

While the formal public participation requirements of the EIA process arise during the planning application stage, the Applicant has repeatedly relied upon its pre-application consultation process as evidence of meaningful community engagement. It is therefore appropriate to consider whether that engagement process was capable of facilitating effective public participation.

However, as outlined in Sections 4.2 and 4.3, the consultation undertaken was limited, no further engagement occurred following significant revisions to the project, and affected residents were not afforded an opportunity to engage with the final proposal prior to its submission. Accordingly, the consultation process relied upon by the Applicant does not reflect the principles of transparency, accessibility and effective public participation that underpin the Environmental Impact Assessment Directive.

4.5 Public Information Day Advertisement Discrepancy

A discrepancy appears to exist between the newspaper advertisement reproduced in Appendix 1.6 of the PACC Report and the advertisement that actually appeared in the Western People. The version reproduced in Appendix 1 contains an extensive list of local townlands, whereas the advertisement published in the newspaper refers only to the barony of Tirawley incorporating Lacken and Ballycastle. The Applicant should clarify which version was actually published and explain why the advertisement reproduced in the PACC Report differs from the version that appeared in the newspaper.

Then add:

The difference between the advertisement reproduced in Appendix 1.6 and the advertisement published in the Western People requires clarification. This distinction is material because the level of geographic detail contained in the Appendix version may influence the understanding of the extent of public notification undertaken. This discrepancy is significant because the Appendix version creates the impression that a much more targeted and locally focused notification exercise was undertaken than is evident from the published advertisement.

From Appendix 1.6

Client: Constant Energy Limited
Project Title: Tirawley Wind Farm
Document Title: PACC Report

Date: Project No:
Document Issue:

Appendix 1: Western People – Newspaper Advertisement

**Tirawley Wind Farm
Public Information Event**



Constant Energy Ltd. are hosting a public information event to inform the local community of the proposed Tirawley wind farm development within the townlands of:

Conaghra, Barroe, Lissadrone East, Lissadrone West, Billoos, Lecarrowntemple, Lackanhill, Ballymurphy, Carrowmore, Castletown, Castlelackan Demense, Aghaleague, Carrowneden, Ballynaleck, Carrowmachshane, Carn, Carrowmore, Glebe, Doonadoba, Carrowcor, Cloonanass, Barnhill Lower, Barnhill Upper, Cloonavarry and Carrickanass, Ballina, Co. Mayo.

The proposed wind farm (Tirawley Wind Farm) is being promoted by Constant Energy, an Irish owned renewable energy company. The wind farm will be developed in conjunction with local landowners.

**Date: Tuesday June 6th, 2023
Time: 2pm to 7pm
Location: Ballina Manor Hotel, Ballina, Co Mayo.**

Advertisement actually included in the Western People

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Public Notices

**Tirawley Wind Farm
Public Information Event**



Constant Energy Ltd are hosting a public information event to inform the local community of the proposed Tirawley wind farm development within the barony of Tirawley incorporating the townlands of Lacken and Ballycastle, Co. Mayo. The proposed wind farm is being promoted by Constant Energy, an Irish owned renewable energy company. The wind farm will be developed in conjunction with local landowners.

**Date: Tuesday June 6th, 2023
Time: 2pm to 7pm
Location: Ballina Manor Hotel, Ballina, Co Mayo.
website: www.Tirawleywindfarm.com**

4.6 Conclusion

The consultation process undertaken by the applicant:

- Was late, limited, and not meaningful
- Did not engage with the affected community, including the nearest residents
- Related only to an earlier and materially different version of the project
- It is submitted that the consultation process relied upon by the Applicant was limited in scope, related principally to an earlier version of the proposal, and does not clearly demonstrate ongoing engagement with those residents identified as the most sensitive receptors.
- In particular, the absence of direct engagement with the nearest occupied non-participating dwelling, the lack of consultation on the revised development layout, and the absence of clear evidence showing how community feedback influenced project evolution raise questions regarding whether the objectives of early, transparent and meaningful community participation were fully achieved.
- These matters are relevant to the Board's assessment of the adequacy of the EIAR and whether the proposed development has been assessed in accordance with the principles of proper planning and sustainable development.

Meaningful consultation is a cornerstone of proper planning and sustainable development. It enables local knowledge to be incorporated into project design, assists in identifying potential impacts at an early stage and promotes confidence in the planning process.

In this case, the consultation undertaken was confined largely to a single information event relating to an earlier version of the project. The nearest affected residents were not directly engaged, no meaningful consultation occurred on the final 16-turbine proposal, and the Applicant has failed to demonstrate how community feedback influenced the final design.

References

- Tirawley Wind Farm Planning Application, Case PAX16.324258, An Bord Pleanála.
- Environmental Impact Assessment Report (EIAR), Tirawley Wind Farm.
- Community Engagement Report, Appendix 1.6.
- EIAR Scoping Responses, Appendix 1.3.
- Department of the Environment, Heritage and Local Government (2006), *Wind Energy Development Guidelines for Planning Authorities*.
- Department of Housing, Planning and Local Government (2019), *Draft Revised Wind Energy Development Guidelines*.
- Department of Communications, Climate Action and Environment (2016), *Code of Practice for Wind Energy Development in Ireland – Guidelines for Community Engagement*.
- Directive 2014/52/EU amending Directive 2011/92/EU on Environmental Impact Assessment.
- UNECE (1998), *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention)*.

Part 2 – RESIDENTIAL AMENITY

5. Landscape and Visual Impact in relation to our home H3

The photomontages supplied by the developer clearly demonstrate the substantial visual and landscape impact that the proposed wind farm would have on our property and its immediate surroundings. Key viewpoints were provided for assessment in the EIAR Photomontages Book 2, Viewpoint 16. Screenshots of these photomontages are included at the end of this section for reference.

These viewpoints directly represent the visual environment that my family and I would experience on a daily basis and are not abstract landscape viewpoints, but views from and immediately adjacent to a private family home.

5.1 Visual Context and Sensitivity

Our property is located within a coastal rural landscape characterised by open agricultural fields, natural undulating topography, and a strong sense of tranquillity and remoteness. We benefit from extensive panoramic views across the Atlantic coastline and surrounding landscape, including, on clear days, views extending towards the mountains of County Donegal. These long-range coastal views contribute significantly to the scenic quality, openness, and visual amenity of the area and strongly contribute to the landscape's high visual sensitivity.

The applicant's own EIAR acknowledges that Viewpoint 16 is a "High" sensitivity receptor and among the viewpoints expected to experience the highest visual effects. Despite this acknowledgement, I believe the true impact on our home and residential environment has been understated.

The photomontages indicate that multiple turbines would be visible within the primary outlook from the dwelling, resulting in a substantial alteration to the existing visual composition and residential setting.

5.2 Visual Magnitude and Degree of Change

The upper image, taken from the lower end of our driveway, shows eight turbines distributed across the skyline and visible surrounding our home. While the photomontages provide a useful assessment tool, they represent fixed viewpoints at a particular moment in time and may not fully reflect the dynamic visual experience of residents moving throughout the property and experiencing turbine movement under varying weather and lighting conditions. The static nature of the image and the selected viewpoint do not fully convey the scale, movement and presence of the turbines as they would be experienced in daily life. Their presence would significantly alter the horizon and diminish the open rural character of the setting.

It is also noted that the photomontage fails to capture the existing Killala wind turbines visible within the wider landscape beyond the proposed development. While these turbines are visible from the property under normal viewing conditions, they fall just outside the frame presented in the photomontage. I am therefore concerned that the image underrepresents the cumulative visual influence of wind energy development experienced from the dwelling and surrounding views.

In contrast, the lower image, taken from just outside our garden wall, reveals a turbine positioned extremely close to our home. The turbine is shown towering directly over the dwelling, with its tower and blades rising far above the roofline and dominating the view. The scale and proximity of the turbine create an overbearing visual presence that draws attention away from the natural landscape and fundamentally alters the visual balance of the setting.

This proximity would result in a high magnitude of visual change, as the turbines become the defining features of the scene, completely at odds with the existing scale and character of the surrounding rural landscape.

5.3 Residential Amenity

The proposed turbines will be visible from multiple areas of the house and property, including but not limited to:

- the driveway and approach to the home,
- the sitting room,
- the kitchen/living area,
- and two bedrooms.

Because the turbines are positioned to the north, south, and west of the property, their visual presence will create an enclosing and encircling effect around the dwelling, with turbines visible across multiple aspects of the property simultaneously rather than appearing as a single distant feature in one isolated view. This means the turbines will become a constant and unavoidable feature of everyday life within the house and while entering and leaving the property.

The development would fundamentally alter the character of the residential environment from a quiet rural domestic setting to one dominated by large-scale industrial structures. The movement of turbine blades, their scale and height, and the cumulative spread of turbines across multiple viewing angles will create a persistent and overbearing visual presence.

The EIAR photomontages and static viewpoint images fail to adequately represent the lived reality of this impact. They cannot properly convey:

- the continuous movement of blades,
- the dominance of the turbines when viewed from inside living spaces,
- the repeated exposure experienced throughout the day,
- the cumulative effect of seeing turbines from several rooms simultaneously,
- the impact of turbine lighting during darker hours and winter months,
- and the enclosing visual effect created by turbines surrounding the dwelling from multiple directions.

Residential properties are recognised as highly sensitive visual receptors because people experience these views continuously and over long periods of time. In this case, the turbines will not merely affect a passing public view but will directly impact the daily living conditions and enjoyment of a family home.

The visibility of turbines from bedroom windows is especially intrusive given that these are private domestic spaces where residents are entitled to a reasonable expectation of visual comfort, peace, and tranquillity.

I am also concerned that the visual dominance, scale, and constant movement of the turbines in close proximity to the dwelling would materially affect residential wellbeing and enjoyment of the home environment. The proposed development would fundamentally alter the experience of living within what is currently a quiet rural setting, replacing it with a visually intrusive and industrialised landscape.

The issue in this case is not merely the visibility of individual turbines within the wider landscape. The defining characteristic of the impact on H3 is that the turbines would occupy multiple aspects of the residential environment simultaneously. Our home would not experience a single distant wind farm view, but rather a surrounding visual presence, with large-scale moving structures visible from the approach to the property, principal living spaces, bedrooms, and external amenity areas. This degree of visual exposure is materially different from a general landscape impact and raises a fundamental question as to whether acceptable residential amenity can be maintained.

The cumulative visual presence of the turbines, particularly within immediate residential views, would create an overbearing environment resulting in a loss of tranquillity and a significant reduction in residential amenity.

This impact would persist for the full operational lifetime of the development and cannot be meaningfully mitigated through screening or landscaping due to the scale, elevation, and prominence of the turbines.

5.4 Landscape Character

From a landscape character perspective, the development would shift the area's visual identity from a rural agricultural and coastal landscape to an industrial energy landscape. The proposed turbines would dominate key residential and landscape views and would fundamentally alter the character and scenic quality of the surrounding environment.

The proposed development would therefore constitute an excessive and disproportionate visual intrusion on an established rural dwelling and would seriously injure the residential amenities of the property.

The applicant's own assessment identifies Viewpoint 16 as a High Sensitivity receptor. Notwithstanding this acknowledgement, the assessment concludes that impacts are acceptable. I respectfully disagree. The photomontages demonstrate that the proposed turbines would become the dominant visual feature in views from and around a family home. The resulting impact is not simply a landscape effect but a direct effect on residential living conditions. The combination of turbine scale, proximity, movement, cumulative visibility and encircling distribution around the dwelling would result in an overbearing and oppressive visual environment that would persist for the full 35-year operational life of the project.

5.5 Response to the LVIA Summary of Visual Impacts

I respectfully disagree with the conclusion that the visual effects arising from the proposed development are "Not Significant".

The LVIA states that the dispersed nature of the turbine array prevents a sense of being contained within a wind farm. However, the conclusion that the dispersed arrangement avoids a sense of enclosure does not appear to fully correspond with the visual evidence presented for VP16, which indicates that turbines would be visible across a broad horizontal field of view from and around the dwelling.

The photomontages show multiple turbines visible from and around the dwelling, with turbines located to the north, south and west of the property. As a result, the development would not be experienced as a distant feature within a wider landscape but as a series of large industrial structures occupying multiple aspects of the residential environment simultaneously.

While the consultant describes the layout as dispersed, the practical effect for residents is that turbines are visible across a broad visual envelope surrounding the dwelling. This creates a clear sense of enclosure and visual domination.

The assessment appears to place considerable weight on the fact that views remain available between turbines and that the wider landscape remains visible. However, the issue for residential amenity is not whether gaps remain between turbines. The issue is whether the turbines become the dominant feature within everyday views from a family home.

In my case, the applicant's own assessment acknowledges a visual envelope of approximately 150 degrees and turbines located as close as approximately 600 metres from the viewpoint. The photomontages further demonstrate that eight turbines are visible from the property. Taken together, these factors indicate a substantial visual effect on residential amenity.

I therefore submit that the conclusion that the development does not create a sense of being contained within a wind farm is inconsistent with the visual evidence presented for VP16 and does not adequately reflect the lived experience of residents in the immediate vicinity of the proposed development.

5.6 Observation Property Value Impact

The applicant relies in Chapter 5.3.7 on studies relating primarily to the United States and United Kingdom, many of which are more than ten years old and do not adequately reflect the Irish rural housing context, planning environment, or property market.

More recent Irish-based research, including the 2023 study by the entitled *“Wind Turbines and House Prices Along the West of Ireland: A Hedonic Pricing Approach”*, found that:

- Residential property values may decrease by up to 14.7% within 1 km of a wind turbine
- The impact increases with turbine height and turbine count
- The effect is more pronounced in rural areas with lower housing density
- Additional turbines within close proximity may contribute to further reductions in value.

The proposed development differs materially from the international studies relied upon by the applicant because, in this case, my dwelling will experience direct and cumulative impacts from multiple large-scale turbines in exceptionally close proximity.

Specifically:

- Multiple turbines are proposed within 1 km of my dwelling, including turbines located approximately 554 m, 601 m and 676 m away, as identified in Table 2.3, together with additional turbines at approximately 818 m and 1.06 km
- The turbines will be highly prominent and visually dominant in views from the property, as demonstrated in the Landscape and Visual Impact Assessment and associated photomontages, including Viewpoint 16
- My property is also identified as being significantly affected by shadow flicker and operational noise.

The combined effect of visual intrusion, shadow flicker, turbine movement, lighting, and operational noise will materially diminish the residential amenity, character, enjoyment, and desirability of the property.

While the EIAR acknowledges the findings of the 2023 Irish CERIS study, it nevertheless concludes that the proposed development would not have a long-term impact on property values. That conclusion is not adequately justified in the Irish context and does not properly address the locally relevant evidence presented within the applicant’s own assessment.

In particular, the applicant has not demonstrated why the documented property value impacts identified within 1 km of turbines would not arise in circumstances where several turbines are proposed at distances as close as 554 m from an existing dwelling and where cumulative visual, noise, and shadow flicker impacts are also predicted.

Accordingly, the EIAR fails to satisfactorily assess the likely effect of the proposed development on residential property value and residential amenity in this locality.

5.7 Conclusion

In summary, the applicant has repeatedly identified H3 as the closest occupied non-participating dwelling and as a sensitive receptor requiring assessment. It is therefore difficult to reconcile this acknowledgement with the conclusion that the resulting effects on residential amenity are acceptable. If the most affected occupied dwelling can only be accommodated by accepting significant visual dominance, multiple turbine views and the loss of the existing residential character, serious questions arise as to whether the proposed development represents proper planning and sustainable development at this location.

The visual effects demonstrated in the photomontages are of major significance. The proposed turbines would dominate key residential views, fundamentally alter the landscape character, and cause unacceptable harm to visual amenity. These impacts cannot be mitigated through landscaping or screening and would remain a persistent and intrusive feature in daily life throughout the operational lifetime of the development.

I do not believe the applicant has adequately assessed the cumulative residential impact arising from turbines being visible from multiple sides of the dwelling. The assessment appears to minimise the extent to which the home itself will become visually enclosed and dominated by turbine infrastructure.

