



SAVE DOUGH MOUNTAIN

**Submission to An Coimisiún Pleanála
Proposed Lissinagroagh Wind Farm**

FuturEnergy Lissinagroagh DAC

Case References: ACP-323048-25 / PAX12.324290

Private Development - REDIII Application

Table of Contents

Submission Details and Authorship	6
Section 1: Introduction and Standing	6
1.1 The Submission	7
1.2 Who We Are	7
1.3 Standing	7
1.4 Purpose and Scope	7
1.5 The Site and Its Planning History	8
1.6 Structure of the Submission	8
1.7 Approach	8
Schedule of Principal Grounds	9
Grounds capable of supporting refusal	9
The pattern of assessment deficiency	9
Section 2: Project Description and Design Envelope	10
2.1 Introduction and scope	10
2.2 Grounds of objection	10
2.3 Conclusion	12
Section 3: Landscape and Visual Impact	13
3.1 Purpose and Scope of this Section	13
3.2 The Applicant's Own Assessment Places the Site Within a Designated Area of High Visual Amenity	13
3.3 The Applicant Reaches No Significant Effect Only by Discounting the Designation It Has Identified	14
3.4 The Viewpoint Set Does Not Sample Where People Actually Live Near the Site	15
3.5 The Assessment Confirms Clear and Prominent Visibility From the Nearest Scenic Designations	16
3.6 The Landscape Is a Tourism, Amenity and Recreational Resource the County Has Committed to Protect	17
3.7 Cumulative and Transboundary Visual Effects	19
3.8 The 2010 Refusal Reason on Visual Amenity Is Engaged Again	20
3.9 The proposal conflicts with the county's own current tourism and recreation policy	20
3.10 Conclusion on Landscape and Visual Impact	21
Section 4: Ecology and Biodiversity	22
4.1 Introduction and scope	22
4.2 Grounds Of Objection	23
4.3 Consistency with the Leitrim County Development Plan 2023 to 2029	34
4.4 Conclusion on ecology and biodiversity	34
Section 5: Ornithology: Hen Harrier, the Birds Directive, and the Adequacy of the Bird Assessment	36
5.1 Introduction and scope	36
5.2 Grounds Of Objection	37
5.3 How this links to the other sections	50
5.4 Conclusion on ornithology	50

Section 6: Hydrology, Hydrogeology and Water Quality	52
6.1 Introduction and Scope	52
6.2 Grounds of Objection	52
6.3 Conclusion and Relief Sought on this Section	59
Section 7: Peatland, Land and Soils	60
7.1 Introduction and scope	60
7.2 The 2010 refusal on this site	61
7.3 Grounds of objection	62
7.4 Supporting observations	73
7.5 Conclusion	74
Section 8: Noise and Vibration	75
8.1 Introduction and Scope	75
8.2 Integrity of the background noise baseline	75
8.3 Amplitude modulation controlled only by a deferred, complaint-driven protocol	76
8.4 Tonality screened out by reliance on a future warranty for an unselected turbine	77
8.5 Compliance margins so small that the conclusion is not robust	77
8.6 Developer-favourable modelling assumptions over soft ground	78
8.7 Indicators of template reuse undermining confidence in the assessment	78
8.8 A single afternoon of measurement for the grid connection environment	78
8.9 Cumulative assessment confined to a single neighbouring wind farm	78
8.10 Conclusion on noise and vibration	79
Section 9: Shadow Flicker	80
9.1 Introduction and Scope	80
9.2 The 'zero shadow flicker' conclusion depends entirely on mitigation deferred to post- consent design	80
9.3 The 'Expected (Realistic)' figures that remove every exceedance rely on averaged inputs that do not bind the design	81
9.4 The number of affected dwellings is materially larger than the chapter's framing suggests	82
9.5 The cumulative effect with Faughary is greater, not neutral	82
9.6 The Applicant relies on screening it has switched off in its own model	83
9.7 The chapter records no limitations despite material gaps in scope and detail	83
9.8 The shadow flicker and noise receptor references are not cross-referable	84
9.9 Sensory and health sensitivities are addressed elsewhere in this submission	84
9.10 Conclusion on shadow flicker	84
Section 10: Traffic and Transportation	86
10.1 Introduction and Scope of this Section	86
10.2 Ground One: The Defining Transport Impact of the Project is Excluded from Every Quantified Assessment	86
10.3 Ground Two: The Temporary Construction Accesses and Delivery-Route Crossings Shown in the Technical Drawings Are Not Represented on the Public Information Map	87
10.4 Ground Three: The Applicant's Own Road Safety Auditor Records that No Swept Path Analysis of the Turbine Delivery Vehicle Was Provided	87
10.5 Ground Four: Material Road Safety Audit Findings Go to Viability, and the Claim that They Were Incorporated is Not Evidenced	88
10.6 Ground Five: The Passage of Abnormal Loads Through Manorhamilton Town Centre is Understated	88

10.7 Ground Six: Night-Time Abnormal Load Deliveries Through Occupied Areas Are Not Assessed for Residential Disturbance in Any Chapter	89
10.8 Ground Seven: The Assessment of 'Not Significant' Rests on Mitigation Deferred to a Contractor Not Yet Appointed	89
10.9 Ground Eight: The Cumulative Assessment is Asserted Rather than Demonstrated, and the Traffic and Peat Chapters Are Not Reconciled on Spoil Movement	90
10.10 Ground Nine: The Chapter Overstates the Completeness of its Own Assessment	90
10.11 Conclusion on Traffic and Transportation	91
Section 11: Cultural Heritage and Archaeology	92
11.1 Introduction and Scope of this Section	92
11.2 The development sits within a recorded prehistoric ceremonial landscape	92
11.3 The impact-assessment matrix is calibrated so that no effect can reach significance	93
11.4 Total destruction of the relict upland landscape is recorded as not significant	93
11.5 Recording is treated as if it neutralised loss	94
11.6 The assessment of the highest-potential ground is deferred to the construction phase	94
11.7 The intangible cultural heritage is recorded in the baseline and then not assessed	95
11.8 The setting assessment relies on bare-earth visibility mapping and an incomplete field baseline	95
11.9 The cumulative assessment is circular	96
11.10 A National Monument is carried at 'Moderate' by the same mechanism	96
11.11 Consistency with the 2010 refusal of the previous application on this site	96
11.12 Conclusion	96
Section 12: Consideration of Alternatives	98
12.1 Introduction and Scope of this Section	98
12.2 Alternative locations are listed but not comparatively assessed	98
12.3 The alternatives chapter does not engage the 2010 refusal on this land	99
12.4 The grid connection is assessed to a weaker standard than the wind farm	100
12.5 Alternative technology: solar rejected on an asserted rather than assessed basis	101
12.6 The deficiency established by this section	102
Section 13: Cumulative and In-Combination Effects	103
13.1 Purpose and Scope of this Section	103
13.2 The Interactions Chapter Discharges Each Interaction Separately and Never Assesses Their Combination	103
13.3 The Cumulative Assessment With Other Wind Farms Is Conducted to Differing Standards and Drawn Together Nowhere	104
13.4 Relevant Assessment Standard	105
13.5 The Deficiency Established by this Section	106
Section 14: Community Impact, Population & Human Health	107
14.1 Purpose and Scope of this Section	107
14.2 Compliance With a Noise Limit Has Been Treated as the Human Health Assessment	107
14.3 The More Recent Health Evidence Is Engaged in the Wrong Chapter, on the Wrong Question	108
14.4 Only Eleven of the 488 Noise-Sensitive Locations Had Their Background Noise Measured	109
14.5 Several Dwellings Are Predicted to Sit Within One Decibel of the Limit, Against a Prediction Uncertainty the Applicant Puts at Plus or Minus Two Decibels	109
14.6 The Cumulative Load on the Same Dwellings Is Never Reaggregated	109

14.7 The Repopulating Character of the Area Is Not Reflected in the Assessment	110
14.8 The applicant's own community-engagement and human-health assessment does not support the weight placed on it	111
14.9 Conclusion on Community Impact and Human Health	112
Section 15: Conclusion	113
15.1 The character of this objection	113
15.2 The substantive grounds for refusal	113
15.3 The assessment is inadequate as an assessment	114
15.4 The effects fall together on the same community	115
15.5 Relief sought	115
APPENDICES	117
Appendix A: Local Knowledge Records	118
A.1 Ornithology: white-tailed eagle	119
A.2 Ornithology: hen harrier and other raptors	121
A.3 Ecology: marsh fritillary	126
A.4 Ecology: bats	128
A.7 Nature and status of these records	129
Appendix B: Receptor and Viewpoint Analysis	130
B.1 Occupied dwellings not represented in the applicant's assessment	131
B.2 Receptor location map	132
Key to surveyed dwellings	132
Appendix C: Photographic Record of the Receiving Environment	136
C.1 Peat, storm exposure and ground conditions	136
C.2 Hydrology and karst	143

Submission Details and Authorship

This submission is prepared and made by Save Dough Mountain, a community group formed by residents of the townlands surrounding Dough Mountain and the wider Manorhamilton area of north County Leitrim, in respect of the proposed Lissinagroagh Wind Farm (FuturEnergy Lissinagroagh DAC) before An Coimisiún Pleanála under references ACP-323048-25 and PAX12.324290.

The submission has been prepared by the group drawing on the local knowledge of its members and their reading of the applicant's Environmental Impact Assessment Report and its appendices. It is made on the planning merits, and each ground advanced is anchored to the applicant's own figures, tables and assessments. It is signed below on behalf of the group by its officers.

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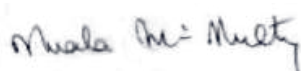
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Section 1: Introduction and Standing

1.1 The Submission

This submission is made by Save Dough Mountain in respect of the proposed Lissinagroagh Wind Farm (FuturEnergy Lissinagroagh DAC), a development of 14 turbines of 180 to 185 metres blade-tip height, with associated on-site substation and grid infrastructure, on lands at and adjoining Dough Mountain, north County Leitrim. The application is before An Coimisiún Pleanála under references ACP-323048- 25 and PAX12.324290. The Environmental Impact Assessment Report accompanying the application was prepared by TOBIN Consulting Engineers.

1.2 Who We Are

Save Dough Mountain is a community group formed by residents of the townlands surrounding Dough Mountain and the wider Manorhamilton area. Its members live, work, and raise families in the landscape that would be directly affected by the proposed development. The group draws on a broad cross-section of the local community. Among its members are farmers with a lifetime's working knowledge of this upland and its ground conditions, retired residents with decades of familiarity with the mountain and its blanket bog, and working members whose professional backgrounds include physicists, chartered engineers, solicitors, academics, healthcare professionals, members of An Garda Síochána, and founders and directors of businesses. This combination of direct local knowledge and professional experience informs the group's reading of the Environmental Impact Assessment Report. The submission that follows, however, rests on the planning merits of the grounds set out below, each anchored to the applicant's own figures, tables, and assessments.

1.3 Standing

Save Dough Mountain makes this submission as a third party under the Planning and Development Act 2000 (as amended). Its members are residents and occupiers of the area within which, and adjoining which, the proposed development would be constructed and operated. They are persons whose amenity, environment, and daily use of the affected landscape stand to be directly and materially affected by the development. The group and its members accordingly have a clear and legitimate interest in the determination of this application.

1.4 Purpose and Scope

The purpose of this submission is to assist An Coimisiún Pleanála in its assessment by identifying, on the planning merits, where the application and its supporting environmental documentation are deficient, and where those deficiencies bear on whether the development should be permitted. The submission engages the substance of the Environmental Impact Assessment Report and its appendices. Throughout, it is anchored to the applicant's own material: the grounds advanced are tested against the figures, methodologies, and conclusions contained in the applicant's own documents, rather than against external claims. Where the applicant's documentation is robust, the submission does not contest it. The submission does not seek to catalogue every conceivable point

of objection. It advances a focused set of grounds, each capable of standing on the face of the documents.

1.5 The Site and Its Planning History

The proposed development is located on and adjacent to Dough Mountain, an area of intact upland blanket bog. A previous scheme on this site was refused permission by An Bord Pleanála on appeal in 2010 (reference PL.12.234741), on grounds concerning the risk to priority peatland habitat and slope stability, and the impact on the visual amenity of Dough Mountain. That refusal, and the environmental sensitivities underlying it, remain directly relevant to the present, and substantially larger, proposal. These matters are addressed in the peatland and landscape sections of this submission.

1.6 Structure of the Submission

The submission is organised into fifteen sections. Following this introduction, Section 2 addresses the project as a whole and procedural matters. Sections 3 to 14 address the substantive environmental topics in turn: landscape and visual impact; ecology and biodiversity; ornithology; hydrology and water quality; peatland, land and soils; noise and vibration; shadow flicker; traffic and transportation; cultural heritage; alternatives; cumulative and in-combination effects; and community impact and human health. Section 15 draws the grounds together and sets out the basis on which refusal is sought.

1.7 Approach

This submission proceeds on the principle that a focused set of well-evidenced grounds carries greater weight than an exhaustive list of weak ones. Each ground is stated at its honest height, anchored to the applicant's own documentation, and advanced in terms directed to the planning merits the Commission must weigh.

Schedule of Principal Grounds

This schedule sets out the principal grounds on which refusal is sought, together with the pattern of assessment deficiencies that runs through the application. It is a summary for ease of reference; each ground is developed, and anchored to the applicant's own documents, in the section indicated. A fuller list of the grounds advanced under each topic appears at the head of the relevant section.

Grounds capable of supporting refusal

1. Peat and slope stability. The applicant's own stability factors are marginal at the deepest-peat, highest-susceptibility turbines, on upland blanket bog of the kind whose degradation and instability grounded the 2010 refusal of the previous scheme on this land (PL.12.234741). (Section 7)
2. Landscape and visual amenity. The site lies within a designated Area of High Visual Amenity, and the second reason for the 2010 refusal, the unacceptable visual impact on Dough Mountain, is re-engaged by this larger proposal. (Section 3)
3. Priority peatland habitat and a designated geological site. A borrow pit and five turbines are sited within the designated Dough Mountain County Geological Heritage Site, on and adjoining priority Annex I active blanket bog. (Sections 7 and 4)
4. Hen harrier. The applicant admits a significant, national-level effect on a nationally important hen harrier population, acceptability depending entirely on an outline and unsecured compensation plan. (Section 5)
5. Hydrological pathway to European sites. The karst setting defeats the surface-water-based mitigation on which the no-adverse-effect conclusion depends, on a pathway that drains toward Lough Melvin. (Section 6)

The pattern of assessment deficiency

6. Across topic after topic, the favourable conclusion rests on mitigation or design deferred to a stage after consent, and therefore not before the Commission: the turbine parameters (Section 2), the peat-stability temporary works (Section 7), the karst void-detection (Section 6), the biodiversity management plan (Section 4), the shadow-flicker layout (Section 9), the amplitude-modulation and tonality controls (Section 8), and the traffic mitigation (Section 10) are each left to be resolved later. The cumulative effect is that the development actually assessed is not the development that would be built.
7. The effects fall together on the same community. Noise, shadow flicker, visual dominance and construction traffic are each assessed discipline by discipline, but they bear on the same occupied townlands at the same time, and the in-combination burden on those receptors is not reaggregated. (Sections 13 and 14)

Section 2: Project Description and Design Envelope

Grounds advanced in this section

As deficiencies warranting, at a minimum, further information:

1. The turbine parameters are expressly unconfirmed and left to be fixed after consent, so the development actually assessed is a range rather than a defined project. (2.2, Ground 1)
2. The wind farm is applied for here while the substation and grid connection on which it depends are consented separately; the Commission must be satisfied that the connection is assessed to the same standard and that this decision is complete without it. (2.2, Ground 2)

2.1 Introduction and scope

This section addresses two features of the way the application is framed, each of which bears on whether the proposed development is before the Commission in a form capable of lawful assessment and grant. The first concerns the turbine parameters, which the applicant has expressly left unconfirmed and seeks to fix within a range after any permission. The second concerns the structure of the consent itself: the wind farm is applied for here, while the on-site 110kV substation and the 32 km grid connection on which the wind farm depends are the subject of a separate application. Neither point disputes the applicant's entitlement to seek permission for a wind farm on this site. Each goes to whether what is sought can properly be assessed and granted as presented.

The relevant primary text is Chapter 2 of the Environmental Impact Assessment Report (EIAR), the Site Notice erected on 13 May 2026, and the drawings referenced in each. The grounds are advanced in order of weight.

2.2 Grounds of objection

Ground 1: The turbine parameters are expressly unconfirmed and left to be fixed after consent, so the development actually assessed is a range rather than a defined project.

The applicant does not apply for turbines of a stated size. It applies for a range, and expressly reserves the choice of dimensions to a later stage. The Site Notice states that “certain details of the proposed development are unconfirmed in this planning application,” and that “the details unconfirmed in this application are the turbine tip height, rotor diameter and hub height.” Chapter 2 (§2.5.4.8) is to the same effect, describing “the details of the proposed project that cannot be confirmed at planning application stage and for which design flexibility is sought,” namely a blade-tip height ranging from 180m to 185m, a rotor diameter ranging from 149m to 163m, and a hub height ranging from 101m to 110.5m.

The mechanism relied on is the unconfirmed-details procedure under section 37CD of the Planning and Development Act 2000, as amended: the Site Notice records that an opinion on the unconfirmed details from the Commission (ACP Ref. 323910-25) accompanies the application. The point taken here is not that the section 37CD procedure is unavailable, but that the way it is used defines the assessed project as a set of parameters rather than a fixed design, and that the environmental

assessment must therefore be shown to have assessed the reasonable worst case across the whole of the reserved range, not a representative or convenient point within it.

This engages the reasoning in *Sweetman v An Bord Pleanála* [2021] IEHC 390 (the Derryadd case), in which the court considered the lawfulness of granting permission for a wind farm on the basis of a design envelope where the final turbine dimensions were not fixed. The concern in such cases is that where a material environmental effect varies across the reserved range, an assessment that does not test the worst case within that range cannot support a conclusion of no significant effect, because the development that is ultimately built may differ in a material respect from the development that was assessed.

Chapter 2 asserts that this difficulty does not arise, on the basis that the variation is small. It states (§2.5.4.8) that “the proposed range of wind turbine parameters is limited to a variation of 5m in tip height, 14m in rotor diameter and 9.5m in hub height,” and each technical chapter states that it has assessed the parameters in Table 2-2 so as to represent the reasonable worst case. That assertion is capable of being correct, but it is not self-proving, and it is not uniform across topics. A 14 m range in rotor diameter and a 9.5 m range in hub height are not trivial for the topics where effect scales with swept area and with height, in particular landscape and visual impact, shadow flicker, noise and ornithological collision risk. The submission does not contend that the envelope is impermissible in principle. It contends that the burden is on the applicant to demonstrate, topic by topic, that the specific scenario assessed is in fact the worst case for that topic across the entire reserved range, and that where a chapter has assessed a single representative turbine rather than the worst-case permutation for its own effect, the assessment has not discharged that burden.

This ground is cross-referred to the individual technical sections. The landscape and visual section, the shadow flicker section, the noise section and the ornithology section each identify where the effect assessed depends on turbine dimensions, and whether the scenario assessed there is the worst case within the reserved range. The present ground establishes the framework; those sections supply the topic-specific analysis.

Ground 2: The wind farm is applied for here, while the substation and grid connection on which it depends are consented separately, so the Commission must be satisfied that the connection is assessed to the same standard and that this decision is complete without it.

The proposed development cannot generate or export electricity without an on-site 110kV substation and a grid connection. The substation is where the medium-voltage cabling from the fourteen turbines is collected and stepped up to 110kV, and the 32 km underground cable is the route by which the power reaches the national grid at the existing ESNB substation at Srananagh, Co. Sligo. These are not ancillary conveniences; they are the elements that make the wind farm a functioning generating station.

The applicant has, correctly, recognised that the wind farm and its connection form a single project for the purposes of environmental assessment. The Site Notice states that the wind farm application and “a separate application to obtain approval for a proposed grid connection and substation” are “functionally interdependent and constitute a single project,” and that the accompanying EIAR and NIS are prepared in respect of the proposed development, the grid connection and the turbine delivery route accommodations. To that extent the applicant has done what the law requires: it has

not sought to treat the connection as a project separate from the wind farm for the purpose of assessing environmental effects. The submission does not contend otherwise, and a bare complaint of project splitting would not reflect the way the application is in fact framed.

The point that does arise is narrower and turns on two things. First, although the wind farm and the connection are described as one project, they are the subject of two separate consent applications, and only the wind farm is before the Commission in this decision. The substation and the 32 km grid connection are to be consented in the separate application. The Commission must therefore be satisfied that it can lawfully grant the wind farm now, when a physically indispensable element of the same single project is to be permitted separately and later, and when the assessment of that element is the subject of a different consent process. Second, and relatedly, the principle in *O'Grianna v An*

Bord Pleanála [2014] IEHC 632 is not satisfied merely by labelling the components a single project. It requires that the environmental effects of the grid connection be assessed to the same standard as the wind farm itself. Where the connection is assessed less rigorously than the generating station it serves, that is a deficiency in the assessment of the project as a whole, and it is not cured by the assertion that the two form one project.

The submission therefore invites the Commission to examine, and not to assume, two matters: whether the environmental assessment of the substation and the 32 km grid connection contained in this EIAR and NIS is carried to the same standard as the assessment of the wind farm elements, in particular in respect of the watercourse crossings on the connection route (including the crossings of the River Bonet by horizontal directional drilling and the eight culvert crossings); and whether the in-combination and appropriate-assessment conclusions in this application are complete and capable of standing on their own, given that the determinative consent for the connecting infrastructure is to be granted in a separate process not before the Commission in this decision. These matters are developed, in respect of water and fisheries, in the Hydrology section of this submission, and in respect of peat and soils, in the Peatland section.

2.3 Conclusion

It is submitted that the manner in which the application is framed raises two questions the Commission should resolve before any grant. The turbine dimensions are expressly unconfirmed and reserved to a later stage, so the assessment must be shown, topic by topic, to have tested the reasonable worst case across the whole of the reserved range rather than a representative point within it. And the wind farm, though correctly described as forming a single project with its substation and grid connection, is applied for separately from them, so the Commission must be satisfied both that the connection is assessed to the same standard as the wind farm and that this decision is complete without the separate consent. Neither point requires the Commission to reject the principle of the development. Each requires it to be satisfied that what is before it has been assessed to the standard the law requires.

Section 3: Landscape and Visual Impact

Grounds advanced in this section

For refusal:

1. The applicant's own assessment places the site within a designated Area of High Visual Amenity, and reaches a no-significant-effect conclusion only by discounting the designation it has itself identified. (3.2, 3.3)
2. The 2010 refusal reason on visual amenity is engaged again by the present, larger proposal. (3.8)

As deficiencies warranting, at a minimum, further information:

3. The viewpoint set does not sample where people actually live near the site. (3.4)
4. The assessment confirms clear and prominent visibility from the nearest scenic designations. (3.5)
5. The proposal conflicts with the county's own current tourism and recreation policy, and with the landscape's protected amenity and recreational value. (3.6, 3.9)

Cross-cutting:

6. Cumulative and transboundary visual effects are not adequately captured. (3.7)

3.1 Purpose and Scope of this Section

This section addresses the landscape and visual impact of the proposed development and the adequacy of the assessment of that impact in Chapter 13 of the Environmental Impact Assessment Report (EIAR Volume II, Chapter 13, Landscape and Visual), prepared for the applicant by Macro Works Ltd. We do not dispute that a landscape and visual assessment has been carried out, nor that it has been carried out by a qualified person. Our case is narrower and, we say, more serious. It is that the applicant's own assessment records the features that ground a refusal, that it reaches its conclusion of no significant effect only by discounting those features, and that in one respect the field of assessment is incomplete. We confine this section to matters that are documentable from the applicant's own chapter and from the current Leitrim County Development Plan, and we anchor every ground to the applicant's own text, tables and figures.

This section carries the visual amenity ground. That ground does not arise in the abstract. A previous application for a wind farm on this same site was refused on appeal by An Bord Pleanála in 2010, and one of the two stated reasons for that refusal was the unacceptable impact of the development on the visual amenity of Dough Mountain, an area of high visual amenity, and on views towards the ridge line. That reason is engaged again by the present application, on the applicant's own evidence, and we return to it at the close of this section.

3.2 The Applicant's Own Assessment Places the Site Within a Designated Area of High Visual Amenity

The starting point is not contested by the applicant. At EIAR Chapter 13, §13.3.2.2, the applicant records that the proposed project is located across the area designated 'B3 - Dough Mountain' as an Area of High Visual Amenity in the current Leitrim County Development Plan 2023 to 2029. The applicant quotes the Development Plan's own description of that designation, which describes an upland landscape with a smooth rounded mountain skyline that overlooks the valley landscape to

the south, presenting a recognisable skyline and conferring a sense of place on the local area, remote and tranquil, where visitors at elevated locations can enjoy panoramic views.

The applicant further records, in the same section, the Development Plan's statement of what makes this landscape important. Among the listed attributes is, in the Development Plan's own words as reproduced by the applicant, "High levels of tranquillity and sense of remoteness away from settlements and roads and wind turbines on the adjacent Saddle Hill". It is a matter of note that the designated value of the area is expressly framed by reference to the absence of wind turbines beyond those already present on Saddle Hill. The proposed development introduces fourteen turbines of up to 185 metres in tip height into and adjacent to that designation.

At §13.7.1 the applicant acknowledges the same point in its own mitigation narrative, stating that the proposed project is situated partially in and adjacent to the B3 Dough Mountain High Visual Amenity Area and that it is, in the applicant's words, "imperative that the turbine array achieves a high aesthetic quality to avoid detracting from the visual amenity of Dough Mountain and its surroundings". The applicant has therefore identified the correct sensitivity and the correct risk. The question for the Commission is whether the applicant's own assessment then holds itself to that standard, or discounts it.

3.3 The Applicant Reaches No Significant Effect Only by Discounting the Designation It Has Identified

Having recorded the B3 Dough Mountain designation, the applicant assesses the sensitivity of the landscape of the site and central study area as no higher than Medium. At §13.8.1 the reasoning is that, although the Landscape Character Area is recognised as sensitive, the most susceptible parts of it lie to the north west within the Area of Outstanding Natural Beauty, whereas the elevated lands within the central study area fall within an Area of High Visual Amenity, which the applicant characterises as "considered less sensitive than the adjacent AONB". On that basis the site is assessed as Medium sensitivity, and the operational landscape effect is assessed as Substantial to moderate within and immediately around the site, reducing to Moderate in the central study area, and thereafter to Slight and Imperceptible. The overall conclusion is Not Significant.

We make three observations, each anchored to the applicant's own material. First, the reduction of the site to Medium sensitivity is achieved by comparison with the adjacent AONB rather than by assessment of the designated Area of High Visual Amenity in which the site actually sits. That the AONB is more sensitive does not render the AHVA insensitive. The AHVA is itself a designation of the Development Plan, adopted through public consultation, and the applicant's own chapter reproduces the Development Plan's statement that the moorland plateaus of this Character Area are "particularly sensitive to change owing to the distinctive character of the mountain skylines, scenic quality, wilderness like quality and visual openness" and are "sensitive to changes which would interfere with important unique skyline views available from the lowlands". The applicant records this and then assesses at a sensitivity below it.

Second, the applicant's own landscape effect at the site is Substantial to moderate and Long term. Under the applicant's own significance matrix at Table 13-3, and the note beneath it, an effect assessed as Substantial or above is defined by the applicant as a significant effect. The applicant's stated operational landscape effect at the site is therefore, on the face of the applicant's own table,

at the boundary of significance, and is described as Substantial to moderate and permanent in duration for the life of the development. The conclusion of Not Significant is reached by treating the effect as dissipating with distance. That is a legitimate observation about the wider study area. It does not answer the effect at the site and its immediate context, which the applicant itself rates at the Substantial to moderate level.

Third, the Leitrim County Renewable Energy Strategy, which the applicant reproduces at §13.3.2.2, states that, having combined the technical analysis and the landscape and visual capacity assessment, “there are no areas where new wind turbines would be considered ‘acceptable in principle’”. The applicant relies on the separate ‘Available Areas’ mapping to place the site within land not excluded by hard constraints. But the applicant’s own quotation of the Strategy confirms that ‘Available Areas’ do not correspond with ‘acceptable in principle’ status for wind energy”. The applicant’s own source therefore establishes that no part of the county, including this site, has been found acceptable in principle for new wind turbines on landscape and visual grounds. That is a material consideration the applicant records and then sets to one side.

3.4 The Viewpoint Set Does Not Sample Where People Actually Live Near the Site

The visual assessment rests on a set of representative viewpoints. At Table 13-7 the applicant sets out twenty nine viewpoints. The applicant explains, correctly, at §13.3.4 that it is not warranted to include every location from which the project is visible, and that a representative set is selected to sample views from different distances, angles and contexts. The soundness of a representative set depends on whether it in fact represents the receptors most affected. For local community receptors the applicant states, at its own description of that receptor category, that clear elevated views are preferred, “particularly when closely associated with a cluster of houses and representing their primary views”, and that coverage of a range of viewing angles is necessary to sample the spectrum of views available from surrounding dwellings.

Measured against that self imposed standard, the set has a gap on the side of the site where the nearest occupied dwellings lie. The nearest local community viewpoints to the south and south east of the array, VP14 at Cashelaveela and VP15 at Tawnyfeacle, are relied upon by the applicant to demonstrate that the southern slopes of Dough Mountain are screened by commercial conifer forestry and that the principal aspect of visual amenity there is oriented southwards, away from the turbines. That may fairly represent the dwellings behind that forested screen. It does not represent dwellings on the northern and eastern approaches to the array, closer to the turbines, which do not share that screening and whose primary aspect is not directed away from the development.

A number of occupied dwellings identified on the ground, on the northern and eastern approaches to the array, do not appear on the applicant’s Appendix 4-1 receptor schedule and are not represented by any Chapter 13 viewpoint. The nearest of these lies of the order of 2.1 km from the closest turbine. They are recorded and photographed by the local survey and shown on the receptor map at Appendix B, and they lie in the sector nearest the turbines, on the side of the site that the applicant’s own local community viewpoints, VP14 and VP15, are used to present as screened and southward-facing, an aspect these dwellings do not share. The point here is confined to the visual assessment: the applicant’s representative viewpoint set does not sample these occupied locations. The completeness of the receptor schedule, and the consequence of these omissions for noise,

shadow flicker and community impact, is argued in Sections 8, 9 and 14 and set out in full in Appendix B.

The point for the visual assessment is limited and is the stronger for being limited. It is not that the applicant was obliged to place a viewpoint at every house. It is that the applicant's representative set, on the northern and eastern approaches nearest the turbines, does not include a viewpoint that captures the primary view from occupied dwellings in that sector, and that the applicant's own local community viewpoints in that sector are the two, VP14 and VP15, which the applicant uses precisely to show screening and a southward aspect that these other dwellings do not share. Where the representative set does not sample the receptors most exposed to the development, the conclusion drawn from that set cannot be taken to represent them. We invite the Commission to treat the visual conclusion as unproven for the occupied dwellings on the near northern and eastern approaches, and to seek representative visualisation from those locations.

3.5 The Assessment Confirms Clear and Prominent Visibility From the Nearest Scenic Designations

The applicant's own viewpoint findings do not describe a development that disappears into its setting. At §13.7.1 the applicant records that at the earlier twenty turbine layout the wireframes showed the potential for highly cluttered views, most notably from scenic view V16, the View of Benbo, Thur and Dough Mountains from the R280, and from O'Donnell's Rock, scenic view V17. The reduction to fourteen turbines was, on the applicant's own account, a direct response to that clutter. That reduction is a matter the applicant is entitled to rely on. It also confirms that the design was driven by a landscape and visual problem the applicant itself identified at these designated views.

At the assessed fourteen turbine layout, the applicant's own viewpoint table, Table 13-8, records that from VP25 and VP26 at O'Donnell's Rock, on the Leitrim Way, all fourteen turbines will be visible to varying degrees, with the majority fully revealed, presenting as "some of the largest moving elements within the landscape and likely to draw the eye of the casual observer", at a Moderate significance of effect. From VP21 the effect is assessed at Substantial to moderate, the highest in the assessment. From the N16 at VP20 the turbines are "clearly and prominently visible". These are the applicant's own descriptions. They are consistent with a development that is prominent from the nearest designated and community receptors, and they sit alongside a conclusion of Not Significant that rests, again, on distance, on screening of some receptors, and on the orientation of certain designated views away from the site.

We do not say the applicant has mislabelled these individual viewpoint effects. We say that a chapter which records all fourteen turbines drawing the eye from the Leitrim Way at O'Donnell's Rock, a Substantial to moderate effect at VP21, and prominent visibility from the N16, and which sits within a designated Area of High Visual Amenity whose value the Development Plan defined partly by the absence of turbines beyond Saddle Hill, has not made out the case that the visual amenity of Dough Mountain is preserved. The applicant's own findings are capable of supporting the opposite conclusion, and it is for the Commission to weigh them against the applicant's conclusion of no significant effect.

3.6 The Landscape Is a Tourism, Amenity and Recreational Resource the County Has Committed to Protect

The applicant's assessment treats the receiving landscape principally as a robust, modified, working landscape, and reduces its sensitivity accordingly. That framing understates a dimension of the landscape that is recorded in the applicant's own chapter and is the subject of formal county and national policy: its value as an amenity and recreational resource, and the tourism function that the surrounding settlements are designated to perform. We do not advance the proposition that the proposed development would deter visitors or cause quantifiable economic loss. The applicant has cited Failte Ireland visitor-attitude research at §13.2.6 of its own chapter, and we do not contest that turbines are not, in general, found to repel tourists. Our point is different and is a matter of policy integration. The same landscape qualities that the applicant identifies as sensitive and then discounts are the qualities on which the county's tourism and amenity strategy is expressly built, and the assessment does not engage with the landscape as an amenity resource in active recreational use.

The applicant's own Chapter 13 records the recreational infrastructure. At §13.3.3.5 it lists the Leitrim Way, the Sligo Way, the Cavan Way and the Miner's Way and Historical Trail among the national waymarked routes within the study area, together with the Glenfarne Loop Walks and a network of cycling routes. It records, at §13.9.2.2.3, that the nearest section of any walking or hiking route to the proposed development is the Leitrim Way, which crosses O'Donnell's Rock immediately south of the site. That is the same location, represented by the applicant's viewpoints VP25 and VP26, from which the applicant's own assessment finds that all fourteen turbines will be visible and will present as some of the largest moving elements in the landscape, likely to draw the eye of the casual observer. The recreational receptor most exposed to the development, on the applicant's own evidence, is therefore a promoted national walking trail.



View toward the site from Cherrybrook, one of the settled valley approaches. Local photograph, for comparison with the applicant's own Cherrybrook photomontage.

