THIRD PARTY PLANNING OBSERVATION

Personal objection by residents of Lemanaghan

Proposed Lemanaghan Wind Farm

15 no. wind turbines (up to 220 m tip height), a permanent 220 kV on-site substation and associated infrastructure, Lemanaghan and surrounding townlands, Co. Offaly

Item	Detail
Assessing authority	An Coimisiún Pleanála (the Commission)
Case reference	PAX19.324161 (RED III planning application)
Applicant	Bord na Móna / SSE Renewables
Local authority area	Offaly County Council
Observers / objectors	Aoife Phelan & Trevor Phelan, Address: Lemanaghan, Ballycumber, Tullamore, Co. Offaly Eircode: R35W9P3
Capacity	Third parties — resident family living within the receiving environment
Nature of submission	Personal letter of objection, community rationale and core planning grounds

To the Secretary, An Coimisiún Pleanála, 64 Marlborough Street, Dublin 1.
This observation should be read as a whole, together with the wider community and technical submissions lodged in this case.

Part 1 — Personal letter of objection

Personal Letter of Objection, Community Rationale and Core Planning Concerns

Dear An Commission Pleanala,

We write this submission not only as objectors to a planning application, but as a family, as parents, as local residents, and as custodians of a place that has shaped our lives and the lives of generations before us.

We respectfully object to the proposed Lemanaghan Wind Farm in the strongest possible terms.

This is not opposition to renewable energy.

This is opposition to the industrialisation of a landscape that is environmentally sensitive, archaeologically exceptional, culturally significant, hydrologically connected and deeply important to the people who live within it.

We believe this is fundamentally the wrong development in the wrong place.

Lemanaghan is our home

Trevor grew up in Kilnagarna, with only the bog separating us, as Aoife grew up in the Lemanaghan townland itself.

Aoife's grandmother was raised in Lemanaghan and walked the old mass paths through these lands towards Boher Church. These were not simply routes from one place to another; they were living pathways of faith, community and tradition. Trevors Grandparents lived in Kilnagarna, worked the bog as fuel for the family home. Our roots are deep in this area.

Today we are raising our own children here in Lemanaghan. We are passing on the same values that were passed on to us: respect for the land, respect for nature, respect for history, respect for heritage, and the understanding that we are only temporary guardians of something far older than ourselves.

We walk these bogs. We photograph these landscapes. We teach our children about them. We tell stories of the area and its folklore. We point out the birds overhead and explain where they migrate. We stop to look at sphagnum moss returning. We notice sundew growing. We recognise the beautiful delicate lichens reappearing across the bog.

We watch Whooper Swans moving between Lough Boora and Lemanaghan. We have seen Heath Spotted Orchids growing. We have observed bats feeding over the landscape at dusk. We have watched kestrels hunting. We listen to the song of the Curlew, Lapwing, Buzzards and other species that continue to use this landscape. We have seen the wise barn owl glide silently through the dark night skies.

To many people these may appear to be ordinary things. To us they are not. They are moments. They are memories. They are part of our lives.

Nature in Lemanaghan is not empty. It is not barren. It is not a degraded landscape waiting for industrialisation. It is alive. It is breathing. It is recovering.

Rationale for objecting

Our objection is not based upon one issue alone. It is based upon the cumulative weight of multiple serious concerns across planning, archaeology, ecology, hydrology, human health, cultural heritage and legal compliance.

We do not believe this application respects:

- the character of Lemanaghan;
- its ecological importance;
- its archaeological significance;
- its living cultural heritage;
- the rights and wellbeing of residents; or
- the long-term future of our families.

For generations local people have worked to protect and preserve this landscape. We are an active community. We organise walks. We participate in heritage initiatives. We support conservation. We educate our children about local history. We are willing participants in peatland restoration and nature recovery.

The recently adopted principles of nature restoration recognise the importance of allowing ecosystems to recover and regain ecological function. Lemanaghan already demonstrates this recovery, and we are witnessing it ourselves. Sphagnum moss is returning. Wetland habitats are reforming. Bird populations continue to use the landscape. Pollinators are growing. The bog is healing.