Front (to 1st floor junction) 17.5m

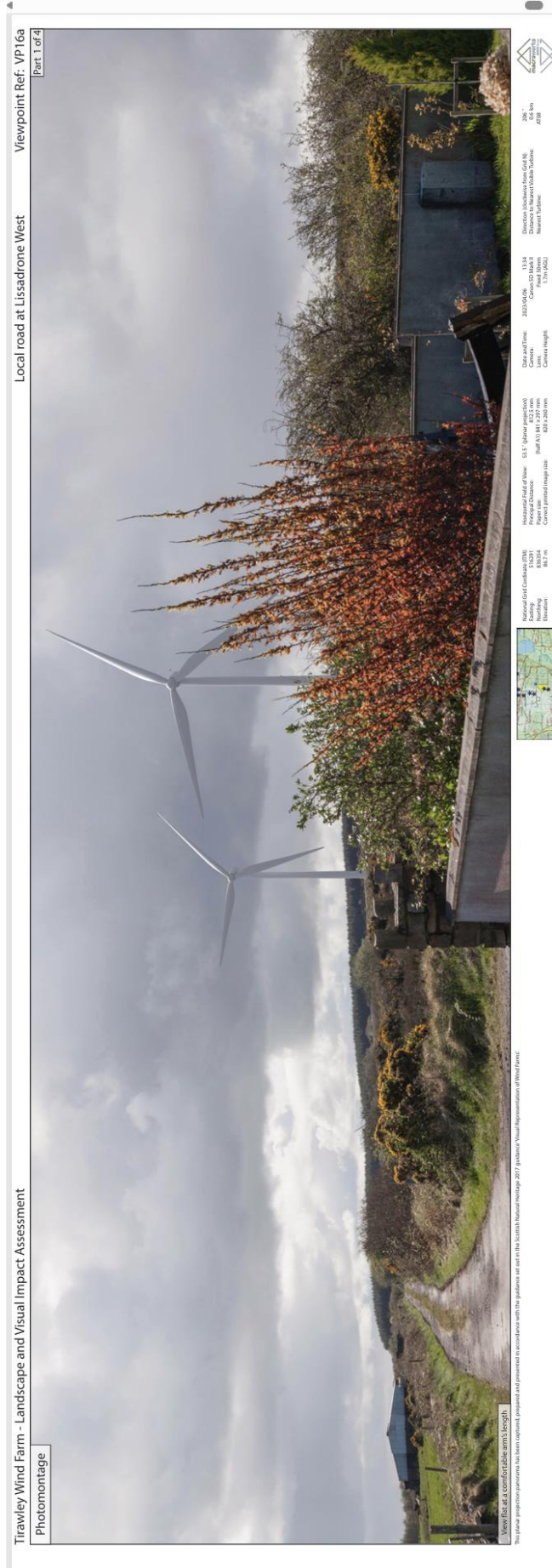
Side (to 1st floor junction) 17.5m

Side (to 1st floor junction) 17.5m

Side (to 1st floor junction) 17.5m

Note: The setbacks are based on the proposed building footprint and are subject to the Local Planning Authority's requirements.

Left taken from the bottom of our driveway



Right taken from outside our garden wall



6. Inadequacy of Photomontages and Visual Assessment

The photomontages submitted with the application are inadequate and do not fully represent the scale, prominence, or cumulative visual impact of the proposed development as it would be experienced across the wider North Mayo landscape.

In particular:

- The photomontages rely on static and limited viewpoints and fail to reflect the panoramic and dynamic experience of visitors travelling between key tourism destinations, including the Céide Fields, Downpatrick Head, and coastal and upland viewpoints along the Wild Atlantic Way. These landscapes are experienced sequentially, with constantly changing views along roads, walking routes and approach corridors, which are not captured in the submitted visualisations.
- The photomontages also fail to adequately represent the visual experience of residents living in close proximity to the proposed turbines. Static images taken from selected viewpoints cannot replicate the day-to-day experience of repeatedly viewing turbines from homes, gardens, local roads, community facilities and places of recreation. In particular, the visualisations do not adequately convey the scale, movement and dominance of turbines exceeding 135metres in height when viewed from nearby residential properties, nor the cumulative effect of multiple turbines being visible from a single location. As a result, the assessment understates the likely impact on residential visual amenity and quality of life for those living within the receiving environment of the development
- The assessment understates the visual prominence of turbines of this scale when viewed against open sky and exposed coastal and inland horizons, particularly in the clear atmospheric conditions typical of this Atlantic setting.
- The photomontages do not adequately convey the cumulative visual effect of multiple turbines appearing simultaneously across the skyline, nor their intervisibility with other existing and proposed wind energy developments within the wider North Mayo area.
- The methodology does not reflect the visitor experience at nationally promoted tourism destinations, where there is a reasonable expectation of coherent, unspoilt and immersive landscapes, rather than intermittent or partial views of large-scale industrial structures.

The inadequacy of the visual assessment is of particular concern given that these locations are protected, curated and actively promoted tourism assets, where landscape quality and visual integrity are central to their value and to significant public investment. A visual assessment that understates or fails to fully communicate the extent of visual intrusion cannot provide a reliable basis for informed decision-making.

These concerns have also been formally acknowledged by the elected members of Mayo County Council. At the Council meeting of 25 March 2024, councillors stated:

“We have invested a lot of money in Downpatrick Head, which has protected views, and we ask that the report carefully examine the photomontages developed for the project, as a number of turbines may be visible. We want to protect our views and the Wild Atlantic

Way.”

(Mayo County Council Meeting Minutes, 25 March 2024, Item No. 4, p.5)

In light of the clear visibility of turbines from multiple tourism destinations, the inadequacy of the photomontages in representing the true visual and cumulative impacts, and the acknowledged concerns of the planning authority, it is submitted that the proposed development would result in an unacceptable adverse impact on nationally significant landscape and tourism assets.

This impact is contrary to the objectives of the Mayo County Development Plan and should weigh significantly against the granting of permission.

7. Noise- Baseline Noise Survey and Predicted Noise Assessments

7.1. Baseline Noise – Reliability of Baseline Noise Survey and Receptor Identification

The **EIAR Noise Chapter (Vol. II, Ch. 11)** and associated appendices (11.1–11.6) identify a number of Noise Sensitive Receptors (NSRs) and Noise Monitoring Locations (NMLs), namely H7, H37, H103, H108, H19, and H14, plus a quarry site. See table 11.8 from chapter 11 inserted below.

However, when the ITM coordinates contained within Table 11.8 are converted using the Irish Grid Reference Finder, the coordinates correspond instead to different receptor IDs: **H4, H178, H2, H92, the Quarry, H89, H91, and H204** (see Figure 2.3).

This apparent discrepancy raises concerns regarding:

- the accuracy and consistency of the baseline noise assessment
- the identification and mapping of Noise Sensitive Receptors
- whether the correct dwellings were assessed
- whether the survey locations represent those closest to the clusters of turbines in the Northern area of the development
- and the overall reliability of the baseline noise dataset relied upon in the EIAR.

These discrepancies undermine confidence in the receptor selection process and the representativeness of the baseline noise survey, particularly given that the nearest inhabited dwelling identified throughout the EIAR, namely my home (H3), does not appear to have been assessed as part of the baseline monitoring survey.

Table 11.8: Baseline Noise Survey

Location	ITM Reference	Description of Location
NML 1 – H7	514628E, 834072N	Monitor located approximately 8m from the end of the house with the main noise sources being low levels off traffic flow and wind effects on vegetation.
NML 2 - H37	516337E, 832024N	Monitor located approximately 35m from the rear of the house with the main noise sources being traffic on nearby roads and local domestic activity.
NML 3A	515513E, 833755N	Monitor located approximately 10m from the end of the house with the main noise sources being low levels of traffic flow, farming activity and wind effects on vegetation.
NML 5 – H103	516678E, 834560N	Monitor located approximately 5m from the old school in proximity to this receptor, with the main noise sources being traffic on local roads and low level farming activity.
NML 7 - Quarry	517084E, 837579N	The main noise sources being distant noise from the sea, low level traffic flow and farming activity.
NML 8 - H108	517041E, 835575N	Monitor located approximately 5m from the end of the house with the main noise sources being distant noise from the sea, low level traffic flow and wind effects on vegetation.
NML 9 - H19	513601E, 835338N	Monitor located approximately 5m from the end of the house with the main noise sources being traffic on local roads and low level farming activity.
NML 831 - H14	516653E, 832742N	Monitor located approximately 5m from the end of the house with the main noise sources being traffic flow on nearby roads.

ITM REF Table 11.8	Converted using Irish grid ref finder	Actual H ID in fig 2.3	Distance to R314	Distance to nearest Turbine Table 15.1
514628E, 834072N	54.24836406876109 -9.309963414706216	H4	384M - R314	555m

516337E, 832024N	54.23024828038031 -9.283176530256615	H178	250M -R314	Over 1.17km
515513E, 833755N	54.24566314790785 -9.296298380255672	H2	610m -R314	322m
516678E, 834560N	54.25308558696446 -9.27865222053572	H92		1095m
517084E, 837579N	54.28027214018676 -9.27325913056019	QUARRY		Not included as a receptor
517041E, 835575N	54.262262613776365 -9.273364117724983	H89		1082m
513601E, 835338N	54.25956449621492 -9.32608210624988	H91	330M R314	1093m
516653E, 832742N	54.23674982043359 -9.278530603663047	H204	830M R314	Over 1.17km

7.2. Questionable Selection of Monitoring Locations

Section 11.2.4 of the EIAR states that:

“The locations for noise monitoring were selected by inspection of Site layout maps and by identifying the nearest receptors surrounding the wind turbines.”

Section 11.3.1 further states that:

“Based on the initial layout, potential noise sensitive receptors, including occupied and unoccupied dwellings, were identified from maps.”

The available evidence does not appear to support these statements.

- **Only 3 of the 8 monitoring locations** are within 1km of a proposed turbine. Of these, one appears to have been excluded from operational noise predictions due to being under the control of the developer, and one is the quarry.
- The quarry has been selected as a noise monitoring location yet it fails to appear in either the noise or shadow flicker predictions as a sensitive receptor for either study. If the quarry is not treated as a noise-sensitive receptor for operational assessment, it is unclear why it was suitable as a representative baseline monitoring location.
- **4 of the 8 monitoring locations** are financially connected to the developer, either through landowner involvement or family connection. It is noted that a significant proportion of the selected monitoring locations appear to be associated with landowners or parties financially connected with the proposed development. While such properties may provide access for monitoring purposes, their selection raises questions as to whether the baseline survey adequately represents the wider non-participating residential population likely to experience operational turbine noise.
- A fifth was but has since changed ownership. This house was sold by a family relative, just prior to this application.
- **4 of the 8 monitoring locations** are unoccupied dwellings, meaning they are not representative of the occupied community likely to experience operational noise.
- **5 of the 8 monitoring locations** are located close to the R314, at distances of approximately **250m–830m**, and therefore do not accurately represent the quieter rural environment in the northern half of the site.

Of particular concern is the absence of any baseline monitoring at, or in the vicinity of, H3, notwithstanding the applicant's repeated identification of this dwelling as the closest occupied non-participating residence to the proposed development. Given its proximity to multiple turbines and its position within the quieter northern part of the receiving environment, H3 represents one of the locations where the reliability of the baseline noise environment is most critical.

Taken together, these factors raise significant concern regarding whether the baseline monitoring survey adequately characterises the existing noise environment at the nearest occupied and potentially worst affected receptors.

In particular, there is concern that the selected monitoring locations may be disproportionately influenced by existing road traffic noise, this combination of factors indicates that the baseline monitoring data do not provide an accurate or representative assessment of the quiet rural residential properties located in close proximity to the proposed turbine clusters on the Northern area if the development.

ETSU-R-97 and the Institute of Acoustics guidance indicate that baseline noise surveys should be carried out as representative Noise Sensitive Receptors and at locations representative of the likely worst affected occupied dwellings.

IOA guide states

2.2.3 "many cases there will be significant variation in general background noise levels within the study area, because of topography and the varying influence of existing noise sources such as roads. In rural or semi-rural areas, noise generated by wind in trees is generally a dominant noise source at higher wind speeds and therefore the proximity of the monitoring location to trees and vegetation, and the type of such vegetation, may be significant. Noise from streams and other watercourses can also be a local factor."

As shown in the table above some locations are close in location to the R314 and some were carried out beside a forestry therefore as shown in 2.2.3 from IOU Guidance this could be significant to the baseline.

The concerns that these standards have not been adequately satisfied within the current assessment and do not adequately represent the most affected by turbine noise.

7.3 Baseline Monitoring Not Representative of the Northern Rural Environment

The concentration of baseline monitoring locations adjacent to the R314 raises concerns as to whether the survey adequately characterises the quieter rural acoustic environment experienced by receptors located further from existing road traffic sources and closer to the northern turbine clusters.

However, the majority of the proposed turbines are located within the northern section of the site, away from the R314 corridor and within a quieter rural environment.

Accordingly, it is unclear why a greater proportion of baseline monitoring was not undertaken at receptors located within the northern half of the site where turbine concentration is greatest and where the receiving noise environment is materially different from roadside locations adjacent to the R314.

The monitoring locations selected near the R314 do not appear to provide an accurate representation of the quieter rural sound environment experienced at receptors in the northern section of the development area.

This raises concerns regarding whether the baseline survey accurately reflects the existing acoustic environment at the locations most likely to experience operational turbine noise impacts.

Noise Monitoring Locations and the Proposed Development



7.4 Contradiction Regarding H2

The EIAR (Section 11.4.3) states:

“There is one dwelling, H2, located approximately 321 m southwest of AT01. This property is under the control of the developer, and the owner is a financial beneficiary of the proposed development. The owner has confirmed that this property will remain unoccupied for the operational lifespan of the proposed development. These dwellings have not been included in this assessment.”

However, as outlined above H2 corresponds to Monitoring Location 3A identified within Table 11.8 and the associated baseline noise monitoring appendices.

The approach adopted appears internally inconsistent. If H2 is considered unsuitable for inclusion within the operational assessment because it is not regarded as a noise-sensitive residential receptor, it is unclear on what basis it was considered suitable as a representative location for establishing the baseline acoustic environment against which operational effects are assessed.

This appears inconsistent with the stated methodology that baseline noise data was obtained at “representative locations close to the Wind Farm Site” for the purpose of characterising the existing noise environment at nearby inhabited dwellings.

7.5 Exclusion of “financially involved” or developer-owned houses is not robust or future-proof

The EIAR proposes to:

- Exclude H1 and H2 from the assessment altogether because they are currently under the control of the developer and claimed to be vacant / to be used as an operations building.
- Apply a higher 45 dB night-time limit at H8 on the basis that these are “financially involved” receptors

This approach raises a number of concerns

1. Planning permission attaches to the land, not to the current owner. There is no guarantee that H1, H2, H8 will remain unoccupied or in the same ownership for the 30-year life of the project.
2. Recent ABP decisions increasingly apply noise limits to “any residential or noise sensitive properties” rather than excluding certain dwellings for ownership reasons.
3. Financial involvement does not alter the status of a dwelling as a residential receptor, nor remove the potential for operational effects on residential amenity, sleep, or health.
4. The approach is inconsistent with the precautionary principle and the EIA Directive requirement to consider likely significant effects over the full life of the project.

The environmental effects of a development must be assessed over the full operational lifetime of the project. The current ownership status or financial arrangements relating to individual dwellings may change over the lifespan of the development and therefore may

not provide a reliable basis upon which to permanently exclude residential receptors from assessment.

7.6 Conclusion on Baseline Noise Assessment

The baseline noise assessment presented within the EIAR contains a number of material inconsistencies and methodological concerns, including:

- discrepancies between receptor IDs and mapped coordinates.
- reliance upon monitoring locations that are financially connected to the development.
- use of unoccupied dwellings as representative receptors.
- concentration of monitoring locations near the R314 rather than within the quieter northern rural environment where turbine density is greatest.
- and exclusion of certain nearby receptors from operational assessment despite their inclusion within the baseline survey.

Taken together, these issues undermine confidence in the representativeness and reliability of the baseline dataset underpinning the operational noise predictions.

In the absence of representative baseline monitoring at the nearest occupied rural dwellings, including H3, it cannot be concluded with sufficient certainty that the operational noise assessment accurately reflects the likely impacts on residential amenity.

Accordingly, the conclusions of the EIAR Noise Assessment cannot be considered robust or reliable.

8. Noise Impact on Our Home (H3)- Closest Inhabited Dwelling

H3 represents the closest occupied non-participating dwelling to the proposed development and is one of the receptors most likely to experience operational turbine noise.

Notwithstanding this, no baseline noise monitoring was undertaken at, or in the vicinity of, the property. This raises a fundamental concern regarding whether the baseline noise environment used to derive applicable limits and assess compliance is representative of the conditions experienced at the dwelling most directly affected by the proposed development.

No baseline noise measurements were undertaken at, or in the vicinity of, my dwelling (H3), despite it being identified by the applicant as one of the nearest and most affected residential receptors.

My home is located within a quiet rural environment characterised by very low residual background noise levels, particularly during night-time periods. The applicant states in multiple places throughout the EIAR

“The closest inhabited dwelling to a turbine not associated with the Proposed Development (H3) is located 554m from the nearest turbine (AT08).”

However, this statement fails to reflect the cumulative influence of the surrounding turbine layout. The applicant’s own EIAR Table 2.3 identifies H3 as being located:

- approximately 601m from turbine AT09;

- approximately 676m from turbine AT10;
and appears to be within approximately 1.04km of at least two additional turbines.
Please see map attached below



Orange Icons represent the turbines and green circles icons represent houses; all turbines were pinned on the map using the developers' own coordinates from Table 2.3 and all houses pinned using the developers' own coordinates provided in Table 11.16.

Accordingly, H3 is exposed not merely to a single turbine, but to the combined operational noise environment arising from multiple turbines in close proximity.

Despite this, no evidence has been provided demonstrating that the baseline monitoring locations selected by the applicant are representative of the acoustic environment experienced at H3. In the absence of site-representative baseline measurements, the validity of the derived noise limits and subsequent operational predictions for H3 cannot be relied upon.

As a consequence:

- the adopted noise limits (Background +5 dB or fixed limits of 43–45 dB LA90) are likely insufficiently protective of the existing quiet rural sound environment at H3;
- the operational noise predictions presented for H3 in Tables 11.8 and 11.17 are based upon unrepresentative baseline assumptions; and
- the actual operational impact at H3 is likely underestimated.