The Leitrim Way forms part of the Beara Breifne Way, a long-distance national route that the national tourism authority has committed to develop as an internationally recognised waymarked walking trail. The wider area is marketed nationally within the Ireland's Hidden Heartlands brand, the defining propositions of which are unspoilt landscape, tranquillity, remoteness and being active in

nature through walking and related outdoor recreation. These are not qualities we are importing from outside the record. They are the same qualities the current Leitrim County Development Plan attaches to the B3 Dough Mountain Area of High Visual Amenity, which the applicant reproduces at its own §13.3.2.2: remoteness, tranquillity, panoramic views from elevated locations, and, in the Development Plan's own words, high levels of tranquillity and sense of remoteness away from settlements, roads and wind turbines beyond those on the adjacent Saddle Hill.

The tourism function is not incidental to the settlement pattern here. Manorhamilton, the nearest centre of population at approximately 2.5 km from the nearest turbine, is designated in the current Development Plan as a Tier 2A Sub Regional Growth Town, recognised as playing an important role in supporting the social, economic and cultural life of its surrounding area and wider network of rural communities. The Development Plan contains a dedicated tourism chapter with tourism development policies and objectives, and the Council has separately published a tourism review and framework for the county. The county's own statutory and strategic documents therefore treat this landscape as an amenity and tourism asset, and treat the surrounding town as a settlement whose recognised function includes serving that amenity.

The currency of that tourism baseline is, moreover, already in question. Since the environmental assessment was prepared, Leitrim County Council has granted permission to Kiltyclogher Community Council for a serviced campervan and camping facility at Kiltyclogher Community Centre, Main Street, Kiltyclogher, comprising five serviced camper or caravan pitches, five tent pitches, a single storey campsite amenity building, and associated recreational amenities. The permission was granted on 15 January 2026, subject to conditions. It represents a permitted, publicly promoted tourism facility of exactly the kind the county's tourism strategy seeks to foster in this part of North Leitrim, established in the wider landscape setting within which the proposed turbines would be introduced. Its relevance here is not that the applicant failed to assess a permission that did not yet exist when the baseline was compiled, but that the tourism and amenity environment against which the landscape and visual effects fall to be judged is a developing one, actively adding visitor-facing capacity of the sort that depends on the unspoilt and tranquil character the Development Plan attaches to this landscape. We invite the Commission to have regard to that permitted facility as part of the current receiving environment.

The deficiency is one of assessment, not of prediction. In reducing the landscape to a robust working landscape of medium sensitivity, the applicant's chapter does not weigh the fact that this same landscape is a designated amenity resource, carries promoted national recreational routes across the very ground from which the turbines are found to draw the eye, and underpins a tourism function that the county's statutory plan assigns to the nearest town. An assessment that records the recreational infrastructure at §13.3.3.5 and the amenity designation at §13.3.2.2, but does not carry either into the sensitivity judgement, has not fully assessed the landscape it is describing. We invite the Commission to weigh the amenity and recreational value of the landscape, as established by the county's own policy and by the applicant's own inventory of routes, against the applicant's characterisation of it as a landscape with a high capacity to absorb the proposed development.

3.7 Cumulative and Transboundary Visual Effects

The applicant assesses cumulative landscape and visual effects at a Medium magnitude and concludes Not Significant. The reasoning at §13.12.1 is that, although the study area contains six operational and three consented or in-planning wind farms in addition to the proposed project, the primary cumulative visual effect arises from the in-combination view of the proposed turbines with the adjacent Faughary Wind Farm, because, in the applicant's own words, all other existing and consented turbines are sufficiently offset from the proposed project or are viewed in a different direction. On that basis the cumulative appraisal is conducted almost entirely against Faughary, and the remaining eight schemes in the applicant's own cumulative schedule at Table 13-11 are effectively set aside.

We accept that the Faughary interaction is the dominant one in views taken from the Leitrim side looking towards the site, and that the southern cluster of wind farms is at distance. There is, however, a gap in the way the cross-border receptors have been treated, and it is a gap the applicant's own chapter exposes. The four viewpoints located in Northern Ireland, VP3, VP4, VP13 and VP22, are all oriented back towards the proposed array, as recorded in Table 13-7, and are each assessed at Slight. They therefore test how the proposed development appears when a viewer in Fermanagh looks towards Lissinagroagh. They do not test the in-combination effect experienced by those same receptors, who on the applicant's own baseline description already look out over a working upland landscape containing existing wind energy development.

That existing development is not hypothetical, and it is not absent from the applicant's own visualisations. The applicant's own baseline at §13.3.1.2 describes the elevated lands across the border in Northern Ireland as having a strong working upland character, and the applicant's own cumulative schedule at Table 13-11 lists Callagheen Wind Farm, thirteen turbines, as operational at 11.9 km to the north west, on the Fermanagh side. That existing wind energy development is visible in the applicant's own cross-border viewpoint material: the panel for VP3, on the Fermanagh side, shows the blade tips of existing operational turbines to one side of the view, together with a further consented scheme depicted in wireframe, and the proposed Lissinagroagh turbines. The point is therefore not that the cumulative situation is unshown. It is that, having depicted a view which already contains operational turbines and a further consented scheme, and into which the proposed development would be introduced, the applicant nonetheless rates the effect at these cross-border viewpoints as no more than Slight, on the basis stated at §13.12.1 that the other schemes are sufficiently offset or viewed in a different direction. Where a receptor already experiences wind energy development in one part of its visual field, and a consented scheme in another, and the proposed development would be added again, the relevant effect is the combined one. It is the weight given to that combined effect, and not its depiction, that we invite the Commission to revisit: the four Slight ratings reflect the proposed turbines assessed against each viewpoint in turn, rather than the full in-combination experience of a cross-border receptor for whom this development would be one more layer in an already accumulating view.

On transboundary effects more generally, the applicant assesses landscape effects within Northern Ireland as Not Significant on the basis that no project infrastructure lies across the border and the nearest border point is approximately 3 km from the site, and assesses the four Northern Ireland viewpoints at Slight. We do not contest the transboundary landscape finding, nor the visibility findings taken in isolation, on the material presently before us. Our point is confined to the

in-combination treatment of the cross-border visual receptors set out above: it is a challenge to the weight the applicant attaches to the combined effect, not a contention that the cumulative view is unshown.

3.8 The 2010 Refusal Reason on Visual Amenity Is Engaged Again

A previous application for a wind farm on this site, for a smaller scheme of eight turbines at 80 metres tip height, was refused on appeal by An Bord Pleanála in 2010, following a grant by Leitrim County Council. One of the two reasons for that refusal concerned the unacceptable impact of the development on the visual amenity of Dough Mountain, described as an area of high visual amenity, and on the designated views towards the ridge line. The present application proposes a substantially larger scheme, fourteen turbines at up to 185 metres in tip height, more than twice the tip height of the scheme refused in 2010, on the same designated landscape.

The second of the two reasons on which An Bord Pleanála refused the earlier scheme (PL.12.234741) was directed squarely at the visual amenity of Dough Mountain. The Board's second reason and consideration stated, in terms, that "the site is located in an elevated position on Dough Mountain, an area of high visual amenity within a designated scenic view as set out in the current development plan for the area", and that, having regard to the development "close to the ridge line of the Mountain, which is a focal point for panoramic views over long and short distances", the proposed development "would constitute an unacceptable obtrusive feature on the landscape and would seriously injure the visual and recreational amenities of the area" and would be contrary to the proper planning and sustainable development of the area. That reason was given against a scheme of eight turbines at 80 metres tip height. The present application proposes fourteen turbines at up to 185 metres, on the same ridge line, within the same designation, which the current Development Plan has carried forward as the B3 Dough Mountain Area of High Visual Amenity.

The relevance of the earlier refusal is not that it binds the Commission. Each application is determined on its own merits and on the material before the decision maker. Its relevance is that the visual amenity of Dough Mountain has already been found, by the appellate planning authority, to be a value of sufficient weight that a much smaller wind farm on this site was unacceptable on that ground. The designation has, if anything, been reinforced in the intervening period. The current Leitrim County Development Plan carries the B3 Dough Mountain Area of High Visual Amenity designation, defines its value partly by reference to the absence of turbines beyond Saddle Hill, and is accompanied by a Renewable Energy Strategy which the applicant itself quotes to the effect that no area of the county is acceptable in principle for new wind turbines. The applicant's own Chapter 13 records all of this, and then concludes that a larger scheme, at more than double the tip height, gives rise to no significant visual effect. It is that conclusion, measured against the applicant's own evidence, that we ask the Commission to examine.

3.9 The proposal conflicts with the county's own current tourism and recreation policy

The conflict is not only with the landscape designation but with the county's own current tourism and recreation policy. Tourism in Leitrim Review and Framework 2023-2027 and its Leitrim Recreation Strategy 2023 to 2032 both position the county's tourism and recreation offer on

precisely the assets this landscape provides: unspoilt scenery, tranquillity, walking and outdoor recreation, and the distinctive upland character of areas such as Dough Mountain. A development that introduces fourteen turbines of up to 185 metres onto a designated Area of High Visual Amenity, at the centre of a walking and recreation landscape that these strategies seek to promote, runs counter to the direction of the county's own adopted tourism and recreation policy. This is a further respect in which the proposal is difficult to reconcile with the proper planning and sustainable development of the area as expressed in the county's current policy framework, and it is a consideration the Commission is entitled to weigh alongside the landscape designation itself.

3.10 Conclusion on Landscape and Visual Impact

We do not ask the Commission to substitute a different professional rating for the applicant's viewpoint by viewpoint judgements. We ask it to note what the applicant's own chapter establishes. The site lies within a designated Area of High Visual Amenity whose value the Development Plan defines partly by the absence of wind turbines. The applicant's own landscape effect at the site is Substantial to moderate and permanent, which on the applicant's own significance matrix sits at the threshold of a significant effect. The county's Renewable Energy Strategy, on the applicant's own quotation, finds no area acceptable in principle for new turbines. The representative viewpoint set does not sample the primary views of occupied dwellings on the near northern and eastern approaches to the array, and the two local community viewpoints in that sector are used by the applicant to demonstrate screening and a southward aspect that those dwellings do not share. And the applicant's own viewpoint findings describe a development that draws the eye and is clearly and prominently visible from the nearest scenic designations and from the Leitrim Way at O'Donnell's Rock.

The deficiency this section establishes is therefore threefold. First, the applicant's conclusion of no significant landscape and visual effect is not supported by, and in material respects is contradicted by, the applicant's own sensitivity findings, its own significance matrix, its own quotation of the Renewable Energy Strategy, and its own viewpoint descriptions. Second, the visual assessment is incomplete in that its representative viewpoint set does not capture the occupied receptors most exposed to the development on the near northern and eastern approaches. Third, the assessment reduces the landscape to a robust working landscape without carrying into its sensitivity judgement the amenity and recreational value that the county's own statutory plan and the applicant's own inventory of waymarked routes attached to it. The visual amenity of Dough Mountain, an area of high visual amenity and the subject of the 2010 refusal reason on this same site, is engaged again by the present application, on a larger scale, and the applicant's own evidence does not establish that it is preserved.

Section 4: Ecology and Biodiversity

Grounds advanced in this section

For refusal:

1. The EIAR concedes residual significant effects, and the integrity conclusion depends on an unsecured Outline Biodiversity Management Plan. (Ground 11)

As deficiencies warranting, at a minimum, further information:

2. The peat-failure pathway is assessed for the national peatland but not carried into the Natura Impact Statement for the European sites. (Ground 1)

3. The integrity conclusion relies on mitigation deferred to a contractor-finalised "live" document. (Ground 2)

4. The in-combination assessment relies on circular reasoning rather than quantitative analysis. (Ground 3)

5. The aquatic baseline is too thin to support the conclusions drawn from it. (Ground 4)

6. Reliance on post-consent survey and adaptive management for European otter. (Ground 5)

7. The bat collision conclusion concedes a likely significant effect on European Protected Species and reaches "no residual effect" only through mitigation deferred to post-construction monitoring; half the layout is High or Medium risk. (Grounds 6 and 7)

8. The bat survey departs from current best-practice guidance in ways the assessment does not acknowledge or justify. (Ground 8)

9. The marsh fritillary compensation is stated inconsistently in the applicant's own plan, is not shown to be ecologically equivalent, and depends on a translocation for which no derogation is identified. (Ground 9)

10. Several protected species are listed but not surveyed, and at least one is mis-stated in law. (Ground 10)

4.1 Introduction and scope

This section addresses the adequacy of the applicant's assessment of effects on ecology and biodiversity, with particular focus on the obligations arising under the Habitats Directive (92/43/EEC). It does not seek to re-state the applicant's case. Where the assessment is robust, that is acknowledged. The submission instead identifies a small number of specific, evidenced deficiencies which, individually and cumulatively, mean that the requirements of Article 6(3) of the Habitats Directive have not been satisfied to the standard required by law, and that An Coimisiún Pleanála is not in a position to lawfully conclude that the proposed project will not adversely affect the integrity of the European sites concerned.

The proposed Wind Farm Site lies within the Drowes and Garvogue catchments and is hydrologically connected to a network of European sites, most significantly Lough Melvin SAC (000428), Lough Melvin SAC (NI) (UKO030047) and Lough Gill SAC (001976). The applicant's own Appropriate Assessment Screening Report concluded that likely significant effects on fourteen European sites

could not be excluded, and the project accordingly proceeded to Stage 2 Appropriate Assessment. The integrity test therefore falls to be determined by reference to the Natura Impact Statement.

This is not the first time development of this site has fallen to be assessed. An earlier wind farm on Dough Mountain (eight turbines, 80 m tip height; An Bord Pleanála reference PL.12.234741) was refused by the Board on appeal, by order dated 7 May 2010. The Board's first reason for refusal turned on the very matters at issue in this section: the site's location within the Dough/Thur Mountains Natural Heritage Area (No. 2384), an extensive area of intact upland blanket bog in which Active Blanket Bog is an Annex I Priority Habitat, and the risk that, given the depth of peat, the slope of the blanket bog and the wet nature of the bog, the development would pose an unacceptable risk of degradation of that priority habitat. The Board expressly stated that it was "not satisfied that the proposed development would not lead to surface pollution and risk of slope instability." That determination is directly relevant for the assessment that follows, and is returned to under Ground 1 and in the conclusion.

The grounds advanced below proceed from a single, well-established legal standard. Under Article 6(3) of the Habitats Directive, as interpreted in Waddenzee (C-127/02), a competent authority may approve a project only where it has made certain that the project will not adversely affect the integrity of the European site concerned. Authorisation may be granted only where no reasonable scientific doubt remains as to the absence of such effects. This is the precautionary principle in its operative form, and it places the burden squarely on the applicant's assessment to dispel doubt, not on the objector to prove harm.

4.2 Grounds Of Objection

Ground 1: The peat-failure pathway is assessed for the national peatland but is not carried into the Natura Impact Statement for the European sites

The deficiency:

The most significant deficiency in the Appropriate Assessment concerns the assessment of peat failure, a peat slide or peat landslide, as a pathway by which the proposed project could affect the integrity of the European sites. The applicant's documents do assess this hazard, but only in the wrong place and against the wrong receptor. The EIAR (Chapter 5, Biodiversity) assesses peat failure for its effect on the national-importance peatland of the Dough/Thur Mountains proposed Natural Heritage Area, and concedes a residual significant effect there. The Natura Impact Statement, which is the document that performs the Article 6(3) integrity test for the European sites, does not assess the peat-failure pathway at all.

This distinction is decisive. The Dough/Thur Mountains proposed Natural Heritage Area is a national designation, assessed in the EIA significance track. The European sites, most significantly Lough Melvin SAC and Lough Gill SAC, are protected under the Habitats Directive, and it is they, and only they, that engage the Article 6(3) integrity test and the Waddenzee standard of no reasonable scientific doubt. The peat-failure assessment that exists in Chapter 5 is directed to the terrestrial bog habitat of the national site. Across the full text of the Natura Impact Statement, by contrast, the terms peat slide, peat landslide, bog slide, peat failure, slope failure and peat instability do not appear once. The NIS identifies seven potential impact pathways, habitat loss; alteration of

groundwater flow; contamination of groundwater bodies; sedimentation / contamination of surface waterbodies; disturbance / displacement of QI/SCI species; collision risk; and the spread of invasive alien species, and characterises the surface-water pathway throughout as arising only from trenching, site excavations, dewatering, and the felling of forestry and vegetation removal. The mechanism by which a body of peat may fail and mobilise as a discrete mass, delivering a sudden high volume of sediment to a watercourse, is not assessed in relation to any European site.

Why this matters: the regulator and the applicant's own documents establish both the hazard and the pathway to the European sites

The significance of this gap is established not by the objector but by the statutory consultee and by the applicant's own technical reports. The hazard is real, it has been recognised, and a rapid pathway to the European sites has been documented, yet the one document that must assess that pathway for European-site integrity does not do so.

First, the statutory nature consultee expressly linked the peat-failure hazard to the European sites. The scoping response of the Development Applications Unit of the Department of Housing, Local Government and Heritage, recorded in Chapter 5 of the EIAR, warned of “the potential for a bog slide event to occur in areas unsuitable for development”, and in the same response stated that, given the hydrological connections to Lough Gill SAC and Lough Melvin SAC, “siltation risks to the SACs during construction works via these watercourses are therefore high.” The Department thereby identified, in terms, both the bog-slide hazard and a high siltation risk to the European sites through the connecting watercourses. The qualifying interests it flagged in those waters included Atlantic salmon, brook lamprey, white-clawed crayfish and European otter in the Owenmore River (Lough Gill SAC), and salmon and trout spawning grounds in the Ballagh River (Lough Melvin SAC).

Second, the applicant's own EIAR concedes that a peat slide would be a significant effect. Chapter 5 records that two turbines (T7 and T8) sit on ground of “moderately high” landslide susceptibility, carry a “medium” peat-stability risk rating before mitigation, and lie approximately 110 m and 155 m from the protected peatland; and it concludes that the risk of peat instability is “a moderate, long-term, irreversible likely significant effect at a national geographic scale,” capable of causing the permanent loss of priority Annex I habitat 7130 active blanket bog. The applicant's Peat Stability Risk Assessment (Appendix 7-1) goes further on the watercourse pathway, conceding that the consequence of a collapse “could range from a very localised area up to a major peat slide event feeding into a watercourse.”

And the applicant's Spoil and Peat Management Plan (Appendix 2-5) provides a dedicated contingency for precisely this eventuality: measures, including the construction of check barrages on land, intended “to prevent a peat slide reaching any watercourse,” together with notification of all relevant authorities in the event of a peat slide. A developer does not prepare a contingency plan to stop a peat slide reaching a watercourse unless that outcome is a foreseeable one.

Third, the Natura Impact Statement itself confirms the hydrological connectivity that would carry such an event into the European sites. It states that, in the karst setting underlying the site, “any contamination of surface water is rapidly transported into the groundwater system, and vice versa,” and it identifies direct hydrological pathways from the site to Lough Melvin SAC and to Lough Gill SAC via the connecting watercourses. A major peat slide feeding into one of those watercourses is precisely the kind of sudden, high-volume sediment-delivery event to which the qualifying interests

of these sites, including Atlantic salmon, the oligotrophic-to-mesotrophic lake habitat and otter, are sensitive.

The position is therefore not that the hazard was overlooked. It is that the applicant assessed the peat- failure pathway for its effect on the national peatland, was warned by the statutory consultee that the same hazard posed a high siltation risk to the European sites, prepared a construction contingency for a peat slide reaching a watercourse, and documented the rapid hydrological connection of those watercourses to the SACs, and yet never carried that pathway into the Natura Impact Statement to assess its effect on the integrity of the European sites. The step that Article 6(3) requires is the one step that was not taken.

The mitigation that neutralises the conceded effect is itself deferred:

There is a further difficulty internal to the EIAR's own treatment. Having found peat instability to be "a moderate, long-term, irreversible likely significant effect at a national geographic scale," Chapter 5 then concludes that, after mitigation, the hazard ranking falls to "low" to "negligible." The entire reduction from an irreversible significant effect on a priority habitat to a negligible one rests on mitigation whose detail is expressly deferred to the post-consent phase, site-specific temporary and permanent works designs for areas of deeper peat and steeper slopes, sheet pile walls or rock-fill berms, detailed design and construction supervision, and post-rainfall monitoring by an appointed Ecological Clerk of Works. This is the same difficulty addressed under Ground 2 below: a conceded significant effect is dissolved by measures that are not specified, at the level of detail required to judge their efficacy, at the time of the assessment.

The legal consequence:

A gap of this kind is fatal to an Appropriate Assessment. In Case C-404/09 Commission v Spain (Alto Sil) and again in C-323/17 People Over Wind, the Court of Justice has confirmed that an appropriate assessment must contain complete, precise and definitive findings capable of removing all reasonable scientific doubt as to the effects of the works on the site concerned. It is not an answer that the peat- failure pathway was assessed elsewhere in the EIAR in respect of a national designation; the Article 6(3) test is a distinct exercise directed to the integrity of the European sites, and it is the Natura Impact Statement that must contain the necessary findings in respect of those sites. Where the statutory consultee has flagged a high siltation risk to the SACs from a possible bog slide, where the applicant's own reports concede a peat-slide-to-watercourse scenario and provide a contingency for it, and where the NIS itself confirms rapid hydrological connectivity to the SACs, the absence of any assessment of that pathway in the NIS means that reasonable scientific doubt as to the absence of adverse effects on the integrity of those sites necessarily remains. The competent authority cannot lawfully conclude otherwise.

The weight of this gap is sharpened by the planning history. When the Board refused the earlier scheme on this site in 2010, it did so in part because it was not satisfied that an eight-turbine, 80 m development would not give rise to surface pollution and risk of slope instability on this peat-covered, sloping site. The present proposal is substantially larger, fourteen turbines at 180 to 185 m to blade tip, with associated borrow pits, hardstands and access tracks, and so the peat-stability concern that grounded the earlier refusal is, if anything, magnified rather than resolved. Against that backdrop, it is all the more striking that the very pathway the Board previously

found decisive on this site, and which the EIAR now concedes to be a significant effect on the national peatland, has not been carried into the Article 6(3) assessment of the European sites at all.

Ground 2: The integrity conclusion relies on mitigation deferred to a contractor-finalised “live” document

The NIS concludes that, following mitigation, there will be no adverse effect on the integrity of any European site. That conclusion is, however, dependent on mitigation measures whose detail is expressly deferred to the post-consent construction phase and placed in the hands of the as-yet-unappointed contractor. This offends the principle that the effectiveness of mitigation must be established with certainty at the time of the assessment.

The NIS states in terms, in respect of the Construction Environmental Management Plan on which much of the surface-water protection depends, that the CEMP “will be revised as required by the appointed contractor and will be treated as a live document to be updated as required throughout the construction of the development.”

The mitigation for European otter is likewise deferred: the NIS does not establish the location of otter holts, but instead relies on “pre-construction confirmatory surveys” to be carried out after consent, with the prospect of a subsequent application for a Regulation 54 derogation licence should a holt be found. The Peat Stability Risk Assessment similarly defers the detailed temporary-works design to “a competent temporary works designer” to be appointed at construction stage, and contemplates a further “detailed design stage PSRA” yet to be developed.

This approach is incompatible with the requirements of Article 6(3) as interpreted by the Court of Justice in Case C-461/17 *Holohan v An Bord Pleanála*, and as applied domestically in *Kelly v An Bord* appropriate assessment where their nature, extent and efficacy are described in sufficient detail, at the time of the assessment, to enable the competent authority to be certain that they will achieve their stated effect. A measure that is to be designed and finalised after consent, by a contractor not yet appointed, and recorded in a document expressly described as “live,” cannot meet that standard. The certainty required by *Waddenzee* cannot rest on a commitment to design the necessary protections later.

Ground 3: The in-combination assessment relies on circular reasoning rather than quantitative analysis

The NIS's assessment of in-combination effects is not a true cumulative assessment. For each of the other projects considered, ongoing forestry operations, Faughary Wind Farm, Carrickeeny Wind Farm, the Kerrigan Quarry extension, the Dromahair Flood Relief Scheme and the Rossinver Wastewater Treatment Plant, the NIS applies an identical and circular line of reasoning.

In each case, the NIS observes that the relevant receiving waterbody currently holds “good” Water Framework Directive status, asserts that this “demonstrates the effectiveness of current water protection mitigation measures,” and concludes on that basis that no adverse in-combination effect will arise. The reasoning is circular: the present good status of a watercourse is treated as proof that future mitigation, at a different development, applying different measures, under different

supervision, will be equally effective. Current condition is not evidence of the efficacy of measures not yet implemented.

More fundamentally, the in-combination assessment contains no quantitative analysis whatsoever of the combined sediment or pollutant loading that the proposed project and the other identified projects could place on the shared receiving waters. There is no assessment of the assimilative capacity of the receiving waterbodies, nor of the cumulative loading against that capacity. The conclusion of no in-combination effect is therefore asserted rather than demonstrated. This is significant because the applicant's own screening exercise considered the Kerrigan Quarry, the Dromahair Flood Relief Scheme and the Rossinver Wastewater Treatment Plant sufficiently connected to warrant detailed in-combination assessment, a detailed assessment which, when it comes, does no more than recite the circular formula above.

Ground 4: The aquatic baseline is too thin to support the conclusions drawn from it

The integrity conclusions in respect of the salmonid and freshwater-dependent qualifying interests of Lough Melvin SAC, Lough Melvin SAC (NI), Lough Gill SAC and Unshin River SAC rest on an aquatic baseline that is, in important respects, thin and temporally limited. Where the conclusion of “no adverse effect” depends on a confident characterisation of the existing aquatic environment, the adequacy of the baseline is itself a material consideration.

The following features of the aquatic baseline are drawn to the attention of the inspector. Single-season, downstream-only electrofishing: the fisheries baseline relies substantially on a single season of electrofishing data, focused downstream, rather than a multi-season programme capable of capturing inter-annual variation in salmonid spawning and nursery use. Late and limited macroinvertebrate sampling: site-level macroinvertebrate data is drawn largely from a single recent sampling exercise, providing a narrow temporal window against which to judge baseline water quality and the sensitivity of the receiving environment. Reliance on WFD status as a proxy for ecological baseline: the assessment leans heavily on the “good” WFD status of receiving waterbodies as a proxy for site-specific ecological condition, which is a catchment-scale classification and not a substitute for site-specific survey effort at the points of impact.

These are not, individually, grounds for refusal in themselves. They are advanced because the precautionary standard requires that the data underpinning a finding of “no reasonable scientific doubt” be commensurate with the sensitivity of the receptors. For internationally important salmonid waters, a single-season, downstream-weighted baseline is a slender foundation for a definitive integrity conclusion.

Ground 5: Reliance on post-consent survey and adaptive management for European otter

As noted under Ground 2, the NIS does not establish the presence or location of European otter holts along the grid connection route, despite confirming otter activity (including spraint sites and a substantial spraint accumulation under a bridge) at several aquatic survey points within Lough Gill SAC. Instead, the assessment defers the identification of breeding and resting places to pre-construction confirmatory surveys, coupled with a contingent, post-consent process of exclusion

zones, trail- camera monitoring and, if necessary, an application for a Regulation 54 derogation licence.

This is a form of “survey-and-react” adaptive management. It substitutes a commitment to find out later for the complete characterisation of the receptor that Article 6(3) requires now. Where a qualifying interest species is known to be active in the affected watercourses, the assessment should establish the baseline before consent, not defer it to a stage at which the principle of the development has already been decided and the practical pressure is to proceed.

Ground 6: The bat collision conclusion concedes a likely significant effect on European Protected Species and reaches “no residual effect” only through mitigation deferred to post-construction monitoring

This ground concerns the assessment of bat collision risk in EAR Chapter 5 (Biodiversity) and Appendix 5-5. It does not assert a survey deficiency. The applicant's bat survey is, on its face, thorough: it was led by a bat specialist, it included daytime inspection of potential roost features and dusk and dawn surveys of fourteen buildings, and it deployed static detectors at fourteen locations over the spring, summer and autumn, recording 18,742 bat passes. Six buildings are confirmed roosts and one is a confirmed Natterer's bat maternity roost. We accept that the roost and activity baseline has been established. The ground is directed instead at how the collision effect that this baseline reveals is then resolved.

All bat species in Ireland are listed in Annex IV of the Habitats Directive as European Protected Species. On the applicant's own classification of the fourteen turbines, four turbines (T6, T7, T11 and T13) pose a high risk, and three (T9, T10 and T12) a medium risk, to local bat populations. The applicant's own assessment is explicit that, in the absence of mitigation, T6, T7, T11 and T13 pose a high risk to local populations of Leisler's bat, common pipistrelle, soprano pipistrelle and Nathusius' pipistrelle, all four of which the applicant identifies (citing NatureScot, 2021) as species at high risk of collision with wind farm sites. Leisler's bat, a high-flying species particularly exposed to rotor-swept collision, was recorded at high activity at T6 and T7. On that evidence the applicant concludes, in its own words, that the collision risk effects of T6, T7, T9, T10, T11, T12 and T13 on local bat populations are a likely significant effect over the long term at a local geographic scale.

A likely significant effect on a European Protected Species, conceded by the applicant, is the point at which the assessment must demonstrate, to the standard the Habitats Directive requires, that the proposed mitigation will in fact reduce that effect to a level that is not significant. It is here that the assessment falls short. The mitigation on which the no-residual conclusion depends is an increase in the turbine cut-in speed to 5.5 m/s from thirty minutes before sunset to thirty minutes after sunrise when temperatures are above 10 degrees Celsius, together with blade feathering below the manufacturer's cut-in speed, applied at the high and medium risk turbines. The applicant then concludes that, following the implementation of these measures, no significant residual effects are anticipated.

The difficulty is that the applicant's own text does not present that mitigation as established to be effective. It presents it as provisional and to be corrected after the event. The chapter states that the results of post-construction compliance monitoring over the first three years, including acoustic surveillance and carcass searches, “will be used to adjust mitigation measures as necessary to

improve effectiveness” . In other words, the applicant does not demonstrate that a 5.5 m/s cut-in will reduce the admitted likely significant effect on these Annex IV species to a non-significant level; it commits to measuring the number of dead bats after the turbines are operating and adjusting the cut-in regime if the carcass counts show the initial figure was insufficient. The conclusion of no significant residual effect is therefore reached in advance of, and in reliance upon, a monitoring-and-adjustment process that has not yet happened and whose outcome is unknown.

This is the same defect that arises for European otters under Ground 5, and it is the defect the Court of Justice identified in *Holohan* (C-461/17) : an assessment may not discount a likely significant effect by reference to mitigation whose effectiveness is not established at the point of decision. A mitigation measure whose adequacy is expressly to be determined by post- construction carcass searches, and adjusted if those searches reveal it to be inadequate, is mitigation deferred, not mitigation demonstrated. The protection of the European Protected Species is thereby made contingent on a future adaptive process rather than secured by the assessment before the Commission. The concession of a likely significant effect at seven turbines, combined with reliance on a cut-in regime the applicant itself reserves the right to change once bat mortality is measured, means the assessment has not established, to the requisite standard, the absence of a significant residual effect on these Annex IV species.

There is a further difficulty with the chosen mitigation, which goes to whether it can be said to be adequate even on its own terms. The applicant's 5.5 m/s cut-in speed sits at the lower end of the range that the guidance it relies upon identifies. The NatureScot guidance the applicant cites indicates that curtailment thresholds should be site-specific and informed by bat-activity peaks, and are likely to fall within a range of wind speeds between 5.0 and 6.5 m/s at temperatures above approximately 10 to 11 degrees Celsius. The applicant has selected a figure close to the bottom of that range. This matters here because the same guidance is explicit that higher-risk, high-flying species, and it names *Leisler's bat* in particular, frequently fly in open areas, such that buffer-based mitigation is unlikely to be effective for them and curtailment is the operative safeguard. This site has confirmed high *Leisler's bat* activity at two of the high-risk turbines (T6 and T7). The published evidence indicates that the reduction in bat fatalities increases with each incremental increase in cut-in speed, so a threshold set at the lower end of the recognised range leaves an avoidable margin of risk unaddressed. Given that Ireland holds a substantial share of the global *Leisler's bat* population, the consequences of under- mitigation at a confirmed *Leisler's* location are not merely local. It is respectfully submitted that the Commission should require the applicant to justify the selection of 5.5 m/s over a more precautionary figure within the guidance range, and to apply the most current onshore-wind bat guidance applicable in this jurisdiction, before any reliance is placed on the no-residual-effect conclusion. In this regard the Commission's attention is respectfully drawn to the fact that Bat Conservation Ireland has since published *Bat Survey, Assessment and Mitigation Guidelines for Onshore Wind in Ireland* (2026), which provides a standardised framework for the survey, assessment and mitigation of bat effects at onshore wind developments specific to the Republic of Ireland and its ecological and legislative context. The applicant is not to be criticised for having relied on the NatureScot (2021) guidance, which was the most recent applicable guidance available when the assessment was prepared. The point is that jurisdiction-specific Irish guidance now exists, and that the appropriateness of the selected curtailment regime, and of the no-residual-effect conclusion that depends on it, is a matter the Commission should have regard to and, if necessary, require to be revisited against that current guidance before permission is granted.

Ground 7: The applicant's own Bat Assessment identifies half the turbine layout as High or Medium collision risk, concedes a significant residual effect, and then discharges it through post-consent mitigation and monitoring

The applicant's own bat survey does not describe a bat-poor site. Appendix 5-5 (the Bat Assessment prepared by Bat Eco Services) records seven bat species within the survey area, which it expressly characterises as “a high level of bat biodiversity,” and states that bat activity was recorded at or in the vicinity of all fourteen proposed turbine locations. A total of 18,742 bat passes were logged on the static detectors in 2024 alone. Three of the recorded species, common pipistrelle, soprano pipistrelle and Leisler's bat, are classified in the applicant's own assessment as High Risk in relation to wind turbines.

On the applicant's own risk assessment, the collision risk is not marginal or confined to one or two locations. The Bat Assessment concludes, before mitigation, that there are four High Risk turbines (T6, T7, T11 and T13) and three Medium Risk turbines (T9, T10 and T12). That is seven of the fourteen turbines, half of the entire layout, assessed by the applicant's own ecologist as High or Medium risk for bats. The activity underlying that finding is substantial and concentrated: the static unit at T9 recorded 1,384 soprano pipistrelle passes in a single autumn deployment, and the unit at T13 recorded 2,209 common pipistrelle passes in the same period, figures the assessment itself flags as markedly above the site average.

The site also contains confirmed bat roosting resources. Building 4, within the proposed development area and approximately 270 m from Turbine 9, is a confirmed daytime roost for soprano pipistrelle, a High Risk species. A further five buildings in the surrounding lands are confirmed roosts, including a Natterer's bat maternity roost of approximately 135 individuals at Building 7, and potential tree roost features were identified in the vicinity of Turbine 9. The assessment is therefore not dealing with an empty commercial forestry block, but with a connected upland, forestry-edge, watercourse and farmland landscape in active use by bats for roosting, foraging and commuting.