To introduce industrial infrastructure of this scale into a recovering landscape appears entirely contrary to wider objectives regarding biodiversity protection, climate resilience and nature restoration.

Living in Lemanaghan is to grow up in a place where history is not something distant, but something present under your feet and in your everyday life. As children, we would stand waiting for the school bus and talk casually with archaeologists carrying out surveys, watching them work across the landscape as they uncovered traces of the past. Over time, they became part of our community, and they have build up relationships with us, they return to our community regularly and participate in heritage events. The land itself, holds layers of memory stretching back thousands of years. This is a place where stories, traditions, and folklore are passed on from one generation to the next, not as something preserved in books alone, but as something lived and shared. Without its people, this area would not survive in any meaningful sense; it is the community that gives life to the landscape, and in return the landscape shapes who we are. The cultural heritage here resonates deeply within us—we carry it forward and hold it closely, with a sense of responsibility and belonging that is hard to put into words.

Lemanaghan is small, but it is special, and it is the generation here now that has been challenged with protecting it for those who come after. The bog and its biodiversity are not static; they are living systems with an extraordinary ability to recover and heal, but only if given the time and space to do so. Our forefathers lived here over 5,000 years ago, and even today we are still discovering new archaeological sites and fragments of that long history. There is still more to be uncovered, more to understand, and more to protect. For that reason, this place deserves careful consideration and respect. **If large-scale wind farm development goes ahead, there is a real concern that people will no longer choose to live here,** altering the fabric of a fragile rural

community. In some parts of Ireland, wind farm developers themselves have objected to residential development near turbines, which raises serious questions about long-term settlement and sustainability. Lemanaghan must be allowed to remain a living landscape one where heritage, biodiversity, and community can continue to exist together, and where future generations are still able to call it home.

Human impact — our home, our lives and our children

While planning documents can contain maps, noise contours, shadow flicker models and visual simulations, they cannot fully capture what it means for families to live here. For us, this is not a theoretical exercise. This is where our children sleep. This is where they play. This is where we hope they grow up.

The proposal introduces concerns regarding noise impacts; low-frequency noise; shadow flicker; visual dominance; cumulative effects; disturbance of peace and amenity; and changes to the character of daily life.

We have listened to residents from other areas of Offaly describe impacts experienced after nearby wind farm developments. We listened to accounts of children being unable to sleep. We listened to families describing changes in their quality of life. We listened to people who stated that these difficulties did not exist before turbines arrived.

As parents this causes us enormous concern. No parent should have to lie awake wondering whether their children may someday struggle to sleep because of a development imposed upon their landscape. No parent should have to question whether industrial infrastructure will alter the peace and wellbeing of their family home.

Under the Planning and Development framework, residential amenity and human health are material planning considerations. Article 191 of the Treaty on the Functioning of the European Union establishes the precautionary principle. Where uncertainty exists regarding potential impacts, caution should prevail. The wind-turbine guidlines 2006, were written at a time when windfarms were smaller and turbine were not as tall – the changes in technology in twenty years is enormous, and we believe these guidelines are no longer fit for purpose. Additionally, the 2019 draft guidelines for windfarms were never fully implemented, raising questions as to what the issues is with these ‘draft’ guidelines and why the planning authority is expected to make decisions that ultimately effect peoples lives and the environment in which they live with out up-to-date guidelines, or indeed legalisation around renewable developments. We ask that the precautionary principal be applied by An Commission Pleanala, until the government resolve this issue.

Personal planning history — a difficult contrast

Perhaps one of the most difficult aspects of this process for us personally is the contrast between what ordinary families are asked to do and what is now being proposed for this landscape.

We applied for planning permission four times before we were finally granted permission for our family home. One applications on the R436 were refused, the second was withdrawn following advice, these family homes, or could not proceed because the road, R436 was considered to be ***carrying at capacity*** and because the access arrangements were considered unsuitable, ‘no

more entrances onto R436 are permitted' we were told. A third application along a local road was granted by Offaly County Council, but subsequently refused by An Bord Pleanala.