This approach is inconsistent with established guidance and accepted acoustic assessment practice, including:

- the 2006 Wind Energy Development Guidelines, which require protection of noise-sensitive residential properties;
- EPA Guidance Note NG4 (2016), which emphasises preservation of quiet rural soundscapes and avoidance of tonal and impulsive characteristics; and
- ETSU-R-97 and the IOA Good Practice Guide, both of which require representative baseline monitoring.

Accordingly, the baseline assessment methodology adopted within the EIAR does not comply with accepted national and international standards for environmental noise assessment.

8.1 Predicted Operational Noise – Risk of Exceedance

- The applicant’s own modelling demonstrates that H3 experiences predicted operational noise levels at, or extremely close to, applicable guideline thresholds, leaving effectively no meaningful margin for compliance.
- **Table 11.17** predicts noise levels of **44.9B(A)** at certain wind speeds for H3, only 0.1 beneath the **daytime limit of 45dB(A)**.
- The applicant acknowledges in **Section 11.4.3** that predicted operational noise levels **exceed the night-time limit (43 dB(A))** at six receptors including H3, H4, H6, H10, H11 and H13.

Table 11.16: Predicted Noise Levels as LA90 at Varying Wind Speeds from the Proposed Development

	ING	ING	4 m/s	5 m/s	6 m/s	7 m/s	8 m/s	9+ m/s
House ID	Easting	Northing	dBA	dBA	dBA	dBA	dBA	dBA
H1*	515110	837466	38.2	42.3	46.1	48.4	48.7	48.7
H2*	515526	833767	35.3	39.4	43.2	45.5	45.8	45.8
H3	516227	836339	34.4	38.5	42.3	44.6	44.9	44.9

Section 11.5.2 states:

“Therefore, mitigation measures are required for exceedances at these receptors.”

The proposed mitigation initially relies upon “directivity” adjustments. However, the applicant’s own results demonstrate that, even following application of these adjustments, the 43 dB(A) night-time limit remains exceeded at three receptors.

11.5.4.1 Vestas V117 – Candidate

Table 11.20: Proposed Impact of Directivity Assessment at receptors in exceedance (12m/s)

Wind Direction (Blowing Towards)	H3	H4	H6	H10	H11	H13
0	44.7	42.3	41.9	42.1	42.7	41.4
45	44.1	40.7	40.9	41.3	41.8	40.9
90	42.9	39.1	40.7	41.1	40.9	40.1
135	42	40.2	40.2	40.4	40.5	40.4
180	40.5	41.8	40.7	40.3	41.1	40.7
225	41.2	43.2	40.6	40.1	41.7	41.4
270	42.8	43	41.4	41.2	43	41.8
315	43.9	42.8	42.5	42.5	43.2	41.4

The applicant subsequently introduces turbine curtailment measures in an attempt to achieve compliance. However, the resulting predicted levels at H3 remain only marginally below the applicable limit, specifically:

- 0.4 dB below the limit in one scenario;
- 0.1 dB below the limit in another scenario; and
- 0.3 dB below the limit in a further scenario.

Similarly marginal outcomes are shown for other receptors, including:

- H4, predicted at only 0.1 dB below the limit; and
- H11, predicted directly at the 43 dB(A) threshold.

Table 11.21: Impact of Curtailment Strategy at Receptors in exceedance of 43 dB(A)

Receptor	Wind Direction (Blowing Towards)	Predicted Noise Level from Directivity (dBA)	Predicted Noise Level from Curtailment Strategy (dBA)	Reduction (dBA)
H3	North-East	44.1	42.6	1.5
	East	44.7	42.9	1.8
	South-East	43.9	42.7	1.2
H4	South-West	43.2	42.9	0.3
H11	South-East	43.2	43	0.2

Accordingly, the EIAR demonstrates that:

- exceedances are predicted prior to mitigation;

- compliance is only achieved through layered mitigation assumptions;
- the final predicted outcomes rely upon negligible margins of tolerance; and
- there remains a significant risk of actual exceedance during operation.

In these circumstances, the assessment cannot reasonably conclude that operational noise impacts at H3 will remain within acceptable limits with sufficient certainty to protect residential amenity and residential health.

The predicted compliance margins presented for H3 are extremely small and fall within normal acoustic modelling uncertainty. The assessment relies upon multiple layers of mitigation, including directivity corrections and turbine curtailment, in order to achieve nominal compliance with the applicable limits.

However, no meaningful tolerance remains to account for:

- meteorological variability;
- turbine performance variation;
- cumulative turbine interaction;
- ground condition variability;
- amplitude modulation;
- tonal characteristics; or
- low frequency noise effects.

Given that H3 is already predicted to operate at or extremely close to both the daytime 45dBa and night-time 43dBa limits, the assessment does not demonstrate robust or reliable compliance with sufficient certainty to protect residential amenity within this quiet rural environment.

8.1.1 Amplitude Modulation

The assessment of operational noise should not be limited solely to compliance with overall noise limits. The character of turbine noise, including the potential occurrence of amplitude modulation, is of particular importance in a quiet rural environment where fluctuations in noise levels may be more perceptible, especially during evening and night-time periods when residents have a reasonable expectation of peace and tranquillity.

Given that H3 is the closest occupied non-participating dwelling to the proposed development and is located within proximity of multiple turbines, it is unclear whether the assessment has adequately considered the potential cumulative effect of amplitude modulation arising from several turbines operating simultaneously. This is particularly relevant given that the predicted noise levels at H3 are already close to the applicable limits, leaving limited margin for additional perceptible noise characteristics.

The Developers own EIAR section 11.2.7 acknowledges

“Current Scientific knowledge is such that AM cannot be predicted at the planning stage, but can only be measured once the wind farm becomes operational”. “An appropriate penalty can be added onto the measured LA90 noise level, to ensure overall noise levels comply with the applicable noise limit.”

On page 53 of Chapter 11, the applicant states

“If specific conditions arise that AM is generated, the operator can amend the operating mode to sufficiently mitigate the generation of AM or reduce the overall noise level in compensation to achieved set noise limits.”

This is particularly relevant in the case of H3 because the Applicant's own assessment demonstrates that compliance with the 43 dB(A) night-time limit is only achieved through the application of multiple mitigation measures, including directivity corrections and turbine curtailment.

Even after these mitigation measures have been applied, the predicted noise levels at H3 remain only marginally below the applicable limit, with compliance margins as low as 0.1 dB. Similar negligible margins are evident at other nearby receptors.

Accordingly, the assessment leaves virtually no residual headroom to accommodate additional noise effects that may arise during operation, including amplitude modulation, modelling uncertainty, meteorological variability, turbine performance variation or cumulative turbine interaction.

The Applicant's proposed approach relies upon identifying and mitigating amplitude modulation after the development becomes operational. However, the assessment has not demonstrated that sufficient margin exists within the predicted noise environment at H3 to accommodate such effects while continuing to achieve compliance with the applicable noise limits.

In circumstances where predicted compliance is dependent upon multiple layers of mitigation and margins of less than 0.1 dB, the Board cannot be satisfied that operational noise impacts at H3 will remain within acceptable limits throughout the operational life of the development.

The Applicant's own assessment demonstrates that exceedances are predicted prior to mitigation and that compliance is only achieved through successive layers of operational assumptions, including directivity corrections and turbine curtailment. The possibility of amplitude modulation is then addressed through a further reactive mitigation approach after commissioning. The assessment therefore relies upon a sequence of assumptions and future interventions in order to achieve compliance at H3, rather than demonstrating a robust margin of compliance at the outset.

8.1.2 Protection of residents in relation to health and amenity

The purpose of noise assessment is not solely to achieve numerical compliance, but to ensure that the residential amenity and wellbeing of nearby occupants are adequately protected over the operational lifetime of the development. This is particularly important where a family home is located in close proximity to multiple turbines and where residents may experience repeated exposure during day-time, evening and night-time periods. The

dwelling is a permanent occupied family home where residents will experience the effects of the proposed development continuously over the operational lifetime of the project. The assessment of residential amenity must therefore consider the reality of continuous exposure over many years, including the ability to enjoy outdoor areas, maintain a peaceful internal environment, and achieve undisturbed sleep.

In *The People Over Wind CLG v An Bord Pleanála 7 Others* 2024 IECH 136, Justice Egan observed: “there is not a binary choice to be made here between the generation of clean energy by a wind farm, and a good night’s sleep for its neighbours. It should be possible to achieve both.”

This statement recognises that renewable energy development must be balanced with the protection of the health and wellbeing of those living near such developments.

The proposed development relies on the Wind Energy Development Guidelines for Planning Authorities (2006), which continue to permit night-time wind turbine noise levels of up to 43 dB LA90 at neighbouring dwellings. These guidelines are now almost twenty years old and do not reflect the current scientific understanding of environmental noise impacts on health.

The World Health Organization (WHO) Environmental Noise Guidelines for the European Region (2018) recommend that wind turbine noise should not exceed 45 dB Lden, which is equivalent to approximately 37 dB LA90. The noise predictions for the proposed Tirawley Wind Farm are presented in LA90 format, making this comparison directly relevant.

The WHO states that these recommendations are intended to protect human health and are based on evidence linking wind turbine noise exposure with adverse effects, including annoyance, sleep disturbance.

Furthermore, the Environmental Protection Agency's State of the Environment Report 2024, in summarising WHO guideline values for environmental noise, notes that:

"The purpose of the guidelines is to provide recommendations for protecting human health."

The EPA further notes that

“The guidelines formulate recommendations, based on the available evidence, and maximum exposure values based on increasing risk of adverse health effects.”

The EPA is Ireland's statutory authority for environmental noise and its recognition of the WHO guideline values is highly relevant to the consideration of potential impacts on local residents.

International experience demonstrates that more protective standards are achievable. For example, New South Wales, Australia, applies a base night-time limit of 33 dB LA90 together with penalties for special audible characteristics such as tonal noise and amplitude modulation. By contrast, the Irish 2006 Guidelines permit substantially higher noise levels and contain no equivalent penalties for these particularly intrusive characteristics.

The difference between the WHO-equivalent level of approximately 37 dB LA90 and the Irish limit of 43 dB LA90 is significant. Acoustic experts generally recognise that a 10 dB increase is perceived as approximately twice as loud. Consequently, the Irish limits permit a

substantially greater level of disturbance than that contemplated by current international public health guidance.

The planning authority is required to consider the likely significant effects of the development on human beings and residential amenity. Reliance solely on the 2006 Guidelines, without proper consideration of the WHO recommendations, EPA observations, and current scientific evidence regarding sleep disturbance and health impacts, would fail to provide adequate protection for nearby residents.

Accordingly, the Board should carefully consider whether the Applicant has demonstrated that the proposed development can operate without giving rise to unacceptable effects on the health, sleep, wellbeing and residential amenity of nearby residents, particularly where the nearest occupied non-participating dwelling is predicted to experience noise levels close to applicable limits and where compliance relies upon operational mitigation measures

The objective should be to achieve both renewable energy generation and the protection of residents' health and sleep, consistent with the principle articulated by Justice Egan.

8.1.3 Wind Speeds

A further concern arises in relation to the wind speed range covered by the proposed curtailment strategy. The applicant states that night-time curtailment is required for wind speeds between 7 m/s and 12 m/s. The baseline/background assessment is also presented up to 12 m/s. However, the receptor-specific prediction tables do not clearly present separate predicted noise levels for 10 m/s, 11 m/s or 12 m/s, instead grouping these as "9+ m/s".

This is not sufficiently transparent, particularly at receptor H3, where the mitigated prediction is stated to be only 42.9 dBA for easterly winds, just 0.1 dBA below the 43 dBA night-time limit. Given this extremely small margin, the applicant should be required to provide full receptor-specific, direction-specific and wind-speed-specific predictions for 7, 8, 9, 10, 11 and 12 m/s, including unrounded calculated values and the turbine operating mode assumed at each wind speed.

Without this information, it is not possible to verify that the proposed curtailment strategy will reliably secure compliance with the 43 dBA night-time limit across the full stated 7–12 m/s operating range.

This lack of transparency is particularly relevant in the case of H3, where the Applicant's own assessment demonstrates that compliance is achieved with a margin of only 0.1 dBA under certain operating conditions. In circumstances where such a limited margin exists, the Board should be satisfied that the assessment provides sufficient detail to verify compliance under all wind speeds and operational scenarios for which mitigation is proposed.

8.2 Conclusion on Predicted Operational Noise at H3

The EIAR demonstrates that H3 is one of the nearest non-participating residential receptors to the proposed development and is exposed to the combined influence of multiple turbines in close proximity.

Despite the significance of this receptor, no baseline noise monitoring was undertaken at, or demonstrated to be representative of, the acoustic environment experienced at H3. The operational assessment instead relies upon baseline data derived from other locations and the Applicant has not demonstrated that these locations adequately reflect the existing quiet rural sound environment surrounding the property.

The Applicant's own assessment demonstrates that compliance at H3 is not achieved under the initial operational scenario and instead depends upon a sequence of mitigation measures, including directivity adjustments and operational curtailment. Even following these measures, the predicted residual margin between operational noise levels and the applicable limits is extremely limited.

The assessment further acknowledges that amplitude modulation cannot be predicted at the planning stage and may require additional operational intervention should it arise. Accordingly, the assessment relies upon a sequence of assumptions, mitigation measures and future operational controls in order to achieve compliance, rather than demonstrating a robust margin of compliance at the outset.

Having regard to the absence of representative baseline monitoring, the negligible compliance margins predicted for H3 and the acknowledged uncertainty surrounding operational noise characteristics, the Board cannot be satisfied that the proposed development will adequately protect residential amenity at H3 or that operational turbine noise will remain within acceptable limits throughout the operational lifetime of the development.

Accordingly, it is submitted that the information contained within the EIAR does not provide sufficient certainty that the operational noise effects at H3, as the closest occupied non-participating dwelling, have been fully and robustly assessed. The absence of representative baseline monitoring, the proximity of multiple turbines, the reliance upon successive operational mitigation measures, and the extremely limited residual compliance margins collectively raise reasonable doubt as to whether an acceptable standard of residential amenity can be maintained throughout the operational lifetime of the development.

8.3 Legal Precedents

The principles applied in recent wind turbine nuisance cases are rooted in the long-established Irish law of nuisance, as recognised by the Supreme Court in *Hanrahan v Merck Sharp & Dohme (Ireland) Ltd* [1988] IESC 1, which recognised that the law protects the ordinary and reasonable enjoyment of property from substantial environmental interference.

The significance of uncertainty in relation to wind turbine noise impacts is reinforced by recent Irish High Court jurisprudence concerning operational wind farms. In *Webster & Anor v Meenacloghspar (Wind) Ltd* [2024] IEHC 136, the High Court found that wind turbine noise constituted an actionable nuisance, with particular regard to its characteristics, including

amplitude modulation, low-frequency components, and the resulting impacts on sleep and residential amenity. The judgment illustrates that compliance with conventional noise assessment metrics may not, of itself, guarantee the protection of nearby residents where the specific character of turbine noise gives rise to significant adverse effects.

Similarly, in *Byrne & Moorhead v ABO Energy Ireland Ltd* [2025] IEHC 330, the High Court found that noise from an operational wind farm constituted a substantial interference with the residents' enjoyment of their home and ordered the permanent shutdown of three turbines. While both cases concerned private nuisance claims relating to operational wind farms rather than the assessment of a proposed development under the planning code, they provide important cautionary examples of the consequences where turbine noise gives rise to unacceptable impacts on nearby residents.

In the present case, the EIAR predicts noise levels at H3 that are close to the applicable limits, relies upon operational mitigation measures to achieve compliance, and acknowledges that amplitude modulation cannot be reliably predicted at the planning stage. These uncertainties are particularly relevant given the findings of the High Court in the above cases, which demonstrate that the actual effects of turbine noise may depend not only on predicted sound levels but also on its specific characteristics and its impact on the occupiers of nearby dwellings. Accordingly, the Board should adopt a cautious and precautionary approach in determining whether the noise assessment and proposed mitigation measures provide sufficient certainty that residential amenity and the wellbeing of nearby residents will be adequately protected.

8.4 Construction Noise Impact on H3

Table 11.13 of the EIAR identifies H3 as being approximately 555 m from the nearest turbine construction activity (T2), with predicted construction noise levels ranging from 32–51 dB(A) LAeq,1hr, with the highest levels associated with rock breaking and excavator loading. While these predicted levels are considered to comply with the applicable construction noise guidance, compliance with absolute construction noise limits alone does not fully address the potential impact on residential amenity. The assessment is based on average hourly noise levels (LAeq,1hr) and may not fully reflect the level of disturbance experienced by residents from intermittent or impulsive noise events, including rock breaking, heavy machinery movements, reversing alarms and increased construction traffic.

The construction noise assessment also references BS 5228, which identifies construction noise effects as potentially significant where the total noise level exceeds the pre-construction ambient noise level by more than 5 dB over a prolonged period, generally considered to be one month or more. However, no baseline noise monitoring was undertaken at H3 itself. The EIAR relies on baseline monitoring at other locations considered representative of the local noise environment and, for the purposes of operational noise assessment, applies the lowest measured background noise levels recorded at NML831 (H14) as the basis for the assessment of all receptors. However, the EIAR does not provide sufficient evidence to demonstrate that the acoustic environment at H3 is comparable to

the selected monitoring locations or that the potential for a prolonged increase in construction noise above the existing ambient environment at H3 has been adequately assessed.