Faced with its own findings, the applicant's assessment concedes, for the construction phase, that the proposed development “would still result in a medium-term likely Significant residual effect at a local level, primarily due to habitat loss.” That is a significant residual effect admitted in the applicant's own words. The assessment then concludes that the operational phase will not result in a likely significant effect, but only on the basis of a suite of mitigation and monitoring measures that are, by their nature, deferred beyond the point of consent: turbine cut-in speed curtailment to be refined over the first three years of operation and reviewed again at Years 10 and 20; carcass searches; annual vegetation control; and a curtailment regime whose final parameters are, on the face of the report, still to be determined. This is the same structural difficulty identified elsewhere in this submission in relation to peat and hydrology: a conceded significant effect is reduced to “not significant” by reliance on measures whose content, effectiveness and refinement are placed after permission, when the Commission is no longer the decision-maker. The principle in *Holohan* (C-461/17) applies here with equal force.

Two further features of the applicant's own assessment compound this. First, the applicant proposes to demolish a building (Building 3, adjacent to Turbine 9) and to fell trees identified as potential roost features, but the decision to demolish is taken in advance of the pre-construction roost survey that

would establish whether a roost is present; a Regulation 54 derogation licence is stated to be required only “if bat roosts are recorded during pre-construction surveys.” Where a development depends on the demolition of a potential roost, and a derogation from the strict protection of the Habitats Directive may be required, the competent authority should be satisfied before granting consent that the derogation can lawfully be obtained, rather than leaving both the survey and the licence to a post-consent stage (Namur-Est Environnement, C-463/20; Commission v Ireland, C-183/05). Second, the applicant's own assessment records that its intended analytical tool, EcoBat, was unavailable at the time of reporting, and that an alternative averaging method was substituted; the assessment does not demonstrate that this substitution produced results equivalent to the tool the guidance anticipates.

For these reasons, the bat assessment does not support the conclusion of no likely significant effect that the applicant asks the Commission to reach. On the applicant's own figures, half the layout is High or Medium collision risk, a significant residual effect is conceded, roosts are present, and the reduction to “not significant” depends on deferred, post-consent mitigation and on a derogation that has not been secured. The submission respectfully invites the Commission to require that these matters be resolved, by complete survey and secured mitigation, before any question of consent arises.

The applicant's own finding that the surrounding lands contain confirmed bat roosts is corroborated by local knowledge: a named resident records an established pipistrelle maternity colony, present every summer since 2023, in a house close to the site (full record and photograph at Appendix A). A maternity roost, where females gather to give birth and rear young, is a particularly sensitive feature, and its presence reinforces the applicant's own conclusion that this landscape is in active use by bats, including for breeding.

Ground 8: The bat survey departs from current best-practice guidance in several respects that the assessment does not acknowledge or justify

The applicant's own conclusions rest on how the bat baseline is interpreted and resolved, and there are a number of respects in which the assessment leaves questions open that the Commission should require the applicant to close before relying on its no-significant-residual-effect conclusion. These points do not impugn the diligence of the survey, which is accepted above to have been thorough; they go to whether the assessment, as reported in Appendix 5-5, engages fully with the collision and roost risks the baseline itself reveals. First, the assessment does not engage with the Bat Conservation Ireland Bat Survey, Assessment and Mitigation Guidelines for Onshore Wind in Ireland (2026); that guidance postdates the fieldwork and the applicant cannot be criticised for the survey design, but it is now the jurisdiction-specific standard against which the adequacy of the assessment falls to be judged, and the Commission should have regard to it. Second, no hibernation-season assessment is reported, notwithstanding the presence of two substantial underground features centrally within the site (the dolines recorded by the applicant in the vicinity of Turbines 7 and 8), which are the kind of feature *Myotis* species use for autumn swarming and overwintering, and notwithstanding that the applicant proposes to demolish a building identified as a potential roost and to fell trees with potential roost features; the assessment does not explain why the absence of a hibernation-season inspection is not material to those proposals. Third, no monitoring at height is

reported, notwithstanding the exceptional 185 m tip height of the proposed turbines and the fact that high-collision-risk species such as Leisler's bat and Nathusius' pipistrelle routinely fly above the roughly 50 m detection range of the ground-based detectors used, so that activity within the rotor-swept collision-risk zone may not be fully captured by the reported baseline. Fourth, the applicant's own report records that its intended analytical tool, EcoBat, was unavailable at the time of analysis and that an alternative averaging method was substituted, without demonstrating that the substitution produced equivalent results. None of these is advanced as proof that the survey was carried out incorrectly; each is a point on which the reported assessment does not, on its face, provide the assurance the no-residual-effect conclusion requires, and on which the Commission is entitled to seek further information before granting consent.

Ground 9: The compensation proposed for marsh fritillary is stated inconsistently in the applicant's own plan, is not shown to be ecologically equivalent, and depends on a translocation for which no derogation is identified

The marsh fritillary butterfly is Ireland's only insect protected under Annex II of the Habitats Directive, and the proposed development affects both its habitat and confirmed larval webs on the site. Three difficulties arise from the applicant's own documents. First, the compensation proposed is stated inconsistently within the applicant's own Outline Biodiversity Management Plan (OBMP): the detailed species section commits to managing 2.58 hectares of wet grassland for marsh fritillary; the executive summary and other sections refer to 2 hectares; and a further section refers to 22.58 hectares. A reader of the applicant's own plan cannot therefore determine what area of compensation is actually being offered, a matter the applicant should be required to clarify, since it materially affects any assessment of adequacy. Second, whatever the correct figure, the compensation is not shown to be ecologically equivalent to what is lost: habitat suitable for marsh fritillary depends on a specific combination of topography, hydrology, sward structure and the presence and abundance of the larval foodplant, and designating an area of wet grassland as compensatory does not demonstrate that it will function as marsh fritillary habitat, still less that it will do so without a substantial time lag. This matters because the species functions as a metapopulation rather than as isolated colonies, so that long-term persistence depends on a connected network of suitable patches, and published research indicates that viable metapopulations may require habitat networks in the order of 70 to 100 hectares (Bulman et al., 2007); a compensatory parcel of the order of two to three hectares cannot be assumed to deliver ecological equivalence on an area basis alone, and the proposed consolidation of dispersed groups into a single area increases, rather than reduces, the population's exposure to a single catastrophic event such as wildfire or a parasitism outbreak. Third, the proposed handling of larval webs and foodplant turves amounts to a translocation of a strictly protected species, yet the applicant's documents do not identify the Regulation 54 derogation licence that such a translocation would require.

The presence of marsh fritillary in the affected landscape is further evidenced by a dated, located and photographed local record from Tullyskerry on 14 June 2026 (Appendix A), which corroborates the applicant's own identification of the species and underlines that the receiving environment supports a species of European conservation importance.

Ground 10: Several protected species are listed in the assessment but not surveyed, and at least one is mis-stated in law

A number of legally protected species are named in the biodiversity chapter but were not the subject of adequate dedicated survey. Two plant species protected under the Flora (Protection) Order 2022, the bristle-leaf (a moss) and the small-white orchid, are referred to as potentially present but appear only as list entries, with no dedicated botanical survey results; this is significant because there are existing records of bristle-leaf within the northern proposed enhancement land that forms part of the application site, yet the species is not addressed in the Outline Biodiversity Management Plan. There is also an apparent inconsistency in the treatment of the enhancement lands, which are described in the chapter as lying “beyond the survey area,” while parts of those same lands appear within the surveyed (blue-lined) area on the applicant's own figures. Similarly, the common lizard, Ireland's only native terrestrial reptile, is assessed as being of low value on the basis of a single walkover in which no direct observation was made; a species the chapter itself describes as difficult to observe cannot safely be assessed as low value on that basis without the targeted survey methods appropriate to the species. The chapter also, on the material reviewed, mis-states the common lizard as an Annex IV species; it is not Annex IV, though it is protected under the Wildlife Acts, and the error should be corrected so that the correct protective regime is applied. Amphibian survey effort raises a comparable concern, having not been undertaken at night within the breeding season when the animals are most detectable. These points form part of a consistent pattern in which protected species are named and then not adequately surveyed or valued, which bears on the completeness of the assessment as a whole.

Ground 11: Residual significant effects conceded in the EIAR and the unsecured Outline Biodiversity Management Plan

Distinct from the Article 6(3) analysis above, the applicant's own EIAR Chapter 5 candidly concedes a series of significant residual effects on Annex I habitats and protected species, for which it relies on compensation delivered through an Outline Biodiversity Management Plan that is, by its own description, an outline and is not secured.

Notably, the EIAR concedes direct and permanent losses and degradation of priority and non-priority Annex I peatland habitat, including the degradation of favourable-condition active blanket bog (habitat 7130, a priority Annex I habitat of national importance) through construction dust, an effect the EIAR itself characterises as “negative, permanent and irreversible.” Such a candid admission of irreversible harm to a priority habitat is unusual and significant. The EIAR further concedes losses of marsh fritillary habitat and of bat foraging habitat.



Marsh fritillary larval web recorded on the site. Local photograph; the EIAR concedes loss of marsh fritillary habitat.

On the ornithological side, and without trespassing on the detailed Birds Directive case advanced in Section 5 of this submission, it is noted here that the Outline Biodiversity Management Plan concedes the loss of approximately 140 hectares of effective hen harrier foraging habitat and proposes compensation in respect of breeding pairs of national importance. That such substantial compensation is required is itself an admission of the scale of residual effect. The difficulty is that the compensatory measures are contained in an “outline” plan that is not secured by an enforceable mechanism, and whose ecological success is therefore uncertain at the point of decision.

The Wind Energy Development Guidelines and the EPA (2022) Guidelines on the Information to be Contained in EIARs both require that mitigation and compensation be specified with sufficient certainty to allow their effectiveness to be judged. An outline, unsecured plan that concedes irreversible loss of a priority habitat does not meet that requirement.

4.3 Consistency with the Leitrim County Development Plan 2023 to 2029

The proposed development must also be assessed against the biodiversity and natural-heritage policies of the Leitrim County Development Plan 2023 to 2029. The Development Plan contains a suite of Natural Heritage policies and objectives directed at the protection of European sites, watercourses and the wider biodiversity resource of the county, and requires that development not give rise to significant effects on biodiversity or on the integrity of European sites.

For the reasons set out under Grounds 1 to 6 above, the applicant has not demonstrated to the requisite standard that the proposed development is consistent with these policies. In particular, the unassessed peat-failure pathway to Lough Melvin SAC and Lough Gill SAC, and the reliance on deferred and unsecured mitigation, are difficult to reconcile with Development Plan policy requiring the protection of the county's European sites and watercourses. It is requested that the consistency of the proposal with the relevant Natural Heritage policies and objectives of the Development Plan be expressly considered.

4.4 Conclusion on ecology and biodiversity

The applicant's ecological assessment is in many respects detailed and competently prepared, and this submission does not suggest otherwise. The difficulty is more specific and, in law, more serious. The peat-failure pathway is assessed in the EIAR for its effect on the national peatland, where it is conceded to be a significant, irreversible effect, but it is never carried into the Natura Impact Statement to assess its effect on the integrity of the European sites, notwithstanding the statutory consultee's warning of high siltation risk to those sites and the applicant's own contingency for a peat slide reaching a watercourse. The integrity conclusion further depends on mitigation deferred to a contractor-finalised "live" document, on an in-combination assessment that reasons in a circle, and on a thin aquatic baseline and post-consent otter surveys. A likely significant effect on Annex IV bats at seven turbines is, in turn, dissolved only by a cut-in regime the applicant reserves to adjust once post-construction mortality is measured. This site, moreover, has already been refused by the Board once, in part on the very peat-stability ground that the Natura Impact Statement leaves unexamined.

Taken together, these deficiencies mean that the Appropriate Assessment does not contain the complete, precise and definitive findings required to remove all reasonable scientific doubt as to the absence of adverse effects on the integrity of the European sites concerned. In those circumstances, and applying the precautionary principle as the Court of Justice requires, An Coimisiún Pleanála cannot lawfully grant consent. It is respectfully submitted that the application should be refused, or, at a minimum, that the applicant be required to furnish a Natura Impact Statement that assesses the peat-failure pathway and secures its mitigation before any grant of consent is contemplated.

Section 5: Ornithology: Hen Harrier, the Birds Directive, and the Adequacy of the Bird Assessment

Grounds advanced in this section

For refusal:

1. The applicant admits a significant, national-level effect on a nationally important hen harrier population. (Ground 1)
2. Acceptability depends entirely on compensation that is only an "outline" plan, and the applicant's documents contradict each other on whether the land is secured. (Ground 2)

As deficiencies warranting, at a minimum, further information:

3. The compensation method is unproven for this kind of site, and the applicant's own wildlife consultee warns it has failed elsewhere. (Ground 3)
4. The 140-hectare loss figure is calculated in a way that flatters the applicant, weakening the headline gain-versus-loss claim. (Ground 4)
5. On collision risk, the applicant's own cautious figure exceeds the safety threshold, and gets under it only by switching to a less cautious assumption. (Ground 5)
6. Survey and scoping gaps: white-tailed eagle, the cable and delivery routes, and migrating whooper swans. (Ground 6)
7. The white-tailed eagle collision assessment reduces its own predicted mortality by an age assumption the evidence does not support. (Ground 8)
8. The winter bird baseline is four seasons out of date, and the hen harrier compensation is not shown to be additional. (Ground 9)
9. An amber-listed sand martin nest site within 25 metres of a proposed turbine is not assessed. (Ground 10)

5.1 Introduction and scope

This section is about the birds, and in particular the hen harrier (*Circus cyaneus*). The applicant's bird assessment is set out in Chapter 6 of the Environmental Impact Assessment Report (EIAR), with the detailed survey data in Appendices 6-1 to 6-15. The hen harrier is a protected species: it is listed on Annex I of the EU Birds Directive (2009/147/EC), which requires Ireland to take special measures to conserve it, and it is the subject of the Government's Hen Harrier Threat Response Plan 2024 to 2028. It is also one of Ireland's rarest breeding birds of prey.

It is only fair to begin with what the applicant has done well. The site was surveyed for birds across five years (2020/21 to 2025), which exceeds the two-year minimum in the standard survey guidance (published by NatureScot, formerly Scottish Natural Heritage, and widely applied in Ireland). The objection below is therefore not that too little survey work was done. It is about the conclusions drawn from that work, and, as it turns out, the strongest points come straight from the applicant's own report, where its own tables and its own consultees say things that undermine the final conclusion that the wind farm is acceptable for hen harrier.

5.2 Grounds Of Objection

Ground 1: The applicant admits a significant, national-level effect on a nationally important hen harrier population

The admission:

We do not have to prove that the applicant overlooked the harm to the hen harrier. The applicant states it plainly. In Table 6-20 of Chapter 6, its own ecologists describe the disturbance and displacement of breeding and foraging hen harriers as “Significant, long-term, negative at the national scale”, in their own wording, and that is their assessment before any compensation is taken into account.



Male hen harrier (Circus cyaneus) over blanket bog and young forestry on the Dough Mountain uplands, within the proposed development area.

The background is not in dispute. The Development Applications Unit of the National Parks and Wildlife Service (NPWS) advised that the forestry around Dough Mountain and Saddle Hill has been “a reliable site for one to two pairs of nesting hen harrier over a number of years.” Chapter 6 rates the breeding population as being of national importance, because the number of pairs recorded is more than 1% of the national breeding population, and the Outline Biodiversity Management Plan accepts that the project may cause “the effective loss of the species from the site.” The compensation proposed is openly designed to make up for the loss of two breeding pairs.



Pair of Hen Harriers

Hen harrier recorded on the Dough Mountain uplands, the open mosaic of bog, heath and forest edge on which the breeding population depends.



**Saddle Hill
Lissinagroagh Wind Farm**

Saddle Hill, Dough Mountain: the open mosaic of rough grassland, heath, bog and forest edge that the breeding hen harrier uses for foraging, looking toward the ridge on which the turbines would stand.

Why this matters: there is no mitigation fallback:

In Table 6-24 the applicant confirms that “no additional mitigation [is] available” for this effect. Moving the turbines was considered and rejected (the harriers nest in different places from year to year, so there is no fixed area to design around), and switching turbines off at sensitive times was rejected as too costly. There is therefore no safety net. The only thing standing between a conceded, nationally significant harm and the applicant's conclusion that all is well is the promise that the compensation scheme will succeed. The rest of this section explains why that promise is not safe to rely on. This is the same precautionary position An Bord Pleanála reached when it refused the earlier wind farm on this hill in 2010 (reference PL.12.234741), and is consistent with NPWS's advice that effects on this fragile regional population may be nationally significant in terms of range loss.

Ground 2: Acceptability depends entirely on compensation that is only an “outline” plan, and the applicant's documents contradict each other on whether the land is secured

Because the applicant admits there is no fallback (Ground 1), its conclusion that “no likely significant effects on hen harrier remain” rests entirely on the compensation package: two Nesting Enhancement Areas of about 54 hectares, plus around 164 hectares of foraging land, said to total 218.4 hectares against an estimated 140 hectares of loss.

The first problem is that the plan setting this out calls itself an “outline” plan. It states that “following consent, the plan will be refined into a detailed Biodiversity Management Plan”, so the real detail (the precise management measures, the baseline surveys after felling, the individual farm plans) is only worked out after permission is granted. That is the wrong way round: the project is said to be acceptable because of this scheme, yet the scheme is not finished.

The second problem is worse, because the applicant's own documents disagree on whether the land is tied down. Within a single passage of Chapter 6, the report says the foraging land “will be secured through legally binding agreements with participating farmers” and, a few lines later, that it “will be secured through planning conditions and formal agreements with landowners”, both written in the future tense, as still to be done. The Outline Biodiversity Management Plan, meanwhile, says in its summary that the lands “are secured through legal agreements” (present tense, as already done), but elsewhere lists “any necessary landowner agreements are in place” as something still to be achieved. It cannot be both. We ask the Commission to require the applicant to produce the actual signed agreements covering all 218.4 hectares, lasting the full 35-year life of the wind farm, rather than accepting a promise.

This is not mere wording. Under the EIA Directive (2011/92/EU, as amended) and the EPA's 2022 Guidelines on the information an EIAR must contain, a finding that no significant effect remains must rest on measures that are real and certain when permission is granted, not on a plan still to be written and land still to be secured. The same concern about relying on plans finalised later runs through Section 4, and we connect the two rather than repeat the argument.

Ground 3: The compensation method is unproven for this kind of site, and the applicant's own wildlife consultee warns it has failed elsewhere

The heart of the compensation is turning low-grade conifer plantation into open heath and scrub (the Nesting Enhancement Areas), and managing nearby farmland for better hunting. The applicant presents this as well-proven, citing the Hen Harrier Project (an EU-funded scheme that ran from 2017 to 2023) and a study by Caravaggi and others (2019) as evidence that habitat management helps the species.

That evidence needs a closer look, because it is not the same thing as what is proposed here. The Hen Harrier Project was a payment scheme rewarding farmers for managing land they already had, not the felling of commercial forestry and its conversion to bog and heath. On that specific technique, the applicant's own consultee sounds a warning. NPWS advised, in advice quoted in Chapter 6, that “past ‘forestry conversion’ sites in Ireland and the UK have failed where habitats have become unmanageable as trees have recolonised,” and urged the applicant to choose areas needing less heavy management over the 35-year life. So the applicant's headline evidence is about a different method from the one the scheme depends on.

The compensation also relies on a chain of things going right, and the applicant's own documents admit the uncertainty in each:

1. the felled ground actually growing into good heath and scrub, which the plan accepts may be patchy and may need re-seeding, brash-spreading and ground disturbance to get going;
2. the harriers actually choosing to nest in the new areas, yet the applicant elsewhere relies on the very fact that harriers move around unpredictably to argue that no fixed turbine “no-go” zone could be designed; it cannot have it both ways; and
3. the land being actively managed across several different farms for 35 years, and a breakdown in that long-term management is exactly the failure NPWS flagged.

The timing gap, in their own words:

Chapter 6 admits that “there will be a temporal lag between the initial implementation of the proposed compensation measures and full functional delivery, as restoration ecology and conservation responses can take time to manifest.” In plain terms: the harriers lose their hunting ground the moment the turbines start operating, but the replacement habitat takes years to become usable. The applicant says it will do the habitat work early to bridge the gap, but that is a hope, not a guarantee, and it depends on the very establishment success NPWS cautioned against assuming. On the applicant's own account, there is a period in which the birds are displaced but the new habitat is not yet ready.

Ground 4: The 140-hectare “loss” figure is calculated in a way that flatters the applicant, weakening the headline “218 hectares of gain versus 140 of loss” claim

The applicant's main reassurance is a simple-sounding sum: 218.4 hectares of new and improved habitat against 140 hectares lost, so a clear net gain. But that sum is only as good as the 140-hectare figure, and that figure is built on choices that each make the predicted loss smaller.

The 140 hectares comes from drawing a 250-metre “disturbance” ring around each turbine. That distance comes from a single study, Pearce-Higgins and others (2009), which the applicant accepts is “the only peer-reviewed study to demonstrate statistically significant displacement effects on foraging hen harrier in relation to wind turbines.” Relying on the best available study is fair enough; the issue is three ways it has been applied that all push the number down:

1. It was a study of open moorland, not forestry. The original study was on open, treeless upland and deliberately left out forested and felled ground. The applicant uses this to argue the forest here will screen the turbines, giving less displacement. That is an assumption, not a measurement, and it cuts both ways: the open bog, wet grassland and heath near the turbines (the best hunting habitat) are not screened, and the felling the applicant itself plans will keep opening the canopy and exposing more ground.
2. The ring is measured from the centre of the mast, not the blade tips. The rotor is up to 163 metres across, so the blade tips sweep about 81 metres beyond the central mast. Measuring from the mast centre assumes a hunting harrier reacts to the pole rather than to the great moving blades, something the original study did not establish.
3. These turbines are far bigger than the ones in the study. The 2009 study used turbines with hub heights of 30 to 70 metres. Those proposed here have hub heights of around 101 to 110 metres and tip heights of 180 to 185 metres, among the tallest onshore turbines ever proposed in Ireland. That the old study saw no extra effect across small turbines tells us little about machines two to three times taller on an exposed ridge.

There is also a telling detail in the applicant's own foraging report (Appendix 6-12). When it tested its most realistic “worst case” (the actual area the harriers used in 2022), it found that all of the 250-metre rings around all fourteen turbines fell inside the harriers’ hunting territory, producing no reduction at all in the loss figure. Their own data shows the harriers ranging right across the turbine layout. So 140 hectares should be read as a floor, not a ceiling, and the comfort drawn from the “218 versus 140” comparison is overstated at both ends, especially as a large part of that 218 is habitat that does not yet exist and still has to be created successfully.

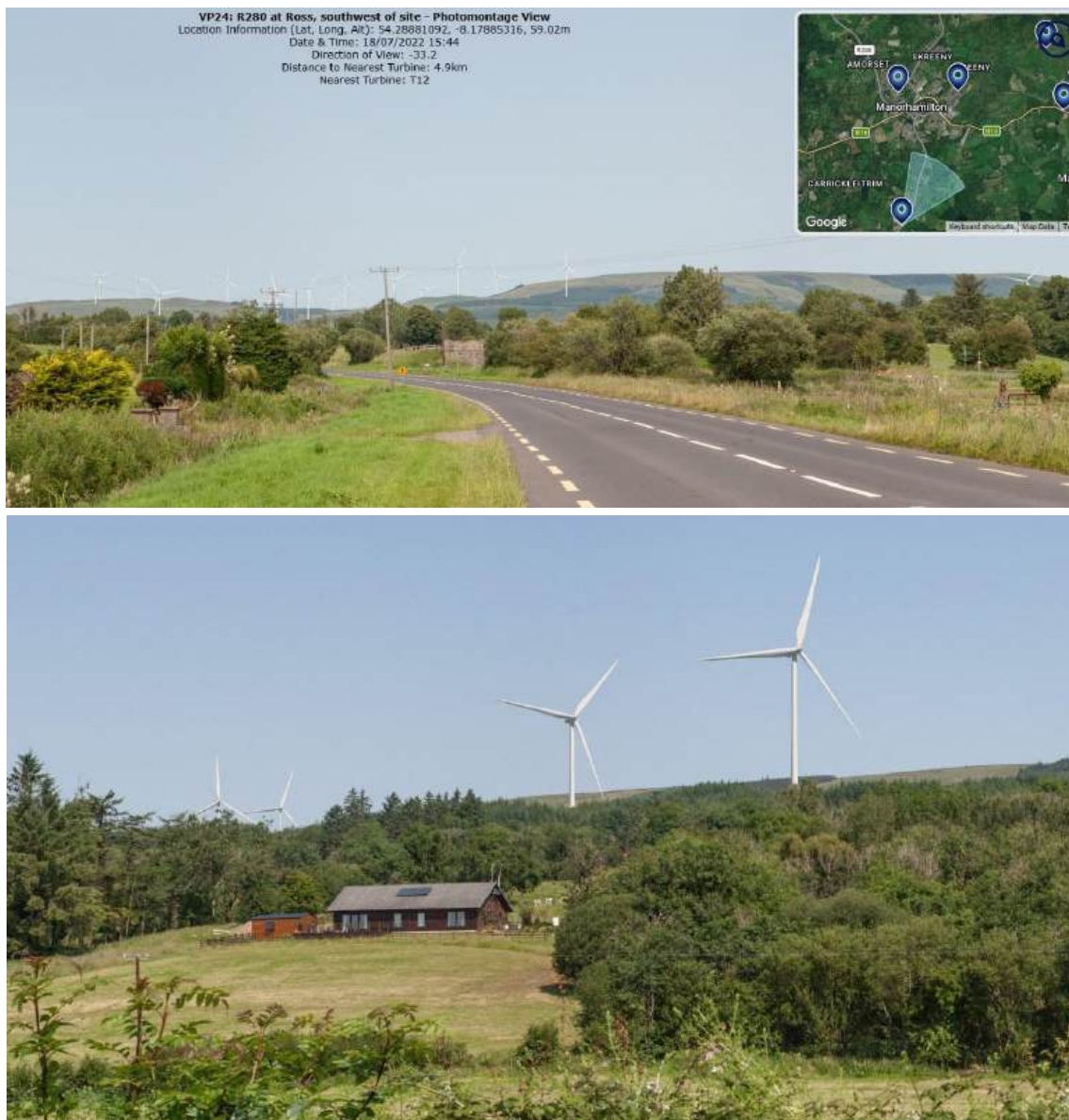
Ground 5: On the risk of birds striking the blades, the applicant's own cautious figure goes over the safety threshold, and it only gets under it by switching to a less cautious assumption

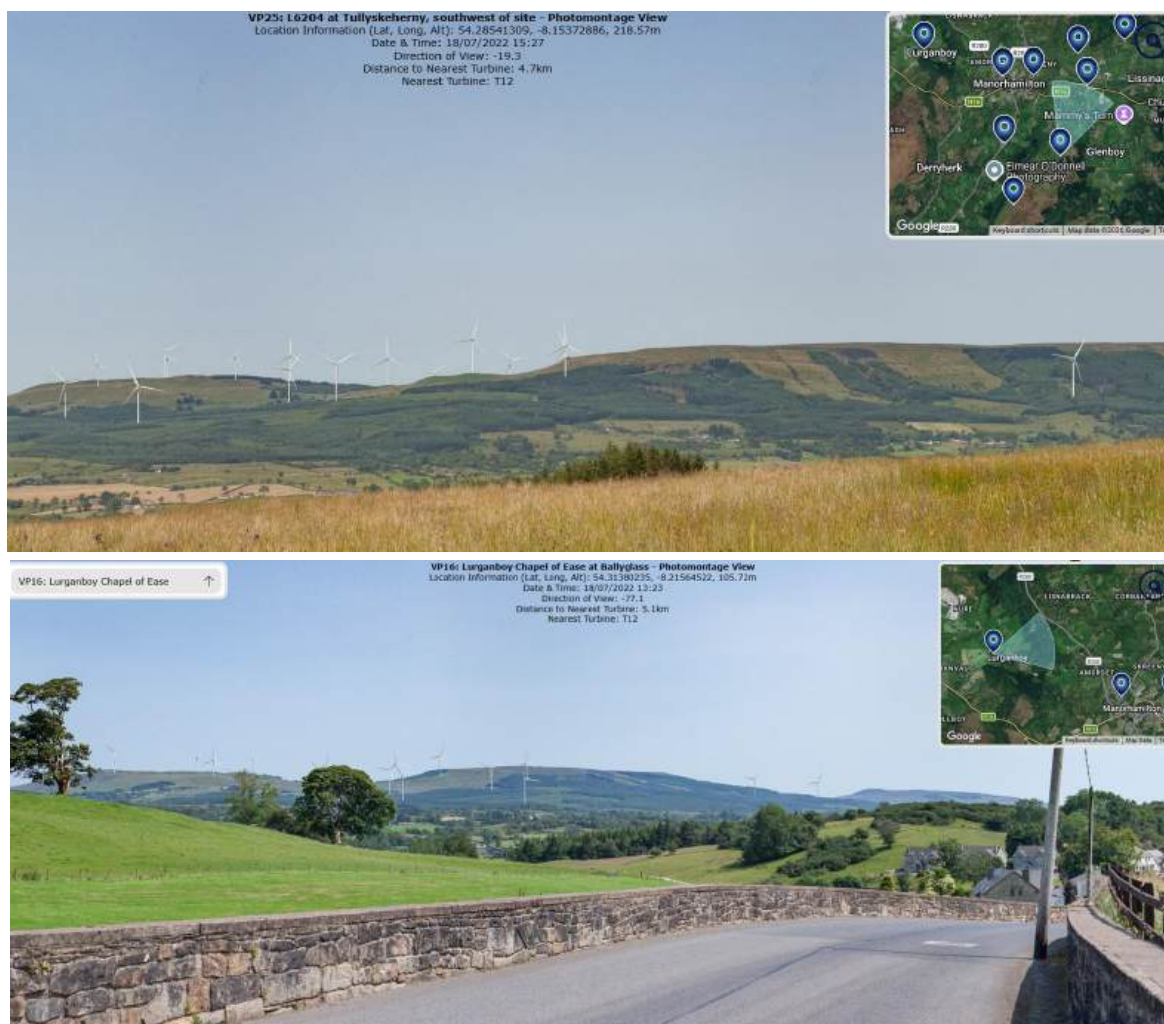
The collision model predicts very few hen harriers actually struck: a mean of 0.06 a year, or roughly two birds over the 35-year life. We are not saying that number is invented; it comes out of the standard model. The point is narrower, and it comes straight from the applicant's own significance assessment in §6.4.5.5.

There is a recognised rule-of-thumb: if a wind farm would add more than 1% to the number of birds in a population that already die each year from natural causes, that is a warning sign needing careful thought. When the applicant works out its figure on the cautious basis that the birds killed are breeding adults (which is what NPWS specifically advised should be assumed, because losing breeding adults hurts a small population most), it gets a 2.31% increase in the natural death rate for the regional hen harrier population, and openly admits this “is above the 1% threshold.”

So what does it do? It switches to a less cautious assumption, treating the casualties as young birds, which have a higher natural death rate anyway, bringing the figure down to 0.56%, under the threshold, and then presents the answer as a range, “between 0.56% and 2.31%.” The trouble is the direction of travel: faced with a cautious figure that breaches the threshold, the applicant reaches for a less cautious assumption to get back under it. NPWS’s advice pointed the other way: assume adults unless adults and young can actually be told apart in the survey data, which here they cannot. So on the applicant’s own cautious figure, the regional impact is not safely under the 1% mark. On a population NPWS describes as fragile, that should not be brushed aside.

Two smaller points back this up. First, the applicant treats displacement and collision as if a bird is only ever affected by one or the other, arguing displaced birds are not at risk of collision. But it cannot lean on displacement to keep the collision figure low and at the same time lean on the low collision figure to play down displacement; on a tiny population it is the two effects together that count. Second, a technical point from the collision report (Appendix 6-14): the highest band in the flight-height survey was simply “above 175 metres,” with no upper limit, so every bird flying above 175 metres was treated as flying above the 185-metre blade tips, that is, as not at risk at all. That quietly removes the top 10 metres of the blade-sweep from the calculation, and can only push the predicted collisions down.





Photomontage of the proposed turbines on the Dough Mountain and Saddle Hill ridge, seen from the surrounding countryside, giving a sense of the turbine scale and skyline against which the harriers fly and forage.

Ground 6: Survey and scoping gaps worth asking the applicant to fill: white-tailed eagle, the cable and delivery routes, and migrating whooper swans

These three points are smaller. We raise them not as knock-out blows but as reasonable requests for the Commission to seek more information:

1. White-tailed eagle. NPWS noted a possible (unconfirmed) white-tailed eagle breeding attempt in 2025, about 5 to 6 kilometres from the nearest turbine. The applicant's dedicated surveys for this species went out only to 5 kilometres, whereas the standard guidance recommends 6 kilometres where breeding birds may be present. The 2025 record sits in exactly the 5-to-6- kilometre band that was not surveyed. Because harm to even a single nesting pair of this reintroduced eagle could matter nationally, the safe course is to require survey to the full 6 kilometres before ruling it out.

The presence of this species in the local area is not merely a matter of the NPWS record. White-tailed eagle has been photographed by members of the community in the vicinity of the site, including at the adjacent Faughary Wind Farm, which is directly relevant to the adequacy of a survey that stopped at 5 kilometres. The following photographs are offered in support of the request that the applicant be required to complete the survey to the full 6 kilometres.

2. No bird surveys along the cable route or the turbine delivery route. No dedicated bird surveys were done for the roughly 32-kilometre underground grid cable route or the temporary working areas along the turbine delivery route. The reason given, that these mostly follow existing roads of little wildlife value, is reasonable for most of the length, but one working area sits only about 20 metres from the Cummeen Strand Special Protection Area (a site protected for its birds), and relying on a desk judgement rather than an actual survey over a route this long is something the Commission may want to test.

3. Migrating whooper swans. NPWS pointed out that this landscape is part of the wider route whooper swans use migrating between Iceland and their Irish wintering grounds. The whooper swan is also an Annex I protected species, and one was recorded flying over the northern part of the site. The applicant concludes no significant effect, but the autumn and spring migration-season surveys from 2023 onward only partly covered those periods, so whether the migration season was properly captured is a fair question.

Ground 7: Local Sightings



White-tailed eagle photographed in the vicinity of Dough Mountain (Gortnacrieve) (image metadata dated 21 July 2024).)



White-tailed eagle, further frame from the same sequence (image metadata dated 21 July 2024).