We redesigned again. We reduced our proposed house from a two-storey dwelling to a split-level bungalow. We reduced the visual impact. We lowered the roofline. We altered the design to make it less intrusive. We listened carefully to every issue raised. We took on board every concern. We redesigned and redesigned again. Eventually permission was granted and we fulfilled our dream to build our family home in the landscape we love.

As ordinary residents we accepted every requirement placed upon us. We adapted because we understood that planning exists to protect landscapes and communities, but we also adapted because this special place is our home, we chose to live here in rural Ireland, not in an industrial landscape.

It is therefore difficult to understand how roads previously considered unsuitable for a single family dwelling can now apparently accommodate the heavy goods movements associated with a large industrial wind farm development. The roads themselves have not changed. The landscape has not changed. The only thing that appears to have changed is the scale of what is being proposed.

We set out below, on the public planning record, exactly how our own modest proposals were assessed — and we respectfully ask the Commission to apply at least the same standard of protection to this landscape now.

Part 2 — The documented contrast: how our own family home was assessed

This Part is not advanced to re-open our own (now permitted) family home. It is advanced because the planning decisions on our applications are on the public record and they establish, in the planning authority's and the Board's own words, the high sensitivity of the Lemanaghan landscape and the strict scrutiny applied to even modest development within it. We respectfully submit that the same considerations — visual amenity, the setting of the monastic site, the capacity of local roads and the protection of the rural and vernacular character of the area — must apply with far greater force to 15 turbines of up to 220 metres and a permanent 220 kV substation. Two documents are appended to, and relied upon in, this observation.

2.1 Offaly County Council — Reg. Ref. 15/73 (refused: restricted regional road and functional need)

Our application under Reg. Ref. 15/73 was for a single dwelling house, domestic garage, on-site wastewater treatment, a connection to the group water scheme and a new site entrance at Lemanaghan, Ballycumber. The Council's Planning Report recommended **refusal**. The site lay on the restricted regional road R436, and the assessment turned on rural-housing policy, including:

- **Policy STAP-16 / STAP-19** — the Council's policy to strictly control development outside identified settlements which could generate significant additional traffic, thereby potentially compromising the capacity and efficiency of national and restricted regional roads;
- **Policy SSP-19 (Areas of Special Control)** — requiring, among other things, that the applicant demonstrate a functional need to reside in the particular rural area and that no alternative site is available outside the area of special control; and
- the definition of **"functional need"** as a need to reside at this particular location in exceptional circumstances or for the purposes of employment.

The planning authority concluded that we did not, in its view, demonstrate that functional need, and recommended refusal on the basis that the proposal would materially contravene the Offaly County Development Plan 2014–2020 and be contrary to the proper planning and sustainable development of the area. We accepted that decision and did not pursue direct access onto the regional road.

2.2 An Bord Pleanála — ABP-301833-18 (inspector recommended refusal: visual amenity and the monastic setting)

A subsequent two-storey dwelling on an alternative site was granted by Offaly County Council (Reg. Ref. 17467) but was the subject of a third-party appeal. In the Inspector's Report (ABP-301833-18, 15 October 2018), the inspector recommended that permission be **refused**. The reasons are directly relevant to the present application because they concern the very landscape now proposed for industrial wind development:

- the dwelling, by reason of its scale, height, massing, site layout and siting on an undulating and prominent site on the approach to Lemanaghan from the south, would be **"a visually discordant feature"** in the rural landscape;
- it would **adversely affect the character and setting of the monastic site** to the north (the site lies within approximately 250–300 metres of St Manchan's Church and the early Christian monastic complex);

- it would seriously injure the visual amenities of the area and detract from its rural and vernacular character; and
- it would therefore be **contrary to the proper planning and sustainable development of the area**, and contrary to the **Lemanaghan Conservation Plan** prepared by the Heritage Council.

The inspector expressly relied upon the **Heritage Council's Conservation Plan for Lemanaghan**, which recommends that developments in the immediate vicinity of the monastic site be sensitive to the site and its setting, and that the view of St Manchan's Church from approximately 300 metres on the southern and western approaches not be obscured by large-scale development. The inspector also relied on the Offaly County Development Plan's own summary of landscape characteristics and sensitivities (Table 7.11.4), which identifies Lemanaghan among archaeological and historical landscapes that are **"highly sensitive to new developments"** which could damage the historical character and the cultural and social importance of the area, and which requires that applications in close proximity be sympathetic to the sensitive nature of the landscape.