This is particularly relevant because H3 is identified as a sensitive receptor within the EIAR and is one of the properties predicted to experience operational noise levels exceeding the 43 dB(A) night-time limit prior to the application of mitigation or adjustments. Given the sensitivity of this receptor, a more receptor-specific assessment of construction noise impacts would be appropriate.

Furthermore, the conclusion that construction noise effects at H3 will be “not significant” does not clearly address the expected duration, frequency, or timing of the highest noise-generating activities, particularly rock breaking and foundation works, which may occur repeatedly over an extended period and could result in a significant reduction in residential amenity despite compliance with average noise limits.

While temporary construction noise is inevitable in a development of this scale, the proximity of H3 to the nearest construction works and its identified sensitivity warrants a more precautionary and receptor-focused approach to construction noise management, including further justification of baseline assumptions, clear information on the duration of high-noise activities, and appropriate mitigation and monitoring measures where required.

9. Cumulative Operational Effects

The assessment of cumulative effects is particularly important in the case of H3, given that the dwelling is already identified as the closest occupied non-participating residence to the proposed development. The cumulative experience of residents does not occur in separate categories of visual impact, noise, shadow flicker and associated infrastructure; rather, these effects are experienced together as part of the daily residential environment.

9.1 Battery Energy Storage System (BESS)

The proposed development does not consist solely of wind turbines. It includes a range of associated industrial infrastructure, including the battery energy storage system, electrical infrastructure and substation facilities. The cumulative effects of these elements, particularly in relation to noise, landscape character and the overall industrialisation of the receiving environment, require careful assessment.

The applicant’s assessment of cumulative effects assessment (11.4.4) does not acknowledge the combined impact arising from both the proposed wind turbines and the Battery Energy Storage System (BESS).

While the predicted BESS noise contribution at H3 is stated to be approximately 8.3 dB LAeq,1hr, this does not remove the requirement to assess the cumulative acoustic effect of all operational components acting together.

Although 8.3 dB LAeq,1hr may appear low in isolation, noise impacts cannot be considered independently where receptors are already predicted to experience turbine noise levels at, or extremely close to, applicable guideline thresholds. The applicant’s own modelling demonstrates that H3 is predicted to experience operational turbine noise levels within only 0.1–0.4 dB of the applicable daytime and night-time limits following mitigation and

curtailment measures. In such circumstances, even relatively modest additional noise contributions warrant careful consideration as part of the overall cumulative acoustic environment.

Accordingly, the EIAR has not robustly demonstrated that the cumulative operational noise environment arising from both the wind farm and associated BESS infrastructure will remain within acceptable limits at H3 over the operational lifetime of the development.

9.2 Cumulative Noise Exposure from Multiple Turbines for H3

The EIAR repeatedly refers to H3 primarily in the context of its distance from the “nearest turbine”. However, this approach does not adequately assess the cumulative acoustic environment arising from the overall turbine layout surrounding the dwelling.

H3 is not exposed to noise from a single isolated turbine. Rather, the dwelling is situated within a concentrated turbine cluster, with turbines positioned to the north, south and west of the property. The applicant’s own documentation identifies H3 as being located approximately:

- 554m from turbine AT08;
- 601m from turbine AT09; and
- 676m from turbine AT10;

with additional turbines also located within relatively close proximity.

Accordingly, the acoustic environment experienced at H3 will arise from the combined and overlapping operation of multiple turbines functioning simultaneously under varying wind, atmospheric and operational conditions. This cumulative scenario is materially different from the effect of an individual turbine assessed in isolation.

The combined operational effect has the potential to increase:

- overall noise exposure levels;
- audibility and perceptibility of turbine noise;
- amplitude modulation effects;
- frequency and persistence of blade interaction noise;
- low-frequency noise accumulation; and
- night-time disturbance within an otherwise low-background rural environment.

The significance of these potential cumulative effects is increased by the particular circumstances of H3, namely its status as the closest occupied non-participating dwelling, the absence of receptor-specific baseline noise monitoring, and the fact that compliance with applicable noise criteria is achieved only following the application of multiple mitigation measures with extremely limited residual margins.

The spatial arrangement of turbines around H3 means that turbine noise may be experienced from multiple directions simultaneously, thereby reducing opportunities for natural acoustic screening or periods of relative acoustic relief. This issue may become particularly significant during night-time periods and under certain wind directions where

receptors may experience concurrent downwind or crosswind propagation effects from several turbines at once.

Despite these circumstances, the EIAR does not appear to provide a sufficiently detailed assessment of:

- the cumulative directional impact of multiple turbines operating concurrently around H3;
- potential overlapping amplitude modulation effects;
- periods of enhanced audibility associated with turbine synchronisation;
- worst-case meteorological or atmospheric stability conditions; or
- the potential interaction between low background noise levels and turbine audibility at this receptor.

The applicant's own baseline monitoring indicates a very low existing rural background noise environment. In such circumstances, even moderate increases in turbine-related noise may become highly perceptible and intrusive, particularly during night-time periods when ambient environmental noise is reduced.

The assessment therefore fails to demonstrate, with sufficient scientific certainty, that the cumulative operational effect of multiple surrounding turbines will not result in significant adverse impacts on residential amenity, sleep quality and quality of life at H3.

Furthermore, reliance upon averaged predictive noise metrics alone may not adequately capture intermittent or character-related effects such as amplitude modulation, tonal characteristics, periodic blade interaction or low-frequency noise perception, all of which may materially influence the lived experience of nearby residents.

The proximity of turbines AT09, AT10 and AT11 to House 3 creates a unique cumulative exposure scenario involving overlapping noise emissions, directional propagation, amplitude modulation, low-frequency sound, visual dominance and repeated shadow flicker impacts. Even where individual turbines may theoretically comply with guideline thresholds in isolation, the combined operational effect on this dwelling may nevertheless result in significant adverse impacts on residential amenity, sleep quality and overall quality of life. The concentration of multiple turbines surrounding a single residential receptor is difficult to reconcile with the protection of residential amenity required under principles of proper planning and sustainable development.

Accordingly, the EIAR has not demonstrated with sufficient certainty that the cumulative operational effects of the development will remain within acceptable limits for the occupants of H3 throughout the operational lifespan of the project

While individual environmental assessments may conclude that each effect is acceptable in isolation, the Board must consider the cumulative burden placed upon the nearest occupied dwelling when visual dominance, operational noise, amplitude modulation, shadow flicker, lighting, and the presence of associated infrastructure are experienced simultaneously over the lifetime of the development.

A family does not experience the development in separate technical chapters. The family experiences it as a single, continuous alteration of their home environment over the 35-year operational lifetime of the project.

10.Shadow Flicker

Internal Inconsistency Regarding the Closest Inhabited Dwelling (H3) and Reliability of the Shadow Flicker Assessment

The EIAR contains a significant internal inconsistency regarding the identification of the closest inhabited dwelling to the proposed turbines.

In Chapter 2 (Development Description), Section 2.4.1, the applicant expressly states:

"The closest inhabited dwelling to a turbine not associated with the Proposed Development (H3) is located 554 m from the nearest turbine (AT08)."

Chapter 2 further confirms in Table 2.3 that H3 is the nearest residential receptor to three turbines:

- AT08 – 554.71 m from H3;
- AT09 – 601.02 m from H3; and
- AT10 – 676.40 m from H3.

These distances identify H3 as the closest inhabited dwelling to the proposed development and one of the most exposed residential receptors.

However, in Chapter 15 (Shadow Flicker), Section 15.2.7, the applicant states:

"The closest inhabited dwelling to a turbine not associated with the Proposed Development (H5) is located 554 m from the nearest turbine (AT08)."

This statement directly conflicts with both Chapter 2 and the applicant's own receptor data contained within Chapter 15. Table 15.1 records H3 at approximately 555 m from turbine AT08, while H5 is recorded at approximately 559 m from turbine AT01. Therefore, the applicant's own data demonstrates that H3, not H5, is the closest inhabited dwelling.

This inconsistency is particularly concerning because H3 is also identified as one of the most affected receptors in the entire shadow flicker assessment. The applicant predicts:

- Expected shadow flicker exposure of 15 hours 30 minutes per year;
- Maximum daily shadow flicker exposure of 54 minutes per day; and
- A worst-case theoretical exposure of 110 hours 08 minutes per year before mitigation.

The contradiction between chapters raises concerns regarding the accuracy, consistency and quality control of the EIAR. Where the assessment of residential effects depends on the identification of the closest and most affected receptors, inconsistencies of this nature undermine confidence in the conclusions reached.

Given that H3 is consistently identified elsewhere in the EIAR as the closest inhabited dwelling and is predicted to experience one of the highest levels of shadow flicker, the

Planning Authority should critically examine the reliability of the shadow flicker assessment and seek clarification regarding the apparent discrepancy.

11.Shadow Flicker Impact on Dwelling H3

It was only upon review of the applicant's Environmental Impact Assessment Report, following the lodgement of the application, that my family became aware that our home was identified as a receptor predicted to experience shadow flicker impacts. This reinforces the concerns previously outlined regarding the absence of meaningful engagement with the nearest affected residents during the pre-application consultation process.

11.1. Applicant's Predicted Shadow Flicker Impact at H3

The applicant's EIAR identifies H3 as the closest inhabited dwelling to a turbine not associated with the proposed development.

According to the EIAR:

- H3 is located approximately 554 metres from turbine AT08 (Table 2.3)
- H3 is located approximately 601 metres from turbine AT09 (Table 2.3)
- H3 is located approximately 676 metres from turbine AT10 (Table 2.3)
- This places the dwelling well within the applicant's shadow flicker assessment study area of 10 rotor diameters (1,170 metres)
- Predicts an expected annual shadow flicker duration at H3 of approximately 15 hours and 30 minutes per year
- Predicts a maximum daily shadow flicker duration of up to 54 minutes per day
- Identifies a theoretical worst-case shadow flicker exposure of 110 hours and 8 minutes annually prior to mitigation.

H3 is identified in the applicant's assessment as one of the most affected occupied dwellings within the study area. The EIAR predicts a maximum shadow flicker exposure of 54 minutes per day prior to mitigation, exceeding the commonly applied guideline threshold of 30 minutes per day by approximately 80%. The assessment also states that 56 receptors are predicted to exceed the 30-minute daily threshold before mitigation measures are implemented.

The dwelling is located in close proximity to several turbines, with AT08, AT09 and AT10 situated approximately 555 m, 601 m and 676 m away respectively. Additional turbines are proposed at distances of approximately 828 m and 1.06 km. As a result, H3 is positioned within a concentration of turbine infrastructure extending around the dwelling from multiple directions. Turbines are proposed to the south, west and north, creating a cumulative turbine presence that is relevant when assessing the overall residential experience, beyond the individual turbines identified as the principal shadow flicker contributors.

Shadow flicker is recognised as a residential amenity issue because it can result in recurring fluctuations in light intensity within homes and outdoor living areas. The applicant's modelling indicates that H3 may experience prolonged periods of shadow flicker on certain days, with the potential to interfere with the normal use and enjoyment of the property. Such effects may be particularly noticeable within living rooms, kitchens, home working spaces, gardens and other residential amenity areas.

The significance of the predicted impact is heightened by the fact that compliance with recommended shadow flicker limits can only be achieved through operational mitigation measures involving automated turbine shut-down systems. As a result, protection of residential amenity at H3 is dependent upon the ongoing effectiveness, maintenance and operation of those systems throughout the lifetime of the wind farm.

Given its proximity to multiple turbines and the level of exposure predicted in the applicant's own assessment, H3 represents one of the most sensitive residential receptors within the study area. The predicted shadow flicker effects therefore give rise to legitimate concerns regarding the adequacy of residential amenity protection at this location.

11.2. Conflict with Applicable Guidance and Policy

11.2.1 Wind Energy Development Guidelines 2006

The Wind Energy Development Guidelines for Planning Authorities (2006) recommend that shadow flicker at neighbouring dwellings should not exceed:

- 30 minutes per day; or
- 30 hours per year.

While the guidelines specifically reference dwellings within 500 metres, the applicant has applied these thresholds to all receptors within 10 rotor diameters.

The applicant's own assessment predicts up to 54 minutes per day of shadow flicker at H3, which exceeds the 30-minute daily threshold adopted within the EIAR assessment.

The applicant's own assessment predicts exceedance of the adopted daily shadow flicker threshold at H3 prior to mitigation, demonstrating that compliance is dependent upon the successful operation of mitigation measures throughout the operational life of the development.

11.2.2 Draft Revised Wind Energy Development Guidelines 2019

The Draft Revised Wind Energy Development Guidelines (2019) adopt a more precautionary approach to shadow flicker impacts, including:

- a policy objective of avoiding shadow flicker at residential properties;
- mitigation through pre-programmed turbine shutdown systems; and
- the use of enforceable operational controls.

The EIAR predicts significant shadow flicker impacts at H3 in the absence of mitigation. However, no evidence has been provided demonstrating that the proposed mitigation measures will eliminate shadow flicker effects in practice or ensure ongoing compliance over the operational lifetime of the development.

The proposal therefore appears inconsistent with the precautionary approach reflected in the Draft Revised Guidelines.

11.2.3 Setback Distance and Cumulative Effects

Although H3 is located approximately 554 metres from the nearest turbine (AT08), this represents only marginal separation from the minimum 500-metre setback referred to within national guidance.

In addition, multiple turbines are located in close proximity to H3, including turbines positioned to the south, west and north of the dwelling.

The EIAR does not adequately assess the cumulative residential experience arising from this turbine arrangement or the likelihood of recurring shadow flicker affecting multiple elevations and habitable rooms of the dwelling throughout the day and across seasonal sun paths

H3 is not only the closest inhabited dwelling to the proposed development but is also located within relatively close proximity of multiple turbines extending from approximately 555 m to 1.06 km from the property. The cumulative presence of turbines at varying distances and orientations around the dwelling distinguishes H3 from many other receptors assessed within the EIAR and warrants particular consideration when assessing residential amenity impacts.

The positioning of turbines around multiple sides of the dwelling materially increases the likelihood of recurring and prolonged shadow flicker exposure and contributes to an overbearing and intrusive residential environment.

When considered together with the predicted duration of shadow flicker, the proximity of multiple turbines, and the dependence on operational mitigation measures, the assessment does not clearly demonstrate that the long-term residential amenity of the nearest occupied non-participating dwelling will be adequately protected.

11.3. Inadequacy of Proposed Mitigation

The proposed mitigation strategy appears to rely primarily upon operational management measures after the development has become operational. This approach places the burden on affected residents to experience, identify and report potential impacts before corrective action is implemented. In the absence of clear, receptor-specific mitigation measures, monitoring arrangements and enforceable operational controls, it is difficult to conclude with certainty that residential amenity at H3 will be adequately protected.

11.3.1 Lack of Receptor-Specific Mitigation

No receptor-specific mitigation plan is provided for H3. In particular, the EIAR does not include:

- identification of the specific turbines contributing to predicted exceedances
- receptor-specific sun angle analysis
- a defined curtailment schedule demonstrating how exceedances at H3 will be prevented.

11.3.2 Absence of Enforceable Controls

The EIAR does not provide binding commitments in relation to:

- real-time monitoring of shadow flicker
- independent verification or auditing of turbine shutdown systems
- reporting of compliance to the planning authority or
- publicly accessible records of turbine curtailment.

No evidence has been provided demonstrating how turbine curtailment would be independently verified or enforced over the operational lifetime of the development.

Instead, the proposed approach appears reliant upon complaint-led investigation after impacts have already occurred. This does not appear to reflect the preventative and precautionary approach to shadow flicker management identified within the Draft Revised Wind Energy Development Guidelines (2019).

11.3.3 Unproven Effectiveness of Mitigation

The EIAR concludes that residual shadow flicker effects following mitigation will be “not significant”. However, this conclusion is not supported by demonstrable evidence confirming that the proposed mitigation measures will reliably eliminate exceedances at H3 in practice.

Accordingly, the conclusion appears to rely on assumed mitigation effectiveness rather than secured and enforceable controls.

11.3.4 Dependence on Operational Mitigation

A particularly significant aspect of the applicant's assessment is that compliance with shadow flicker guidance is not achieved through turbine siting, turbine separation distances or project design.

Instead, the EIAR acknowledges that compliance is dependent upon automated turbine shut-down systems operating throughout the lifetime of the development. The EIAR states that when conditions exist for shadow flicker to affect nearby properties, the relevant turbine will automatically shut down until the risk has passed.

The applicant's own assessment therefore demonstrates that the proposed development, as designed, would result in shadow flicker impacts exceeding recognised guidance thresholds at H3 unless active operational intervention occurs.

In effect, protection of residential amenity at H3 is dependent upon the continuous effectiveness, maintenance and enforcement of turbine curtailment systems for the entire operational life of the wind farm.

This raises legitimate concerns regarding long-term compliance, monitoring, enforcement and protection of residential amenity.

Significantly, the applicant's own assessment predicts that H3 would experience up to 54 minutes of shadow flicker on a single day in the absence of mitigation. This exceeds the adopted daily guideline threshold by approximately 80%. The need for turbine shutdown to achieve compliance demonstrates that the proposed turbine layout itself does not avoid shadow flicker impacts at the closest inhabited dwelling.