White-tailed eagle recorded at the adjacent Faughary Wind Farm(Brackary More). This is a still from a video 7th October 2024



White-tailed eagle recorded at the Brackary More townland. This is a still from a video 27th June 2026



White-tailed eagle recorded at the Boleyboy Mountain with its juvenile . This is a still from a video 09th June 2026

Ground 8: The white-tailed eagle collision assessment reduces its own predicted mortality by an age assumption the evidence does not support

The white-tailed eagle is a reintroduced Annex I species whose Irish population is small and expanding, and which began to be recorded in the vicinity of the site only from 2022. The applicant's own collision risk model, at Table 6-15 of Chapter 6, predicts that the proposed development would increase the species' annual background mortality by 2.6 per cent, a figure well in excess of the 1 per cent threshold that the chapter itself adopts (following Percival, 2003) as the level below which an effect may be regarded as insignificant. On the applicant's own precautionary method, therefore, the starting position is a predicted effect above the significance threshold.

The applicant then reduces that figure. Chapter 6 reasons that the birds most likely to frequent the site, and therefore to be killed, are dispersing immature birds rather than territory-holding adults, and that because juvenile survival (stated at 40 per cent) is much lower than adult survival (stated at 94 per cent), applying a juvenile survival rate causes the predicted increase in background mortality to fall to 0.56 per cent, below the 1 per cent threshold. The conclusion of no likely significant effect rests on that reduction. The difficulty is that the reduction depends on an assumption about the age of the birds that would be killed, and the published evidence does not support using age in this way: research on white-tailed eagle turbine mortality has found that collision victims are predicted not by age but by sex (Heuck et al., 2020). If the birds killed cannot be assumed to be disproportionately juvenile, the juvenile-survival adjustment that carries the figure below the threshold is not soundly based, and the applicant's own unadjusted figure of 2.6 per cent is the more defensible starting point. A conclusion of no significant effect that depends on an age assumption contradicted by the literature does not remove reasonable scientific doubt for a small, expanding, Annex I population.

The concern is compounded by two further features of the applicant's own assessment. The collision model relied on breeding-season data only, because no non-breeding (winter) surveys were undertaken after the 2021/22 season, yet the winter period is when juvenile eagles range most widely and explore new territory, so the very data most relevant to this species' use of the site is absent. And the proposed mitigation of carcass removal within 24 hours is of limited realism on a remote upland site that receives little footfall, particularly once operational.

This is not a matter of the applicant having failed to record eagles at all. The applicant's own Chapter 6 records a tentative white-tailed eagle breeding attempt identified through NPWS consultation in March 2026, and confirmed off-site breeding in 2025 with two juveniles observed. That record is reinforced by dated local knowledge: a white-tailed eagle was recorded on video over the Boleyboy area in the breeding season, the footage showing an adult bird together with a juvenile, with a nest indicated (the location withheld for the protection of the species). The full record is set out at Appendix A. The significance is that a breeding-season record of an adult and juvenile together is difficult to reconcile with the assumption on which the applicant's mortality reduction depends, namely that the eagles at risk are overwhelmingly dispersing juveniles rather than resident or territory-holding adults.

Ground 9: The winter bird baseline is four seasons out of date, and the hen harrier compensation is not shown to be additional

Two features of the ornithological assessment reduce the weight that can be placed on its conclusions for the most sensitive species. First, the winter baseline is stale: the applicant's own chapter records that hen harrier winter roost surveys were undertaken only in the 2020/21 and 2021/22 seasons, so that no winter survey effort has been undertaken for the four intervening seasons up to the date of application. Under the recognised guidance on the lifespan of ecological data (CIEEM, 2019), a baseline of this age should be reviewed where site conditions or species populations may have changed materially, and here they demonstrably have, the applicant's own documents recording the recent arrival and expansion of white-tailed eagle and the continuing national decline of hen harrier. Against that background, the chapter's statement that "no winter roosts were identified on or near the site" cannot safely be read as establishing current absence, because no recent winter survey has been carried out to test it. Second, the hen harrier compensation is not shown to be additional. The Outline Biodiversity Management Plan proposes to enhance 164.25 hectares of foraging land (218.4 hectares including the Nesting Enhancement Areas) to offset an estimated 140 hectares of foraging habitat lost to displacement, using management techniques drawn from national agri-environment schemes and the Hen Harrier Project, and the plan itself recognises, as one of its stated principles, that enhancement must "demonstrate clearly that what is proposed provides additional habitat to what is already present." That test is not clearly met where the enhancement lands are farmed under existing agri-environment arrangements in which comparable habitat management is already incentivised: to the extent that the same measures are already being delivered under an existing scheme, the additional ecological benefit attributable to the development, as opposed to what would occur anyway, is not established.

The applicant's reliance on a stale winter baseline is thrown into sharper relief by local knowledge of the species' continuing presence: named local observers record hen harrier as a regular presence over Dough Mountain and its foothills, seen on a near-daily basis in spring and early summer (Appendix A). While not a substitute for systematic survey, such records are consistent with continued use of the site by a species in national decline, and reinforce the point that a four-season-old winter baseline cannot safely be treated as establishing current absence.

Ground 10: An amber-listed sand martin nest site within 25 metres of a proposed turbine is not assessed

The sand martin is an amber-listed species of conservation concern under the Birds of Conservation Concern in Ireland assessment. A sand martin nest site is present within approximately 25 metres of a proposed turbine location (T8), yet the species does not appear to have been included in the impact assessment, and no mitigation has been designed to address the likely effects of construction and operation at that location. Given the proximity of an active nesting feature to turbine infrastructure, the omission should be remedied by a species-specific assessment before the effect on this receptor can be treated as understood.



Sand Martin Nesting Site in proximity to proposed T8 site

5.3 How this links to the other sections

This section should be read alongside Section 4 (Ecology and Biodiversity), which deals with the European-site protection rules (Appropriate Assessment under the Habitats Directive) and the peat-slide pathway, and left the full hen harrier and Birds Directive argument to be made here; and Section 6 (Hydrology) and Section 7 (Peatland and Soils), because whether the harriers' bog and wet-heath habitat survives, and whether the peatland rewetting promised in the compensation can actually be delivered, depends on the water and peat-stability issues dealt with there. Where those sections show a risk to the open bog and wet heath, that strengthens Grounds 3 and 4 here.

5.4 Conclusion on ornithology

What makes this section unusual is that the applicant's own report hands us the key facts. Table 6-20 calls the impact on hen harrier significant, long-term and negative at the national scale; Table 6-24 says no extra mitigation is available; and so the whole case for the wind farm being acceptable comes down to whether the compensation scheme works. Our objection is that this single, load-bearing promise is not safe to rely on:

First, the compensation is only an outline plan, finished off after permission rather than before; its main method (turning forestry into bog and heath) is one the applicant's own wildlife consultee warns has failed elsewhere; and the applicant's own documents cannot agree on whether the land is even secured.

Second, the loss the scheme must make up for has been calculated to look smaller than it is, while the applicant's own worst-case data shows harriers using the whole turbine area, so the reassuring "218 hectares versus 140" comparison does not hold up.

Third, on the risk of birds striking the blades, the applicant's own cautious figure (a 2.31% rise in the regional death rate) goes over the recognised 1% warning line, and it only gets back under by adopting a less cautious assumption than its own wildlife consultee advised.

Taking a precautionary approach, as An Bord Pleanála did when it refused the earlier wind farm on this very hill in 2010, we respectfully ask the Commission to find that the bird case for this wind farm has not been made out, and to refuse permission. If permission is not refused outright, we ask the Commission at the least to require the applicant to: produce the signed legal agreements proving the compensation land is secured for the full life of the project; show that the replacement habitat will be working before the existing habitat is lost, not years afterwards; complete the white-tailed eagle survey out to 6 kilometres; and re-state the collision conclusion on the cautious "adult bird" basis NPWS advised.

Section 6: Hydrology, Hydrogeology and Water Quality

Grounds advanced in this section

For refusal:

1. The karst setting defeats the surface-water-based mitigation toolkit on which the no-adverse-effect conclusion depends. (Ground 1)

As deficiencies warranting, at a minimum, further information:

2. The Polldough dye trace, the only site-specific evidence of the karst pathway, is unattributed and unverifiable. (Ground 2)

3. The applicant's own bedrock mapping records geological faults through the site, a recognised preferential groundwater pathway the connectivity assessment does not characterise. (Ground 2A)

4. The Water Framework Directive baseline understates receptor sensitivity on the Lough Melvin pathway, and does not assess the full set of quality elements. (Ground 3)

5. Residual baseline weaknesses contradict the chapter's "no limitations" self-certification. (Ground 4)

6. The construction-phase pollution risk to a salmon-bearing system is understated. (Ground 5)

7. The conclusion that significant karst is "unlikely" rests on a desktop-and-walkover survey, with confirmatory void-detection deferred to a post-consent stage. (Ground 6)

6.1 Introduction and Scope

This section addresses the hydrological, hydrogeological and water-quality assessment presented in Chapter 8 (Hydrology and Hydrogeology) of the Environmental Impact Assessment Report (EIAR). The proposed wind farm occupies upland terrain bordering Dough Mountain, draining on its northern flank into the Ballagh and Lattone rivers and thence to Lough Melvin, a transboundary water body straddling the border with Northern Ireland and a European site under the Habitats Directive. The site is underlain in part by a Regionally Important Aquifer - Karstified Conduit (the Dartry Limestone Formation), and the EIAR records 76 karst features within the study area, including the Polldough cave/swallow-hole system.

The submission does not dispute that Chapter 8 assembles a substantial baseline. It identifies a number of grounds on which, respectfully, the chapter falls short of the standard required for An Coimisiún Pleanála ("the Commission") to be satisfied, to the degree of certainty the law requires, that the proposed development will not give rise to significant adverse effects on the water environment or on the European sites hydrologically connected to it. The grounds are presented in order of weight. They draw, wherever possible, on the applicant's own data and admissions.

Cross-references: This section should be read with Section 4 (Ecology and Biodiversity), which addresses the Appropriate Assessment and Natura Impact Statement, and Section 7 (Peatland and Land/Soils), which addresses peat stability and the bog-slide pathway. The water-quality pathways described here are the same pathways by which construction effects would reach the qualifying interests of Lough Melvin and Lough Gill.

6.2 Grounds of Objection

Ground 1: The karst setting defeats the surface-water-based mitigation toolkit

The central difficulty in Chapter 8 is an internal contradiction between its baseline and its mitigation approach. The baseline characterises the groundwater bodies underlying and surrounding the site as karstified and intimately connected to surface water. In the chapter's own words, there is “a high degree of interconnection between groundwater and surface water” in the karstified limestone; recharge “can be rapid and a large proportion of the flow can occur through conduits, sometimes at extremely high velocities (e.g. 100s m/hr)”; and “any contamination of surface water is rapidly transported into the groundwater system, and vice versa.”

Notwithstanding this, the assessment methodology (§8.2.4) applies a conventional source-pathway-receptor model and relies on “embedded mitigation” and the standard construction-phase measures of the kind set out in §8.5 of the chapter, namely settlement ponds, silt traps, buffer zones and drainage controls. These are, by design, surface-water controls. They are engineered to intercept, slow and settle overland flow. They are not capable of arresting a contaminant that, on the applicant's own account, can enter a swallow hole and travel through bedrock conduits at hundreds of metres per hour to re-emerge at a spring or watercourse some distance away, having bypassed every surface interception measure on the site.

This difficulty is compounded by the fact that the surface-water measures themselves are effective only on assumptions that cannot be guaranteed. They depend on near-perfect design and construction: if there is a break, an accident, or a departure from specification, the contents of a settlement pond can be released suddenly, producing a downstream effect more damaging than the diffuse run-off the pond was built to control. They depend equally on the absence of rainfall events large enough to overwhelm the design capacity of the system. On a high, exposed, peat-covered site, neither assumption is secure. It may be possible to reduce the risk; it is not possible to eliminate it, and a residual risk that cannot be eliminated is precisely what the integrity test does not permit where a European site is in the contaminant pathway.

The point is not that karst science is uncertain. It is that the applicant's mitigation does not match the applicant's own conceptual model. Where a pathway is sub-surface, rapid and conduit-driven, a surface-water toolkit cannot give the Commission the assurance that the Habitats Directive requires. The Court of Justice in Waddenzee (C-127/02) held that consent may be granted only where the competent authority has made certain that the plan or project will not adversely affect the integrity of the site concerned, and that this is so where no reasonable scientific doubt remains as to the absence of such effects. A mitigation strategy that does not address the dominant contaminant pathway its own baseline identifies cannot dispel reasonable scientific doubt.

The 2010 refusal of the earlier wind-farm proposal on this same upland (An Bord Pleanála, PL.12.234741) applied the precautionary principle to the risk of degradation of the priority habitat and to slope instability. The same principle applies with equal force where the contaminant pathway is a karst conduit system that the proposed mitigation is not designed to control. The submission respectfully invites the Commission to find that the residual risk to connected waters, including Lough Melvin, has not been excluded to the requisite standard.

Ground 2: The Polldough dye trace, the only site-specific evidence of the karst pathway, is unattributed and unverifiable

The sole piece of site-specific evidence in Chapter 8 establishing how the karst system connects to surface water is a single sentence at §8.3.2.2: “A qualitative dye trace from Polldough indicated a groundwater pathway to the local stream - i.e. Mt Dough Stream 1 km to the south.” That is the entirety of the disclosure. The chapter gives no author, no date, no description of methodology, no detection points, no travel time, no recovery data, and no reference to any underlying report. It is expressly described only as “qualitative”, that is, presence/absence only, so it establishes, at most, that a connection exists, while disclosing nothing about velocity, dilution, or the proportion of flow involved. Yet this single trace is doing a great deal of work: it is the evidential bridge between the karst conduits described in the baseline and the surface watercourses that carry flow toward the European sites.

An assessment of likely significant effects cannot rest on a load-bearing connectivity finding on an undated, unattributed, un-methodologised result that no reader can interrogate or reproduce. The submission respectfully requests that the Commission, before determining the application, require the applicant to produce the underlying dye-trace study: its author, date, methodology, monitoring network, and results, so that the connectivity on which so much of the water assessment turns can be properly examined. Absent that, the pathway analysis in Chapter 8 is not capable of independent verification, which is itself a deficiency in the EIAR under the EIA Directive and the EPA's 2022 Guidelines.

Ground 2A: The applicant's own bedrock mapping records geological faults running through the site, a recognised preferential pathway for groundwater movement that the connectivity assessment does not characterise.

The difficulty at Ground 2 is compounded by a feature of the site that the applicant's own soils and geology chapter records but the water assessment does not carry forward. At §7.3.1.4, Chapter 7 states that a number of geological faults runs through the proposed wind farm site, often delineating bedrock formations.” These faults mark the boundaries between the Glenade Sandstone, Dartry Limestone, Glencar Limestone and Benbulbin Shale formations that underlie the site. Their significance here is hydrogeological, not seismic: in a karstified limestone setting, fault zones are recognised as preferential pathways along which groundwater, and any contaminant it carries, can move rapidly and along routes that surface topography does not predict. The applicant's own chapter acknowledges the general principle, describing the site's karst landforms as features “which often function as important conduits” for recharge to the underlying aquifer.

The consequence is that the site is crossed both by mapped karst conduits and by mapped faults, and the interaction between the two is precisely what determines where a pollutant released on the surface would actually travel. Yet the connectivity evidence in Chapter 8 rests, as set out at Ground 2, on a single qualitative dye trace from Polldough. Neither chapter characterises the flow behaviour of the fault-controlled pathways, and no tracer testing is presented to establish whether faulted structures conduct flow toward the Ballagh and Lattone systems and Lough Melvin. The submission respectfully submits that where a chapter records faulting running through the site and elsewhere concedes that the site's karst features are important conduits, the absence of any assessment of

fault-controlled groundwater movement is a further reason why the pathway analysis cannot dispel reasonable scientific doubt to the standard the Habitats Directive requires. This concern is sharpened by the applicant's own vulnerability mapping. Chapter 8 (§8.3.2.4, Figure 8-10) classifies groundwater vulnerability across the site as ranging from Low to Extreme, and records in its own words that vulnerability is “extreme” to the north and southeast, the ground on which turbines and a borrow pit are proposed. Where the applicant's own classification places infrastructure on ground of extreme groundwater vulnerability, crossed by both mapped faults and mapped karst conduits, the case for characterising the sub-surface pathways before consent, rather than after, is stronger still.

Ground 3: The Water Framework Directive baseline understates receptor sensitivity on the Lough Melvin pathway

Chapter 8 discloses that three of the river waterbodies on the northern, Lough Melvin-bound drainage line (Lattone_010, Ballagh_010 and Rosfriar_010) carry a Water Framework Directive (WFD) status of “Under Review.” That disclosure, while correct, is incomplete in a way that materially understates the sensitivity of the receiving environment.

First, the chapter makes no reference to the fact that this drainage line discharges to Lough Melvin itself, which the EPA classifies as Moderate status and At Risk, nor to the lake's designation as an Area for Action under the LAWPRO catchment restoration programme. The Ballagh drains to Lough Melvin approximately 5.2 km downstream of the site; the Lattone flows via the Rosfriar to the same lough. A receiving water that is already Moderate, At Risk and the subject of an active restoration programme is, by definition, a sensitive receptor with little or no assimilative headroom. Omitting that context allows the assessment to treat “good” upstream status as though it were the whole picture, when the relevant downstream receptor is under recognised pressure.

Second, the WFD compliance assessment treats current status as evidence that future mitigation will succeed, without any quantitative loading analysis or assessment of the assimilative capacity of the receiving waters. Under Waddenzee and the WFD's own non-deterioration obligation, the question is not whether the water is presently “good,” but whether the project can be shown not to cause deterioration or to compromise the restoration objective. Chapter 8 does not perform that analysis for Lough Melvin because it does not engage with Lough Melvin's actual status at all.

Third, the compliance assessment does not substantively evaluate the full set of quality elements on which WFD status depends. Appendix 8-1 defers the biological and hydromorphological quality elements to Chapter 6 and Chapter 8, and within its own Stage 3 assessment addresses them almost entirely through the single lens of sediment and suspended-solids release. The genuinely biological elements, the composition and abundance of macrophytes and phytobenthos, the age structure of the fish community, and the benthic macroinvertebrate community, are not evaluated as such; and the hydromorphological assessment is confined to a general statement that clear-span crossings will have no direct impact, without evaluating the ten watercourse crossings, three borrow pits, extensive peat excavation and drainage as hydromorphological pressures on the affected water bodies. A conclusion of no deterioration reached without that element-by-element analysis is not made out on the evidence.

Ground 4: Residual baseline weaknesses contradict the chapter's “no limitations” self-certification

At §8.2.1, Chapter 8 certifies that “No significant difficulties or limitations have been identified” and that “No limitations are considered to materially affect the reliability or robustness of the assessment outcomes.” That self-certification is contradicted by gaps the chapter itself discloses elsewhere.

A 35-year monitoring gap on the Lough Melvin pathway. Table 8-10 shows that EPA biological monitoring on the Ballagh_010, the direct watercourse to Lough Melvin, and on the Owenmore (Manorhamilton)_020 ceased in 1990. A WFD status is nonetheless assigned to these waterbodies on the strength of data more than three decades old. The chapter elsewhere concedes that “regular monitoring did not occur” in these sub-basins.

A thin, snapshot surface-water dataset. Site-specific surface-water sampling was undertaken on only a handful of occasions (October 2020, July 2021, January 2025 and October 2025) at three to five points, which the chapter itself characterises as “one-off” and a “snapshot.” Continuous turbidity monitoring began only in Q1 2025. For a project whose dominant water risk is episodic, rainfall-driven sediment release, and the chapter records turbidity rising from under 5 NTU at base flow to over 200 NTU in heavy rain, a baseline this sparse cannot characterise the episodic events that matter.



Flash flooding off Dough Mountain draining toward Lough Melvin via the Ballagh/Dooard system: the episodic, rainfall-driven surface-water pathway the construction-phase mitigation must control.

No representative on-site flow data. §8.3.1.5 records that there were “no active hydrometric stations located in the immediate environs” of the site, and that down-gradient stations are “not

representative” of flows at the site. The assessment therefore proceeds without measured flow data for the very watercourses it must protect.

No assessment of extreme-rainfall events against the projected climate. The dominant water risk on this site is episodic, rainfall-driven sediment and contaminant release, yet Chapter 8 does not assess the design events that govern that risk. A competent surface-water assessment would test the proposed drainage and silt-control measures against standard extreme-rainfall events, namely the 1-, 6-, 24- and 48-hour rainfalls at recurrence intervals of 10, 25, 50 and 100 years, which are the events that typically cause the greatest run-off and flooding. It would also have regard to Met Eireann's published projections that the frequency and intensity of heavy-precipitation events in the north and west will rise materially over the lifetime of the development. Mitigation sized to historic or average conditions, rather than to these design events, is liable to be overwhelmed by the very rainfall the chapter elsewhere acknowledges drives turbidity above 200 NTU. The omission is itself a limitation, and one with direct consequences for the reliability of the conclusion that downstream waters will be protected.

Individually, each of these is a limitation a competent assessment would acknowledge and carry through to its confidence levels. Collectively, they flatly contradict the §8.2.1 statement that there are no limitations material to reliability. A chapter cannot both disclose a 35-year data gap, a one-off sampling regime, an absence of representative flow data and an unmodelled extreme-rainfall risk, and certify that nothing affects the robustness of its conclusions. That is a deficiency in the EIAR's treatment of its own limitations, contrary to the EIA Directive and to the EPA (2022) Guidelines, which require difficulties and gaps to be stated transparently and their implications assessed.

Relationship to the Holohan / CEMP point: Chapter 8 itself does not defer its water-protection measures to a contractor-finalised construction environmental management plan; it frames them as embedded and standard measures. To the extent, however, that the water-protection measures relied upon here are the same measures that the Natura Impact Statement defers to a “live,” contractor-finalised CEMP, the objection based on Holohan (C-461/17) set out in Section 4 applies with equal force to the water pathways described in this section, and is adopted here by reference rather than repeated.

Ground 5: The construction-phase pollution risk to a salmon-bearing system is understated

Beyond the diffuse sediment risk, the construction phase carries a specific and serious risk of high-pH pollution that the assessment does not adequately weigh. The works will require substantial concrete pours for turbine foundations, hardstandings and ancillary structures. Cement-based products are strongly alkaline and corrosive: wet concrete and the washings from concrete plant and machinery generate a fine silt with a pH of approximately 11.5, well outside the range of 6 to 9 required for salmonid waters under the European Communities (Quality of Salmonid Waters) Regulations 1988 (S.I. No. 293 of 1988). Alkaline pollution of this kind physically damages fish by burning the gills and skin, and peat ecosystems, which are naturally acidic, are highly sensitive to its introduction.

This is not a theoretical concern on this drainage line. The watercourses draining the site form part of the pathway to Lough Melvin, whose qualifying interests for the purposes of the Habitats Directive

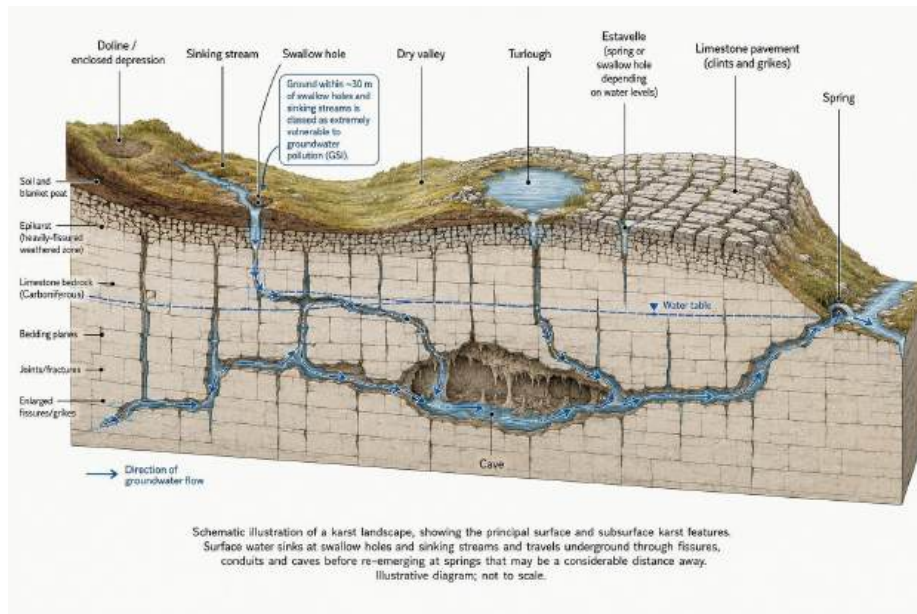
include the Atlantic salmon. A high-pH or sediment release reaching a swallow hole and travelling through the karst conduits described in Ground 1 would arrive in the receiving watercourse with little warning and no opportunity for interception, and would do so in a system whose protected fish population is precisely what the assessment must safeguard. The combination of a rapid sub-surface pathway and a pollutant lethal to salmonids is the kind of low-probability, high-consequence risk that a precautionary assessment is required to take seriously rather than discount.

The risk is given weight by experience elsewhere in County Leitrim, where construction works associated with upland wind-farm development have been linked to serious pollution of a salmonid watercourse following ground disturbance and peat failure, with sediment reported to have travelled several kilometres downstream and caused a substantial fish kill. The submission offers that experience not as a precedent binding on the Commission, but as a concrete illustration, in the same county and the same upland-peat setting, of the failure mode that the surface-water mitigation in Chapter 8 is intended to prevent and cannot be guaranteed to prevent.

Ground 6: The conclusion that significant karst is “unlikely” rests on a desktop-and-walkover survey, with the confirmatory void-detection deferred to a post-consent stage

There is a further difficulty with the karst evidence that goes to the adequacy of the assessment rather than to the connectivity gap identified above. The Karst Assessment (Appendix 7-2) identifies its karst features “using aerial photograph, lidar data and site walkovers,” and on that basis concludes that across most of the site “significant karst development is unlikely, and unstable ground and significant cavities are not anticipated.” That conclusion is reached without the intrusive investigation that would be needed to confirm the absence of subsurface voids: the applicant's own report recommends that geophysical surveying “to assist in the identification of any potential karstic voids not identified in this assessment” be carried out, and that rotary-cored boreholes and geophysics at infrastructure of medium-or-greater karst risk be undertaken, expressly “at the detailed design stage.” The single void-detecting geophysical survey carried out before the application was confined to one turbine location (T7). In other words, the survey that could actually confirm whether cavities are present at the turbine, hardstand and borrow-pit locations is deferred until after consent, while the conclusion that cavities “are not anticipated” is drawn now, from a surface-level survey, and relied upon in the application. Where the reassurance offered to the Commission depends on a confirmatory investigation that has not yet been carried out, the Commission cannot be satisfied on the present material that significant subsurface karst is absent from the infrastructure footprint; that is a matter that should be resolved before consent, not after it.

To assist the reader who is not a specialist in geology, the way water moves through a karst system such as that beneath Dough Mountain is illustrated schematically below. The essential point for this submission is that in karst terrain surface water can sink underground at a swallow hole and travel through conduits and voids to re-emerge at a spring some distance away, by pathways that are not visible at the surface. This is why the avoidance of mapped surface features, on which the applicant relies, does not by itself establish that the subsurface flow paths, and any contamination they might carry, have been characterised.



Schematic illustration of a karst landscape, showing the principal surface and subsurface karst features. Surface water sinks at swallow holes and sinking streams and travels underground through fissures, conduits and caves before re-emerging at springs that may be a considerable distance away. Illustrative diagram; not to scale.

6.3 Conclusion and Relief Sought on this Section

On the hydrological and hydrogeological evidence, the EIAR does not establish, to the standard the law requires, that the proposed development will avoid significant adverse effects on the water environment or on the European sites hydrologically connected to it. The mitigation toolkit does not match the karst pathway the applicant's own baseline describes (Ground 1); the only site-specific evidence of that pathway is unverifiable (Ground 2); the WFD baseline understates the sensitivity of the Lough Melvin receptor (Ground 3); the chapter's "no limitations" certification is contradicted by the gaps it discloses (Ground 4); and the construction-phase risk of high-pH and sediment pollution to a salmon-bearing system is understated (Ground 5).

The submission respectfully requests that the Commission: require the applicant to produce the underlying Polldough dye-trace study (author, date, methodology, monitoring network and results) before the application is determined; require a quantitative loading and assimilative-capacity assessment for the Lough Melvin pathway that engages with the lough's Moderate / At Risk status and its Area-for-Action designation; require the surface-water and silt-control measures to be assessed against standard extreme-rainfall design events and Met Eireann's climate projections, and against the specific risk of high-pH pollution to the salmonid system; and, having regard to the precautionary principle as previously applied to this upland in PL.12.234741, refuse permission, or in the alternative impose conditions sufficient to address the karst-pathway risk, the baseline deficiencies and the unverified connectivity evidence identified above.

Section 7: Peatland, Land and Soils

Grounds advanced in this section

For refusal:

1. The applicant's own stability factors (Over-Design Factors) are marginal at the deepest-peat, highest-susceptibility turbines, falling to 1.1 in the loaded condition and 1.18 in the long-term saturated condition, yet the chapter reports the result as comfortably low-risk; this re-engages the peat-stability reason for the 2010 refusal. (Ground 2; and 7.2)
2. A borrow pit and five turbines are sited within the designated Dough Mountain County Geological Heritage Site of stated global rarity, and the significance of that impact is understated. (Ground 8)
3. The interaction between karst-related ground subsidence and peat failure, each recorded in the applicant's own risk register, is not assessed. (Ground 9)

As deficiencies warranting, at a minimum, further information:

4. The peat-failure pathway to the European sites, identified by a statutory consultee, is not carried into the Natura Impact Statement. (Ground 1)
5. The favourable stability conclusion rests on temporary-works design deferred to a post-consent "detailed design stage" assessment not before the Commission. (Ground 5)
6. The chapter understates the landslide susceptibility class recorded in its own appendix. (Ground 3)
7. Subsurface karst is logged as a live instability factor across the northern site, then assessed away on the basis of surface avoidance alone. (Ground 4)
8. Excavated peat is proposed as borrow-pit backfill despite being unsuitable structural fill and a groundwater-contamination pathway. (Ground 10)
9. The application does not define the environmental end-state to which the site is to be restored after decommissioning. (Ground 11)

Cross-cutting:

10. The carbon balance for a blanket-bog site omits the dominant peat-carbon term, so the payback and net-benefit conclusions are unproven. (Ground 7; see also Section 12)

7.1 Introduction and scope

This section addresses the assessment of land, soils, geology and peat stability set out in Chapter 7 of the Environmental Impact Assessment Report (EIAR), together with its supporting appendices, principally the Peat Stability Risk Assessment at Appendix 7-1 (Ciaran Reilly and Associates, May 2026), the Karst Assessment at Appendix 7-2 (TOBIN, February 2026) and the Spoil and Peat Management Plan at Appendix 2-5 (TOBIN, April 2026). It also draws on Chapter 12 (Climate) in respect of peatland carbon.

The applicant's own turbine layout over the blanket-bog slopes is set out at EIAR Figure 7-1 (Chapter 7). The Commission is referred to the applicant's figure; it is not reproduced here.

The proposed development would place 14 turbines of 180 to 185 m blade-tip height, with associated foundations, crane hardstands, approximately 16.3 km of internal access track, ten clear-span bridges and three borrow pits, across upland blanket-bog slopes on and adjoining Dough Mountain. The Peat Stability Risk Assessment records peat depths of up to 4.5 m and the relocation of an estimated 101,911 m³ of peat and peaty soil. The site lies within the Dough/Thur Mountains pNHA, and Chapter 7 records that the receiving environment includes the hydrologically connected waterbodies of Lough Gill and Lough Melvin, the latter identified in the scoping process as a sensitive receptor comparable to a designated NHA.

It is acknowledged at the outset that the applicant has carried out a substantial body of ground investigation across three phases (2021, 2024 and 2025) and has applied a recognised methodology, namely the Scottish Government's Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (2nd ed., 2017). The concern raised here is not that no assessment was done, but that the assessment which was done does not, on its own figures and admissions, support the favourable conclusion the EIAR draws from it, and that on the most important questions the necessary work is expressly deferred to a stage after consent. The grounds below are advanced in order of weight.

7.2 The 2010 refusal on this site

This is not the first proposal to place a wind farm on these slopes. A previous application on the same site (An Dough Windfarm Ltd; eight turbines of 80 m blade-tip height) was granted by Leitrim County Council but refused by An Bord Pleanála on appeal (PL.12.234741; Board Order dated 7 May 2010). The Board's first reason and consideration turned on the upland blanket bog. Having regard to the location of the wind farm centrally within the Dough/Thur Mountains Natural Heritage Area (number 2384), an extensive area of intact upland blanket bog in which Active Blanket Bog is an Annex I Priority Habitat, and having regard to “the depth of peat on the site, the slope of blanket bog and the wet nature of the bog”, the Board considered that the development would pose an unacceptable risk of degradation of the priority habitat. It continued, in words that go to the heart of this section, that “the Board is not satisfied that the proposed development would not lead to surface pollution and risk of slope instability”. The development was therefore held to be contrary to the proper planning and sustainable development of the area.

The present proposal places turbines of roughly double the blade-tip height (80 m rising to 180 to 185 m), with correspondingly greater foundation loads, excavation volumes and hardstand footprints, on the same peat-covered slopes. That the wider area is known landslide ground is not in dispute: the applicant's own Peat Stability Risk Assessment records, from the GSI Irish Landslides Database, five shallow peat landslides and two scree slides in the vicinity of the site. The burden therefore lies on the applicant to demonstrate, with robust site-specific evidence, that the concerns which grounded the 2010 refusal have been resolved. For the reasons set out below, it is submitted that the present EIAR does not discharge that burden.



Storm Éowyn: erosion, slippage and windthrow on the road to the summit of Dough Mountain, at the location of a proposed turbine . (22nd January 2025)

7.3 Grounds of objection

Ground 1: The peat-failure pathway to the European sites is identified by a statutory consultee but not carried through to the integrity assessment.

In its scoping response, Fermanagh and Omagh District Council recommended that the EIAR contain both a Peat Landslide Hazard Assessment and a Peatland Heritage Impact Assessment, and expressly identified Lough Melvin ASSI as a hydrologically connected sensitive receptor comparable to a designated NHA. The applicant produced the peat-landslide assessment (Appendix 7-1) but no Peatland Heritage Impact Assessment, and the receptor analysis in the Peat Stability Risk Assessment stops at the site boundary. It assesses the likelihood of a peat failure occurring, but does not carry the consequences of such a failure downstream to the hydrologically connected receptors, including Lough Melvin, that the scoping process itself identified.

The peatland-heritage half of that recommendation was sequencing-specific, and it was not honoured. Fermanagh and Omagh District Council recommended that the Peatland Heritage Impact Assessment be carried out before any boreholes or trial pits were undertaken, to prevent damage to artefacts of archaeological significance in a recognised prehistoric landscape that includes the ring-cairn and cist

AHO1 (RMP LEO08-006001) near Turbine 3. No such assessment was carried out; the intrusive ground investigation on which the present chapter relies was undertaken from November 2021 onward, and the only archaeological mitigation offered in the EIAR is test trenching prior to construction, a later and different stage. The recommended protective sequence was therefore not followed. This point is developed in the Cultural Heritage section of this submission and is noted here only insofar as it bears on the completeness of the applicant's response to the soils-and-geology scoping recommendations.