We invite An Commission Pleanala to review the Lemanaghan Conservation Plan on this link.

https://www.heritagecouncil.ie/content/files/lemanaghan_county_offaly_conservation_plan_2007_2mb.pdf

2.3 What these decisions establish

Read together, our own planning history places the following beyond dispute, in the planning authority's and the Board's own assessments:

1. The Lemanaghan landscape is officially recognised as **highly sensitive** in archaeological, historical, cultural and visual terms, with a dedicated Heritage Council Conservation Plan and specific development-plan protection.
2. The **setting of, and approach to, the monastic site** is a material planning consideration capable, on its own, of justifying the refusal of even a single family dwelling.
3. **Visual amenity, scale, height and massing** are decisive in this landscape — a two-storey house was considered visually discordant; a 220-metre turbine is roughly twenty-six times that ridge height.
4. The **capacity and safety of the local and regional road network** (including the R436) was treated as a genuine constraint on even modest development.
5. Ordinary residents were required to **reduce scale, lower rooflines, redesign repeatedly and avoid sensitive access**, in the name of protecting this landscape.

2.4 The inconsistency we ask the Commission to confront

We do not say that our home and a wind farm are the same kind of development. We say that the planning system cannot consistently hold that this landscape is too sensitive to absorb a single, family dwelling on the approach to the monastic site, while simultaneously accepting 15 turbines of up to 220 metres, a permanent 220 kV substation, borrow pits, kilometres of access roads and heavy construction traffic across approximately 1,111 hectares of the same peatland and within the same cultural landscape. The contrast is summarised below.

Consideration	Our family home (refused / restricted)	Proposed wind farm (PAX19.324161)
Scale / height	Two-storey house, ~8.4 m ridge — found visually discordant	15 turbines up to 220 m tip height; 220 kV substation. The substation is 23meters tall.
Setting of monastic site	Refusal recommended for impact within ~250–300 m	Industrial array and infrastructure across the wider monastic and peatland landscape
Local / regional roads	R436 access treated as a real constraint on one dwelling	Heavy goods and abnormal-load movements over the same road network
Landscape sensitivity	“Highly sensitive”; Conservation Plan applied strictly	Same designation and Conservation Plan — sensitivity does not diminish with project size
What was required	Repeated redesign, reduced scale, lowered roofline	The Applicant must, at least, meet the same standard of protection

If consistency of decision-making and the protection of the Lemanaghan landscape mean anything, they must mean that a development of this scale faces scrutiny that is at least as rigorous as that applied to our family home — and, given its scale, very much more so.

REVISED PART 3 — for insertion into the Phelan Observation (replaces the previous Part 3)

Part 3 — Our grounds of objection: the EIAR is incomplete, internally inconsistent and unreliable

We have read the application and the Environmental Impact Assessment Report (EIAR) in detail. We set out below, in our own right and on our own analysis, the specific and serious deficiencies we have identified. Each point is grounded in the applicant's own submitted documents or in publicly available and verifiable information. Our position throughout is the one with which we began: we accept the need for renewable energy; we do not accept that this development, of this scale, in this place, has been shown to be acceptable, or that the EIAR provides a complete, precise and reliable basis on which the Commission could lawfully grant consent.

3.1 The standard the applicant must meet

We respectfully remind the Commission of the standard against which the application must be judged, because in our submission the application falls below it:

1. **Complete, precise and reliable information.** Under Article 5(1) and Annex IV of the EIA Directive (2011/92/EU as amended by 2014/52/EU), and Article 8a, the Commission may only reach a reasoned conclusion on the likely significant effects of the project on the basis of complete, precise and reliable information. Holohan v An Bord Pleanála (C-461/17) confirms that the assessment must cover all significant effects, including the interactions between environmental factors.