11.4. Impact on Residential Amenity and Wellbeing

A dwelling is not experienced as a technical receptor but as a family home. The recurring passage of moving shadows across windows, internal rooms and external amenity spaces has the potential to interfere with the normal enjoyment of the home. This is particularly significant where the affected property is occupied on a permanent basis and where exposure may continue over the operational lifetime of the proposed development.

The EIAR acknowledges that shadow flicker can result in disturbance and annoyance to nearby residents.

For H3, the predicted exposure of up to 54 minutes in a single day represents a significant and intrusive impact on normal residential use and enjoyment of the dwelling.

The concern is not solely the duration of predicted shadow flicker but also the concentration of turbine infrastructure surrounding the dwelling. H3 is located within relatively close proximity of multiple turbines extending from approximately 555 m to 1.06 km from the property. This contributes to the cumulative residential amenity burden experienced by occupants and reinforces concerns regarding the suitability of the proposed layout in the immediate vicinity of the closest inhabited dwelling.

The impact is further exacerbated by the spatial arrangement of turbines surrounding the property, including turbines positioned to the south, west and north of the dwelling. This increases the likelihood that shadow flicker effects may affect multiple rooms and elevations rather than a single isolated area.

The EIAR also acknowledges that shadow flicker cannot be predicted on a day-to-day basis. This unpredictability introduces additional disturbance and uncertainty for residents attempting to use and enjoy their home environment normally.

Taken cumulatively, the predicted impacts raise significant concerns regarding whether an acceptable standard of residential amenity can be maintained at H3 throughout the operational lifetime of the development.

11.5. Conclusion

The applicant's own EIAR predicts that H3 will experience:

- approximately 15.5 hours of shadow flicker annually
- up to 54 minutes of shadow flicker in a single day
- significant theoretical worst-case exposure prior to mitigation.

These impacts are particularly significant because the applicant's own assessment predicts exceedance of the adopted daily shadow flicker threshold at H3 prior to mitigation. The EIAR demonstrates that compliance can only be achieved through operational turbine shut-down measures rather than through the design or layout of the development itself.

H3 is identified throughout the EIAR as the closest inhabited dwelling to the proposed turbines and one of the most affected occupied receptors within the study area. The applicant's own modelling predicts substantial shadow flicker exposure at this dwelling and confirms that the proposed development is dependent upon continuous operational mitigation to prevent exceedance of recognised guidance limits.

In these circumstances, it has not been demonstrated that residential amenity at H3 will be adequately protected throughout the operational life of the development.

The applicant's own assessment identifies H3 as one of the most affected occupied dwellings within the study area and predicts daily shadow flicker levels substantially in excess of the 30-minute threshold adopted from the 2006 Wind Energy Development Guidelines.

Compliance is achieved only through reliance on operational turbine curtailment rather than through the siting or design of the development itself. Given the inconsistency within the EIAR regarding the identification of the closest inhabited dwelling, the absence of receptor-specific mitigation details, the lack of enforceable monitoring arrangements and the discrepancies in receptor numbers reported throughout the assessment, it has not been demonstrated that residential amenity at H3 will be adequately protected throughout the operational life of the development

12.Omission of Sensitive Receptors from the Shadow Flicker Assessment

I submit that the current shadow flicker assessment appears incomplete. The applicant defines the shadow flicker study area as 10 times the rotor diameter, i.e. $10 \times 117 \text{ m} = 1,170 \text{ m}$, and states that receptors within this study area are to be assessed.

The previous Tirawley Wind Farm EIAR, ABP Case Ref. PAX16.323778, Table 15.1, identified properties within that study area and listed their coordinates and distance to the nearest turbine. In the previous assessment, the following receptors were identified within the 1,170 m study area:

Previous ID	Coordinates	Nearest Turbine	Distance
H119	517007E, 836317N	AT10	1,124 m
H122	515945E, 831977N	AT02	1,144 m
H123	516052E, 832172N	AT02	1,152 m

These receptors are all within the applicant's stated 1,170 m threshold and therefore fall within the defined shadow flicker study area.

As demonstrated by the extracts provided from Table 11.16 of the current EIAR and Table 15.1 of the previous application (ABP Case Ref. PAX16.323778), the coordinates for these receptors remain unchanged. While turbine AT10 has been renumbered as AT08 in the current application, the turbine location itself does not appear to have materially changed. On the basis of the information presented, the omission does not appear to be explained by relocation of the receptors or changes to turbine positioning outside the study area.

On that basis, any receptor previously confirmed to be within 1,170 m of a turbine should have been included within the current shadow flicker assessment unless the applicant clearly demonstrates that:

- the receptor no longer exists,
- the receptor now lies outside the 1,170 m study area.

No such explanation appears to have been provided.

Where the Applicant has defined a specific assessment methodology based on a 1,170 m study area, the consistent application of that methodology to all sensitive receptors is fundamental to ensuring a complete and reliable assessment of likely shadow flicker effects.

It should also be noted that previous receptor H122, now identified as H102 in the current documentation, is St Patrick's College, a secondary school and therefore a highly sensitive receptor. The receptor location and distance to turbine AT02 remain within the applicant's stated shadow flicker study area of 1,170 m. Despite this, the receptor does not appear to have been included within the current shadow flicker assessment.

The omission of a school receptor from the assessment is particularly concerning given the potential for shadow flicker effects during school operating hours and the expectation that educational facilities would be fully assessed where they fall within the applicant's own study area criteria.

Accordingly, the failure to assess receptors that demonstrably fall within the applicant's stated 1,170 m study area calls into question the robustness, reliability and overall completeness of the shadow flicker assessment presented in the EIAR. This is particularly

significant given that one of the omitted receptors is St Patrick's College, a highly sensitive educational receptor.

The below extract is taken from chapter 11 and table 11.16, I have highlighted 3 House ID's and there easting and northing coordinates

	ING	ING	4 m/s	5 m/s	6 m/s	7 m/s	8 m/s	9+ m/s
House ID	Easting	Northing	dBA	dBA	dBA	dBA	dBA	dBA
H101	517007	836317	28.8	32.9	36.7	39	39.3	39.3
H102	515945	831977	25.1	29.2	33	35.3	35.6	35.6
H103	516052	832172	25.4	29.5	33.3	35.6	35.9	35.9
H104	516952	834926	26.4	30.5	34.3	36.6	36.9	36.9
H105	517096	836244	28.2	32.3	36.1	38.4	38.7	38.7

The below is taken from Table 15.1 in the applicant's previous application in relation to Tirawley Windfarm case number PAX16.323778

H115	517850	838466	AT17	1103
H116	518085	837658	AT18	1115
H117	513005	836321	AT08	1115
H119	517007	836317	AT10	1124
H121	513228	834982	AT07	1133
H122	515945	831977	AT02	1144
H123	516052	832172	AT02	1152

PART 3 - HUMAN HEALTH, SLEEP, RESIDENTIAL AMENITY AND QUALITY OF LIFE

1. Introduction – Human Health as a Material Planning Consideration

The protection of human health, wellbeing and residential amenity is a fundamental consideration in the assessment of any proposed wind energy development. The Environmental Impact Assessment process requires consideration not only of measurable environmental changes, but also of the potential implications of those changes for the health, wellbeing, living conditions and quality of life of nearby residents.

Human health is not limited to the absence of diagnosed disease but encompasses the physical, mental and social conditions necessary for individuals to live healthy, safe and fulfilling lives. The World Health Organization recognises environmental noise as an important public health concern because of its potential effects on sleep, wellbeing, daily activities and overall quality of life.

The applicant's Population and Human Health EIAR acknowledges that human health considerations include exposure to environmental factors, impacts on vulnerable groups and changes to living conditions. However, the assessment appears to place significant emphasis on compliance with technical standards and does not fully address whether the proposed development would result in a substantial and long-term alteration of the living environment experienced by nearby residents.

This objection does not suggest that all wind turbines inevitably cause disease or that every individual exposed to wind turbine noise will experience adverse health effects. However, a substantial body of scientific literature demonstrates that exposure to wind turbine noise is consistently associated with increased annoyance, and a number of studies have identified associations with sleep disturbance, psychological stress responses and reductions in aspects of health-related quality of life. These findings are particularly relevant where residents are exposed to large-scale wind energy developments over prolonged periods and where the existing environment is characterised by rural tranquillity and very low background noise levels.

Accordingly, the assessment of this proposed development should not be restricted solely to whether predicted noise levels comply with prescribed acoustic limits. It must also consider whether the overall change to the receiving environment, including operational noise, visual dominance, shadow flicker, aviation lighting, and the introduction of substantial energy infrastructure into a previously quiet rural landscape, may have significant effects on residential amenity, sleep, wellbeing and the peaceful enjoyment of the home.

As one of the nearest non-participating residents to the proposed development, my family and I would experience the combined effects of this environmental change on a daily basis throughout the operational lifetime of the wind farm. My dwelling is located approximately 554 m, 601 m and 676 m from the nearest proposed turbines, with additional turbines

located within approximately 878 m and 1.02 km. These circumstances make the adequacy of the assessment of human health, sleep and residential amenity particularly important.

2. Scientific Evidence on Wind Turbine Noise, Annoyance and Wellbeing

The most robust and consistent finding within the scientific literature is the relationship between wind turbine noise exposure and annoyance. Studies by Pedersen and Persson Waye (2004; 2007), together with the pooled analysis by Janssen et al. (2011), identified a clear exposure–response relationship whereby the proportion of highly annoyed residents increased as wind turbine noise levels increased. These studies also found that annoyance may be greater in quiet rural areas and where turbines are visible from the dwelling, demonstrating that the impact of wind energy developments is not solely a matter of measured sound pressure levels, but also relates to the character, tranquillity and visual qualities of the receiving environment.

The World Health Organization (WHO) Environmental Noise Guidelines for the European Region (2018) recognise environmental noise as an important public health concern and acknowledge that severe annoyance caused by wind turbine noise constitutes an adverse health outcome because of its potential to negatively affect wellbeing and daily activities. Consequently, the WHO issued a conditional recommendation that average exposure to wind turbine noise should be reduced below 45 dB Lden.

Evidence regarding sleep disturbance and broader wellbeing effects also warrants careful consideration. The systematic review by Schmidt and Klokke (2014) identified consistent evidence of increasing annoyance with increasing wind turbine noise exposure and reported associations in some studies with sleep disturbance, psychological distress and reduced quality of life. Similarly, Baliatsas et al. (2016) reviewed observational studies on low-frequency noise and infrasound and concluded that annoyance, sleep disturbance and reduced wellbeing were recurrent findings, while also recognising the need for further high-quality research.

The Danish nationwide cohort study by Poulsen et al. (2019) further identified an association between higher long-term exposure to wind turbine noise and increased redemption of sleep medication and antidepressants among older adults. Although observational studies cannot establish direct causation, such findings indicate that potential effects on sleep and mental wellbeing among exposed populations should not be disregarded.

The Health Canada Wind Turbine Noise and Health Study (2014), one of the largest studies conducted in this area, did not identify a direct relationship between wind turbine noise exposure and self-reported illnesses, objective sleep measurements or physiological markers of stress. However, the study did identify a statistically significant increase in annoyance with increasing wind turbine noise exposure. This distinction is particularly important in planning terms, as a development may comply with numerical noise criteria while nevertheless causing significant adverse effects on residential amenity and enjoyment of the home.

More recent reviews, including van Kamp and van den Berg (2021), continue to conclude that annoyance is the most consistently demonstrated effect associated with wind turbine sound exposure, while evidence regarding sleep disturbance and other health outcomes remains less certain. Nevertheless, uncertainty regarding the exact mechanism or severity of long-term health effects should not be interpreted as evidence that impacts on wellbeing, tranquillity and quality of life do not exist.

The mechanisms by which environmental noise may influence health have also been examined more broadly. Hahad et al. (2024) reviewed evidence showing that chronic environmental noise exposure can activate stress-related biological pathways, disturb sleep, impair cognitive functioning and contribute to adverse mental health outcomes. While not specific to wind turbines, these mechanisms are relevant where residents may experience long-term exposure to recurring environmental noise.

Furthermore, the impact of wind turbine development on residential amenity cannot be assessed solely by compliance with prescribed noise limits. The distinctive characteristics of wind turbine sound, including rhythmic swishing, periodic amplitude modulation and the occurrence of noise during otherwise quiet periods, may increase its intrusiveness and reduce its acceptability to nearby residents. The visual presence and prominence of large turbines within the landscape may further contribute to perceived disturbance, annoyance and changes in the experience of rural tranquillity.

3. Sleep Disturbance and the Limitations of Technical Noise Assessment

Sleep is a fundamental determinant of human health. Disturbed or insufficient sleep has been associated with adverse effects on cognitive function, emotional wellbeing, physical health and day-to-day functioning.

The World Health Organization identifies environmental noise as an important public health issue and the Night Noise Guidelines for Europe identify 40 dB L_{night}, outside as a long-term health-based target intended to protect the public from adverse effects of night-time noise (WHO, 2009).

However, wind turbine assessments commonly use the LA_{90,T} metric, which represents the sound level exceeded for 90% of the measurement period and forms the basis of assessment under ETSU-R-97 and Irish Wind Energy Development Guidelines. Because L_{night} and LA₉₀ represent different acoustic indicators, direct comparison is not straightforward.

Consequently, compliance with an LA₉₀-based planning criterion does not necessarily demonstrate consistency with the broader public health objectives of the WHO regarding long-term protection of sleep. This distinction is particularly relevant for individuals whose sleep requirements differ from conventional assumptions regarding night-time rest, including residents who routinely sleep during daytime hours because of shift work.

While technical compliance with applicable noise limits is an important consideration, it should not be assumed to represent the complete assessment of potential effects on sleep,

wellbeing and residential quality of life, particularly for residents living in close proximity to large-scale wind turbines.

This is particularly relevant where the proposed development would introduce a new and continuous source of industrial noise into a previously quiet rural environment over a prolonged operational lifespan

4. Psychosocial Stress, Environmental Change and Loss of Environmental Control

Psychological research has demonstrated that a perceived loss of control over environmental conditions may contribute to feelings of stress and helplessness, with potential implications for psychological wellbeing and coping capacity (Evans & Steptoe, 2001).

While controlled studies of wind turbine noise have not consistently demonstrated direct cognitive impairment, broader environmental health research recognises that individual factors including noise sensitivity, expectations and perceived lack of control can influence annoyance and stress responses to environmental noise (Clark & Paunovic, 2018). Chronic environmental stress responses may contribute to sleep disturbance, reduced quality of life and impaired psychological wellbeing (Basner et al., 2018; WHO, 2018).

For a rural population accustomed to a quiet existing environment, the introduction of a large-scale energy development with associated operational turbine noise, construction activity, altered landscape character and the anticipation of ongoing disturbance may represent a significant psychosocial change.

The issue is not solely the absolute level of noise but the transformation of the existing living environment and the loss of previously experienced tranquillity and environmental control. These factors are recognised within wider environmental health literature as contributing to annoyance, stress and reduced quality of life.

5. Shift Work, Daytime Sleep and Vulnerable Receptors

I have been employed as a shift worker for approximately ten years and regularly sleep during daytime hours. Consequently, my principal sleep period frequently occurs at times when the proposed wind farm would be operating under daytime noise limits rather than night-time limits.

Scientific evidence recognises that shift workers are particularly vulnerable to the effects of sleep disruption and circadian rhythm disturbance. Kecklund and Axelsson (2016) identified that shift work is commonly associated with reduced sleep duration and circadian misalignment, with chronic insufficient sleep linked to impaired cognitive performance, fatigue, increased accident risk and adverse cardiovascular and metabolic effects.

Unlike residents whose principal sleep period occurs during conventional night-time hours, my ability to obtain restorative sleep depends on the daytime acoustic environment at my dwelling. Daytime sleep is generally more vulnerable to disturbance because it occurs at a

time when normal environmental activity and noise levels are greater, while the body's natural circadian drive promotes wakefulness rather than sleep. For a long-term shift worker, maintaining an undisturbed daytime sleep environment is therefore particularly important to preserve alertness, health and occupational safety.

The proposed development is predicted to operate at noise levels approaching the applicable daytime noise criterion at my residence. The EIAR identifies my dwelling as a sensitive residential receptor for the purposes of the assessment of noise, shadow flicker and landscape effects. However, it does not appear to specifically examine whether a daytime noise environment considered acceptable for residents engaged in normal daytime activities provides an equivalent level of protection for a resident whose principal sleep period routinely occurs during those same hours due to long-term shift employment.

In my case, this issue extends beyond general residential amenity. Any disturbance to my daytime sleep may have direct implications for fatigue, concentration, health and workplace safety. This concern is heightened by the scale of the proposed development, comprising 16 turbines, including turbines located approximately 555 m and 676 m from my dwelling, with additional turbines located within approximately 878 m and 1.02 km.

I respectfully submit that my circumstances as a long-term shift worker represent a relevant and material consideration in the assessment of residential amenity, sleep disturbance and potential health effects associated with the proposed development. A daytime noise environment that may be considered acceptable for a resident who is awake may not provide an equivalent level of protection for a resident whose principal sleep period occurs during the day.

6. Vulnerable Groups, Health Equity and the Need for Individualised Assessment

The principle of health equity recognises that environmental impacts may not be distributed equally throughout the population and that certain individuals may experience greater susceptibility to environmental stressors. These groups may include children, older persons, individuals with existing health conditions and persons whose employment requires atypical sleep patterns, such as shift workers.