This is the same deficiency identified in the ecology section of this submission, arising here in the soils chapter. A peat slide is the physical mechanism by which silt-laden run-off would be delivered to the watercourses of the Drowes catchment and on to Lough Melvin, the very receptor that Fermanagh and Omagh District Council identified in scoping. The connection is not abstract: the risk register for Turbine 2, the deepest-peat location at 4.5 m and one of the lowest Over-Design Factors on the site, records that the access road crosses the watercourse at that point, scored at the maximum value of 20. The location where failure is most marginal is therefore also a location where the drainage network is directly engaged. An assessment that characterises peat-failure likelihood without assessing that downstream consequence is incomplete against the source-pathway-receptor model that a robust EIAR and Natura Impact Statement require.



Storm Éowyn: uprooted blanket bog on the Dough Mountain slopes, causing bog movement and blocking watercourse channels.

Ground 2: The applicant's own Factors of Safety are marginal at the most sensitive locations, yet the chapter reports the result as comfortable.

The deterministic stability analysis in Appendix 2 of the Peat Stability Risk Assessment expresses results as an Over-Design Factor (ODF), where a value of 1.0 is the minimum acceptable threshold under the Eurocode 7 framework the assessment adopts. The applicant's own tabulated results show that, in the loaded construction condition (a 1 m peat surcharge, undrained) and again in the long-term saturated condition (drained, high groundwater), several locations clear that threshold by only a narrow margin:

Location	Peat depth (m)	ODF undrained (1 m surcharge)	ODF drained (high groundwater)
Turbine 2	4.5	1.1	1.96
Turbine 4	2.0	1.1	1.18
Borrow Pit 1	3.3	1.1	1.62
Turbine 6	1.6	1.2	1.26
Site minimum	–	1.1	1.18

Source: Appendix 7-1, Appendix 2, Table 1 (undrained, Case 2) and Table 2 (drained, high groundwater, Case 1). An ODF of 1.0 is the minimum acceptable value; the site minimum drained ODF is 1.18 at Turbine 4.

Chapter 7 summarises this as “an acceptable ODF (1 or greater) ... considered to be at low risk of peat failure.” That summary is literally accurate but materially incomplete. Three features of the applicant's own data qualify it. First, the margins are slender at the most sensitive locations: a surcharged undrained ODF of 1.1 at Turbines 2 and 4 and at Borrow Pit 1, and a long-term drained ODF of just 1.18 at Turbine 4 under high groundwater, which is between 10 and 18 per cent above the bare minimum, on peat up to 4.5 m deep. Second, the 1.1 result at Turbine 2 is reached only after the peat's characteristic undrained shear strength has been reduced from the site value of 13 kPa to 9.6 kPa to reflect the “very soft” peat logged in trial pit TP42: the deepest-peat location passes by the narrowest margin even on a reduced-strength input. Third, the assessment's own risk register scores the calculated Factor of Safety as a discrete hazard, and at Turbine 4 that line is scored 20 pre-control and 12 post-control, the single highest residual line item in that location's register. The applicant's own register therefore continues to flag the calculated stability at the marginal turbines as a high residual risk even after mitigation, which is difficult to reconcile with the chapter's unqualified “low risk” characterisation. It is submitted that the Commission should assess the tabulated results directly.

That the short-term excavation behaviour of the peat may be acceptable is not disputed: the applicant records sidewall collapse in only two of the 31 trial pits that encountered peat, and that is a fair observation as to pit-wall stability during digging. The concern here is different in kind. It is the stability of loaded and drained peat slopes over the lifetime of the development, which the ODF tables themselves show to be marginal at the deepest-peat, highest-susceptibility locations.

Ground 3: The chapter understates the landslide susceptibility recorded in its own appendix.

Chapter 7 states that all turbine base locations and the substation footprint are mapped as “Low” landslide susceptibility, “except for T3, T4, T5, T7 and T8 turbine base locations mapped as having ‘Low to Moderately High’ landslide susceptibility.” The Peat Stability Risk Assessment on which the chapter relies records something more onerous. Its Table 1 places Turbine 1's hardstand and Borrow

Pit 1 within the “High” susceptibility class, with a further eight assessment areas in “Moderately High.” The principal chapter, the document the Commission reads first, therefore presents a more reassuring picture of baseline susceptibility than the specialist appendix it cites. Where a chapter and its own supporting report diverge on a matter as fundamental as the susceptibility class of the ground beneath a turbine and a 174,720 m³ borrow pit, that inconsistency is a proper basis for the Commission to treat the chapter's conclusions with caution.

Ground 4: Subsurface karst is logged as a live instability factor across the northern site, then assessed away on the basis of surface avoidance alone.

The Peat Stability Risk Register in Appendix 3 of the Peat Stability Risk Assessment records, at every assessment area from Turbine 1 to Turbine 10 and at the borrow pits, the entry “Evidence of subsurface flow: Suspected karst nearby,” scored at the highest or near-highest pre-control values (16, rising to 20 at Turbines 7, 8 and 9) and reduced only to 9 after mitigation. Notwithstanding that the assessment's own register treats subsurface karst flow as a material conditioning factor for peat stability across the northern and central site, Chapter 7 concludes that karst risk is “negligible” on the single basis that surface infrastructure avoids mapped karst features with a 30 m buffer.

That reasoning does not meet the risk its own documents record. The Karst Assessment (Appendix 7-2) confirms a section of proposed access track immediately south of Turbine 3 falls within an area of “high” karst hazard, and that the design relies on piling, grouting and geogrid reinforcement “where encountered” during later investigation. Critically, the Karst Assessment does not establish the hydrological behaviour of the karst system: the geophysical survey at Turbine 7 comprised only electrical resistivity tomography and peat probing some 170 m west of the swallow holes, and there is no dye-trace or tracer study within the appendix. This is the same gap identified in the hydrology section of this submission, where the sole evidence of connectivity between Polldough Cave and the surface-water network is an unattributed, undated and un-referenced qualitative dye-trace result in Chapter 8. The result is that a peat slide mobilised into a swallow hole, precisely the surface-to-groundwater pathway that surface-feature avoidance does not address, has not been assessed.



Mapped karst features, Cave close to proposed T7 location.



Mapped karst features, swallow holes and high-hazard access-track example.



Mapped karst features, 1 of the “7 Rooms” north of T1 & T3.



Mapped karst features, swallow holes and high-hazard access-track section south of T3.

Ground 4A: The turbine layout, read against local knowledge of the ground, repeatedly places infrastructure on the most water-sensitive and least stable parts of the mountain.

The grounds above are drawn from the applicant's own documents. They are reinforced by direct local knowledge of the specific ground on which each turbine is proposed, a substantial part of which is documented in dated site photographs and is offered here as evidence of the receiving environment. The applicant's own records corroborate several of these points independently: the Peat Stability Risk Assessment maps Turbine 1's hardstand and Borrow Pit 1 in the "High" susceptibility class; Chapter 7 records a swallow hole 20 to 30 metres in diameter immediately east of Turbine 7; and the risk register logs "suspected karst nearby" from Turbine 1 to Turbine 10.

Read in that light, the layout shows a consistent pattern. Turbine 1 stands in forestry above a steep gorge, where bog slippage and exposed peat on the lower end of the upland bog are visible and photographed. Turbines 2 and 3 on Saddle Hill lie beside flood streams that carry water and sediment rapidly in heavy rain. Turbines 4, 5 and 6 sit in flood-prone ground partly concealed by mature forestry and adjacent to steep gorges, so that the drainage they cross cannot be fully seen until the forestry is felled. Turbines 7 and 8 lie beside the swallow-hole and cave area and the proposed borrow pit, the part of the site where the applicant's own register scores subsurface karst flow at its highest values, and where storm-felled forestry from Storm Éowyn is visible and photographed. Turbines 9, 11 and 12 are proposed adjacent to rivers. Turbines 13 and 14 are isolated locations within approximately 100 metres of watercourses, on upland ground through which water from the summit and slopes of Dough Mountain seeps and moves downslope.

The submission asks the Commission to note that these observations are consistent with, and in several instances directly confirmed by, the applicant's own susceptibility mapping and karst records, and that together they describe a layout which repeatedly places foundations, hardstands, access tracks and borrow pits beside gorges, flood streams, rivers, swallow holes and hidden drainage. Where the applicant's own figures already place turbines and a borrow pit in "High" and "Moderately High" susceptibility ground and beside a mapped swallow hole, and where the instability and storm exposure of that ground is further evidenced by dated local photographs, that is a proper basis for the Commission to require site-specific verification of ground and hydrological conditions at each of these locations before any question of consent arises.

Ground 5: The favourable conclusion rests on mitigation deferred to a post-consent "detailed design stage" assessment whose content is not before the Commission.

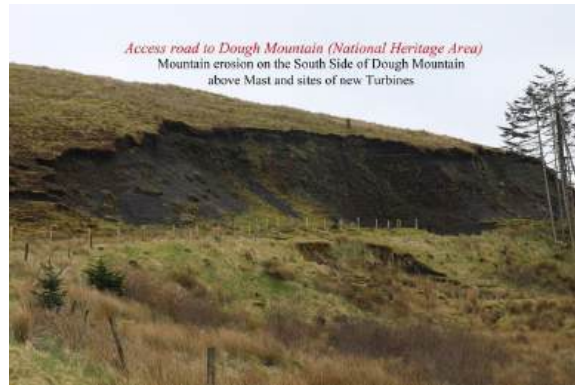
The document before the Commission is, on its own face, a "planning stage" Peat Stability Risk Assessment. Each of its 21 assessment areas reduces its post-control risk rating on the assumption that a future assessment and design will be produced and will succeed. The recommendations require the client to "develop design stage Peat Stability Risk Assessment," note that "the geotechnical designer may require additional site investigations to refine the design," and defer "site-specific temporary works design" (the actual stabilising measures of berms, sheet piling and battering) to the construction stage. The Karst Assessment is to the same effect: earthworks "will be designed ... during the detailed design stage," and "a similar karst feature inspection protocol will be developed."

Chapter 7 confirms how much of the load-bearing work is postponed. The detailed design, construction and maintenance of the borrow-pit backfill operation is to be documented in “the detailed, design stage Peat Stability Risk Assessment, the Peat Stability Risk Register, and the Site Geotechnical Folder which is to be handed over for operation and maintenance.” The stabilising works themselves, the movement-monitoring post regime, the emergency landslide response, and the design of check barrages and catch ditches, are each described in the chapter as measures the contractor will develop and implement, not as designs assessed in the application. The chapter also records that extraction will require rock-breaking or blasting, stating that “rock breaking will be required for the majority of the time in all borrow pits”; that determinative construction operation, on the peat-covered upland slopes, is likewise not designed or assessed at application stage.

In other words, the very measures on which the “low” and “negligible” residual ratings depend are not assessed in the application; they are promised for a stage after permission, when the Commission will no longer be the decision-maker. This engages the principle in *Holohan v An Bord Pleanála* (Case C- 461/17): an assessment cannot lawfully reach a conclusion of no significant effect on the basis of mitigation whose details are postponed and therefore cannot be evaluated when consent is granted. The deficiency is structural, not a matter of degree, and it affects the load-bearing conclusion of the entire chapter.

Ground 6: The deposition of excavated peat into borrow pits in high-susceptibility ground above suspected karst is asserted to be incapable of failure, but the operation itself is deferred.

Chapter 7 states that placing excavated peat “completely below the existing ground profile on all sides” in the borrow pit deposition areas “eliminat[es] any possibility of a peat stability-related slope failure.” That is an absolute claim. It sits uneasily with the applicant's own record. Borrow Pit 1 is mapped in the “High” susceptibility class with “suspected karst nearby” in its risk register. Borrow Pit 2, the largest on the site with a potential volume of 174,720 m³, lies within the mapped extent of the Dough Mountain Geological Heritage Site (Site Code LM009), alongside Turbines 5, 6, 8, 13 and 14. All three borrow pits are in sandstone bedrock from which, on the chapter's own account, “rock breaking will be required for the majority of the time.” Approximately 101,911 m³ of peat and peaty soil is to be relocated into these pits, and the detail of the backfill operation is expressly deferred to “the detailed, design stage Peat Stability Risk Assessment.” A claim that failure is rendered impossible should be demonstrated by a designed and assessed scheme, not asserted in advance of one.



Proposed turbine locations lie in forestry immediately downslope of eroded upland bog on Dough Mountain.

The borrow pit and peat-deposition areas in relation to susceptibility mapping and the Dough Mountain Geological Heritage Site boundary are shown on the applicant's own EIAR borrow-pit figure (Chapter 7). The Commission is referred to the applicant's figure; it is not reproduced here.

Ground 7: The carbon balance for a blanket-bog site omits the dominant peat-carbon term, so the payback and net-benefit conclusions are unproven.

The climate assessment in Chapter 12 (Climate) concludes that the construction-phase emissions of 13,530 tCO₂e are offset by operational savings of approximately 51,333 tCO₂e per year, giving payback "within the first year" and an overall effect that is "minor adverse" and "not significant." That conclusion rests on a carbon balance which, on a peatland site, omits the single largest carbon term. The objection is not that the payback is necessarily long; it is that the balance is structurally incomplete, so the payback and net-benefit findings are not made out on the evidence presented.

The tool was not designed for this. Chapter 12 (§12.4.1.1.1) records that the assessment used the TIL Online Carbon Tool under TIL PE-ENV-01104, a methodology the chapter itself describes as "commissioned by TIL to assess GHG emissions associated with road or rail projects." The same section records that Leitrim County Council, in its Scoping Report Request, suggested an alternative (the UK Environment Agency's Carbon Calculator for Construction Activities); the applicant declined it. Neither tool is peatland-specific, and neither captures the carbon dynamics of excavated and drained peat.

A recognised tool for exactly that purpose does exist: the Scottish Government's Carbon Calculator for wind farms on Scottish peatlands (Nayak et al., 2008; Nayak et al., 2010; Smith et al., 2011),

which is designed to quantify the carbon lost from physically removed peat and from the oxidation of drained peat over a wind farm's life. It is offered here only as a methodological comparator, since it is calibrated to Scottish conditions and addresses peat carbon alone rather than the whole life-cycle of the development; the point is simply that a peatland-specific method for capturing the very emissions the applicant has omitted was available and was not used.

The consequence is visible in the applicant's own Table 12-8. The only "Land Use Change and Vegetation Loss" figure is 6,267 tCO₂e, which is forestry felling alone (63.3 ha of commercial forest) and is then fully cancelled by a matching replanting credit of minus 6,267 tCO₂e, netting to zero. The "Excavation" line is 148 tCO₂e, under one per cent of the total, and represents plant and fuel energy, not peat carbon. "Peat removal" is named once, in the site-clearance description, and is never quantified. There is no figure anywhere in the chapter for the carbon contained in the excavated peat, for the operational CO₂ from drained and disturbed peat oxidising over the 35-year life, or for the lost future sequestration of the bog. Yet Chapter 7 (§7.4.1.3) expressly concedes that excavation "will lead to carbon release, and to the loss of potential carbon storage, due to depletion of the peat bog carbon sink," and states that this "has been further assessed in Chapter 12." It has not.

The omission is concrete, not theoretical. Chapter 7 (§7.4.1) states that the "calculated volumes of peaty podzol soils and peat to be excavated are 101,911 m³." That volume is in the application. It was simply never carried into the carbon arithmetic of Chapter 12. A whole-of-life carbon balance for a blanket-bog wind farm that excludes the carbon consequences of relocating in excess of one hundred thousand cubic metres of peat cannot be treated as complete.

There is also an internal inconsistency between the two halves of the same chapter. Chapter 12's climate-change risk assessment (§12.7.3.2) screens landslide and subsidence as a climate hazard at "moderate" risk, and accepts that climate change "may increase landslide risk due to heavier rainfall." The chapter thus treats the peat body as a climate-sensitive feature for the purpose of assessing risk to the development, while omitting that same peat body's carbon when assessing the impact of the development. The two positions are difficult to reconcile.

This point is advanced narrowly, and is not a challenge to the principle of renewable energy generation, the climate benefit of which is not disputed. It holds the applicant to its own framework. The significance test the chapter adopts (the ISEP guidance, at §12.4.1.4) turns on the project's "net impact over its lifetime." That test cannot have been completed to its own standard while the largest peat-soil carbon term is absent from the arithmetic. The same omission bears on the chapter's reliance on the Climate Act and the national net-zero objective, the national framework for which (including the National Peatlands Strategy and EU Regulation 2018/841 on land use and forestry) treats intact peat as a protected carbon store.

It also bears on the Commission's own statutory position. Under section 15(1) of the Climate Action and Low Carbon Development Act 2015, as amended by the Climate Action and Low Carbon Development (Amendment) Act 2021, An Coimisiún Pleanála is a relevant body required, in so far as practicable, to perform its functions in a manner consistent with the national climate objective and the mitigation of greenhouse gas emissions. This is an obligation of consistency rather than a duty to reach any particular outcome (*Coolglass Wind farm Limited v An Coimisiún Pleanála* [2026] IESC 5), but it cannot be discharged on the present material, because the chapter has not quantified the

largest peat-carbon term and the Commission therefore does not have before it the information needed to weigh the development's carbon effect at all.

Ground 8: The applicant's own chapter confirms that a borrow pit and five turbines are sited within the Geological Heritage of County Leitrim, a designated County Geological Heritage Site of stated global rarity, yet the significance of that impact is understated

The eastern part of the proposed development lies within a designated County Geological Heritage Site, and this is not a matter of dispute between the parties: it is stated by the applicant. EIAR Chapter 7, at §7.3.1.8, records that the Geological Survey of Ireland has designated the Dough Mountain Geological Heritage Site (Site Code LM009), covering an area of 10.26 square kilometres, which overlaps the eastern section of the proposed wind farm. The chapter quotes the GSI's own description of the site as “a particularly complex site in terms of its geological history, and has an array of unusual karst features, upland ribbed moraines and straight-as-an-arrow stream gullies.”

The significance of the site is, again on the applicant's own account, not local but global. Chapter 7 states in terms that “Leitrim is one of the few localities in the world where upland ribbed moraines occur,” and that these landforms are particularly well expressed on the south-western side of Dough Mountain, in Boleyboy townland, where the ridges reach up to one kilometre in length, 300 metres in width, and 15 to 20 metres in height. This is a landform of international geological rarity, recognised as such in the county geological audit published by Geological Survey Ireland and Leitrim County Council (The Geological Heritage of County Leitrim , Parkes, Meehan, Gallagher, Hennessy and Glanville, 2021), and its presence is the reason the site carries its heritage designation.

The difficulty is what the applicant proposes to place within that designated site. Chapter 7 states, without qualification, that “Borrow pit 2, Turbines 5, 6, 8, 13 and 14 are located in the Dough mountain GHS.” That is five of the fourteen turbines, together with a borrow pit from which rock will be excavated, sited within a geological heritage site of stated global rarity. A borrow pit is, by definition, an excavation: the extraction of rock and the removal of overburden at that location is a direct and permanent alteration of the very ground for which the site is designated. Turbine foundations, hardstands and access tracks at the five turbine locations involve further excavation, drainage and ground disturbance within the designated area.

An assessment adequate to the EIA Directive must identify the significance of that effect and explain how it has been addressed. What the chapter does not adequately do is grapple with the consequence of siting a borrow pit and five turbines within a site whose designation rests on landforms the applicant itself describes as globally rare and, by their nature, irreplaceable. Ribbed moraine is a glacial landform laid down once, over millennia; it cannot be re-created or restored once excavated or built upon. Where a development places extractive and construction infrastructure within a designated heritage site of international geological rarity, the burden is on the applicant to demonstrate, clearly and specifically, that the designated features will not be materially and permanently harmed. On the material before the Commission, that demonstration has not been made, and the residual significance of the effect on the Dough Mountain Geological Heritage Site is understated. The submission respectfully invites the Commission to require the applicant to identify precisely which designated geoheritage features fall within the footprint of Borrow Pit 2 and of

Turbines 5, 6, 8, 13 and 14 and their associated hardstands, tracks and drainage, and to assess the significance of the permanent alteration of those features, before any question of consent arises.

Ground 9: The interaction between karst-related ground subsidence and peat failure is not assessed

The applicant's documents treat karst and peat stability as separate topics: the Karst Assessment addresses subsurface voids and their treatment, and the Peat Stability Risk Assessment addresses the stability of the overlying peat. What neither document does is assess the interaction between the two, notwithstanding that the applicant's own peat risk register records "suspected karst nearby" as a conditioning factor for peat stability across the northern and central site. In a setting where karstified limestone underlies blanket peat, ground subsidence associated with a karst void, or the modification of karst drainage during construction, can alter pore-water pressures and the local hydrological regime within the overlying peat, and thereby increase the risk of peat failure. The consequence of a peat failure on this site, the mobilisation of sediment into the swallow-hole and watercourse network that drains toward Lough Melvin, is addressed elsewhere in this submission. The point here is narrower and prior to it: the mechanism by which subsurface karst behaviour could trigger or aggravate peat instability has not been assessed at all, and a stability case that treats the karst and the peat as independent of one another is incomplete on ground where the applicant's own register records them as connected.

Ground 10: Excavated peat is proposed as borrow-pit backfill despite being unsuitable structural fill and a groundwater-contamination pathway

The applicant proposes to place excavated peat into the borrow pits as part of site restoration. That proposal raises two difficulties the assessment does not address. First, peat is not a suitable material for structural backfilling: its low bearing capacity and high settlement characteristics make it a poor engineering fill, so that borrow pits restored with peat cannot be relied upon to behave as stable ground. Second, and more significantly for the water environment, placing peat into an excavation cut into bedrock changes the way water moves through that location. The borrow pits are excavated into rock from which overburden has been stripped, in ground the applicant's own hydrology chapter classifies as of high to extreme groundwater vulnerability; water infiltrating through peat placed in such an excavation will carry a different chemical and biological load, including dissolved organic carbon and the products of peat decomposition, than the water that presently percolates through the intact bedrock, and it will do so at a location where the natural protective overburden has been removed. The result is a potential pathway for the alteration of underlying groundwater quality that the assessment neither identifies nor evaluates. Where excavation, backfill and groundwater vulnerability coincide in this way, the effect on groundwater quality should be assessed before the restoration method is accepted.

Ground 11: The application does not define the environmental end-state to which the site is to be restored

A related deficiency concerns the end-state of the site. The application does describe how individual elements will be reinstated after decommissioning: access tracks are to be retained for forestry and agricultural use, temporary compounds recovered in soil and replanted with forestry, and borrow pits reinstated to no higher than existing ground level. What it does not do is define a restoration objective for the blanket peatland itself. Nowhere does the application commit to restoring the hydrological or ecological function of the bog whose sensitivity grounded the 2010 refusal; the reinstatement it describes is directed at surface stability and a return to forestry and agriculture, not at the recovery of active blanket bog. The applicant's own Peat Stability Risk Assessment carries the decommissioning stage no further than a commitment to appoint a geotechnical engineer and to develop a decommissioning-stage assessment at that future time.

The distinction matters. Reinstatement of a surface is not the same as the restoration of the hydrological and ecological function of blanket bog: a site can be left level and revegetated while its peat-forming hydrology, and the priority habitat that depends on it, remain permanently lost. Without a defined restoration objective, the long-term land use of the site and its effects on the peatland and its hydrology cannot be assessed, and the Commission cannot be satisfied that the site will be returned to a condition consistent with the protection of the peatland whose sensitivity grounded the 2010 refusal. It is submitted that the applicant should be required to specify the intended restoration end-state and to demonstrate that it is achievable and consistent with the protection of the blanket bog.

7.4 Supporting observations

Document provenance and internal consistency

Two features of the application documents bear on the weight the Commission can place on them. First, the Spoil and Peat Management Plan refers to the Peat Stability Risk Assessment inconsistently, as both “Appendix 8-4” and “Appendix 7-1,” and its document path identifies its origin in a separate

“Cloghercor Wind Farm” project, indicating template re-use. Second, Chapter 7 records “76 unmapped karst features” while the Karst Assessment records and tabulates 73. These are not in themselves grounds of refusal, but they are the kind of internal inconsistency that, taken with the more substantive divergences at Grounds 2 and 3, supports a cautious reading of the chapter's conclusions.

The Commission's pre-application advice on peat stability

Peat stability was identified as a matter of concern by the Commission itself at the pre-application stage. The Record of the pre-application consultation meeting of 20 October 2025 (ACP-323048-25) records the Commission's representatives advising the prospective applicant that “thorough consideration of rainfall, drainage, water quality, peat stability, and floating roads is required.” The same record notes that the application would be subject to a completeness check of the entire application documentation, not the EIAR alone, with a Schedule of Information to inform that check to be provided with the strategic infrastructure determination. The grounds above are directed precisely at the peat-stability matters the Commission flagged: the slope-stability margins (Ground

2), the susceptibility baseline (Ground 3), the deferred mitigation underlying the assessment (Ground 5), and the failure to carry the peat-failure pathway into the integrity assessment (Ground 1).

7.5 Conclusion

It is submitted that the land, soils and peat-stability case advanced in the EIAR does not, on its own figures, support the conclusion of no significant effect. The Factors of Safety are marginal at the deepest-peat and highest-susceptibility locations; the principal chapter understates the susceptibility recorded in its own appendix; subsurface karst is logged as a live instability factor and then set aside on the basis of surface avoidance alone, with the hydrological behaviour of that karst never established; and the favourable conclusion depends throughout on mitigation deferred to a post-consent stage, contrary to the principle in *Holohan*. The peat-failure pathway to Lough Melvin, identified by a statutory consultee, is not carried into the integrity assessment, and the peatland carbon released by excavation is conceded but never quantified.

These are the same concerns, peat instability on sloping blanket bog, the adequacy of the environmental information, and the application of the precautionary principle, that grounded the refusal of the earlier, far smaller scheme on this site in 2010. On a proposal of roughly twice the turbine height, it is respectfully submitted that they are not resolved, and that the precautionary principle applies with at least equal force. The Commission is invited to require the applicant to remedy these deficiencies and, in the absence of such remedy, to refuse permission.

Section 8: Noise and Vibration

Grounds advanced in this section

As deficiencies warranting, at a minimum, further information:

1. The integrity of the background noise baseline is in question. (8.1)
2. Amplitude modulation is controlled only by a deferred, complaint-driven protocol. (8.2)
3. Tonality is screened out by reliance on a future warranty for an unselected turbine. (8.3)
4. The compliance margins are so small that the conclusion is not robust. (8.4)
5. The modelling adopts developer-favourable assumptions over soft ground. (8.5)
6. Indicators of template reuse undermine confidence in the assessment. (8.6)
7. A single afternoon of measurement stands for the grid-connection environment. (8.7)
8. The cumulative assessment is confined to a single neighbouring wind farm. (8.8)

8.1 Introduction and Scope

This section addresses the assessment of noise and vibration effects set out in Chapter 9 of the Environmental Impact Assessment Report (EIAR) and its supporting appendices (Appendices 9-1 to 9-10), prepared by AWN Consulting for the applicant. The chapter concludes that no significant noise or vibration effect arises at any noise-sensitive location during construction, operation or decommissioning. The grounds set out below do not contend that the predicted turbine noise levels breach the adopted limits on the face of the applicant's own tables. The concern is different and, it is submitted, more fundamental: the assessment that produces those compliant figures rests on a baseline of questionable integrity, controls two of the most significant residual risks (amplitude modulation and tonality) through measures deferred beyond the consent process, and reports compliance margins so small that the conclusion is not robust to the uncertainties the applicant itself acknowledges. These points are raised in order of weight.

8.2 Integrity of the background noise baseline

Every operational turbine noise limit in this application is derived from a single background noise survey, and the reliability of that survey is the foundation on which the entire operational assessment stands. On examination of the survey report (Appendix 9-3) and the calibration certificates appended to it, that foundation is not secure in three respects.

Calibration certificates that do not match the instruments used

Appendix 9-3 records, at Table 2-3, the serial number of the sound level meter deployed at each of the eleven monitoring locations, and provides calibration certificates at Appendix D. At three locations the certificate provided is for a different instrument than the one the table records as having been used. At location NML-5 the meter is recorded as serial 164426, but the certificate filed for NML-5 is for meter 186668. At locations NML-8 and NML-10 the meter is recorded as serial 564809, but the certificate filed for each is for meter 586940. For these three positions there is therefore no calibration certificate before the Commission for the instrument actually used to gather the data. This is not a peripheral matter: NML-5 and NML-10 return among the highest measured

background levels in the survey, and their derived curves are expressly assigned, under Table 9-13, to set limits at further dwellings beyond the monitored locations.

Certificates that predate the survey, with no contemporaneous or subsequent verification

The background fieldwork was carried out between 22 September and 9 December 2021. The calibration certificates supplied at Appendix D are all dated between 22 January 2020 and 28 October 2020, that is, between eleven and twenty-two months before the instruments were deployed. The body of the report states at §2.4 that instruments were check-calibrated before and after the survey with drift below the accepted tolerance, but no pre-survey or post-survey field calibration record is provided, and no certificate of the periodic two-yearly verification that fell due after 2020 is included. The data have now been carried forward into an application lodged in 2026 with no recalibration certificate covering the intervening period.

A four-year-old baseline asserted, rather than demonstrated, to remain valid

Chapter 9 acknowledges at §9.4.2 that the survey was undertaken in 2021 and states that it “remains valid” because no significant change in the noise environment is considered to have occurred since. No analysis is offered in support of that assertion. The survey report itself was only finalised on 29 April 2026. The position, taken together, is that the limits governing the operation of fourteen turbines for the lifetime of the development are set by instruments last formally certified in 2020, deployed in 2021, three of them without a matching certificate, and never re-verified against current conditions. For a Strategic Infrastructure Development of this scale, it is submitted that the Commission cannot give the derived limits the weight the compliance conclusion requires, and that the applicant should be required to produce the missing certificates and to justify the continued validity of a baseline now approaching five years old.

8.3 Amplitude modulation controlled only by a deferred, complaint-driven protocol

The chapter accepts, at §9.3.4.7, that “other” or excess amplitude modulation (AM) is a recognised characteristic of wind turbine noise that can be audible at considerable distances, can persist for hours under certain atmospheric conditions, and that the United Kingdom Government's 2016 review recommended a penalty scheme capable of being imposed as a planning condition. Notwithstanding this, the assessment applies no amplitude modulation penalty to the predicted levels and proposes no amplitude modulation limit, on the stated basis that AM cannot be predicted at the planning stage.

The control of amplitude modulation is instead deferred in its entirety to the Noise Management Protocol at Appendix 9-10. That protocol is purely reactive. It is triggered only by a complaint; it requires the affected resident to complete a noise diary before investigation proceeds; and at successive steps it leaves the measurement and rating methodology to be settled after consent as “an agreed survey methodology... or equivalent agreed methodology” and “equivalent agreed methodology” for the analysis itself. There is no defined threshold at which amplitude modulation constitutes a breach, no penalty scheme, and no objective trigger independent of a resident first identifying and reporting the problem.

The consequence is that the measure on which protection against amplitude modulation depends is neither defined in the application nor capable of assessment now, but is left to a future agreement

between the operator and the local authority outside the consent process. Where the integrity of an assessment conclusion depends on the content of mitigation that is deferred to be finalised after consent, that approach engages the principle in Case C-461/17 Holohan, under which the competent authority must have before it, at the time of decision, the complete particulars necessary to assess the effects relied upon. A protocol whose methodology and trigger remain to be agreed does not meet that standard.

8.4 Tonality screened out by reliance on a future warranty for an unselected turbine

Tonality is a penalisable special audible characteristic under the guidance the assessment itself adopts. At §9.4.3.2 the chapter confirms that no tonal penalty has been applied to the predicted levels, and that in place of an assessment the applicant relies on a commitment that "the selected turbine manufacturer will provide a warranty confirming that the turbine's noise output will not necessitate a tonal correction."

The turbine has not been selected. The assessment models a composite "Assessment Turbine" drawn from five candidate models across the range of candidate dimensions. A known and penalisable characteristic is therefore removed from the assessment not by measurement or prediction, but by a warranty that does not yet exist and that is to be provided by a supplier not yet chosen. As with amplitude modulation, the "not significant" finding is made to depend on a document and a commitment that postdates the decision. This is a further instance of the Holohan difficulty and should be assessed in the same light.

8.5 Compliance margins so small that the conclusion is not robust

Appendix 9-7 tabulates the predicted cumulative noise level against the adopted criterion at every dwelling. The "excess" columns show no exceedance, and this submission does not assert one. The significant point is the size of the margin at the most affected dwellings, read against the assumptions baked into the prediction.

At dwelling H0046 the predicted daytime level reaches 41.1 dB against a low-wind criterion of 40 dB, avoiding an exceedance only because the assigned criterion steps up to 45 dB at higher wind speeds. At dwellings H0819 and H1599 the prediction reaches 40.1 dB, and at H1467 it reaches 39.6 dB, in each case within a single decibel of a 40 dB criterion floor. These figures already incorporate the applicant's chosen modelling assumptions, including a positive uncertainty allowance of 2 dB. Where the headroom between prediction and limit is a few tenths of a decibel, and the baseline that sets that limit is itself open to the questions raised at ground 1, the margin is not sufficient to absorb error in the baseline, in the eventual turbine selection, or in the ground and meteorological assumptions discussed at ground 5. A conclusion of "not significant" that depends on tenths of a decibel is not a robust basis for consent.

8.6 Developer-favourable modelling assumptions over soft ground

The prediction model is described at Appendix 9-5. It adopts a ground absorption factor of G equal to 0.5, representing mixed ground, applied across a site that the remainder of the EIAR characterises as upland blanket bog and commercial forestry. Acoustically, peat and dense vegetation are soft, absorptive surfaces; the choice of an intermediate value rather than a value reflecting the predominantly soft ground conditions tends to influence the predicted levels, and any such influence runs in the direction favourable to the applicant at precisely the dwellings where, as shown at ground 4, the predicted margin is already minimal. The basis for the selected ground factor, and its appropriateness to the actual surface across the propagation paths to the nearest dwellings, should be justified rather than assumed.

8.7 Indicators of template reuse undermining confidence in the assessment

A series of internal inconsistencies indicates that the noise chapter and its appendices have been adapted from documents prepared for a different project and not fully reconciled to this application. The background survey report opens by stating that monitoring was undertaken at "5 no. representative locations" before tabulating eleven. The same report records that "locations B and C" were relocated "on 20 August 2019 to accommodate cattle," a date and a location-labelling scheme that belong to neither this survey, which ran in 2021, nor its NML-1 to NML-11 numbering. The wind-shear measurement heights are given inconsistently as 90 m and 75 m in Appendix 9-3 and as 80 m and 65 m in the chapter at §9.4.2.2. Most strikingly, every one of the noise appendices is internally numbered as Chapter 12 rather than Chapter 9: the figures and tables of Appendices 9-2, 9-4 and 9-8 carry references such as "Figure A12-2-1," "Table A12-9-1" and "Figure 12-7-1," and Appendix 9-3 directs the reader to noise criteria "as set out in Chapter 12 (Noise and Vibration) of the EIAR," a chapter that does not exist in this application. Appendix 9-8 labels three separate contour figures identically as "Figure 12-8-5." Individually minor, these errors are collectively material, because they go directly to the care with which the assessment that sets the noise limits was assembled and checked.

8.8 A single afternoon of measurement for the grid connection environment

The baseline noise environment for the approximately 32 km grid connection route is established, at Appendix 9-4, by attending spot measurements at six locations on a single day, 2 December 2025, comprising three fifteen-minute samples at each location.

The instrument used is recorded with a calibration date of November 2023, and no certificate for it is provided. A characterisation of this kind, covering a route that passes through Killanummery, Dromahair and Manorhamilton, is a thin evidential basis on which to discount construction-phase noise effects along the full length of the connection.

8.9 Cumulative assessment confined to a single neighbouring wind farm

The cumulative operational noise assessment considers only the existing three-turbine Faughary wind farm. The chapter notes at §9.4.3.2 that Faughary operates under a planning condition of 45

dB(A) LAeq, concedes that this is less strict than the criteria adopted for the proposed project, and then applies the project's own criteria to the cumulative total. That treatment is reasonable in itself. What is not demonstrated is the basis for excluding every other consented or proposed wind energy development in this part of County Leitrim from the cumulative screening. Given the number of such developments in the wider area, the applicant should be required to show, rather than assert, that no other development falls within the cumulative screening distance.

8.10 Conclusion on noise and vibration

The applicant's conclusion of no significant noise effect is presented as a finding of compliance, but it rests on a background baseline whose calibration record is incomplete and whose currency is asserted rather than shown; it defers the control of amplitude modulation and tonality, the two characteristics most associated with community disturbance, to measures finalised after consent; and at the most affected dwellings it reports headroom of a fraction of a decibel. It is respectfully submitted that the Commission should require the applicant to remedy the calibration record and justify the baseline, to bring forward defined amplitude modulation and tonality limits within the application rather than within a post-consent protocol, and to demonstrate the robustness of the compliance margins before any reliance is placed on the chapter's conclusions.

Section 9: Shadow Flicker

Grounds advanced in this section

As deficiencies warranting, at a minimum, further information:

1. The "zero shadow flicker" conclusion depends entirely on mitigation deferred to post-consent design. (9.1)
2. The "Expected (Realistic)" figures that remove every exceedance rely on averaged inputs that do not bind the design. (9.2)
3. The number of affected dwellings is materially larger than the chapter's framing suggests. (9.3)
4. The cumulative effect with Faughary is greater, not neutral. (9.4)
5. The applicant relies on screening it has switched off in its own model. (9.5)
6. The chapter records no limitations despite material gaps in scope and detail. (9.6)
7. The shadow flicker and noise receptor references are not cross-referable. (9.7)

9.1 Introduction and Scope

This section addresses Chapter 10 (Shadow Flicker) of the Environmental Impact Assessment Report prepared by TOBIN Consulting Engineers, together with the underlying modelling output at Appendix 10-1. The chapter models the periodic shadowing effect that the rotating blades of the fourteen proposed turbines would cast on dwellings around the site, and concludes that, after mitigation, there will be no significant residual effect because the Applicant has committed to delivering zero shadow flicker at any occupied dwelling within ten rotor diameters of a turbine. The analysis below does not dispute that shadow flicker is, in principle, a predictable and controllable effect. It identifies, instead, a series of respects in which the chapter's conclusion of no significant residual effect rests on commitments and assumptions that are not secured, not verified, or not carried through consistently. Several of these points are drawn from the Applicant's own modelling report at Appendix 10-1, which discloses both the per-turbine results and the model settings that the main chapter does not reproduce, and which on examination undercuts the chapter's presentation in material respects.

9.2 The 'zero shadow flicker' conclusion depends entirely on mitigation deferred to post-consent design

The chapter's central conclusion is not that the layout avoids shadow flicker, but that any flicker which occurs will be cancelled out by mitigation. On the Applicant's own worst-case modelling, fifty-nine of the eighty-four assessed receptors would experience some shadow flicker, twenty-nine would exceed the 30 minutes per day guideline threshold, and twenty-eight would exceed the 30 hours per year threshold before any mitigation is applied. The chapter resolves this entirely by reference to a commitment to install a shadow flicker control system on the relevant turbines (identified as T2, T3, T9, T11, T13 and T14) which will detect potential flicker and shut the turbine down, supplemented by resident-by-resident screening agreements. Neither mechanism is fixed in the chapter. The shutdown system's detailed programming, the screening to be planted or installed,

and the arrangements for monitoring and complaint handling are all left to be finalised after consent, with the complaints process routed through the Construction and Environmental Management Plan.

Where the acceptability of a development depends on mitigation, that mitigation must be sufficiently defined at the point of decision for the competent authority to be satisfied of its effectiveness, rather than deferred to a later design or contractor stage (the principle reflected in Case C-461/17, Holohan). The shadow flicker chapter places the entire weight of its no-significant-effect conclusion on measures whose substance is not before the Commission. The Commission is asked to accept an outcome ("zero shadow flicker") without the means of delivering it being specified to a standard that can be assessed or conditioned with confidence.

The per-turbine output at Appendix 10-1 raises a further, specific concern about the scope of even the unsecured commitment. The chapter states that the shadow flicker control system will be installed on the turbines to the west and south, namely T2, T3, T9, T11, T13 and T14. The modelling report, however, attributes a worst-case shadow contribution of 111 hours and 33 minutes per year to turbine T1, and 62 hours and 50 minutes per year to turbine T12, neither of which appears in the chapter's list of turbines to be fitted with the control system. On the face of the two documents, two of the turbines shown by the Applicant's own modelling to be material contributors to shadow flicker are not among those identified for mitigation. This should be clarified and, if it is an omission, corrected, because it goes directly to whether the "zero shadow flicker" outcome can be delivered by the measures actually described.

9.3 The 'Expected (Realistic)' figures that remove every exceedance rely on averaged inputs that do not bind the design

The chapter presents two sets of results. The worst-case column shows twenty-eight receptors exceeding the annual threshold, with maximum daily values above one hour at several dwellings (for example 01:10, 01:08 and 01:07 per day) and worst-case annual totals as high as 85 hours and 18 minutes. The "Expected (Realistic)" column then reduces the number of receptors exceeding the annual threshold to zero. That reduction is achieved by applying two averaging factors: a sunshine-probability factor based on the long-term average that the sun shines for roughly 30 per cent of daylight hours, and a wind-direction factor reflecting the prevailing south-to-west wind.

Two difficulties arise. First, the sunshine figure is drawn from the Met Eireann station at Clones, County Monaghan, not from the site, and is applied as a long-term monthly average. The monthly averages used in the model (set out in Appendix 10-1) range from roughly one hour of daily sunshine in December to between four and five and a half hours in late spring and summer. Shadow flicker is not experienced as a monthly average; it is experienced on the specific clear mornings and evenings when the sun is low and unobstructed, which is precisely when the worst-case daily figures apply. An averaging factor cannot demonstrate that a given dwelling will not endure a flicker episode well in excess of the daily guideline on any particular bright day. Clones, moreover, is a lowland inland station to the east, whereas the turbines stand on an exposed upland ridge with site elevations recorded as ranging from 170 to 380 metres above ordnance datum. An exposed ridge of that character cannot simply be assumed to share the sunshine and obstruction profile of a sheltered lowland recording station. Second, and more fundamentally, neither averaging factor is a feature of the development; it is a statistical expectation about the weather. The physical design still produces

the worst-case results, and it is the worst-case results that the mitigation in 9.1 must actually prevent. The "Expected" figures therefore describe what is statistically likely, not what is designed for, and they cannot be relied upon to discharge the obligation to ensure no significant effect at any dwelling.

The number of affected days, disclosed in Appendix 10-1 but not carried into the main chapter table, illustrates the point starkly. Receptor 5 is modelled as experiencing some shadow flicker on 181 days of the year from the proposed wind farm alone, rising to 244 days of the year in the cumulative case with Faughary. A dwelling exposed to potential flicker on two days out of every three across the year is wholly dependent on the shutdown system operating correctly on each of those days. The annual averaging that reduces the headline exceedance count to zero does nothing to reduce the number of days on which the residents must rely on the mitigation functioning; it simply spreads the modelled hours across the calendar. The frequency of exposure, rather than the averaged annual total, is the measure of how much work the unsecured mitigation is being asked to do. It should be added that present occupancy is not a stable input to this averaging in any event: several of the dwellings within the study area are recorded as vacant at present, and in a county with the highest residential vacancy rate in the State these are restorable homes whose reoccupation during the operational life of the development is foreseeable, so that an effect discounted on the basis of current vacancy may later arise in full. The repopulation of vacant and derelict dwellings in this area is not hypothetical: it is supported by State refurbishment grant funding and by an active Leitrim County Council relocation campaign, and a concrete local example of a dwelling recorded as derelict but currently under refurbishment is given in Section 14.

9.4 The number of affected dwellings is materially larger than the chapter's framing suggests

The chapter emphasises the separation distances achieved in the layout, noting a minimum turbine-to-dwelling distance of 720 metres and a closest receptor at 763 metres. Notwithstanding that framing, the modelling identifies a substantial affected population: twenty-nine of eighty-four dwellings exceed the daily guideline and twenty-eight exceed the annual guideline in the worst case, with a number of dwellings recording exceedances on more than seventy and in one case eighty-eight days of the year. This is not a marginal effect confined to one or two isolated properties; it is a widespread potential effect across a significant proportion of the surrounding community, which is then entirely dependent on the unsecured mitigation discussed above. The scale of the affected population is itself a material consideration and should not be obscured by the separation distances, which on the Applicant's own data are insufficient to prevent guideline exceedances at a large number of homes.

9.5 The cumulative effect with Faughary is greater, not neutral

The cumulative assessment adds the operational Faughary Wind Farm, located approximately 550 metres to the north-west. The selection of Faughary as the sole scheme assessed is accepted: the recognised cumulative screening distance for shadow flicker is two kilometres, and the Applicant's own schedule of plans and projects considered for cumulative assessment confirms that no other

wind energy development lies within that distance of the proposed turbines. The point is therefore not one of omission but of how the in-range cumulative effect is treated. On the Applicant's own cumulative output at Appendix 10-1, the addition of Faughary worsens the position at numerous receptors. At receptor 5 the worst-case annual figure rises from 64 hours and 48 minutes to 97 hours and 7 minutes, the "Expected" annual figure rises from 8 hours and 49 minutes to 14 hours and 39 minutes, and the number of affected days rises from 181 to 244. Receptor 73 rises from roughly 49 to 73 hours per year worst case, receptor 51 from 52 to 68 hours, receptor 16 from 50 to 66 hours, and receptor 47 from 29 to 47 hours, among others. The chapter nonetheless concludes that there are no additional likely significant effects, again solely by reference to the zero-flicker commitment. The cumulative analysis therefore demonstrates a real and in some cases substantial increase in the physical shadow burden on identified homes, while the conclusion of no additional effect is carried entirely by the same unsecured mitigation. The commitment is doing all of the analytical work in the cumulative case, just as it does in the project-alone case, and the underlying data show the combined effect to be materially greater, not neutral.

9.6 The Applicant relies on screening it has switched off in its own model

The chapter discounts its worst-case results on the basis that, in reality, existing screening from vegetation, forestry, buildings and terrain will significantly reduce or even eliminate the modelled effect, and it offers screening as one of the routes to the promised zero outcome. Appendix 10-1 reveals that the modelling which produced those worst-case results was run with the line-of-sight calculation deactivated. The report states that sheltering from obstacles, areas or hills is not taken into account. The chapter's description of the model as incorporating a Zone of Visual Influence that checks whether terrain screens each property is therefore not reflected in the run that generated the published figures.

This produces a double difficulty for the Applicant. On the one hand, switching terrain and obstacle screening off inflates the worst-case numbers, which the Applicant then discounts by pointing to the very screening the model ignored, an approach that cannot be tested because the screening was never modelled. On the other hand, the Applicant cannot consistently treat screening as both absent (for the purpose of producing conservative headline figures) and present and effective (for the purpose of concluding that real effects will be lower and that screening can serve as mitigation). If screening is to be relied upon at all, its presence, adequacy and permanence at each affected dwelling must be demonstrated rather than asserted, particularly where the chapter's own description of the receiving environment is of commercial coniferous forestry subject to periodic harvesting and replanting, which cannot be assumed to provide stable screening across the operational life of the development. As presented, the screening on which the chapter relies is neither modelled nor secured.

9.7 The chapter records no limitations despite material gaps in scope and detail

The chapter states that no limitations or difficulties were encountered in undertaking the assessment. That statement is difficult to reconcile with the chapter's own supporting material. Appendix 10-1 records that the line-of-sight calculation was deactivated, so that screening from

terrain, obstacles and hills was not taken into account, notwithstanding that the chapter describes the model as incorporating a terrain-based Zone of Visual Influence. A modelling choice of that significance, which affects every receptor result, is a limitation that ought to have been disclosed and explained in the chapter rather than recorded only in the appendix and described in the chapter as absent. The turbine- specific contributions and the per-receptor day counts are likewise held in the appendix rather than the chapter, so the chapter as presented does not itself contain the information needed to verify its receptor-level conclusions. A statement that no limitations were encountered understates the extent to which the chapter's conclusions depend on settings and material disclosed only elsewhere, and should be read with that in mind.

9.8 The shadow flicker and noise receptor references are not cross-referable

In its pre-application completeness schedule for this case, the Commission required that the application contain a map of all sensitive receptors within the zone of influence for shadow flicker, with the reference to be kept consistent with the equivalent map for noise, and the noise chapter likewise to be consistent with shadow flicker. The purpose of that requirement is to allow any reader to confirm that a dwelling treated as sensitive for one amenity effect is carried through to the assessment of the other. As presented, that cross-referencing is not possible. The shadow flicker chapter identifies its eighty-four receptors by a simple sequence from 1 to 84 with no property reference, while the noise chapter identifies its sensitive locations by house reference numbers of an entirely different form. Neither chapter contains a lookup table reconciling the two systems. The result is that the two assessments cannot be checked against one another on the face of the documents, which is the very consistency the completeness schedule called for. The Commission is invited to require a single reconciled receptor schedule, using common identifiers across the noise and shadow flicker chapters, so that it can be confirmed that every dwelling sensitive to one effect has been carried into the assessment of the other.

9.9 Sensory and health sensitivities are addressed elsewhere in this submission

The potential for shadow flicker to affect residents with photosensitivity or other neurological sensitivities, and the broader question of amenity and wellbeing for those living closest to the turbines, are matters of human health and community impact. To avoid duplication, those points are developed in the Community Impact and Human Health section (Section 14) of this submission, which should be read together with this section. The relevance here is simply that the large number of dwellings exposed to potential flicker, as set out above, increases the population over which any such sensitivities may arise, and reinforces the need for the controlling mitigation to be secured rather than promised.

9.10 Conclusion on shadow flicker

The shadow flicker chapter does not establish that the proposed layout avoids significant effect; it establishes that significant effect would occur at a large number of dwellings and would then be controlled by mitigation. That mitigation is, on the face of the chapter, unsecured and deferred to

post-consent design, the realistic figures that remove every exceedance rest on weather averages rather than design, the cumulative position with Faughary is worse rather than neutral, and the screening invoked to soften the worst case is impermanent. The Commission is accordingly invited to treat the "zero shadow flicker" conclusion as unproven on the material presented, and, if minded to grant, to require that any shadow flicker control and screening regime be fully specified, secured and independently monitored as a precondition rather than left to be settled after consent.

Section 10: Traffic and Transportation

Grounds advanced in this section

As deficiencies warranting, at a minimum, further information:

1. The defining transport impact of the project is excluded from every quantified assessment. (10.2, Ground One)
2. The temporary construction accesses and delivery-route crossings shown in the technical drawings are not represented on the public information map. (10.3, Ground Two)
3. The applicant's own road safety auditor records that no swept-path analysis of the turbine delivery vehicle was provided. (10.4, Ground Three)
4. Material road safety audit findings go to viability, and the claim that they were incorporated is not evidenced. (10.5, Ground Four)
5. The passage of abnormal loads through Manorhamilton town centre is understated. (10.6, Ground Five)
6. Night-time abnormal-load deliveries through occupied areas are not assessed for residential disturbance in any chapter. (10.7, Ground Six)
7. The assessment of "not significant" rests on mitigation deferred to a contractor not yet appointed. (10.8, Ground Seven)
8. The cumulative assessment is asserted rather than demonstrated, and the traffic and peat chapters are not reconciled on spoil movement. (10.9, Ground Eight)
9. The chapter overstates the completeness of its own assessment. (10.10, Ground Nine)

10.1 Introduction and Scope of this Section

This section addresses Chapter 16 (Traffic and Transportation) of the Environmental Impact Assessment Report (EIAR) prepared by TOBIN Consulting Engineers, together with Appendix 16-1 (Traffic Management Plan) and Appendix 16-2 (Stage 1 Road Safety Audit). It is concerned principally with the construction phase, which the chapter itself identifies as the period of greatest potential effect on the surrounding road network. The grounds set out below are confined to matters where the application documents are, in the respectful submission of the observer, incomplete, internally inconsistent, or reliant on assessment deferred beyond the point at which the Commission is asked to determine the application. Where the chapter is robust, that is acknowledged and no point is pressed.

The proposed development would import its turbine components as Abnormal Indivisible Loads (AILs) from Killybegs Port in County Donegal, travelling by the N56, N15 and N16 national roads and approaching the site from the south by way of the L6184 local road through the townlands surrounding Dough Mountain. The route passes through Manorhamilton town. The defining transport feature of the project is therefore the movement of a small number of exceptionally large loads, including turbine blades stated at 81.5 metres in length, over rural roads and through an occupied town centre, at night.

10.2 Ground One: The Defining Transport Impact of the Project is Excluded from Every Quantified Assessment

The quantified traffic assessment in Chapter 16 rests entirely on the percentage increase in vehicle movements at four assessment junctions during the morning and evening peak hours. By the applicant's own statement, the Abnormal Indivisible Load deliveries are excluded from that quantified assessment. The note to Table 16-6 records that traffic associated with the delivery of ALLs has not been included in the traffic impact percentage increase because the deliveries will take place at night under traffic control measures with a Garda escort, and §16.7.7 confirms that only the standard construction haul trips are carried into the junction assessment.

The consequence is that the single most demanding element of the project, the transport of 112 abnormal loads including 42 blade deliveries, is never numerically assessed for its effect on the network. It is instead described in qualitative terms as a slight, negative and brief effect at each pinch point. The observer submits that excluding the defining feature of the project from quantified assessment, on the basis that it occurs at night, does not remove the impact; it removes the assessment of the impact. The effect of moving 81.5 metre loads through a town centre and along constrained rural roads is precisely the matter on which the Commission requires a robust evidential basis, and it is the matter the chapter does not quantify.

10.3 Ground Two: The Temporary Construction Accesses and Delivery-Route Crossings Shown in the Technical Drawings Are Not Represented on the Public Information Map

A discrepancy arises between the detailed application drawings and the summary layout provided for public information. The project description at Chapter 2 records a new temporary access on the L6184 in the townland of Cherrybrook, and a temporary modification to an existing access on the L6184 in the townland of Lissinagroagh for the construction phase, and the access drawings at Chapter 16 show a temporary site access ("Site Access 3 Temporary") and temporary road crossings serving the approach toward the southern turbines. These temporary construction accesses and crossings are not clearly represented on the summary project layout reproduced in the non-technical public information booklet. The point is one of the completeness of the information made available to the public and to affected landowners: a reader relying on the public booklet would not see the full extent of the temporary construction footprint, including works on local roads and land in the vicinity of dwellings. The submission invites the Commission to be satisfied that the temporary construction accesses and delivery-route works have been adequately disclosed and assessed, and that the public information accurately reflects the infrastructure shown in the technical chapters.

10.4 Ground Three: The Applicant's Own Road Safety Auditor Records that No Swept Path Analysis of the Turbine Delivery Vehicle Was Provided

Chapter 16 repeatedly asserts that a swept path analysis of the Turbine Delivery Route was undertaken using the longest component, the 81.5 metre turbine blade, at §§16.2.2 and 16.9.2.3. The Stage 1 Road Safety Audit at Appendix 16-2, prepared by CST Group on the applicant's own behalf, records the opposite. At item 4.1.2 the audit team states in terms: "No swept path analysis of the turbine delivery vehicle has been provided". The auditors were obliged to proceed on the

assumption that a 16.5 metre articulated lorry would be used, and even for that very much smaller assumed vehicle they found that the wheel paths cross outside the existing paved roads in places.

There is therefore a direct conflict between the chapter's account of the assessment carried out and the account given by the applicant's own road safety auditor of the material that was actually before the audit team. The observer does not seek to resolve that conflict, but submits that it is a matter the Commission should require the applicant to address directly, because the swept path of the actual delivery vehicle on the actual route is the foundation on which the deliverability and safety of the entire turbine delivery depends. Until it is produced and verified, the chapter's conclusion that the route can accommodate the loads is not evidenced.

10.5 Ground Four: Material Road Safety Audit Findings Go to Viability, and the Claim that They Were Incorporated is Not Evidenced

§16.9.2.4 of the chapter states that the recommendations of the Stage 1 Road Safety Audit have been incorporated into the scheme design. The audit itself raises seven safety problems, several of which go not to detail but to whether the design works as drawn. At item 4.1.3 the audit team expressed concern that the dwell areas at the site junctions, stated at a gradient of plus or minus 2.5 per cent, are not viable because the existing road junctions are generally much steeper than this and the drawings indicate no new construction to achieve the stated gradient. At item 4.1.4 the auditors record that it is not clear from the drawings whether the narrow existing tracks are to be widened or used as they are. At item 4.2.3 they find that the visibility splay at Site Accesses 5 and 6 crosses the brow of a hill and that visibility to the right may be restricted.

These are not matters of finish. They go to whether the junctions can safely accommodate the development traffic at all. The chapter's assertion that the recommendations have been incorporated cannot be verified from the documents lodged, because the Road Safety Audit Feedback Form at Appendix B of the audit, which is the document recording the designer's response to each recommendation and the auditor's acceptance of that response, is referenced but not completed in the issued report. The observer submits that the Commission should not accept the bare statement of incorporation in the absence of the completed feedback form demonstrating how each safety problem has in fact been resolved.

10.6 Ground Five: The Passage of Abnormal Loads Through Manorhamilton Town Centre is Understated

The Abnormal indivisible Load route passes through Manorhamilton, where the speed limit is 50 kilometres per hour. Table 16-16 of the chapter sets out a long sequence of pinch points requiring temporary accommodation works on the N16 through the town itself, including multiple roundabouts, the works described at the Station Road roundabout, the Drum Road roundabout and the AbbVie roundabout, together with repeated entries requiring road edge strengthening, oversail clearance and removal of street furniture along the N16 Manorhamilton road. The chapter characterises the whole of this work as slight and negative and states that the road edge strengthening at all pinch points is envisaged to take less than two weeks in total.

The observer submits that the cumulative disruption of carrying out edge strengthening, sign removal, vegetation cutting and oversail manoeuvres at this number of locations through an occupied town centre, and the residual condition in which the town's verges, signage and street furniture are left, is materially understated by the repeated application of a slight and brief descriptor to each individual location considered in isolation. The consultation response from Failte Ireland recorded in Table 16-1 raised a specific concern about construction traffic in tourism sensitive areas; that concern is acknowledged in the table but is not carried through into the assessment of effects.

10.7 Ground Six: Night-Time Abnormal Load Deliveries Through Occupied Areas Are Not Assessed for Residential Disturbance in Any Chapter

The applicant has chosen to programme the Abnormal Indivisible Load deliveries for night time. §§16.5.2 and 16.5.4 state that turbine deliveries will take place outside normal construction hours, primarily during night time, to take advantage of lower traffic volumes. The chapter offloads the amenity consequences of construction traffic to other chapters of the EIAR. The difficulty is that the night-time movement of these convoys past dwellings is not assessed for residential disturbance in those other chapters either.

Chapter 9 (Noise and Vibration) assesses construction traffic noise only as a change in daytime traffic flow at the same four daytime assessment junctions, by the method at §9.6.2.12, and separately assesses the noise of the accommodation works themselves at §9.6.2.11. It does not assess the noise of the night-time AIL convoys passing residential receptors. This is a significant omission on the chapter's own logic, because Chapter 9 sets a separate and stricter night-time noise limit of 43 dB LA90, expressly, in its own words, to protect sleep inside properties during the night, and it imports a duration test at §9.3.2.4 under which a moderate or major impact occurring on ten or more nights in any fifteen, or forty nights in any six months, constitutes a significant effect. The delivery programmes stated at 23 to 38 delivery events, with up to fourteen turbines deliverable per month, spread over a longer period; that schedule may readily cross the very night-time threshold the applicant has written into its own chapter, yet the schedule is never tested against it.

Chapter 4 (Population and Human Health) does not close the gap. That chapter lists the World Health Organisation Night-Time Noise Guidelines for Europe (2009) among its own guidance documents, but it addresses the night-time deliveries only in the context of effect on tourist traffic, concluding that because they occur off peak and briefly they will not affect tourism. Its treatment of the deliveries as they affect residents simply repeats the slight, negative and brief conclusion taken from Chapter 16. The result is that the disturbance the applicant has itself scheduled for night time, past occupied dwellings including those fronting the N16 through Manorhamilton, falls between three chapters, each of which assumes the matter is dealt with elsewhere. The observer submits this is a failure of the EIAR to assess a likely significant effect of the project, contrary to the requirements of the EIA Directive and the EPA Guidelines (2022), and notes that it echoes the basis on which the predecessor application on this site was found, on appeal, to rest on a substandard environmental statement.

10.8 Ground Seven: The Assessment of 'Not Significant' Rests on Mitigation Deferred to a Contractor Not Yet Appointed

The conclusion that residual traffic effects are not significant depends entirely on measures whose content is, by the applicant's own account, not yet fixed. The final haul route and the source of quarry material are to be determined on appointment of a contractor (§16.5.3). The Traffic Management Plan at Appendix 16-1 is described as a live document to be updated following grant of planning permission and prior to commencement. The diversion routes for the grid connection works rest on a desktop study, with the appointed contractor to liaise with the local authorities to agree suitable routes. Abnormal load licensing, temporary speed limits, the convoy system and the site specific temporary traffic measures are all to be developed by the contractor after consent.

The observer does not suggest that detailed construction-stage method statements must be finalised at application stage. The submission is narrower: where the assessment of significance itself depends on the efficacy of measures whose content is admittedly undefined and is to be settled only after the Commission has determined the application, the assessment is not one the Commission can presently verify. This engages the principle in Case C-461/17 Holohan, that an assessment cannot lawfully rely on measures whose detail and effect are deferred to a later stage beyond the consent decision. The point is made here as a matter of the adequacy of the environmental assessment of effects, and is consistent with the same concern raised in the hydrology and peatland sections of this submission.

10.9 Ground Eight: The Cumulative Assessment is Asserted Rather than Demonstrated, and the Traffic and Peat Chapters Are Not Reconciled on Spoil Movement

§16.12.1 states that a ten kilometre search of the planning databases identified no committed development of sufficient scale or proximity to give rise to significant cumulative traffic effects. No project is named and no traffic figure is given in support of that conclusion in the body of the chapter. A bare statement that nothing relevant was found, without identification of what was considered, does not allow the conclusion to be tested.

Separately, the chapter quantifies the import of aggregate and concrete, including the 230 heavy vehicle movements arising on each foundation pour day, but it does not address the haulage implications of the excavated peat identified in the peatland documentation, which the observer's examination of Chapter 7 and the Peat and Spoil Management Plan puts in the order of 101,911 cubic metres. If that material is moved off site, or transported around the internal network, it is construction traffic that does not appear in the daily movement figures at Table 16-7. The observer submits that the traffic chapter and the peatland chapter should be reconciled on the movement of spoil before the daily and peak traffic figures can be relied upon.

10.10 Ground Nine: The Chapter Overstates the Completeness of its Own Assessment

§16.2.7 states that no limitations were identified during the preparation of the Traffic and Transport Assessment. That statement sits uneasily beside the absence, on the applicant's own auditor's account, of a swept path analysis of the actual turbine delivery vehicle, and beside the exclusion of the AIL deliveries from the quantified assessment. A comparable statement appears in the noise

chapter at §9.10, which records that no difficulties or limitations were encountered. The observer draws the Commission's attention to these statements not as a freestanding ground but because the assertion of complete and limitation-free assessment, made in two chapters that between them do not assess the night-time delivery disturbance, bears on the weight that can properly be given to the chapters' conclusions of no significant effect.

10.11 Conclusion on Traffic and Transportation

The observer respectfully submits that the traffic assessment, while competently presented in its treatment of standard construction traffic at the assessment junctions, does not provide the Commission with an adequate basis on which to conclude that the project's transport effects are not significant. The defining transport feature of the project, the night-time movement of abnormal loads through rural roads and an occupied town centre, is excluded from the quantified assessment, is not supported by a verified swept path analysis of the actual delivery vehicle on the applicant's own auditor's account, and is not assessed for residential night-time disturbance in the traffic, noise or human-health chapters. The assessment of no significant effect rests on mitigation deferred to a contractor not yet appointed. The observer requests that the Commission require the applicant to remedy these deficiencies, and that the application not be determined on the present incomplete transport assessment.

Section 11: Cultural Heritage and Archaeology

Grounds advanced in this section

For refusal:

1. The development sits within a recorded prehistoric ceremonial landscape, and the total destruction of the relict upland landscape is recorded as not significant. (11.1, 11.3)

As deficiencies warranting, at a minimum, further information:

2. The impact-assessment matrix is calibrated so that no effect can reach significance. (11.2)
3. Recording is treated as if it neutralises loss. (11.4)
4. The assessment of the highest-potential ground is deferred to the construction phase. (11.5)
5. The intangible cultural heritage is recorded in the baseline and then not assessed. (11.6)
6. The setting assessment relies on bare-earth visibility mapping and an incomplete field baseline. (11.7)
7. A National Monument is carried at "Moderate" by the same calibration mechanism. (11.9)
8. The cumulative assessment is circular, and the 2010 refusal of the previous application is engaged. (11.8, 11.10)

11.1 Introduction and Scope of this Section

This section concerns Chapter 14 of the Environmental Impact Assessment Report (EIAR), Archaeological, Architectural and Cultural Heritage, prepared by IAC Archaeology. The submission does not dispute the quality of the desktop baseline, which is thorough and professionally compiled. The concern is narrower and, it is submitted, decisive: the chapter gathers a substantial heritage resource, including a prehistoric ceremonial landscape that the proposed development sits within, and then, through the calibration of its own impact-assessment matrix and a reliance on recording in place of preservation, returns a finding of no significant effect at every stage and on every receptor. The grounds below are directed at that assessment, and are anchored throughout to the applicant's own figures and definitions in Chapter 14 and Appendices 14-5 and 14-6.

11.2 The development sits within a recorded prehistoric ceremonial landscape

The proposed wind farm is not located on archaeologically empty ground. Chapter 14 records a ring-cairn and cist (AHO1; RMP LEOQO8-006001 and LEO008-006002) within the wind farm site, 146m to the north-east of turbine TO3, at the summit of Saddle Hill. The chapter identifies this monument as part of a wider Bronze Age ceremonial landscape together with AHO3 (two barrows, a standing stone and a ceremonial enclosure), AHO4 (a wedge tomb) and AH110 (a ring-cairn on the summit of Crocknagaple Hill). The chapter states in terms that AHO1, AHO3 and AHO4 "may represent a Bronze Age ceremonial landscape focussed on the northern slopes of Saddle Hill", and that AH110 may also form part of that landscape. This grouping of ceremonial and funerary monuments, focused on the very hill on which the turbines are to be built, is the heritage feature most directly engaged by the development, and it frames every ground that follows.

11.3 The impact-assessment matrix is calibrated so that no effect can reach significance

The single most important feature of Chapter 14 is that not one of the 250 or more heritage receptors assessed, at any phase, is rated as significant in EIA terms. The strongest residual rating assigned to any receptor anywhere in the chapter is "Moderate", which §14.2.3.3 expressly defines as not significant in EIA terms and as not requiring additional mitigation. The entire prehistoric ceremonial landscape (AHO1, AHO3, AHO4, AH110) sits at "Moderate", together with a further set of ringforts and monuments, a total of 32 archaeological sites at that single rating. When a permanent, 180m to 185m structure placed within a recorded ceremonial landscape produces no significant effect on any heritage asset, the matrix, rather than the development, is doing the work.

The AHO1 magnitude rating is inconsistent with the chapter's own definitions

The clearest illustration concerns AHO1 itself. §14.4.4 concedes that the proposed T03 and its associated hardstand "will interrupt sightlines between these two monuments [AHO1 and AH110], which occupy prominent positions within the landscape". The permanent severance of intervisibility between two summit monuments is, on the applicant's own Table 14-4, a "High" magnitude impact: that table defines "High" as an impact that "alters an important aspect of the setting of upstanding monuments leading to a loss of character, integrity". Yet Appendix 14-6 records the magnitude of impact on AHO1 as "Medium". On the applicant's own significance matrix (Table 14-5), a receptor of "High" sensitivity subject to a "High" magnitude impact yields a "Significant" effect; the same receptor at "Medium" magnitude yields only "Moderate". The conclusion that the ceremonial landscape is not significantly affected therefore rests entirely on a magnitude rating that is one band lower than the chapter's own definitions require. This is an internal inconsistency in the application of the methodology, not a difference of professional opinion, and it determines the outcome for the most sensitive receptor in the assessment.

The proximity is not in dispute. The applicant's own Figure 14-13 (Appendix 14-1) shows turbine T03, its hardstand and cut-and-fill placed immediately against the Zone of Notification of AHO1, with the booley features CHO1, CHO2 and CH04 in the same group. The applicant's own Plate 14-7 (Appendix 14-2) is a photograph taken from the ring-cairn looking south-west towards the T03 location: it shows the open, unscreened upland sightline that the 180m to 185m turbine will occupy and dominate. The image is the applicant's own record of the very view the development will alter.