An assessment based solely upon general population thresholds may not fully capture the circumstances of individuals whose patterns of exposure differ from conventional assumptions. The absence of specific consideration of such vulnerable groups may therefore represent a limitation in the assessment of human health effects.

7. Cumulative Effects on Residential Amenity and Quality of Life

The significance of the proposed development cannot be determined by considering individual environmental effects in isolation. For the nearest non-participating residents, operational noise, shadow flicker, moving blades, visual dominance, aviation lighting and the permanent change to the character of the surrounding rural landscape would be experienced simultaneously over the operational lifetime of the development.

The combined effect of these changes may result in a substantial alteration of the experience of the home and surrounding environment, even where individual elements of the development are predicted to comply with separate technical standards. Therefore, the cumulative effect of all relevant environmental stressors should be considered when assessing residential amenity, wellbeing and quality of life.

8. Human Rights, Health and Protection of the Home

8.1 International Human Rights and Environmental Health

The protection of human health extends beyond the absence of illness and includes the environmental conditions necessary for individuals to live healthy, safe and dignified lives.

Article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) recognises the right to the highest attainable standard of physical and mental health. The UN Committee on Economic, Social and Cultural Rights, in General Comment No. 14, clarified that this right extends beyond access to healthcare and includes the underlying determinants of health, including environmental conditions necessary for people to lead healthy lives (CESCR, 2000, paragraphs 4 and 11).

The United Nations General Assembly Resolution 76/300 (2022) further recognises the human right to a clean, healthy and sustainable environment. While this resolution does not create a direct planning standard, it reinforces the principle that environmental decision-making should consider the implications of environmental change for human health and wellbeing.

8.2 Interference with Rights Protected by Article 8 of the European Convention on Human Rights

Article 8(1) of the European Convention on Human Rights provides that:

"Everyone has the right to respect for his private and family life, his home and his correspondence."

The European Court of Human Rights has recognised that significant environmental impacts may engage Article 8 where they materially interfere with the peaceful enjoyment of the home. In *López Ostra v Spain* (1994), the Court recognised that severe environmental nuisance may affect an individual's wellbeing and prevent the enjoyment of the home. In *Hatton and Others v United Kingdom* (2003), the Court accepted that environmental noise may engage Article 8 where it affects private and family life. In *Fadeyeva v Russia* (2005), the Court emphasised the need for public authorities to strike a fair balance between wider economic interests and the effective protection of individual rights.

My dwelling has been identified within the EIAR as a sensitive residential receptor for the purposes of the noise, shadow flicker and landscape assessments and is located approximately 554 m, 601 m and 676 m from the nearest proposed turbines AT08, AT09 and AT10 respectively. As one of the nearest non-participating dwellings, it will be subject to the

cumulative effects of operational noise, shadow flicker, substantial visual change, aviation lighting and the wider industrialisation of the surrounding rural landscape.

The EIAR acknowledges that my dwelling requires specific assessment. The noise assessment demonstrates that compliance with the proposed night-time noise limit of 43 dB(A) is dependent upon the application of turbine directivity corrections and operational curtailment measures. Following these mitigation measures, the predicted margin of compliance is extremely limited, being approximately 0.1 dB(A). Such a limited margin provides very little tolerance for uncertainty associated with acoustic prediction, atmospheric variability and real-world turbine operation. In these circumstances, careful consideration should be given to whether the assessment has demonstrated with sufficient confidence that unacceptable effects on nearby residents will be avoided.

Similarly, the shadow flicker assessment predicts an exposure of approximately 54 minutes per day at my dwelling prior to mitigation, exceeding the 30-minute daily threshold referred to in the Wind Energy Development Guidelines (2006). Compliance is therefore also dependent on operational mitigation through turbine curtailment.

The combined effects of turbine noise, shadow flicker, blade movement, visual dominance, aviation lighting and the transformation of the surrounding environment would form part of the daily living environment within and around my home. These cumulative effects have the potential to materially affect residential amenity, quality of life and the peaceful enjoyment of my home and family life.

Given the close proximity of the proposed turbines to my dwelling, the reliance on mitigation measures and modelling assumptions to achieve compliance, and the extent of the predicted cumulative environmental change, I respectfully submit that the applicant has not adequately demonstrated that the potential effects on nearby residents have been sufficiently avoided or reduced. In these circumstances, there is a significant concern that the proposed development may result in a disproportionate interference with the rights protected under Article 8 of the European Convention on Human Rights.

9. Low-Frequency Noise and Infrasound

The assessment of wind turbine noise should not be limited solely to conventional A-weighted audible noise measurements. A-weighting significantly reduces the contribution of very low-frequency sound and infrasound and may therefore not provide a complete assessment of the low-frequency pressure fluctuations associated with modern large-scale wind turbines.

Recent peer-reviewed research has highlighted that modern wind turbines differ substantially from earlier generations due to their greater rotor diameters, increased hub heights, and lower blade-passing frequencies. A 2026 study published in *Applied Acoustics* by Mattsson et al. investigated infrasound propagation from modern wind farms using validated three-dimensional acoustic modelling together with field measurements using specialised, calibrated infrasound microphones. The study reported that modern large-scale

wind turbines generated significantly higher infrasound levels than those previously reported for older turbine designs.

The applicant's acoustic assessment appears to be based on conventional environmental noise assessment methods. However, recent peer-reviewed research has demonstrated that specialised infrasound measurements using calibrated low-frequency instrumentation can identify low-frequency pressure fluctuations from modern wind turbines that are not specifically assessed through conventional A-weighted noise assessments. It is therefore reasonable to question whether the submitted assessment adequately characterises the low-frequency acoustic environment associated with modern large-scale turbines, particularly given the increasing size and changing acoustic characteristics of modern turbine designs.

Importantly, the authors state that the long-term effects of exposure to the characteristic pulsating infrasound produced by modern wind turbines remain unresolved and that further studies reproducing realistic long-duration exposure conditions are required. In circumstances where scientific uncertainty remains, the applicant should demonstrate through a comprehensive and independently reviewed assessment that the proposed development will not result in unacceptable impacts on residential amenity.

Accordingly, it is requested that the planning authority require a detailed, site-specific assessment of low-frequency noise and infrasound, including consideration of the proposed turbine model, blade-passing frequencies, local topography, atmospheric conditions, and cumulative effects with existing or permitted wind energy developments.

Mattsson, K., Eriksson, G., Persson, L., Chilo, J. and Tatar, K. (2026) *Efficient finite difference modeling of infrasound propagation in realistic 3D domains: Validation with wind turbine measurements*. **Applied Acoustics**, 243, Article 111156.

10. Conclusion on Human Health, Sleep and Quality of Life

The proposed Tirawley Wind Farm would introduce a substantial and permanent energy infrastructure development into a currently quiet rural environment. For nearby residents, including my family, the potential effects cannot be considered solely through the lens of compliance with technical acoustic thresholds.

The combined effects of operational noise, landscape transformation, loss of tranquillity, shadow flicker, ongoing anticipation of disturbance and the proximity of large-scale turbines may have implications for sleep, psychological wellbeing and overall quality of life.

The absence of specific consideration of vulnerable groups, including children, older persons, individuals with existing health conditions and residents whose employment requires daytime sleep, may indicate that the assessment does not fully reflect a health-equity approach to environmental assessment. My particular circumstances as a long-term shift worker, whose principal sleep period frequently occurs during daytime hours, represent

a particular vulnerability that does not appear to have been specifically assessed within the Applicant's EIAR.

For these reasons, I respectfully submit that the assessment of human health impacts should extend beyond a demonstration of compliance with technical acoustic criteria and should consider the broader determinants of health, individual vulnerability, residential amenity and the long-term ability of affected residents to enjoy their homes and maintain their wellbeing.

Given the proximity of the proposed turbines to my dwelling, the reliance on mitigation measures to achieve compliance, the limited margin for acoustic uncertainty, my particular vulnerability as a long-term shift worker, and the cumulative effects of noise, shadow flicker, visual change and aviation lighting, I respectfully submit that the Applicant has not adequately demonstrated that the proposed development can operate without giving rise to unacceptable effects on my residential amenity, sleep, wellbeing and peaceful enjoyment of my home throughout its operational lifetime.

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PART 4 – LANDSCAPE, HERITAGE AND TOURISM

1. Impact on High-Sensitivity Landscapes

The applicant's own Landscape and Visual Impact Assessment identifies significant portions of the receiving environment, particularly the coastal zone, as possessing High to Very High landscape sensitivity and acknowledges that these landscapes have a limited capacity to absorb change.

The EIAR also identifies substantial and substantial-moderate visual effects at a number of representative viewpoints. These findings are significant because they demonstrate that the receiving landscape has a high sensitivity and limited capacity to absorb large-scale development, and that notable adverse visual effects are anticipated by the Applicant's own assessment

The North Mayo coast is characterised by open coastal views, dramatic cliffs, rolling farmland, blanket bog, archaeological landscapes, dark skies and a strong sense of remoteness. These qualities contribute significantly to the area's landscape value and form an essential part of its identity.

The introduction of turbines of this scale would fundamentally alter the character of the landscape and introduce dominant industrial structures into views currently defined by natural and cultural heritage features.

2. Impact on the Céide Fields and UNESCO World Heritage Potential

UNESCO Status and Planning Policy Context

The applicant's assertion that the Céide Fields are not included on Ireland's 2022 UNESCO Tentative List should not be interpreted as indicating reduced heritage value or diminished sensitivity. The Céide Fields were included on Ireland's 2010 UNESCO Tentative List for over a decade and remain internationally recognised as one of the most extensive prehistoric field systems and cultural landscapes in the World.

Importantly, the Mayo County Development Plan includes a specific objective (BEO 2) to: "To protect the tentative World Heritage Site in Mayo on the UNESCO Tentative List – Ireland 2010, The Céide Fields, from inappropriate development and support its nomination to World Heritage Status."

This objective remains in force and constitutes a material consideration. It indicates that the integrity, setting and archaeological potential of the Céide Fields are material considerations in assessing whether development may affect the future protection and nomination potential of the site.

Céide Fields as an Extensive Prehistoric Cultural Landscape

The significance of the Céide Fields extends beyond the excavated archaeological remains and visitor centre. The site forms part of a much larger prehistoric cultural landscape preserved beneath blanket bog across North Mayo.

Research undertaken in the area has demonstrated that extensive Neolithic field systems survive beneath the bog and continue beyond the currently excavated areas. In such circumstances, the absence of recorded monuments within the development footprint cannot be regarded as evidence that archaeological features are absent. The character of the wider Céide landscape indicates a continuing potential for previously unrecorded archaeological remains.

Landscape, Visual and Integrity Impacts

The proposed development would introduce sixteen turbines of approximately 135 metres in height into a landscape characterised by open horizons, extensive peatland and a strong sense of continuity between the archaeological resource and its surrounding environment.

The significance of the Céide Fields is inseparable from this wider landscape setting. The ability to understand and appreciate the prehistoric field systems within an extensive and largely undeveloped bogland environment forms an important component of the site's cultural value.

The proposed turbines would introduce large-scale moving vertical structures into this setting and would alter the character of views experienced from and within the wider Céide landscape. As a result, the development has the potential to diminish the integrity, coherence and cultural landscape context that contribute to the significance of the site.

Conclusion

The EIAR places significant emphasis on direct impacts on known archaeological features but does not adequately assess the effect of the development on the wider cultural landscape, setting and integrity of the Céide Fields.

Accordingly, it is considered that the assessment may understate the sensitivity of the receiving environment and does not clearly demonstrate that the potential effects of the proposed development on a cultural landscape of international importance have been fully evaluated. The proposal therefore raises significant concerns regarding its consistency with the objectives of the Mayo County Development Plan relating to the protection of the Céide Fields and its wider landscape setting.

4. Impact on Rathlacken Court Tomb Trail

The Rathlacken Court Tomb Trail is an important archaeological, cultural and recreational amenity within North Mayo. The trail provides access not only to Rathlacken Court Tomb itself, but also to a wider prehistoric landscape containing ancient field systems, stone walls, cairns, standing stones, habitation sites and other archaeological features dating back more than 5,000 years.

Rathlacken Court Tomb MA007 016006 is recognised as one of the finest examples of a court tomb in County Mayo. Archaeological excavations undertaken between 1990 and 1997 revealed an exceptionally well-preserved monument comprising a circular court and three chambers constructed from massive upright stones. Evidence of cremation deposits, prehistoric pottery and stone implements was discovered during excavation, demonstrating prolonged use of the site and its continued significance into the Bronze Age.

Importantly, the significance of the area extends beyond the court tomb itself. Published information from Our Irish Heritage and Mayo Ireland describes the Rathlacken area as part of an extensive prehistoric landscape containing numerous megalithic monuments, house sites and ancient stone-walled field systems preserved beneath blanket bog. Archaeological research undertaken by Greta Byrne identified an integrated system of prehistoric field walls within the area which has been described as comparable to the Céide Fields landscape. The trail therefore provides visitors with an opportunity to experience not only an individual monument but a broader archaeological landscape of exceptional significance.

The archaeological value of the Rathlacken landscape is further demonstrated by the presence of multiple megalithic monuments, prehistoric dwellings and extensive pre-bog field systems distributed across the surrounding area. These features contribute to an understanding of the development of early farming communities in North Mayo and form an important part of the county's cultural heritage resource.

The Rathlacken Court Tomb Trail allows visitors to engage directly with this landscape and to appreciate the relationship between the monuments and their wider setting. The educational, cultural and recreational value of the trail is intrinsically linked to the largely undeveloped character of the surrounding landscape and the ability to experience these archaeological features within a setting that has retained much of its historic character.

The setting of a cultural heritage asset is widely recognised as an important component of its significance. In the case of Rathlacken Court Tomb, the monument derives much of its value not only from the physical remains themselves but from its relationship with the surrounding prehistoric landscape of field systems, habitation sites, megalithic monuments and blanket bog. The ability to understand and appreciate the monument within this wider landscape context contributes directly to its archaeological, educational and cultural value. Any development that substantially alters this setting has the potential to affect how the monument is experienced, understood and interpreted, even where no direct physical impact occurs to the archaeological remains themselves.

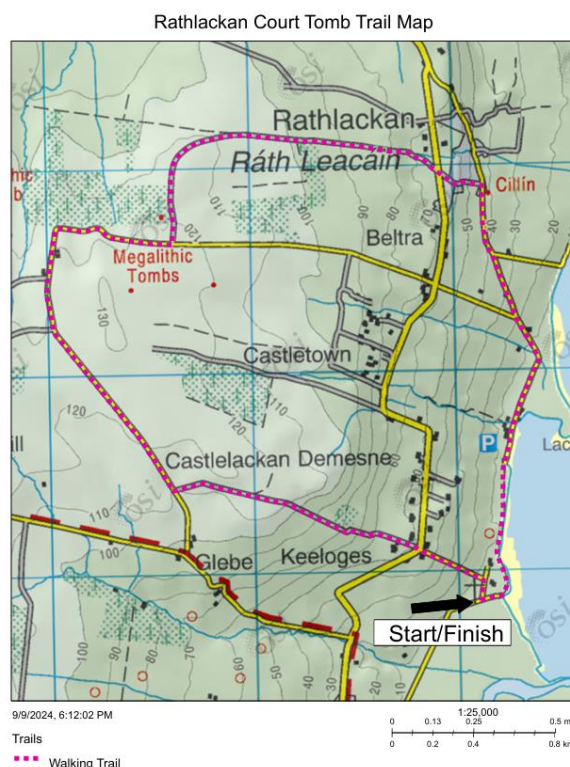
The proposed development would introduce sixteen turbines approximately 135 metres in height into the wider landscape surrounding the trail. These large-scale industrial structures would become a prominent feature within views experienced by walkers and visitors and would alter the character of a landscape that is currently valued for its archaeological significance, openness and relative absence of modern infrastructure.

The proposed development would:

- Alter the setting of an important prehistoric monument;
- Introduce industrial-scale energy structures into a sensitive archaeological landscape;
- Diminish appreciation of the wider prehistoric landscape associated with the trail;
- Reduce the sense of time-depth, continuity and remoteness that contributes to the visitor experience;
- Adversely affect the interpretation and appreciation of the area's archaeological heritage;
- Conflict with planning objectives seeking to protect cultural heritage assets and their landscape setting.

Given the recognised archaeological significance of the wider Rathlacken landscape, including the presence of prehistoric field systems described as comparable to the Céide Fields, it is submitted that the EIAR does not adequately assess the impact of the proposed development on this important heritage resource and its setting.

Accordingly, the potential impact on the Rathlacken Court Tomb Trail and the wider archaeological landscape of which it forms part should be afforded significant weight in the determination of this application.



Sources:

- Our Irish Heritage, *Rathlacken Court Tomb*
- Mayo Ireland, *Rathlacken Court Tomb Trails*

5. Impact On Kilcummin Loop Walk

The Kilcummin Loop Walk is a recognised recreational amenity and a highly sensitive visual receptor within the receiving environment.

The EIAR acknowledges that, at Viewpoint V10 (Carrowmore Beach), which forms part of the Kilcummin Loop Walk, the proposed turbines will be:

- “Clearly visible”;
- occupy “a broad visual envelope across the distant ridge”; and
- remain “a noticeable feature of this coastal view”.