11.4 Total destruction of the relict upland landscape is recorded as not significant

The same suppression operates in the opposite direction in the construction-phase assessment. Appendix 14-5 confirms that a series of previously unrecorded cultural heritage features will be physically and permanently destroyed at turbine bases, hardstands and borrow pits. These include CHO2 (an upstanding drystone hut, interpreted in the field inspection as a structure related to upland booleying), CH12 (a ruinous building), CH13 (a well), CH15 (a building), CH22 (a quarry and vernacular buildings with a drystone wall) and CH23 (a lime kiln and building). For each of these, Appendix 14-5 records the magnitude of impact as "Very High", which Table 14-4 defines as the receptor being "completely and irreversibly destroyed".

Notwithstanding complete and irreversible destruction, each of these receptors is rated only "Moderate" in significance. That outcome is achieved because every one of them has been pre-

assigned a sensitivity of "Low". On the matrix, "Low" sensitivity multiplied by "Very High" magnitude produces "Moderate", which is not significant in EIA terms. In other words, the demolition of an entire surviving upland farming landscape, of huts, lazy beds, lime kilns, field walls and a well, registers no significant effect at any point in the assessment solely because of the sensitivity value chosen at the outset. The field inspection itself records that. CHO1 to CHOS5 and the associated lazy beds form a coherent group of booleying features on Saddle Hill; assessed as a relict landscape rather than as isolated low-value points, that group is not properly characterised as uniformly "Low" sensitivity.

11.5 Recording is treated as if it neutralised loss

The chapter's route from "Moderate" pre-mitigation effects to "not significant" residual effects runs almost entirely through "preservation by record", that is, a written and photographic record taken in advance of construction. With respect, recording is documentation of a loss, not avoidance or mitigation of it. The heritage asset is still permanently removed from the landscape; what survives is an archive of it. §14.6 nonetheless treats the production of that record as reducing the residual effect to "not significant", which conflates the making of a record with the prevention of harm.

This matters because the chapter's own guidance points the other way. The Failte Ireland guidance summarised at Table 14-1, and relied upon by the applicant, states that the focus should be a presumption in favour of preservation in situ, with preservation by record reserved for cases "where preservation in-situ is not the option chosen". Chapter 14 does not explain why preservation in situ was rejected for the directly impacted receptors, nor whether micro-siting of TO3, T06 and the borrow pits to avoid them was examined and found impracticable. In the absence of that explanation, the default to recording is not reasoned, and the residual finding of "not significant" is not supported.

11.6 The assessment of the highest-potential ground is deferred to the construction phase

The location with the highest archaeological potential in the entire site is, on the chapter's own analysis, the ground around TO03: it lies beside AHO1, within the ceremonial landscape, in undisturbed upland bog and rough pasture, and the chapter accepts that "due to the environmental conditions within bogs, potential sub-surface archaeological features may be well-preserved", and that TO3 "therefore has a higher potential for sub-surface archaeological remains to be present". Yet §14.5.2 states that this location is "not suitable for archaeological test trenching" and will instead be subject only to archaeological monitoring of topsoil stripping, "followed by further mitigation as required and agreed with the National Monuments Service".

The same formula is applied to the eight ringforts and enclosures whose Zones of Notification are crossed by the grid connection route (AH85, AH122, AH123, AH124, AH127, AH128, AH130, AH131), and to every greenfield section. The effect is that the EIAR does not establish the baseline or assess the significance of effects at the most sensitive ground before consent: it commits to discovering what is there, and deciding what to do about it, after consent and during construction. An environmental impact assessment is required to identify and evaluate likely significant effects before development consent is granted, and may not lawfully postpone that evaluation to a later stage on

the basis of measures to be agreed in the future. Reliance on monitoring and on mitigation "to be agreed with the NMS" as a substitute for assessment is the form of deferred mitigation addressed in the case law on Article 6 of the Habitats Directive and, by extension, on EIA adequacy generally.

11.7 The intangible cultural heritage is recorded in the baseline and then not assessed

The scoping response from the Department (DAU), set out at Table 14-1, expressly requested an assessment of effects on cultural heritage "within the landscape surrounding the proposed project", including an archaeological and historic landscape study. Chapter 14 collects the relevant intangible material: the placename analysis at Table 14-12 records, for example, Cherrybrook as Léim an Eachai ("the leap of the horseman"), Lissinagroagh as Lisin na gCruach ("little fort of the stacks") and Cashelaveela as Caiseal an Mhile ("cashel of the soldier"); the field inspection records the booleying tradition and surviving evidence of turf-cutting on Saddle Hill.

Specific recorded folklore attaches directly to the affected hill, and the chapter does not engage with it. The National Folklore Collection's Schools' Collection (1937 to 1939), compiled at Coillte Clochair (Kiltyclogher) National School, records that Sir Frederick Hamilton, the builder of Manorhamilton Castle, was hanged on Saddle Hill following the events of 1641 (National Folklore Collection, The Schools' Collection, volume cited under Coillte Clochair (B.), "Manorhamilton Castle"). A second entry, compiled at Brackary Beg, records the remains of a dwelling on the slopes of Saddle Hill, the home of a man who made scythe-stones for export. These are not generic associations: they tie the very hill on which T03 and AHO1 stand, and the surrounding relict structures the chapter rates as "Low" sensitivity, to recorded oral tradition and to the historical narrative that the chapter itself sets out in its baseline. The material directly answers the Department's request for an assessment of cultural heritage within the landscape, and it is publicly available and citable (duchas.ie).

None of this intangible layer is carried into the assessment of effects. The operational assessment in Appendix 14-6 is, in substance, a visibility exercise conducted against tangible receptors using Zone of Theoretical Visibility mapping. The lived character of the upland as a named, worked and remembered landscape, which the DAU asked to have assessed, is documented in the baseline (and, in the case of the Saddle Hill folklore, available but not drawn upon) and then treated as if it were absent when effects are evaluated. That is a gap between the assessment requested and the assessment carried out.

11.8 The setting assessment relies on bare-earth visibility mapping and an incomplete field baseline

The assessment of indirect (setting) effects depends on the Zone of Theoretical Visibility mapping carried over from the Landscape and Visual chapter. Chapter 14 twice concedes that this ZTV is a bare-earth model that "does not take account of any potential screening from vegetation or buildings". For a visibility assessment that concession cuts against the applicant: a bare-earth model shows more potential visibility, not less, so relying on it while concluding that setting effects are slight or moderate is methodologically the wrong way round. If anything, the unscreened model should raise the assessed magnitude of visual effect on the monuments, not support its reduction.

Compounding this, the field inspection (§14.3.11.1) records that several turbine locations could not be assessed for visibility on the ground at all because of dense coniferous plantation. The result is that, precisely for the turbines closest to the ceremonial landscape, the visual relationship between development and monument has not been verified in the field, and the setting conclusions rest on modelling that the chapter itself describes as not accounting for real-world screening.

11.9 The cumulative assessment is circular

The operational Faughary Wind Farm lies only approximately 545 m to the north-west of the proposed site, and its study area overlaps with many of the same heritage receptors. §14.7.2.1 nonetheless dismisses cumulative effects on the basis that "the predicted cumulative effects are not greater than the effects already predicted as a result of the proposed project". Because the project's own effects were themselves capped at "Moderate / not significant" by the calibration challenged at 11.2 and 11.3 above, the cumulative test is pre-decided by the same suppressed baseline. The identical sentence is then repeated for each neighbouring wind farm in turn. A cumulative assessment that measures additional projects against an already understated baseline cannot identify a cumulative effect, whatever the true position on the ground.

11.10 A National Monument is carried at 'Moderate' by the same mechanism

The Black Pig's Dyke (AH13; National Monument NM 653) is a receptor of the highest sensitivity. It too is returned at "Moderate / not significant" in the residual-effects table. As with AHO1, that outcome is only reachable by holding the magnitude of impact to "Medium". Where a National Monument is involved, the burden of demonstrating that a permanent development of this scale produces no significant effect on its setting is correspondingly higher, and a conclusion that depends on a single, unexplained magnitude rating does not discharge it.

11.11 Consistency with the 2010 refusal of the previous application on this site

An Bord Pleanála refused the previous wind farm application on this site in 2010 (PL.12.234741), one reason being the unacceptable impact on visual amenity arising from development near the ridge line within a designated scenic area. The present chapter's own findings reinforce, rather than dispel, that concern from the heritage perspective: it confirms ceremonial and funerary monuments on and around the Saddle Hill ridge, and it accepts that the turbines will interrupt monumental sightlines along that ridge. The heritage setting of the ridge is therefore a material consideration that the chapter records but does not, for the reasons given above, properly weigh.

11.12 Conclusion

Chapter 14 establishes a rich and sensitive heritage baseline, including a prehistoric ceremonial landscape that the development sits within, and then returns a finding of no significant effect on any receptor at any phase. That finding does not survive examination of the applicant's own appendices. It depends on a magnitude rating for AHO1 that is inconsistent with the chapter's own definition of a

"High" setting impact; on a "Low" sensitivity floor that converts the complete destruction of a relict upland landscape into a "not significant" effect; on the treatment of recording as if it were preservation; on the deferral of the assessment of the highest-potential ground to the construction phase; on the omission from the assessment of the intangible heritage the Department asked to have assessed; and on a cumulative test that is circular by construction. It is submitted that the heritage assessment, as it stands, does not provide An Coimisiún Pleanála with an adequate basis on which to conclude that the proposed development would not have significant effects on the archaeological, architectural and cultural heritage resource, and in particular on the Saddle Hill ceremonial landscape and the setting of the Black Pig's Dyke National Monument.

Note on local input:

Three categories of local evidence would directly strengthen this section and are objective and verifiable: ground-level photographs from AHO1 and AH110 confirming the intervisibility that the chapter concedes the turbines will sever, complementing the applicant's own Plate 14-7; the Saddle Hill folklore already located in the National Folklore Collection's Schools' Collection (the hanging of Sir Frederick Hamilton on Saddle Hill, and the named scythe-stone maker's dwelling on its slopes), which fills the intangible-heritage gap identified at 11.6 and can be cited directly from duchas.ie; and testimony as to surviving booleying, turf-cutting and rights of way on Saddle Hill, corroborating that CHO1 to CHO5 and the lazy beds form a coherent relict landscape rather than isolated low-value features.

Section 12: Consideration of Alternatives

Grounds advanced in this section

As deficiencies warranting, at a minimum, further information:

1. Alternative locations are listed but not comparatively assessed. (12.1)
2. The alternatives chapter does not engage the 2010 refusal on this land. (12.2)
3. The grid connection is assessed to a weaker standard than the wind farm. (12.3)
4. Alternative technology (solar) is rejected on an asserted rather than assessed basis. (12.4)

12.1 Introduction and Scope of this Section

This section addresses Chapter 3 of the EIAR (Reasonable Alternatives), prepared by TOBIN Consulting Engineers. It does not dispute that the applicant has produced an alternatives chapter, nor that renewable energy is a legitimate objective in the public interest. The ground advanced here is narrower and is directed to adequacy: that the assessment of reasonable alternatives, measured against the applicant's own methodology and against the requirements of Article 5(1)(d) and Annex IV of Directive 2014/52/EU, is incomplete in the one respect that matters most at this location, namely the comparison of alternative locations, and is conducted to an uneven standard as between the wind farm and its associated grid connection. Each ground below is anchored to the applicant's own text and figures.

12.2 Alternative locations are listed but not comparatively assessed

Article 5(1)(d) of the EIA Directive requires “a description of the reasonable alternatives... studied by the developer... and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.” Annex IV expands this to a description of reasonable alternatives “in terms of project design, technology, location, size and scale... including a comparison of the environmental effects.” The applicant quotes both provisions at EIAR Chapter 3, §3.3.1, p.3-1 to 3-2. Location is the first-named category in Annex IV.

12.2.1 The chapter supplies a genuine comparative table, setting the environmental effects of options side by side, for every alternative type except location. Layout alternatives are compared at Table 3-4 (20, 18 and 14 turbines); substation siting at Table 3-5 (three options); port of entry at Table 3-6 (Killybegs against Galway); turbine delivery route at Table 3-7; and grid connection at Table 3-8 (four underground cable routes). For alternative locations, by contrast, Table 3-2 (§3.6, p.3-11 to 3-14) sets out a single-column “rationale for selection” of the chosen site alone. No competing site is assessed against it. The comparison the Directive expressly requires for location, the first alternative type named in Annex IV, is the one comparison the chapter does not perform.

12.2.2 The applicant does identify candidate sites. The 2014 Coillte GIS screen carried five sites forward for detailed assessment, including Croagh, Co. Leitrim; a 2017 re-run produced a further six, including Lissinagroagh itself (§3.6.3, p.3-9 to 3-10). Having named these sites, the chapter states only that each is “a project in its own right” assessed in its own EIAR. That is a reason for not re-running a national site search; it is not a substitute for the Annex IV comparison of environmental

effects between the reasonable location alternatives that the applicant itself identified. The material to make the comparison existed within the applicant's own process and was not brought into the assessment.

12.2.3 Even the comparisons the applicant did perform are conducted at a level of generality that limits their value. The layout comparison (Table 3-4, p.3-21 to 3-24) sets a 20-turbine, an 18-turbine and the final 14-turbine scheme side by side, yet the only quantified environmental discriminator it records between them is setback distance to the nearest dwelling, given as ">750m," ">750" and ">760m" respectively (Table 3-3, p.3-18). For several factors, including shadow flicker, noise and telecommunications, the table expressly records the effect of removing six turbines as "Neutral." An alternative analysis in which the headline environmental difference between a 20-turbine scheme and a 14-turbine scheme is ten metres of setback is not a searching comparison of scale; it is a narrative of a design that had already settled. This is context for the more fundamental omission of any location comparison at all.

12.2.4 The 2017 re-run of the site screen was not a like-for-like repeat. The applicant records that in 2017 Coillte re-examined its portfolio "using the same site selection process described above, but on this occasion reducing the required contiguous site area from 300ha to 100ha" (§3.6.3, p.3-9). Lissinagroagh does not appear among the sites the original 2014 criteria carried forward; it emerges only from the 2017 run conducted at the lowered threshold. The chapter offers no explanation for why the minimum contiguous area was reduced by two thirds, nor any consideration of what the change implies. A site that did not satisfy the applicant's own original threshold, and surfaced as a candidate only after that threshold was relaxed, is on the applicant's own methodology a more marginal site than those the 2014 criteria identified. That is a matter an adequate alternatives assessment should confront on its face, particularly where the site carries the designation-proximity and prior-refusal history set out below. It is not addressed.

12.2.5 The gap is not academic at this location. The applicant's own Phase 1 screening (§3.6.1, p.3-9) discounts land designated as "SAC, SPA, NHA, pNHA." The chosen site sits immediately against the Dough/Thur Mountains NHA/pNHA, and the chapter's own Table 3-2 records Dough Mountain (472m AOD) as a defining high point of the site setting ("Land Use" row, p.3-13). A site-selection methodology that treats proximity to a designated upland bog as a discounting criterion, yet selects a site abutting exactly such a designation, is one an inspector would expect to see reconciled on the face of the alternatives chapter. It is not.

12.3 The alternatives chapter does not engage the 2010 refusal on this land

A previous wind farm on this same site (An Dough Windfarm Ltd, eight turbines, 80 m tip height; Leitrim County Council ref 09/260) was granted by the planning authority but refused on appeal by An Bord Pleanála (PL.12.234741, Board Order dated 7 May 2010). The two reasons for refusal went, first, to the intact upland blanket bog of the Dough/Thur Mountains Natural Heritage Area (no. 2384), an Annex I priority habitat, and to the Board's stated position that it was not satisfied the development would not lead to surface pollution and risk of slope instability; and, second, to the visual amenity of Dough Mountain, an area of high visual amenity within a designated scenic view, the Board finding the development close to the ridge line to be an unacceptable obtrusive feature that would seriously injure the visual and recreational amenities of the area.

12.3.1 The purpose of an alternatives assessment, based on the EPA's own guidance quoted by the applicant at §3.3.3 (p.3-2), is that “where significant adverse effects are identified then alternative options are identified and evaluated.” On this land, a competent authority has already identified significant adverse effects, of a specific and documented character, at this specific location. Those findings are the most directly relevant piece of location-specific evidence available to an alternatives assessment for this site. The chapter does not mention them.

12.3.2 The applicant cannot be criticised for the current scheme differing from the 2009 scheme; that is the point of iteration. But the 2010 refusal is precisely the material an Annex IV location comparison is meant to weigh: it explains why this location carried, and on the applicant's own designation screen still carries, constraints that other candidate sites in the portfolio may not. An alternatives chapter that neither cites nor distinguishes the only prior determination on the environmental acceptability of

development at this location has not, in substance, evaluated the location alternative to the standard the Directive and the EPA guidance require.

12.4 The grid connection is assessed to a weaker standard than the wind farm

The applicant presents this development as a single project. The site notice and application material describe it as one project across all constituent townlands, and the alternatives chapter treats the 32 km underground grid connection as an integral element of the scheme (§3.7.6, p.3-37). On the applicant's own framing, the grid connection is not a separate future project; it is part of the project now before the Commission. It follows, on the principle in *O’Grianna v An Bord Pleanála* [2014] IEHC 632, that the connection must be assessed to the same standard as the wind farm, and that any element assessed to a weaker standard is a deficiency in the project as a whole.

12.4.1 The scale of what is assessed to that weaker standard is set by the applicant's own site-selection admission. Table 3-2 (“Grid Access/Capacity,” p.3-12) records that although two nodes lie considerably closer to the site, Corderry 110kV substation approximately 13.5 km south and Cathaleen Falls 110kV substation approximately 21 km north, “there is currently no available capacity at these nodes,” forcing the connection to Srananagh some 32 km away. The grid solution before the Commission is therefore, on the applicant's own account, a long second-best driven by capacity constraint rather than a preferred route. That makes the depth of assessment applied to the 32 km route more important, not less; the further the connection is driven from the site, the more receptors and watercourses it traverses, and the greater the need for the quantified comparison the wind farm receives and the connection does not.

12.4.2 The layout, substation and port comparisons (Tables 3-4 to 3-6) turn on concrete, project-specific parameters: turbine counts, setback distances (760m against 750m), output in MW, kilometres of new track, numbers of compounds. The grid connection comparison at Table 3-8, by contrast, resolves every one of ten environmental factors across four route options into the same undifferentiated formula: the discounted routes carry “more crossing points and HDD” and therefore a “potential” for effects, while the chosen route is “slightly longer... but less crossings.” No route is assigned a quantified or even qualitatively distinct effect on any receptor. The comparison is conducted at a level of generality that the wind-farm comparisons are not.

12.4.3 This matters because the applicant's own route descriptions disclose a materially significant distinction that Table 3-8 then flattens. The chosen route (UGC Option 1) is described as avoiding designated sites; but the discounted Options 2, 3 and 4 are each recorded, in the applicant's route narratives at §3.7.6 (p.3-37 to 3-38), as passing through or incurring into Lough Gill SAC/pNHA. A European site in the comparison set is a difference in kind, not the difference of degree ("more crossings") that the comparison table records. Where the reason a route is chosen is avoidance of a European site, the alternatives chapter should say so in those terms and assess it accordingly; presenting it as a marginal trade-off in crossing numbers understates the environmental basis for the selection and leaves the connection assessed less rigorously than the wind farm it serves.

12.4.4 The capacity constraint the applicant records is not an isolated local fact; it reflects a wider deficiency in the transmission network of the North-West that is the subject of an active grid-reinforcement programme not yet built. The applicant's own Table 3-2 records that the two nearer nodes have no available capacity, forcing the 32 km route to Srananagh. Srananagh itself lies within the area that the transmission system operator, EirGrid, has identified as requiring major reinforcement before it can properly accommodate additional generation: EirGrid's "Powering Up the North West" programme provides for two new 220kV circuits across Roscommon, Sligo, Leitrim and Donegal, one of which (the Flagford to Srananagh project) involves a partial replacement of the existing 110kV circuit that feeds Srananagh with a new 220kV circuit, together with new 220kV and 110kV connections into the Srananagh station. On EirGrid's own published information, those reinforcement projects remain at an early stage of EirGrid's six-step development process (Step 4, the definition of route corridors, following the Step 3 public consultation that closed in November 2025), with route corridors not yet fixed, no line route selected, and no development consent in place. The relevance of this to the alternatives assessment is twofold. First, it confirms that the grid solution the applicant has selected is not merely a long route but a route into a node whose capacity to carry the exported power depends on regional reinforcement that is itself unbuilt, unrouted and unconsented, which bears directly on the deliverability and the cumulative footprint of the connection the applicant treats as an integral part of a single project. Second, it sharpens the point at 12.4.1 to 12.4.3: where the connection depends on future transmission infrastructure of this scale, the thin, undifferentiated treatment the connection receives at Table 3-8, compared with the wind farm, is a more serious gap in the assessment of the project as a whole, not a lesser one.

12.5 Alternative technology: solar rejected on an asserted rather than assessed basis

12.5.1 The rejection of solar as an alternative technology (§3.8, p.3-43) is reasonable in outcome; solar on a felled upland forestry site is not an obvious substitute, and an inspector is unlikely to require the applicant to have carried it forward. This ground is advanced narrowly and is not relied on as a freestanding reason for refusal. It is noted only for completeness and to illustrate the chapter's pattern of asserting comparative conclusions rather than assessing them.

12.5.2 The quantified land-take figures that drive the rejection ("approx. 231 to 302.4 MW" of solar, "379 to 605 hectares" of felling) rest on a single commercial web source cited at footnote 6, a solar installer's FAQ page, rather than on any assessment within the EIAR to the standard applied elsewhere in the document. The conclusion may well be correct; the point is only that it is stated, not

assessed, and that this is consistent with the chapter's treatment of location and grid alternatives above.

12.6 The deficiency established by this section

The applicant has assessed the alternatives that were never going to change the outcome, layout, substation, port and delivery route, to a proper comparative standard, and has assessed the two alternatives capable of changing the outcome, location and grid connection, to a weaker one. The Annex IV comparison of environmental effects between locations, the first alternative type the Directive names, is not performed; the only prior determination on the environmental acceptability of development at this location is not engaged; and the grid connection, an integral part of a project the applicant itself describes as single, is compared at a level of generality that conceals a European-site distinction the applicant's own route descriptions disclose. The result is an alternative chapter that is complete in form but, on the applicant's own text and figures, incomplete in the respects that carry weight. This is a deficiency in the environmental impact assessment that the Commission is asked to weigh in the round, and in combination with the substantive grounds advanced in Sections 3 and 7, to which the location-specific constraints identified here directly relate.

Section 13: Cumulative and In-Combination Effects

Grounds advanced in this section

Cross-cutting:

1. The interactions chapter discharges each interaction separately and never assesses their combination. (13.2)
2. The cumulative assessment with other wind farms is conducted to differing standards and drawn together nowhere. (13.3)

13.1 Purpose and Scope of this Section

This section concerns the adequacy of the applicant's assessment of cumulative and in-combination effects. It is a narrow section, and deliberately so. It is directed at two structural features of the Environmental Impact Assessment Report: the way the applicant's interactions chapter discharges the interactions it identifies, and the way the cumulative assessment of this project with other wind energy developments is distributed across the technical chapters. It is not the place in which the effect of the development on residents is argued. That is the subject of Section 14 (Community Impact and Population and Human Health), and of the substantive noise, shadow flicker and landscape grounds in Sections 8, 9 and 3. This section is confined to whether the combined and cumulative assessment that the EIA Directive requires has in fact been carried out, and it anchors that question to the applicant's own chapters and figures.

13.2 The Interactions Chapter Discharges Each Interaction Separately and Never Assesses Their Combination

Chapter 18 of the EIAR (Volume II, Interactions of the Foregoing, prepared by TOBIN) sets out at Table 18-1 a matrix of the environmental factors with the potential to interact during the construction, operational and decommissioning phases. That matrix is a proper starting point and the applicant is entitled to rely on it. The question is what the chapter then does with the interactions it identifies.

13.2.1 The method the chapter adopts is to address each interaction once and to resolve it by returning it to the chapter in which the underlying effect was assessed. At §18.2 the applicant states that each environmental interaction relating to any two-chapter topics is addressed only once, so as to avoid repetition. The consequence is uniform across §18.2. The interaction of Population and Human Health with Noise and Vibration is discharged by recording that noise has been assessed in Chapter 9 and that there is no further interaction anticipated beyond that already assessed in Chapter 9. The interaction with Shadow Flicker is discharged by recording that Chapter 10 provides that assessment and that no further interaction will take place. The interaction with Landscape and Visual is discharged by recording that it has been assessed in Chapter 13. Each interaction is, in substance, returned to the chapter it came from.

13.2.2 The effect of that method is that no part of the EIAR assesses the combined weight of these effects where they fall together. Each contributing effect is assessed against its own threshold, within its own chapter, and found not significant there. Chapter 18, which is the one part of the report

designed to consider the effects together, does not assess them together; it verifies that each has been separately assessed elsewhere. Confirming that several effects have each been assessed in isolation is not the same as assessing their combination, and it is the combination that the interactions chapter exists to address.

13.2.3 The applicant's own conclusion illustrates the point. At §18.5 the chapter concludes that significant cumulative or synergistic effects are not anticipated and that interactions between environmental factors are not predicted to result in significant adverse effects. On the face of the chapter, that conclusion is reached by carrying forward a series of individually not-significant findings, each imported from the chapter that produced it, rather than by any independent assessment of their

combined effect. Where a number of effects that are each below the threshold of significance fall on the same receptors, whether their combination remains below that threshold is a question none of the individual chapters is equipped to answer, because none of them assesses the others. The interactions chapter answers it by assumption rather than by assessment.

The receptors on whom these effects converge, and the consequence of that convergence for residential amenity and human health, are identified and argued in Section 14 and its Appendix SDM- 1. They are not repeated here. The point in this section is the prior and structural one: that the assessment which would weigh that convergence has not been carried out.

13.3 The Cumulative Assessment With Other Wind Farms Is Conducted to Differing Standards and Drawn Together Nowhere

The second feature concerns the in-combination effect of this project with other wind energy developments in the surrounding area. Here the difficulty is not that the work is absent. In several chapters it is present. It is that it is conducted to a different spatial extent and by a different method in each chapter, and that no chapter draws the separate cumulative findings together into a single view of the cumulative wind energy presence on this receiving environment.

13.3.1 The spatial extents do not match. The ornithology chapter assesses cumulative effects using a 20 km search distance around the site (Chapter 6, §6.4.7), following IWEA (2012) and NatureScot guidance, and identifies within that radius a defined set of wind farms with the potential for cumulative effects. The landscape and visual chapter conducts its cumulative appraisal against a schedule of nine wind farms in its study area (Chapter 13, Table 13-11), but then narrows the substantive appraisal almost entirely to the single adjacent Faughary Wind Farm on the basis that all other schemes are sufficiently offset or viewed in a different direction (§13.12.1). The two chapters therefore proceed from different scheme lists, over different distances, and reach their cumulative conclusions on different bases. Neither is reconciled against the other.

13.3.2 The consequence is that there is no single place in the EIAR where the full set of operational, consented and in-planning wind energy developments in the surrounding area is assessed together as a cumulative presence on this landscape. Each chapter conducts a legitimate topic-specific cumulative assessment within its own confines. What is absent is the step above them, in which the cumulative and in-combination effect of the surrounding wind energy development on this

landscape is assessed as a whole. Chapter 18, which is the natural home for that step, expressly confines itself to interactions between the effects of this project and does not undertake it.

13.3.3 This has particular force because the applicant's own baseline relies on the existing wind energy character of the area. The landscape chapter describes the elevated lands as having a strong working upland character (§13.3.1.2), and the value of the designated B3 Dough Mountain Area of High Visual Amenity is defined in the current Development Plan, as the applicant reproduces it at §13.3.2.2, partly by reference to the sense of remoteness away from settlements and roads and wind turbines on the adjacent Saddle Hill. The same existing development cannot both be relied upon to characterise the landscape as robust and absorbent of further turbines and be set aside from the assessment of the cumulative effect of adding fourteen more. That in-combination judgement is argued in full, for the visual receptors, in Section 3; it is noted here only as an instance of the wider absence of any assessment of the cumulative wind energy presence taken as a whole.

13.3.4 There is a further dimension of the cumulative picture that no chapter of the EIAR assesses at all: the transmission infrastructure that this development, taken with the wider grid works planned for the same area, would add to this landscape. The proposed project includes a 32 km underground grid connection to Srananagh in Co. Sligo. Srananagh is also the focus of a separate and substantial programme of transmission reinforcement by the transmission system operator, EirGrid: the

“Powering Up the North West” programme provides for two new 220kV circuits across Roscommon, Sligo, Leitrim and Donegal, including a new 220kV circuit into Srananagh and a partial replacement of the existing 110kV circuit that serves it. The same receiving environment is therefore in prospect of receiving this wind farm, this wind farm's own 32 km connection, and new high-voltage transmission line corridors, within an overlapping area and period. Whether or not the two EirGrid circuits are yet consented, they are reasonably foreseeable projects of which the applicant, connecting into the very node they reinforce, can be taken to be aware. The EIAR assesses none of this in combination. The cumulative and in-combination assessment of the wind farm with foreseeable transmission development on the same landscapes, like the cumulative wind energy assessment above, carried out nowhere.

13.4 Relevant Assessment Standard

13.4.1 The obligation to assess cumulative effects is not discharged by assessing each effect, and each project, separately. Annex IV, point 5(e), of Directive 2014/52/EU, transposed into Irish law by Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (as amended), requires a description of the likely significant effects resulting from, among other things, the cumulation of effects with other existing and/or approved projects. The Environmental Protection Agency's Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022) describe cumulative effects as those arising from the incremental changes caused by past, present and reasonably foreseeable future projects together with the proposed development, so that the assessment standard reaches beyond projects already built or consented to those that are reasonably foreseeable. The provision is directed at the combined effect, not the itemised one. An interactions chapter that resolves every interaction by returning it to the chapter of origin, and a set of technical chapters each of which assesses cumulation only within its own topic and to its own

spatial extent, together leaving the Annex IV cumulation assessment carried out in parts and assembled nowhere.

13.5 The Deficiency Established by this Section

Two connected structural deficiencies are established. First, the applicant's interactions chapter identifies that multiple effects converge during the operational and construction phases, and then discharges each interaction by returning it to the chapter that assessed the effect in isolation, so that the combined weight of those effects is assessed nowhere; the conclusion that the interactions are not significant is reached by carrying forward individually not-significant findings rather than by assessing the combination. Second, the cumulative assessment of this project with other wind energy developments is conducted to differing spatial extents and by differing methods across the technical chapters, with no chapter drawing those findings together into a single assessment of the cumulative wind energy presence on this landscape, notwithstanding that the applicant's own baseline relies on that existing presence to characterise the landscape as absorbent of further development.

We do not ask the Commission to find that any individual effect has been mis-assessed within its own chapter. We ask it to note that the combined and cumulative effects, which Annex IV requires to be assessed, have been assessed in parts and never in the round. The consequence of that gap for the residents on whom the effects converge is argued in Section 14; the deficiency in the assessment itself is the subject of this section, and it is one the Commission is asked to weigh together with the substantive grounds in Sections 3, 8, 9 and 14 to which it relates.

Section 14: Community Impact, Population & Human Health

Grounds advanced in this section

For refusal:

1. Compliance with a noise limit has been treated as the human health assessment. (14.1)

As deficiencies warranting, at a minimum, further information:

2. The more recent health evidence is engaged in the wrong chapter, on the wrong question. (14.2)

3. Only eleven of the 488 noise-sensitive locations had their background noise measured. (14.3)

4. Several dwellings are predicted to sit within one decibel of the limit, against a prediction uncertainty the applicant puts at plus or minus two decibels. (14.4)

5. The cumulative load on the same dwellings is never reaggregated. (14.5)

6. The repopulating character of the area is not reflected in the assessment. (14.6)

7. The applicant's own community-engagement and human-health assessment does not support the weight placed on it. (14.7)

14.1 Purpose and Scope of this Section

This section concerns Chapter 4 of the Environmental Impact Assessment Report, Population and Human Health, and the noise assessment in Chapter 9 on which Chapter 4 relies. Our submission is not that the predicted noise levels are high. On the applicant's own figures they are low. Our submission is that the assessment of effect on the people living in the affected dwellings has not, in substance, been carried out, and that demonstrated compliance with a noise limit derived from guidelines now twenty years old has been treated as though it were that assessment. We set out below, in order of weight, the respects in which the human health assessment is, in our submission, incomplete as a matter of fact and inadequate as a matter of law.

14.2 Compliance With a Noise Limit Has Been Treated as the Human Health Assessment

Chapter 4 sets out its own method plainly. At §4.2.5.3 it states that human health protection is considered through the assessment of the environmental factors, or pathways, that the identification of hazards is undertaken in other chapters, namely Chapter 9 Noise and Vibration, Chapter 10 Shadow Flicker, Chapter 11 Air Quality and others, and that the associated significance in terms of the potential impact on human health is then considered in Chapter 4. In practice the chapter does not independently assess the effect on people. It gathers the compliance findings reached in each technical chapter and restates them as findings on human health.

The consequence is visible in the chapter's own conclusions, which reduce the human health question to a single proposition. At §4.6.2 the chapter states that so long as the limits are met, vulnerable individuals and the wider community are protected. At §4.9 it repeats that compliance with the limits set out in best practice guidelines will ensure that individuals and communities are protected. The reasoning is therefore closed before it begins. The limit is treated as protective by definition, the predicted emissions are shown to fall within the limit, and protection of health is taken to follow, in the chapter's words, even amongst the most vulnerable.

The chapter concedes the very point that should have given it pause. At §4.6.2 it accepts that individual health status or potential vulnerability of individual receptors cannot be known or assessed. Having accepted that it cannot assess vulnerability, it does not then assess effect by some other means. It substitutes the limit for the assessment. That is the central deficiency in the chapter, and the grounds that follow are particular instances of it.

The EIA Directive, as transposed, and the EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022) require an assessment of the likely significant effects of the project on population and human health. A demonstration that predicted noise will fall within a decibel limit drawn from the 2006 Wind Energy Development Guidelines is not, by itself, such an assessment. Annoyance and sleep disturbance are recognised as health relevant outcomes in their own right, including by the World Health Organization guidelines that Chapter 4 itself lists. An LA90 planning limit does not measure them. The chapter's conflation of compliance with assessment is, in our submission, an error that goes to the adequacy of the EIAR.

14.3 The More Recent Health Evidence Is Engaged in the Wrong Chapter, on the Wrong Question

The applicant cannot answer the foregoing by pointing to its treatment of the World Health Organization Environmental Noise Guidelines for the European Region (2018). It is necessary to be precise about where, and on what question, those guidelines are addressed, because the EIAR engages them in one chapter and then fails to carry that engagement into the chapter where the health question is actually answered.

In Chapter 9, at §9.3.4.5, the applicant's acousticians address the WHO 2018 guidelines in full. They set out the conditional recommendation to reduce wind turbine noise below 45 dB Lden, they record that the quality of evidence is rated low and the recommendation therefore conditional, they observe that Lden may be a poor characterisation of wind turbine noise, and they conclude, in their professional opinion, that the 45 dB Lden level should not currently be applied as a target noise criterion for a wind development in Ireland. We do not, in this section, take issue with that conclusion on its own terms. It answers a noise engineering question, namely whether 45 dB Lden should be adopted as a numerical noise limit for this project, and Chapter 9 is entitled to reach a reasoned view on that question.

That is not a human health question, and it does not discharge the duty to assess the effect on people. The WHO 2018 guidelines identify wind turbine noise as a source for which a conditional recommendation was made, and they do so because of evidence relating to annoyance. The relevance of the WHO material to Chapter 4 is not that it sets an alternative numerical limit, but that it identifies annoyance, and the sleep disturbance associated with night-time noise, as health outcomes that an assessment of human health effects should address. Chapter 4 does not address them. It does not carry the WHO 2018 material across from Chapter 9 at all. It lists the guidelines among its references and then reasons exclusively from compliance with the 2006 limit. The result is that the one place in the EIAR where the more recent health evidence is engaged is the place where the question being asked is a noise engineering question, and the place where the health question is asked makes no use of that evidence. The evidence and the question never meet.

14.4 Only Eleven of the 488 Noise-Sensitive Locations Had Their Background Noise Measured

The operational noise limits in this application are derived from a background noise survey conducted at eleven monitoring locations. From those eleven, a relationship between wind speed and background noise was derived and then applied, by assignment, to all 488 noise-sensitive locations identified around the site. At the great majority of dwellings, therefore, the background noise environment was not measured but inferred.

The significance of this is as follows. The lower the measured background noise, the lower the permitted turbine noise limit, because the limit is set as the greater of a fixed floor and a margin above the measured background. Where background is not measured at a dwelling but assigned to it, the assignment carries an assumption about how quiet, or otherwise, that dwelling's surroundings are. The applicant's own approach recognises this, in that it assigns the lowest of its derived noise categories, described in the documentation as NML-4, to dwellings other than the eleven monitored. The consequence for the assessment is that the actual background noise environment of 477 of the 488 noise-sensitive locations is not established by measurement. For a project whose entire human health case rests on the proposition that turbine noise will sit at or below the permitted limit at each dwelling, the absence of measured background at all but eleven dwellings is a material limitation that the assessment does not acknowledge as such.

14.5 Several Dwellings Are Predicted to Sit Within One Decibel of the Limit, Against a Prediction Uncertainty the Applicant Puts at Plus or Minus Two Decibels

At a number of dwellings the predicted operational noise level sits within one decibel of the applicable limit. The noise chapter records a prediction uncertainty, expressed in the modelling, of the order of plus or minus two decibels. Where the predicted margin of compliance is smaller than the acknowledged uncertainty in the prediction, compliance at those dwellings is not robustly demonstrated. It is, on the applicant's own figures, within the margin of error. We do not say this establishes an exceedance. We say that it removes the assurance that the human health case requires, because the chapter treats predicted compliance as the guarantee of protection, and at these dwellings predicted compliance is not secure to the precision the conclusion depends upon. This compounds the difficulty identified in Section 8 of this submission concerning the integrity of the background baseline, since a margin of less than a decibel leaves nothing to absorb any error in the baseline from which the limit was derived.

14.6 The Cumulative Load on the Same Dwellings Is Never Reaggregated

The people living closest to the proposed development will not experience each environmental effect in isolation. The dwellings nearest the turbines are, in many cases, the same dwellings exposed to shadow flicker, to construction traffic, including the night-time abnormal load movements addressed in Section 10, and to the visual presence of the development. Each of these effects is assessed in its own chapter, against its own threshold, and found not significant within that chapter. What the EIAR does not do at any point is bring those effects back together and ask what their combined load is on the particular households that bear all of them at once.

This is the proper province of the population and human health chapter, because it is the chapter whose subject is the person rather than the parameter. A household that experiences turbine noise within a decibel of the limit, shadow flicker controlled only by a promised shutdown system, the visual dominance of turbines of 180 to 185 metres on the ridge above it, and a period of night-time construction deliveries, experiences those things together and over time. The assessment that asks whether the project protects human health should assess that combined and accumulating burden. Chapter 4 does not. It receives the not significant findings of the individual chapters and adds them, in effect, to a not significant total, without ever assessing the interaction. The absence of any cumulative human health assessment of this kind is a gap in the EIAR, and it is the gap most directly felt by the small number of households living closest to the development. This point is developed in Section 13 of this submission in respect of the in-combination amenity assessment; the human health dimension of it belongs here.

14.7 The Repopulating Character of the Area Is Not Reflected in the Assessment

The assessment treats the receiving environment as a settled and largely static rural population. The pattern of dwellings around the site does not bear that out. Within the study area there are dwellings of recent construction, including dwellings built within the last decade, alongside dwellings presently vacant or recorded as derelict but capable of restoration and reoccupation. The area is, in that sense, not a depopulating upland but one in which people are continuing to build and to return. This matters to the human health assessment in two ways. First, an assessment that discounts effects on the basis of present vacancy may understate the effect that will in fact be experienced when those dwellings are reoccupied within the operational life of the development, a point made in respect of shadow flicker in Section 9. Second, the characterisation of the area as one of low and declining population, where it appears in the supporting material, should not be permitted to reduce the weight given to the amenity and health of the community that is in fact present and growing.

This is not a matter of general assertion. The reoccupation of vacant and derelict rural dwellings in this county is an active, State-funded and locally promoted process, and its effect on the receptor baseline is foreseeable rather than speculative. Two matters of public record establish the point. The first is financial. The Vacant Property Refurbishment Grant, funded by the Department of Housing, Local Government and Heritage through the Croi Conaithe (Towns) Fund, provides a grant of up to 50,000 euro to bring a vacant dwelling back into use as a home, rising to up to 70,000 euro where the property is confirmed to be derelict, that is, structurally unsound and dangerous, or is entered on the local authority's Derelict Sites Register. Properties built up to and including 2007 and vacant for two years are eligible, and the grant is available for dwellings in rural parts of the county, not only in towns and villages. A grant of this scale materially changes the economics of restoring a derelict rural cottage, and it is precisely the dwellings the assessment treats as permanently unoccupied that the scheme is designed to return to use.

The second is that Leitrim County Council is at present actively encouraging exactly this. In June 2026 the Council launched the Most Definitely Leitrim campaign, a relocation and place-branding campaign directed at people in Irish cities and abroad, which expressly showcases individuals and families who have restored vacant and derelict properties in the county through the Croi Conaithe grant and related schemes, and which forms part of what the Council describes as its wider work to

support sustainable population growth, rural regeneration and housing renewal across the county. The competent authority is therefore presented with a proposal that assesses effects against a static, partly vacant baseline in the same period, and in the same county, in which the relevant local authority is running a public campaign, backed by substantial grant funding, to reverse that vacancy. The assessment's implicit assumption that vacant dwellings will remain vacant is, on the public record, contrary to declared public policy for the area.

The point is given concrete form within the affected landscape itself. Local knowledge identifies a dwelling in the vicinity of the site, at approximately 54.31822 degrees north, 8.12587 degrees west, roughly two kilometres from the Dough Mountain summit area, which is recorded on the most recent GeoDirectory data as derelict, but at which a full refurbishment is in fact under way. On the ground, the structure the applicant's data would treat as a derelict and therefore discountable receptor is being returned to use as a home. This single, verifiable example illustrates the wider deficiency: a receptor schedule and an amenity assessment built on a snapshot of current vacancy cannot be relied upon where the settled trajectory of the area, supported by grant funding and active local-authority policy, is toward reoccupation over the very 35-year operational life across which the effects of the development must be assessed.

The local survey underlying Appendix B reinforces the point. Of the dwellings it records on the approaches to the array, several presently recorded as derelict lie among the turbines themselves, the nearest at approximately 66 m from Turbine 9, with others at approximately 323 m and 386 m from Turbines 9 and 11. These are the very structures a present-occupancy baseline treats as permanently discountable, yet they are among the dwellings most physically exposed to the development, and they are precisely the restorable rural homes at which the grant funding and relocation policy described above are directed.

We do not advance this as a standalone ground that any particular vacant dwelling has been wrongly excluded, and we are conscious that the applicant assessed the nearest and worst-affected receptors. The point is directed to the reliability of the baseline: an assessment of effect on human health and amenity that rests on present occupancy understates the population that will foreseeably be exposed, and it does so in a policy environment that is actively working to increase that population. It is a correction the assessment requires.

14.8 The applicant's own community-engagement and human-health assessment does not support the weight placed on it

Two features of the applicant's own community-facing material qualify the reassurance it is said to provide. First, the Community Engagement Report (Appendix 1-5) describes the engagement as "very active and extensive" and states that the project team considered its objectives "achieved and surpassed," yet the figures the report itself relies on record only 41 attendees at the community engagement clinics. Website visits, brochures, media notices and engagement with elected representatives are recorded, but none of these establishes the level of informed local support or opposition, and a developer-prepared engagement report is in any event not an independent measure of public opinion. The report itself records that substantial concerns were raised by members of the public, including on noise, hydrology, missing streams and springs, landslides, visual impact, heritage and the adequacy of the engagement, which are matters going to the core

suitability of the site rather than points of detail. Second, the Population and Human Health assessment (Chapter 4, §4.3.2.3) confines its study area to properties within 2 km of the turbines, and, although the chapter states that this area may be extended where population centres, receptor density or local considerations require it, that extension was not applied here. For a development of fourteen turbines of up to 185 m on a prominent upland, the effects on the wider community, through visual dominance of the mountain backdrop, loss of rural amenity, and the tourism and heritage setting of a landscape used well beyond the 2 km band, are not captured by a 2 km housing exercise. The applicant's own community-engagement and human-health material therefore does not establish either that the affected population has been adequately consulted or that the community effects have been fully assessed.

14.9 Conclusion on Community Impact and Human Health

The population and human health chapter does not, in our submission, carry out the assessment its subject requires. It treats demonstrated compliance with a noise limit drawn from the 2006 Wind Energy Development Guidelines as though it were a complete assessment of effect on the people living around the development. It engages the more recent World Health Organization evidence only in the noise chapter, on the engineering question of whether to adopt a numerical limit, and never carries that evidence into the chapter where the health question is answered. It rests on background noise actually measured at only eleven of 488 noise-sensitive locations. It predicts, at several dwellings, compliance within a margin smaller than its own acknowledged prediction uncertainty. And it never reaggregates the combined load of noise, shadow flicker, visual effect and construction disturbance on the particular households that bear all of them together. The proper conclusion is not that the development will make people ill. It is that the EIAR has not assessed the effect of the development on human health to the standard the law requires, and that the Commission is therefore not in a position to be satisfied on that question. We respectfully request that the applicant be required to carry out a genuine human health assessment, addressing annoyance, sleep disturbance and cumulative load, before the application is determined.

Section 15: Conclusion

This section draws together the grounds advanced in Sections 2 to 14. It does not introduce new arguments. Its purpose is to state, in one place and in the terms an inspector will weigh, why the environmental impact assessment before the Commission is inadequate to support a grant of permission, and why the substantive grounds and the assessment deficiencies, taken together, warrant refusal. Every point restated below is argued in full, and anchored to the applicant's own text and figures, in the section identified.

15.1 The character of this objection

This objection does not ask the Commission to weigh the applicant's evidence against a competing body of evidence assembled by the objector. It asks the Commission to test the applicant's own environmental impact assessment against the standard the EIA Directive (2014/52/EU), the Habitats Directive (92/43/EEC) and the governing Irish authorities require of it, and to find that on the applicant's own documents that standard is not met. The strongest grounds below are those on which the applicant's own figures, tables and admissions undercut the applicant's own conclusions. That is the form in which they are pressed.

The objection is advanced on the principle of quality over quantity. It does not run every conceivable point. It does not rely on operational noise levels being characterised as dangerous, on infrasound or wind turbine syndrome, or on the campaign's local support. It rests on a limited number of well-evidenced, legally grounded grounds that an inspector can act on.

15.2 The substantive grounds for refusal

Two grounds go to the physical acceptability of development at this location, and both are reinforced by the only prior determination on this land, the refusal of the earlier scheme on appeal by An Bord

15.2.1 Peatland, land and soils (Section 7)

The site is an intact upland blanket bog, an Annex I priority habitat, on the Dough/Thur Mountains NHA/pNHA. The 2010 refusal identified an unacceptable risk of degradation of that bog and of slope instability at this location, and applied the precautionary principle. The current EIAR does not dispel that risk to the standard the precautionary principle requires. This is a substantive reason for refusal in its own right, and it engages the first of the 2010 refusal reasons directly.

15.2.2 Landscape and visual impact (Section 3)

The site lies within the B3 Dough Mountain Area of High Visual Amenity, a designation of the current Leitrim County Development Plan whose value the Plan defines partly by the absence of wind turbines beyond those already on the adjacent Saddle Hill. On the applicant's own evidence, the operational landscape effect at the site is Substantial to moderate and permanent, which on the applicant's own significance matrix at Table 13-3 sits at the threshold of a significant effect; the

county's Renewable Energy Strategy, on the applicant's own quotation, finds no area of the county acceptable in principle for new turbines; and the applicant's own viewpoint findings record all fourteen turbines drawing the eye from the Leitrim Way at O'Donnell's Rock and being clearly and prominently visible from the N16. The representative viewpoint set does not sample the primary views of the occupied dwellings most exposed on the near northern and eastern approaches. The visual amenity of Dough Mountain was the second stated reason for the 2010 refusal on this same land; it is engaged again by the present application on a substantially larger scale, at more than double the tip height, and the applicant's own evidence does not establish that it is preserved. This ground engages the second of the 2010 refusal reasons directly.

15.2.3 Ecology, ornithology and water (Sections 4, 5 and 6)

The Appropriate Assessment and the ecological assessment rely in material respects on mitigation whose design or outcome is deferred to a later stage, contrary to Holohan (C-461/17); the hen harrier assessment does not adequately establish the absence of a significant effect; and the grid connection is assessed to a weaker standard than the wind farm it serves, contrary to the single-project principle in O'Grianna. Each is argued in full in its section.

15.3 The assessment is inadequate as an assessment

Separately from the physical grounds, the EIAR is deficient as an environmental impact assessment. These are not complaints about the project; they are gaps in the applicant's compliance with the assessment obligation, each of which an inspector can treat as a reason to refuse or to require the assessment to be redone.

15.3.1 Design envelope (Section 2)

The applicant seeks post-consent design flexibility within a range (180 to 185 m tip, 149 to 163 m rotor, 101 to 110.5 m hub) while assessing effects against a single point within that range, engaging the difficulty identified in *Sweetman v An Bord Pleanála* [2021] IEHC 390.

15.3.2 Noise (Section 8)

Demonstrated compliance with the 2006 Wind Energy Development Guidelines is not, by itself, a complete assessment of the effect of noise on human health; the duty is to engage genuinely with that effect, per *Balz v An Bord Pleanála* [2019] IESC 90. Baseline and calibration integrity in the AWN survey is the lead point.

15.3.3 Alternatives (Section 12)

The Annex IV comparison of environmental effects between locations, the first alternative type the Directive names, is not performed; the 2010 refusal on this land is not engaged; and the grid connection is compared at a level of generality that conceals a European-site distinction the applicant's own route descriptions disclose.

15.3.4 Cultural heritage, shadow flicker and traffic (Sections 11, 9 and 10)

Further specific deficiencies in the magnitude rating of the archaeological asset, in receptor treatment, and in the assessment of the delivery route on rural roads and bridges are established in their sections and are relied on in combination.

15.4 The effects fall together on the same community

The grounds above are set out topic by topic because that is how the Environmental Impact Assessment Report is organised. The people who would live with this development do not experience it that way. The same occupied townlands that lie closest to the turbines are the townlands exposed to the operational noise assessed in Section 8, the shadow flicker assessed in Section 9, the visual dominance assessed in Section 3, and the construction and delivery traffic assessed in Section 10. These are not effects on four different populations; they are four effects on one population, arriving together and enduring together over the life of the development.

The applicant's own interactions chapter confirms the difficulty rather than resolving it. As set out in Section 13, that chapter verifies that each effect has been separately assessed, but it does not assess their combination, and the in-combination amenity burden on the households where the effects converge is nowhere reaggregated. A conclusion that each effect, taken alone, is not significant is not the same as a conclusion that the combined effect on a given household is acceptable, and it is the latter question that a robust assessment must answer.

That question matters here because the receiving environment is not the empty upland the assessment framing implies. As Section 14 establishes, this is a living and repopulating rural area, with dwellings of recent construction alongside dwellings capable of reoccupation, and a community whose amenity and health are entitled to be weighed as they will in fact be experienced. The convergence of noise, shadow flicker, visual dominance and construction disturbance on that community is a material consideration in the round, and it is one the application does not assess.

15.5 Relief sought

For the reasons set out in full in Sections 2 to 14 and drawn together above, Save Dough Mountain respectfully requests that An Coimisiún Pleanála refuse permission for the proposed development. In summary:

(a) the proposed development would be located on intact upland blanket bog carrying an Annex I priority habitat, at unacceptable risk of degradation and slope instability, on the same land and for

substantially the same reason that An Bord Pleanála refused development on appeal in 2010, and the current assessment does not dispel that risk to the standard the precautionary principle requires;

(b) the proposed development would introduce fourteen turbines of up to 185 m tip height into and adjacent to the B3 Dough Mountain Area of High Visual Amenity, giving rise on the applicant's own evidence to a landscape effect at the threshold of significance and to prominent visibility from designated scenic views and a promoted national walking trail, in a manner that engages the second reason for the 2010 refusal on this same land, at more than double the scale, and that the applicant's own assessment does not establish to be acceptable;

(c) the environmental impact assessment and Appropriate Assessment are, on the applicant's own documents, inadequate in respects that go to the heart of the assessment obligation, including the design envelope, the assessment of alternatives, the standard applied to the grid connection, and the treatment of noise as a human-health effect; and

(d) the cumulative amenity effects of the development fall together on an occupied and repopulating rural community in a manner the applicant has not reaggregated or assessed in the round.

The grounds are advanced together and in the alternative. Any one of the substantive grounds in Section 15.2 is, Save Dough Mountain submits, sufficient in itself to warrant refusal; the assessment-adequacy grounds in Section 15.3 are, at the least, sufficient to require that permission not be granted on the assessment as it stands.

APPENDICES

Supporting records and material referenced in the submission above

Appendix A: Local Knowledge Records

This appendix collects first-hand local records of the receiving environment, gathered from residents and users of Dough Mountain through a structured local-knowledge form. Each record is offered as evidence of the receiving environment, in the manner contemplated by the EIA Directive's recognition that the public concerned may hold relevant information about the local environment. The records are set out with the observer's name (where the observer consented to be named), the date or frequency of the observation, the townland or location, the topic, and the basis of knowledge (direct observation, long-standing local knowledge, or recollection). Where a photograph or video was provided, this is noted.

One category of information is deliberately withheld. In accordance with best practice for the protection of strictly protected species, the precise locations of birds-of-prey nests are not recorded in this submission. Where an observer has indicated the presence of a hen harrier, white-tailed eagle, merlin or peregrine nest, that location has been kept confidential and is not reproduced here. The records below therefore describe presence, behaviour and dates, but not nest locations.

The records are offered in support of, and as corroboration of, the grounds advanced in the body of this submission, in particular the ornithology grounds in Section 5, the ecology grounds in Section 4, and the hydrology and peat grounds in Sections 6 and 7. They are not advanced as a substitute for systematic survey, but as dated, located, first-hand evidence that the receiving environment is in active use by the species and features described.

A.1 Ornithology: white-tailed eagle

A white-tailed eagle was observed and recorded on video over the Boleyboy area of Dough Mountain on 9 June 2026, within the breeding season, by a named local observer who saw the bird during an evening walk. The video footage shows an adult white-tailed eagle together with a juvenile. The observer has indicated the presence of a nest, the location of which is withheld from this submission for the protection of the species. This record is directly relevant to the white-tailed eagle collision assessment discussed at Section 5.8: a dated breeding-season record of an adult and juvenile together is evidence of resident, breeding-associated use of this airspace, which is difficult to reconcile with the applicant's assumption that the eagles at risk are overwhelmingly dispersing juveniles.



White-tailed eagle recorded at the Boleyboy Mountain with its juvenile . This is a still from a video 09th June 2026



White-tailed eagle photographed in the vicinity of Dough Mountain (Gortnacrieve) (image metadata dated 21 July 2024).



White-tailed eagle recorded at the Brackary More townland. This is a still from a video 27th June 2026



White-tailed eagle recorded at the adjacent Faughary Wind Farm(Brackary More). This is a still from a video 7th October 2024

A.2 Ornithology: hen harrier and other raptors

Named local observers record hen harrier as a regular presence over Dough Mountain and its foothills. One observer (E. McNulty) records hen harrier as regularly present, especially in spring and summer, at Carrigeengeare and Boleyboy, seen on a daily basis. A further observer (D. McNulty) records hen harrier and buzzard over Dough Mountain and at the foothills on a daily basis, especially in spring and early summer, with photographs provided. A further record (B. von Will) lists bird-species sightings at Tawnyinah including hen harrier, snipe and great spotted woodpecker. These records corroborate the continuing presence of hen harrier discussed at Section 5.9.



Male Hen Harrier hunting close to trees 16th April 2026 (Joe Sheeran) (54.32745166666666, -8.110411638888888)



Female Hen Harrier 16th April 2026 (Joe Sheeran) (54.32778330555556, -8.110371638888896)



Female & Male Hen Harrier 2024 (Joe Sheeran) (54.354288305555556, -8.107055000000008)



Male Hen Harrier approaching T13 site (Joe Sheeran) (54.328496638888886, -8.114114972222222)



Buzzard 16th April 2026 (Joe Sheeran) (I)



Sand Martin Nesting SITE 2 (Joe Sheeran) (54.34416663888888, -8.095310000000005)



Mountain erosion and Sand Martin nesting site
on the South Side of Dough Mountain
above Mast and sites of new Turbines

Sand Martin Nesting SITE 2 in proximity to proposed T8 site 19th April 2026 (Joe Sheeran) (54.3281766388889, -8.11414833333336)



Sand Martin Nesting SITE 2 in proximity to proposed T8 site 19th April 2026 (Joe Sheeran) (54.3281766388889, -8.11414833333336)



Sand Martin Nesting SITE 2 in proximity to proposed T8 site 19th April 2026 (Joe Sheeran) (54.3281766388889, -8.11414833333336)

A.3 Ecology: marsh fritillary

Named residents at Tullyskerny (F91X6WT; approximately 54.3672, -8.1051) recorded and photographed marsh fritillary butterflies on their land on 14 June 2026 (M. Butterworth and C. Leadon). The same observers record a mountain hare at the same location on 4 April 2026, and on several other occasions, also photographed. These records corroborate the marsh fritillary ground at Section 4, Ground 9.



Marsh fritillary photographed at Raheelin in July 2025.



Marsh fritillary photographed at Tullyskerry on 14 June 2026. Local photograph provided by M. Butterworth and C. Leadon.

A.4 Ecology: bats

A named resident (B. von Will) records an established pipistrelle bat maternity colony in the roof of a house at Tawnyinah (F91F9T3; approximately 54.3098, -8.0928), present every summer since 2023, with a photograph provided. A maternity roost is a particularly sensitive feature. This record corroborates the bat ground at Section 4, Ground 6 and the applicant's own finding of confirmed bat roosts in the surrounding buildings.



Bat recorded at the Tawnyinah maternity roost. Local photograph provided by B. von Will.

A.7 Nature and status of these records

These records were gathered on a standard form that asked each observer to state honestly whether they saw the matter themselves, were told of it or knew it locally, or recalled it from earlier years, and to provide dates and locations. The form expressly cautioned observers not to guess or exaggerate, and not to record birds-of-prey nest locations. The records are offered on that basis. The Commission is invited to weigh them as first-hand evidence of the receiving environment, alongside, and in corroboration of, the applicant's own survey material and the grounds advanced in this submission.



Mountain hare photographed at Tullyskerny on 4 April 2026. Local photograph provided by M. Butterworth and C. Leadon.

Appendix B: Receptor and Viewpoint Analysis

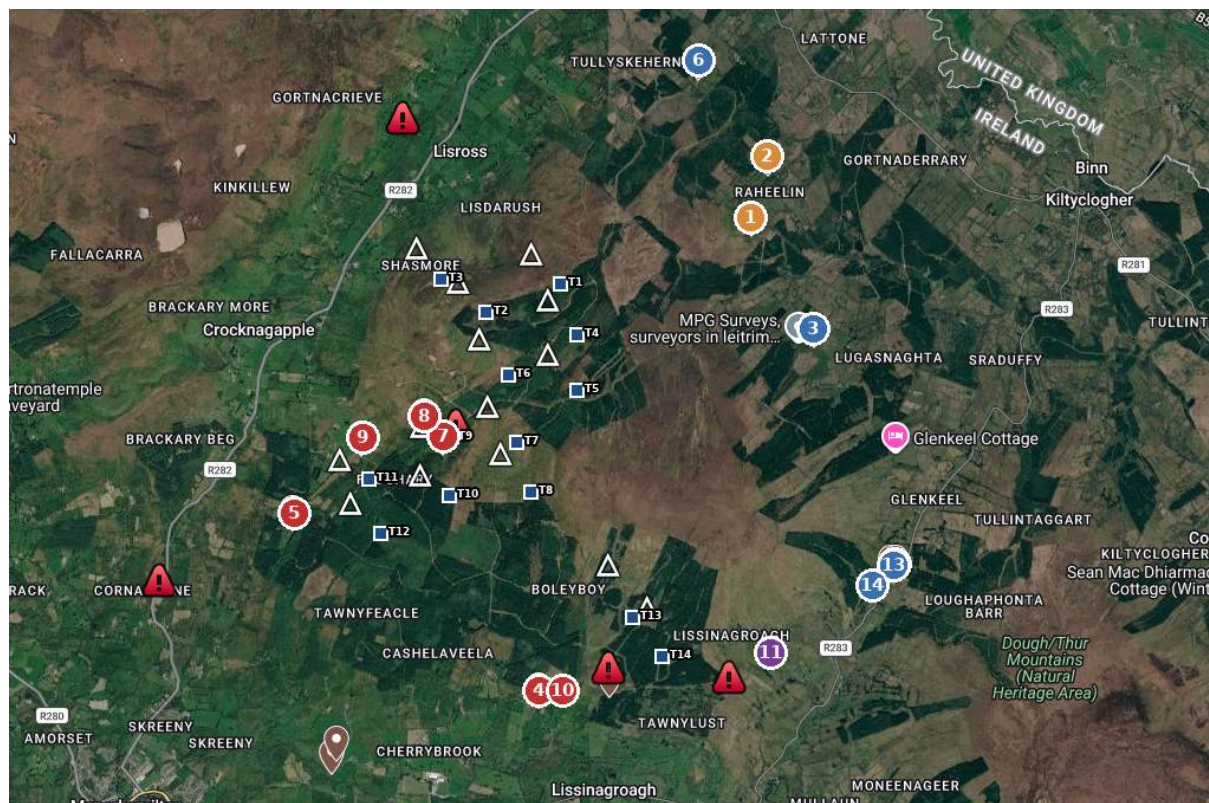
This appendix sets out the receptor-completeness analysis referred to in Sections 3 (Landscape and Visual), 8 (Noise) and 14 (Community Impact and Population and Human Health). Its purpose is to test whether the applicant's assessment captures the occupied dwellings most exposed to the proposed development, and it does so by comparing dwellings identified on the ground against the applicant's own receptor schedule and representative viewpoint set.

B.1 Occupied dwellings not represented in the applicant's assessment

On the local survey, fourteen dwellings on the northern and eastern approaches to the array were recorded and photographed on the ground by Save Dough Mountain and are shown, against the proposed turbine layout, on the receptor map at Figure B.3. Of these, five are occupied, two are vacant, and the remainder are recorded as derelict. None appears on the applicant's Appendix 4-1 receptor schedule, and none is represented by a Chapter 13 viewpoint. The occupied dwellings lie on the side of the site where the applicant's own local community viewpoints, VP14 and VP15, are used to demonstrate southward screening that these dwellings do not share; the nearest occupied dwelling lies on the order of 2.1 km from the closest turbine. The vacant and derelict dwellings are more striking still: several sit among the turbines themselves, the closest recorded as derelict at approximately 66 m, 323 m and 386 m from Turbines 9 and 11. The significance of the occupied omissions is argued in Sections 3, 8 and 14; the significance of the vacant and derelict dwellings, on a receptor baseline that discounts present vacancy, is argued in Sections 9 and 14. It is set out here as a receptor-completeness matter.

B.2 Receptor location map

Figure B.3. Dwellings recorded and photographed on the ground by Save Dough Mountain, shown against the proposed turbine layout (Lissinagroagh Wind Farm, ACP-323048-25). The fourteen dwellings shown are a sample of the occupied, vacant and derelict receptors on the northern and eastern approaches to the array; none appears on the applicant's schedule of sensitive receptors at EIAR Appendix 4-1. Distances are measured from each dwelling to the nearest proposed turbine, using the applicant's own turbine coordinates at EIAR Table 2-1. Satellite imagery © Google.



● Occupied ● Vacant ● Derelict ● Mis-registered ■ Proposed turbine (T1 to T14) Numbers key to the table and figures below.
Satellite imagery © Google.

Key to surveyed dwellings

No.	Verified status	Nearest turbine	Distance to turbine (m)	Within flickerzone (1.63km)	Photograph
1	Vacant	T1	1900	No	Figure A1
2	Vacant	T1	2289	No	Figure A2
3	Occupied	T4	2241	No	Figure A3
4	Derelict	T13	1133	Yes	Figure A4
5	Derelict	T11	774	Yes	Figure A5
6	Occupied (M Maguire's)	T1	2455	No	Figure A6
7	Derelict	T9	66	Yes	Figure A7
8	Derelict	T9	323	Yes	Figure A8
9	Derelict	T11	386	Yes	Figure A9
10	Derelict	T13	958	Yes	Figure A10
11	Mis-registered (Vacant/Derelict)	T14	1029	Yes	Figure A11
12	Occupied	T14	2361	No	Figure A12

13	Occupied	T14	2351	No	Figure A13
14	Occupied	T14	2097	No	Figure A14

Each dwelling above was located and recorded on the ground, and its distance to the nearest proposed turbine calculated from the applicant's own turbine coordinates at EIAR Table 2-1. None appears on the applicant's schedule of sensitive receptors at EIAR Appendix 4-1, and so none was assessed for operational noise or shadow flicker. Seven of the fourteen lie within the 1.63 km shadow-flicker screening distance of a turbine, including derelict dwellings at approximately 66 m, 323 m and 386 m from Turbines 9 and 11. Dwelling 11 is recorded by the applicant but is mis-registered as to its status. Photographs follow.

Photographs of surveyed dwellings

Photographs taken on site. Place each image in the slot beneath its figure number; the figure numbers key to the map and table above.

Figure A1 House 1 – Vacant

54.35311, -8.08617 | 1900 m to T1



Figure A2 House 2 – Vacant

54.35830, -8.08373 | 2289 m to T1



Figure A3 House 3 – Occupied

54.34378, -8.07694 | 2241m to T4



Figure A4 House 4 – Derelict

54.31326, -8.11706 | 1133m to T13



Figure A5 House 5 – Derelict

54.32827, -8.15269 | 774m to T11



Figure A6 House 6 – Occupied

54.36632, -8.0938 | 2455m to T1



Figure A7 House 7 – Derelict

54.33469, -8.13088 | 66m to T9



Figure A8 House 8 – Derelict

54.33644, -8.13371 | 323m to T9



Figure A9 House 9 – Derelict

54.33457, -8.14271 | 386m to T11



Figure A10 House 10 – Derelict

54.31329, -8.11348 | 958m to T13



Figure A11 House 11 – Mis-registered (Vacant/Derelict)

54.31654, -8.08316 | 1029m to T14



Figure A12 House 12 – Occupied

54.32401, -8.06515 | 2361m to T14



Figure A13 House 13 – Occupied

54.32401, -8.06515 | 2351m to T14



Figure A14 House 14 – Occupied

54.32214, -8.06833 | 2097m to T14



Appendix C: Photographic Record of the Receiving Environment

This appendix collects dated photographs of the receiving environment referred to in the body of the submission, in particular the peat, hydrology and storm-exposure conditions discussed in Sections 6 and 7, and the landscape and habitat conditions discussed in Sections 3, 4 and 5. The photographs are offered as evidence of the physical conditions on and around the site, which the applicant's desk-based maps, photomontages and drawings do not fully convey. Each photograph is presented with its subject, location and, where available, its date.

C.1 Peat, storm exposure and ground conditions

The photographs referred to in Section 7 (Storm Éowyn erosion, slippage and windthrow at proposed turbine locations; uprooted blanket bog; exposed peat faces) are collected here as a dated photographic record. Joe Sheerin's site photographs, labelled by location and turbine number, are the principal source; the strongest frames for Turbines 1, 7 and 8 and the mast area should be placed here with date and location once obtained.



Surface Water Entering Stream 8th July 2026 (Joe Sheeran) ()



Storm Eowyn Damage at T14 7th April 2026 (Joe Sheeran) ()



Storm Eowyn Damage at T14 7th April 2026 (Joe Sheeran) (54.31571330555555, -8.087031638888892)



Saddle Hill Bog 8th July 2026 (Joe Sheeran) (I)



Peat Slippage 24th October 2022 (Joe Sheeran) (I)



Peat Slippage 24th October 2022 (Joe Sheeran) (54.34529997222223, -8.092446666666667)



Peat Slippage 17th August 2023 (Joe Sheeran) ()



Peat Slippage 17th August 2023 (Joe Sheeran) ()



Peat Slippage 17th August 2023 (Joe Sheeran) ()



Peat Slippage 17th August 2023 (Joe Sheeran) ()



Peak of Dough Mountain: Marshy Bog

Saturated Ground Dough Mountain 17th April 2021 (Joe Sheeran) (54.32988830555555, -8.093514972222227)



Clear Land Slippage above Coillte Plantation 7th December 2022 (Joe Sheeran) (54.328736638888884, -8.114504999999996)

C.2 Hydrology and karst

The photographs referred to in Section 6 (flash flooding draining toward Lough Melvin; mapped karst features and swallow holes on the application site) are collected here. Only photographs taken on the application site or its immediate setting are included; images from other karst sites are not used, so that every photograph represents the receiving environment of this proposal.



Mapped karst features, Cave close to proposed T7 location.



Mapped karst features, swallow holes and high-hazard access-track example.



Mapped karst features, 1 of the "7 Rooms" north of T1 & T3.



Mapped karst features, swallow holes on left & T7 on right (54.332924972222216, -8.119088333333334)



Steep Gorge under Dough Mountain (54.323018333333316, -8.103119972222224)



T13 & T14 Forestry (54.324038333333334, -8.10434830555555)



T14 On Left of Gorge (54.32403833333334, -8.10434830555555)