Notwithstanding these findings, the EIAR concludes that the resulting effect will be moderate-slight and not significant.

This conclusion is not adequately explained and appears inconsistent with the assessment findings.

The Kilcummin Loop Walk is not an ordinary roadside receptor. It is a recreational route where the landscape itself is the primary resource being experienced. Users are attracted to the route because of its scenic coastal setting, panoramic views, sense of openness and tranquillity. In this context, the visual sensitivity of the receptor is appropriately regarded as high.

The assessment appears to place considerable weight on the assertion that the turbines are viewed in the opposite direction to the principal coastal aspect. However, this does not accurately reflect the way in which the route is experienced in practice. The Kilcummin Loop Walk is a circular route which affords views in multiple directions. Walkers engage with the wider landscape throughout their journey and are not confined to a single viewing direction. Inland views, elevated views and panoramic views form an integral component of the recreational experience.

Furthermore, the assessment focuses primarily on visibility from an individual viewpoint rather than the overall experience of users moving through the landscape. The visual effects experienced by walkers are sequential and cumulative in nature and cannot be fully represented through a single static photomontage. The EIAR does not clearly demonstrate how this wider recreational experience has been assessed.

The conclusion that the turbines will be “well contained” within the landscape is similarly open to question. While the surrounding area contains elements of agricultural land use, the receiving environment remains characterised by expansive coastal views, open horizons and a strong sense of naturalness. The introduction of sixteen turbines, each approximately 135 metres in height, would introduce large-scale moving structures into this landscape and would materially alter its visual character.

Particular regard should also be had to the recent investment of approximately €200,000 under the Outdoor Recreation Infrastructure Scheme in improving and promoting the

Kilcummin Loop Walk. This investment reflects the recognised recreational and tourism value of the route and the importance of maintaining the quality of the landscape experience it provides.

Accordingly, it is submitted that the EIAR understates both the sensitivity of the receptor and the significance of the resulting visual effects. The assessment does not adequately evaluate the sequential and experiential nature of the route, nor does it satisfactorily explain how a development acknowledged to be clearly visible and noticeable across a broad visual envelope can be concluded to give rise to effects that are not significant.

The visual impact on the Kilcummin Loop Walk should therefore be regarded as significant and adverse.

6. Impact on the Wild Atlantic Way

The Wild Atlantic Way is a flagship national tourism initiative developed by Fáilte Ireland, showcasing Ireland's most distinctive coastal landscapes along a 2,500 km route from Donegal to Cork. It is of significant national economic importance, forming a core component of Ireland's international tourism offering and supporting regional employment and rural economies.

County Mayo occupies a pivotal position along this route, containing some of its most scenic, least-modified and distinctive coastal landscapes, including Downpatrick Head, the Céide Fields and extensive stretches of undeveloped coastline and upland hinterland. This section of the Wild Atlantic Way is specifically promoted for its sense of wildness, remoteness and authenticity, qualities which are central to the visitor experience and which differentiate the area within the national tourism product.

The protection of these qualities is fundamental to the continued success of the Wild Atlantic Way. In this context, the introduction of 16 turbines, each approximately 135 metres in height, within the inland visual basin of this coastal landscape would introduce a prominent and industrial-scale presence into views associated with the route.

This would result in a material alteration of landscape character, undermining the sense of naturalness and tranquillity that defines this section of the Wild Atlantic Way. The cumulative visual presence of the turbines is incompatible with the expectations of visitors, who are drawn to the area for its unspoilt landscapes and immersive natural environment.

Accordingly, it is submitted that the proposed development would erode the scenic integrity and experiential value of this nationally important tourism asset, and should be carefully considered in that context by the Board

7. Impact on Downpatrick Head

Downpatrick Head is a Signature Discovery Point on the Wild Atlantic Way and one of Ireland's most iconic and widely recognised natural landmarks. Its value to North Mayo's cultural, scenic and economic identity derives from:

- Its dramatic and uninterrupted Atlantic views;
- Its wild, rugged and exposed coastal setting;

- Its strong cultural associations, including links to St. Patrick, the wartime Éire sign, established pilgrimage traditions and local folklore.

The Mayo County Development Plan (Vol. 1, Variation No. 1) includes policies and objectives intended to protect the scenic, physical and visual character of sensitive landscapes, including the North Mayo coastline and its nationally significant tourism assets. Policies NEP 14 and Objective NEO 27 (pp.188–189) require that development proposals accord with the Landscape Appraisal and Landscape Sensitivity Matrix, which identify this area as a high-sensitivity landscape with limited capacity to absorb intrusive development.

Downpatrick Head is explicitly located within this high-value landscape and forms a core component of the county's national tourism offering. The protection of its setting is therefore essential.

The applicant's Photomontage Book 1, Viewpoint 1 confirms that multiple turbines will be clearly visible from Downpatrick Head, appearing prominently along the inland skyline. This represents a material alteration of a landscape currently defined by openness, naturalness and the absence of large-scale built structures.

The introduction of an array of turbines of approximately 135 metres in height would:

- Erode the defining sense of remoteness and wildness;
- Introduce industrial-scale vertical structures into expansive coastal panoramas;
- Diminish the visitor experience at a nationally significant tourism destination;
- Conflict with Development Plan objectives (pp.108–109) to protect scenic views, landscape character and heritage assets.

Given the designation of Downpatrick Head as a Signature Discovery Point on the Wild Atlantic Way, its landscape setting carries elevated national importance. The presence of large-scale wind turbines within its viewshed would undermine the scenic integrity and experiential value of this key tourism asset.

The Mayo Landscape Appraisal and Landscape Sensitivity Matrix identifies the North Mayo coastal landscape as having a high degree of sensitivity and a limited capacity to absorb visually intrusive development. In such landscapes particular caution is required where development would introduce prominent vertical structures across extensive viewsheds. The scale and visibility of the proposed turbines raise significant concerns regarding their compatibility with the sensitivity and capacity of the receiving landscape.

8. Impact on Kilcummin Back Strand



Approach road to Kilcummin Back Strand (source: North Mayo website)

The north mayo website ranks the back strand as one of the best beaches in north Mayo, they state “It’s our personal favourite, not least for the breathtaking vista that awaits you once you reach the crown of the hill on the approach road.” The introduction of multiple turbines along the skyline would fundamentally alter the visual composition of this landscape and diminish the scenic quality for which the location is recognised and promoted.

Kilcummin Back Strand is widely recognised as one of the most scenic beaches in North Mayo and is promoted as such by tourism and local amenity organisations.

Its appeal derives from:

- Panoramic views;
- Open coastal character;
- Undeveloped landscape setting;
- Scenic approach routes.

The presence of multiple turbines along the skyline would introduce prominent vertical structures into a landscape valued for its openness, coastal character and panoramic views. This impact should be considered alongside wider effects on tourism and recreation throughout North Mayo.

9. Impact on the Western Way and Outdoor Recreation

The proposed development affects a section of the Western Way, one of Ireland's principal long-distance walking routes and an important tourism and recreation resource.

While temporary diversions and operational setbacks are proposed, these measures do not address the permanent visual presence of industrial-scale turbines in close proximity to a route promoted for landscape appreciation, outdoor recreation and nature-based tourism.

Walkers use the Western Way specifically to experience the scenery, heritage and sense of remoteness associated with North Mayo. The introduction of large-scale turbines into this setting has the potential to alter these qualities and affect the experience the route is intended to provide. As with the Kilcummin Loop Walk, the primary purpose of the route is landscape appreciation, meaning visual impacts should be afforded particular weight when assessing the significance of effects on users

10. Impact on Lacken Gazebo, (Castlelackan Folly, RPS 016)

Castlelackan Folly (Lacken Gazebo), a Protected Structure, is one of the most recognisable historic landmarks in the Lacken area. The proposed development would have a significant effect on its setting and heritage significance.

The applicant's own Environmental Impact Assessment acknowledges that Lacken Gazebo is a High Value heritage receptor and concludes that the development will result in a Significant adverse effect on its setting. Importantly, the assessment also states that there are no mitigation measures available that can effectively reduce this impact. This is a significant consideration in the Board's assessment, particularly given the recognised heritage value of the Protected Structure and the absence of available mitigation measures.

The Gazebo was intentionally built in a prominent location overlooking Lacken Bay. Its purpose was not simply to provide views of the surrounding landscape but also to act as a landmark that could be seen from across the area. The heritage value of the structure therefore comes not only from the views available from it, but also from its visibility, prominence and relationship with the wider historic landscape.

The EIAR acknowledges that the Gazebo occupies a prominent ridge and was designed as a landscape feature associated with the Castlelackan estate. However, the assessment places too much emphasis on the fact that views of the sea and surrounding landscape will remain available. The key issue is not whether people standing at the Gazebo will still be able to see Lacken Bay. The key issue is whether the Gazebo itself will continue to function as the dominant landmark it was designed to be.

At present, the Gazebo forms a defining feature on the skyline of the ridge and contributes significantly to the visual identity of the surrounding landscape. The proposed turbine, at approximately 135 metres in height, would be vastly larger than the Gazebo and would become the dominant feature in the landscape. Given its proximity to the Protected Structure, the turbine would draw attention away from the Gazebo and fundamentally alter the visual hierarchy of the area. The Gazebo's role as the principal historic landmark on the ridge would be significantly diminished by the introduction of a substantially larger vertical structure in close proximity.

The proximity of the proposed turbine to the Protected Structure is a significant consideration. According to the applicant's own assessment, Turbine AT16 would be located approximately 293 metres from the Gazebo. This is not a distant landscape impact. The relationship between the turbine and the Protected Structure would be immediate and unavoidable. The scale difference between the two structures would be extreme and would significantly alter the character and setting of the Gazebo.

The Gazebo is also an important public amenity and heritage destination. It is regularly visited by local residents and visitors who use it as a viewpoint and a place to appreciate the history and landscape of the area. Its value extends beyond the structure itself and includes the experience of approaching it, viewing it within the landscape and understanding its historic purpose. The introduction of a turbine of this scale within its immediate setting would fundamentally change that experience.

The proposal raises significant concerns regarding its consistency with the objectives of the Mayo County Development Plan, which seek to protect Protected Structures and their settings. The applicant's own assessment accepts that the setting of the Gazebo will experience a Significant adverse effect. It is difficult to see how a proposal that causes a significant and unmitigated impact on the setting of a Protected Structure can be considered consistent with policies that require the protection of that setting.

The fact that the impact may cease at the end of the wind farm's operational life does not lessen its significance. A substantial adverse impact lasting for 35 to 40 years would affect an entire generation's experience and appreciation of this important heritage asset.

For these reasons, it is submitted that the proposed development would result in an unacceptable impact on the setting, character, prominence and cultural significance of Castlelackan Folly (Lacken Gazebo). The Gazebo was built to be seen and to act as a defining landmark within the landscape. The proposed turbine would have the potential to dominate the immediate setting of that landmark, diminish its historic role and significantly alter the experience of this Protected Structure for both residents and visitors. Accordingly, this impact should be afforded significant weight in the Board's assessment of the overall

acceptability of the proposed development.



Picture taken from outside the graveyard

10. Conflict with the Wild Mayo Destination and Experience Development Plan 2026–2031

The recently adopted **Wild Mayo Destination and Experience Development Plan 2026–2031 (DEDP)** establishes a strategic vision for North Mayo as a world-class destination centred on wilderness, cultural heritage, landscape appreciation and immersive outdoor experiences. The plan identifies the region’s dramatic coastlines, rugged boglands, extensive trail networks and deep connection between landscape, heritage and community as the foundations of its tourism identity.

The central vision of the DEDP is clear:

“Wild Mayo is recognised as a spectacular outdoors destination offering immersive wilderness and adventure for all.”

The plan states that visitors are drawn by “stunning coastlines”, “rugged boglands”, “wild Atlantic air”, and opportunities to connect with authentic landscapes, heritage and traditions.

The DEDP’s strategic priorities include:

- The Céide Coast, including the world-class coastal trail linking Céide Fields and Downpatrick Head;

- The Western Way and North Mayo Trails Network, intended to establish the area as a premier destination for hiking and cycling;
- Killala and other visitor hubs that encourage people to stop, explore and stay;
- Outdoor adventure and water-based recreation;
- Heritage, culture and storytelling;
- Sustainable and slow tourism based on the protection and appreciation of North Mayo's natural assets.

These are precisely the landscapes, views and visitor experiences that have the potential to be altered by the proposed Tirawley Wind Farm. The introduction of sixteen industrial-scale turbines reaching 135 metres in height into the landscape surrounding the Wild Mayo destination raises a significant question as to whether such development is compatible with the DEDP's ambition to strengthen North Mayo's identity as a place defined by wildness, remoteness, scenic quality and authentic engagement with nature.

The DEDP specifically seeks to strengthen the "Wild Mayo" proposition, positioning North Mayo as a leading wild adventure destination, while celebrating its natural environment and cultural heritage and championing sustainable and slow tourism models. It also seeks to provide tourism infrastructure and experiences that are built around the area's natural assets.

While renewable energy development is an important national objective, the scale, visibility and potential aviation lighting associated with 135-metre turbines must be carefully considered in the context of the emerging tourism strategy for North Mayo. The character of the Wild Mayo destination is not based on built attractions, but on the quality of its open landscapes, coastal scenery, dark skies, tranquillity and sense of immersion in a largely undeveloped environment.

The proposed development therefore appears difficult to reconcile with the strategic vision of the Wild Mayo Destination and Experience Development Plan 2026–2031. It introduces a substantial industrial element into a landscape that the State's own tourism strategy seeks to promote internationally as a place of wilderness, adventure, heritage and authentic connection with the natural environment.

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11. Deficiencies in the EIAR Assessment

It is submitted that the Landscape and Visual Impact Assessment does not adequately assess the combined significance of impacts across multiple sensitive receptors including:

- The Céide Fields;
- Downpatrick Head;
- The Wild Atlantic Way;
- Kilcummin Loop Walk;
- Rathlacken Court Tomb Trail;

- Kilcummin Back Strand;
- The Gazebo (Castlelackan Folly) RPS 016
- Other tourism and recreational assets throughout North Mayo.

While these receptors are assessed individually, insufficient consideration is given to their collective importance as part of the wider tourism, heritage and landscape resource of North Mayo.

The assessment also places significant emphasis on individual viewpoints and isolated receptors but gives insufficient consideration to the combined experience of visitors moving through the landscape and experiencing multiple receptors within a single journey.

Accordingly, it is submitted that the Landscape and Visual Impact Assessment understates the overall significance of the proposed development and does not adequately assess the combined interaction of effects across the wider North Mayo landscape.

12. Cumulative and Sequential Effects

When considered individually, the impacts identified across the EIAR may be presented as localised or moderate. However, when assessed collectively, the proposed development gives rise to significant cumulative effects across a range of highly sensitive receptors including the Céide Fields cultural landscape, the Wild Atlantic Way, Downpatrick Head, Kilcummin Loop Walk, Kilcummin Back Strand, Rathlacken Court Tomb Trail and the wider tourism landscape of North Mayo.

The introduction of sixteen turbines with a height of approximately 135 metres would result in a combined visual and landscape effect greater than the sum of its individual impacts, creating a consistent and pervasive industrial presence across a wide geographical area.

The EIAR itself recognises the importance of cumulative and sequential visibility effects associated with wind energy developments. Visitors travelling through North Mayo would experience repeated visibility of turbines from:

- Scenic roads;
- Walking routes;
- Beaches;
- Heritage attractions;
- Wild Atlantic Way viewpoints;
- Recreational amenities.

The impact is therefore not confined to isolated viewpoints but forms part of a continuous landscape experience.

The cumulative impact would:

- Reinforce the perception of the area as an increasingly industrialised landscape;
- Result in repeated and sustained visibility of turbines across key viewpoints and visitor destinations;
- Compound adverse effects on tourism assets and recreational amenities;

- Undermine the overall integrity of a landscape characterised by openness, continuity and relative absence of large-scale built structures;
- Diminish the sense of wildness, remoteness and scenic quality that underpins the area's tourism appeal.

Furthermore, it is noted that additional wind energy developments, including the approved Glenora Wind Farm (22 turbines, PA16-318701), Keerglen Wind Farm (8 turbines, currently under appeal, 500344) and the pre-application Clydagh Wind Farm proposal (22 turbines - 324260) have the potential to contribute to combined and sequential visibility across the wider landscape.

In this context, the proposed development cannot be assessed in isolation. It would contribute to the layering and concentration of wind energy infrastructure across North Mayo, resulting in the cumulative industrialisation of a landscape that forms a key component of the county's tourism and cultural identity.

Accordingly, it is submitted that the cumulative and sequential effects of the proposed development have been understated and that the resulting impact would be significant and adverse.

13. Conclusion – Landscape, Heritage and Tourism

The landscapes, heritage assets and recreational resources of North Mayo derive their significance not from isolated viewpoints but from the collective experience of a connected coastal, archaeological and rural landscape characterised by openness, natural character, extensive views, historic continuity and a strong sense of place.

The applicant's own assessments acknowledge that the receiving environment includes landscapes of High to Very High sensitivity, that significant visual effects will arise at certain locations, and that the setting of Castlelackan Folly (Lacken Gazebo), a High Value Protected Structure, will experience a Significant adverse effect for which no mitigation measures are available.

The proposed development would introduce sixteen turbines, approximately 135 metres in height, into this sensitive landscape context. The effects would not be confined to a single receptor but would be experienced across a network of nationally and regionally important tourism and heritage assets, including Downpatrick Head and the Wild Atlantic Way, the Kilcummin Loop Walk, Kilcummin Back Strand, the Western Way, the Céide Fields landscape, Rathlacken Court Tomb Trail and Castlelackan Folly.

Particular concern arises where the assessment of individual receptors does not clearly demonstrate how the cumulative visitor experience, the sequential nature of recreational routes and the wider relationship between heritage assets and their landscape settings have been fully considered.

In relation to heritage, the significance of assets such as the Céide Fields landscape, Rathlacken Court Tomb and Castlelackan Folly extends beyond their physical structures or boundaries. Their value is intrinsically linked to their wider landscape context, historic setting and the ability of residents and visitors to understand and appreciate them within their existing environment.

The fact that the proposed wind farm has a finite operational life does not remove the significance of impacts that would persist for approximately 35 to 40 years. Such long-term changes would substantially alter the experience, appreciation and character of important landscape, heritage and tourism resources over a prolonged period.

Accordingly, it is submitted that the EIAR has not adequately demonstrated that the landscape, visual, cultural heritage and tourism effects of the proposed development have been appropriately avoided or reduced to an acceptable level. Given the acknowledged sensitivity of the receiving environment, the absence of mitigation for certain significant heritage impacts, and the cumulative nature of the proposed changes, these impacts should be afforded significant weight in the Board's assessment of the overall acceptability of the development.

14.Observation – Planning Precedent (PL16.239901)

Reference is made to the decision of An Bord Pleanála in Case PL16.239901 (Ballinaleck, Carrowmore, Ballina, Co. Mayo), where permission for a four-turbine wind farm was refused.

“The proposed development, by virtue of its elevated location and proximity to a vulnerable coastal area, would have a disproportionate, significant and adverse impact on the visual amenities of the area and would be contrary to Policy P/EH-LC1 of the Mayo County Development Plan.”

(Inspector’s Report, Colin McBride, 2012)

The Board concluded that:

- The development would have a disproportionate and adverse visual impact
- The site was located within a highly sensitive landscape
- The proposal was contrary to the Mayo County Development Plan.

The current proposal:

- Comprises 16 turbines of significantly greater height and scale
- Is located within an elevated coastal landscape
- Is located within or adjacent to similarly sensitive landscape areas
- Would result in substantial visual intrusion on the skyline and scenic views.
- Is located within or adjoining areas classified as Highly or Extremely Sensitive landscapes, comparable to the Carrowmore site in PL16.239901.
- Raises significant concerns regarding consistency with the landscape protection and scenic view objectives of the County Development Plan
- Turbines AT07 and AT08 are proposed in close proximity to the location of the previously refused Carrowmore wind farm, which reinforces the relevance of the landscape sensitivity issues identified in Case PL16.239901.

Planning Balance and National Policy Context

National policy, including the Wind Energy Development Guidelines (2006) and Climate Action Plan 2024, supports renewable energy development but also requires a plan-led approach that balances renewable energy objectives with environmental protection, landscape considerations, and the protection of residential amenity.

The decision in PL16.239901 demonstrates that, notwithstanding national support for renewable energy, landscape sensitivity, visual impacts and compliance with Development Plan objectives remain critical considerations in determining the suitability of a particular site for wind energy development. The current proposal raises significant concerns as to whether an appropriate balance has been achieved. The scale, height and cumulative presence of sixteen turbines, approximately 135 metres in height, has the potential to result in significant visual effects and alter the character of a landscape that the Mayo County Development Plan identifies as highly sensitive. If a smaller development was deemed unacceptable in this landscape context, the current proposal gives rise to equal or greater planning concerns

Accordingly, it is submitted that the findings of An Bord Pleanála in Case PL16.239901 are a relevant material consideration when assessing the suitability of the current proposal within a similarly sensitive coastal landscape. Having regard to the scale of the proposed development, its proximity to the previously refused site, the identified landscape sensitivity and the cumulative visual effects, permission should be refused.

PART 5 – POLICY

1. Conflict Between the EIAR and Mayo County Council's Position

A significant concern arises from the clear divergence between the conclusions of the applicant's Landscape and Visual Impact Assessment and the position expressed by Mayo County Council during pre-planning consultation. 9th March 2026

The EIAR concludes that the proposed Tirawley Wind Farm would not give rise to significant adverse landscape or visual effects. However, Mayo County Council expressed substantial reservations regarding the proposal. In particular, the Council advised that, in principle, only a limited number of turbines located within Tier 1 Preferred Areas could be considered acceptable; that several turbines are located outside both Tier 1 and Tier 2 areas; that the dispersed turbine layout does not conform to the layouts identified in the Draft Revised Wind Energy Development Guidelines; and that the acceptability of numerous turbines would depend on their effects on sensitive and vulnerable landscapes, scenic routes, scenic viewpoints and coastal landscapes. The Council further stated that, having regard to the visual sensitivity of the area and its coastal landscape character, it did not consider the proposal suitable at this location.

The Council also highlighted the visibility of the development from designated Wild Atlantic Way Discovery Points and expressed concern regarding potential adverse effects on the area's unique coastal landscape, tourism resource and sensitive natural environment. Most significantly, the conclusion of the pre-planning consultation record states unequivocally that "Mayo County Council is not in favour of the proposed development at this location."

Furthermore, Mayo County Council advised during the pre-planning consultation that the review of the Council's Renewable Energy Strategy was likely to be published before a decision was made on any application. The Council noted that lands previously identified as acceptable for wind energy development under the Renewable Energy Strategy 2011–2022 may no longer be considered suitable owing to the significant heights of modern turbines and the scale of development now being proposed. This observation is particularly relevant as it demonstrates that the local authority considered the existing policy framework to be under active review in light of the changing nature and increasing scale of modern wind energy development.

These views create a fundamental inconsistency between the applicant's assessment and the position of the local planning authority. The Council's concerns extend beyond the specific turbine layout and include wider questions regarding landscape capacity, visual sensitivity, tourism impacts and the suitability of the area for industrial-scale wind energy development. Where the authority charged with implementing local planning policy, protecting landscape character, scenic amenity and tourism assets has expressed such clear reservations, and has indicated that the suitability of lands previously identified for wind energy development is being reconsidered, it is submitted that substantial weight should be attached to that professional judgement. The Board should therefore approach with caution the applicant's consultant-led conclusion that landscape and visual effects are acceptable and should critically examine whether the EIAR has fully and objectively assessed the scale of likely impacts on this highly sensitive coastal landscape.

2. Draft Mayo Renewable Energy Strategy – Map 6.14

The Draft Mayo Renewable Energy Strategy contains a county-wide assessment of wind energy potential, constraints and landscape sensitivity. The outcome of this assessment is presented in Map 6.14, "Wind Strategy Map (Wind Potential Lands)".

Significantly, the proposed Tirawley Wind Farm is located within an area identified on Map 6.14 as **"Unsuitable"** for wind energy development and is not located within the lands identified as **"Open for Consideration"** for new wind farm development.

The accompanying text to Map 6.14 states that:

"Areas located outside of 'Areas Open to Consideration' with the exception of the established clustered wind farm areas are not deemed suitable for commercial wind farm development because of their overall sensitivity arising from landscape, ecological, recreational or cultural and built heritage resources."

This statement is highly significant. It represents Mayo County Council's most recent published strategic assessment of wind energy potential and constraints within the county.

The Draft Strategy therefore indicates that the proposed development is located within an area currently identified as 'Unsuitable' for commercial wind farm development due to the sensitivity of the receiving environment. This conclusion is entirely consistent with the position expressed by Mayo County Council during pre-planning consultation, where the Council stated that it was not in favour of the proposed development at this location and considered the area unsuitable having regard to its visual sensitivity, coastal landscape character, tourism importance and cultural heritage value.

Accordingly, it is submitted that the findings of the Draft Renewable Energy Strategy represent a significant material consideration in assessing the suitability of this location for a large-scale wind energy development, particularly when considered alongside Mayo County Council's pre-planning observations regarding landscape sensitivity, coastal character, tourism and cultural heritage.

Policy Considerations

The assessment of the proposed Tirawley Wind Farm must be considered within the wider context of current local planning policy, emerging strategic guidance and the professional position expressed by Mayo County Council regarding the suitability of this location for large-scale wind energy development.

A significant inconsistency exists between the applicant's conclusion that the proposed development would not result in unacceptable landscape and visual effects and Mayo County Council's pre-planning position that it was not in favour of the proposal at this location due to concerns regarding landscape sensitivity, coastal character, tourism impacts and the suitability of the area to accommodate development of this scale.

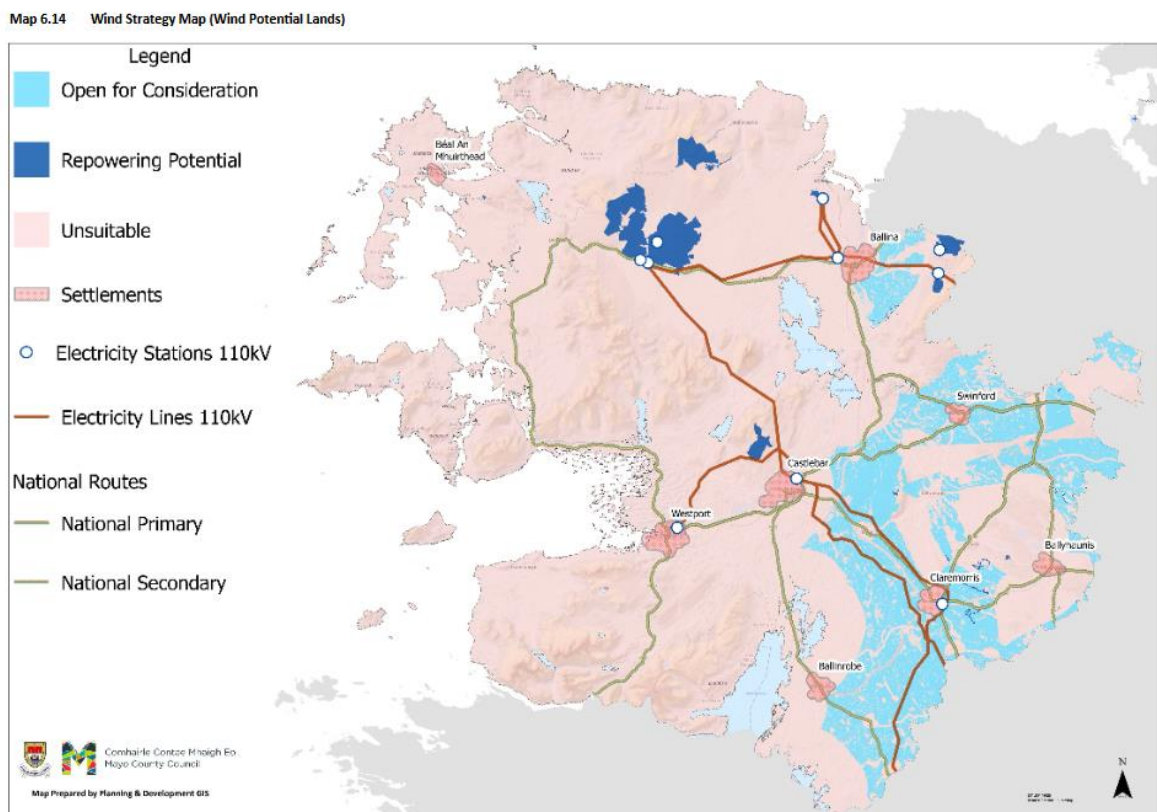
The Council's subsequent Draft Renewable Energy Strategy further reinforces these concerns, identifying the location within an area currently classified as "Unsuitable" for commercial wind farm development due to landscape, ecological, recreational and cultural heritage sensitivities. While the Draft Strategy is not an adopted statutory planning

document, it represents the Council's most recent published strategic assessment of wind energy potential and constraints within the county and therefore constitutes a relevant material consideration.

Taken together, the pre-planning consultation response, the Draft Renewable Energy Strategy, the acknowledged sensitivity of the receiving landscape and the identified potential for significant landscape, heritage and tourism effects raise substantial concerns regarding the suitability of this location for a development of this scale.

Accordingly, it is submitted that the applicant has not adequately demonstrated that the proposed development is compatible with the landscape capacity, environmental sensitivities and strategic planning objectives applicable to this part of North Mayo. These matters should be afforded significant weight in An Coimisiún Pleanála's assessment of the overall acceptability of the proposed development.

Extract from Map 6.14 – Wind Strategy Map (Wind Potential Lands), Draft Mayo Renewable Energy Strategy (April 2026)



Source: Mayo County Council, Draft Renewable Energy Strategy for County Mayo, Map 6.14 (Wind Strategy Map – Wind Potential Lands), April 2026.

3. Summary of Reasons Why Permission Should Be Refused

It is respectfully submitted that An Coimisiún Pleanála should refuse permission for the proposed Tirawley Wind Farm (Case Reference PAX16.324258) for the following principal reasons:

1. Inadequate Public Consultation and Failure to Properly Identify the Host Community

The applicant has failed to demonstrate that meaningful, transparent and effective consultation was undertaken with the communities most directly affected by the proposed development. Lacken, the host community in which the development is located and where the primary effects will be experienced, was not properly identified within the applicant's public-facing documentation. The consultation process relied primarily on a single Public Information Day relating to an earlier design and did not provide meaningful engagement with affected residents, including the nearest occupied non-participating dwelling, H3.

2. Significant Adverse Effects on Residential Amenity

The proposed development would have a severe and long-term impact on the residential amenity of nearby residents, particularly H3, the closest occupied non-participating dwelling. The scale, proximity and distribution of the turbines around the property would result in an overbearing visual presence, loss of rural character, and a significant deterioration in the quality of the residential environment.

3. Inadequate Landscape and Visual Assessment

The submitted visual assessment and photomontages do not adequately represent the full extent of the visual impacts that would be experienced by residents, visitors and users of the wider landscape. The proposal would introduce large industrial structures into a highly sensitive coastal landscape, affecting the scenic character and experience of North Mayo, including the Céide Fields, Downpatrick Head, the Wild Atlantic Way and other important recreational and heritage locations.

4. Deficiencies in the Noise Assessment

The reliability of the baseline noise assessment is undermined by inconsistencies in receptor identification, the selection of monitoring locations, the use of locations associated with financially involved parties or unoccupied dwellings, and the failure to undertake baseline monitoring at H3. Consequently, there is insufficient certainty that the operational noise impacts have been adequately assessed.

5. Inadequate Protection Against Shadow Flicker, Noise and Health Effects

The applicant has not demonstrated that residents will be adequately protected from shadow flicker, turbine noise, amplitude modulation, sleep disturbance and the resulting effects on health, wellbeing and quality of life. The proposed mitigation measures rely

heavily on operational controls rather than avoiding impacts through appropriate siting and design.

6. Failure to Adequately Assess Cumulative Effects

The application does not adequately address the cumulative effects of the proposed development when considered alongside existing, permitted and proposed wind energy developments and associated infrastructure in the wider area. The cumulative industrialisation of the landscape and the combined impacts on residential amenity, tranquillity, tourism and community identity have not been properly assessed.

7. Adverse Effects on Landscape, Heritage and Tourism Assets

The proposed development would adversely affect the setting, character and visitor experience of nationally significant landscape and tourism assets, including the Céide Fields, Downpatrick Head, the Wild Atlantic Way, Rathlacken Court Tomb Trail, Kilcummin Loop Walk and other important recreational locations that contribute to the cultural identity and economic sustainability of North Mayo.

8. Conflict with Proper Planning and Sustainable Development

Although the importance of renewable energy and national climate objectives is acknowledged, such development must be located and designed in a manner that protects existing communities and sensitive landscapes. The applicant has not demonstrated that the proposed development achieves an appropriate balance between renewable energy generation and the protection of residential amenity, landscape character, environmental quality and cultural heritage.

4. Overall Conclusion and Request to Refuse Permission

This submission has demonstrated that the proposed Tirawley Wind Farm would result in significant and unacceptable impacts on the residential amenity of nearby residents, the character and sensitivity of the North Mayo landscape, important heritage and tourism assets, and the wider receiving environment.

The evidence presented identifies serious deficiencies in the consultation process and raises substantial concerns regarding the adequacy and reliability of key environmental assessments, including those relating to visual impact, noise, shadow flicker and cumulative effects. In particular, the proposed development would impose a disproportionate burden on those residents living closest to the turbines, including my family home (H3), which the applicant itself identifies as one of the most sensitive receptors.

While I recognise the important role of renewable energy in achieving Ireland's climate and energy objectives, these objectives do not remove the obligation to ensure that individual

developments are appropriately located, robustly assessed and compatible with the principles of proper planning and sustainable development.

Having regard to the significant adverse effects identified throughout this submission, the inadequacies in the applicant's assessments, and the failure to demonstrate that residential amenity and the exceptional landscape qualities of North Mayo can be adequately protected, it is respectfully submitted that the proposed Tirawley Wind Farm is not an appropriate development at this location.

For all of the reasons outlined in this submission, I respectfully request that An Coimisiún Pleanála refuses planning permission for the proposed Tirawley Wind Farm (Case Reference PAX16.324258).

Thank you for taking the time to consider these observations

Yours faithfully,

Geraldine McManus