- **Appropriate Assessment.** Where Appropriate Assessment is engaged, consent may be granted only where there is no reasonable scientific doubt as to the absence of adverse effects on the integrity of the relevant European sites (Waddenzee, C-127/02; Holohan, C-461/17).
- **Climate.** Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended 2021) requires the Commission to perform its functions consistently with Ireland's climate plans, carbon budgets and the national climate objective — a real, justiciable obligation confirmed by the Supreme Court in Coolglass Wind Farm Ltd v An Coimisiún Pleanála [2026] IESC 5. If the carbon assessment is internally inconsistent, the Commission cannot be properly informed of the project's actual climate effect and cannot discharge that obligation.
- **Precaution.** Where scientific uncertainty exists, Article 191 TFEU and the precautionary principle require that significant weight be given to that uncertainty, and that consent not issue until it is resolved. Ireland's experience at Derrybrien (Commission v Ireland, C-215/06; penalty proceedings C-261/18) demonstrates the consequences of inadequate assessment of peatland wind development.

The burden of demonstration lies on the applicant. It is not discharged by general policy support for renewable energy. We submit that it has not been discharged here.

Part 3 (continued) — Carbon and climate: a net climate benefit has not been demonstrated

This development is advanced and justified primarily as a climate-mitigation project. It is the accepted position in Irish and UK planning practice that a wind farm on peatland must demonstrate that it saves more carbon than it releases. We have examined Chapter 11 (Climate) and Appendix 11-2 (Carbon Calculations) closely. One of us works professionally as a data analyst, and our analysis below is drawn from comparing the figures within the applicant's own submitted documents. We do not contend that the project is necessarily incapable of demonstrating an adequate carbon balance; we contend that, as presented, it has not done so, and that the carbon case is not reliable enough for the Commission to be satisfied upon it.

3.2.1 The applicant's headline carbon claim

Chapter 11 presents a carbon payback period of approximately **4.6 years**, total expected carbon losses of **261,360 tCO_2**, and a lifetime carbon saving of **1,973,125 tCO_2** over the 35-year operational life (15 turbines at 6 MW each; 90 MW; 220 kV grid connection and on-site substation). We submit that those figures are not reliable as presented, for the reasons set out below — each of which arises from the applicant's own documents.

3.2.2 Defect 1 — a static 2024 grid emission factor applied across 35 years

The lifetime savings figure is calculated using the 2024 grid emission factor of **204.3 gCO_2/kWh**, applied as a constant across the entire 35-year period. Yet the EIAR's own Appendix 11-1 documents Ireland's statutory obligation to achieve a 75% reduction in electricity-sector emissions, and 80% renewable electricity, by 2030. If that obligation is met — as the law requires — the grid emission factor will fall to a small fraction of the 2024 figure within a few years of first generation. A carbon-saving calculation that assumes a high, fixed displacement factor for 35 years overstates the saving. No sensitivity analysis using declining factors is provided, and it is not clarified whether an average or marginal emission factor methodology is used.

3.2.3 Defect 2 — the saving is not calculated against the grid that will actually exist

A directly comparable, publicly available precedent exists. Derrinlough Wind Farm is a project on the Boora bog complex in Co. Offaly, delivered by the same applicant and the same planning consultant. The published record shows planning permission in August 2021, construction commencing in February 2023, and the wind farm opening on 27 April 2026 — approximately **56 months** from permission to first generation.

Applying that interval to Lemanaghan, with a planning decision in late 2027, first generation would not begin until late 2032 to early 2033. By then Ireland is required to be at roughly 80% renewable electricity, implying a grid carbon intensity of approximately **20–40 gCO_2/kWh** — between five and ten times lower than the 204.3 gCO_2/kWh the EIAR applies. The carbon saving has not been calculated against the grid that will actually exist when the turbines generate. (Our timeline projection is offered as illustrative; the underlying dates and statutory targets are not.)

3.2.4 Defect 3 — the applicant's own calculator contradicts the headline figure

The Appendix 11-2 Macauley Institute Carbon Calculator generates its own payback periods of **61.5 years** (coal baseline), **147.2 years** (fossil-fuel mix) and **310.7 years** (grid mix) — every one of which exceeds the 35-year operational life of the wind farm. The EIAR does not explain the discrepancy between these outputs and the 4.6-year figure in Chapter 11. The same appendix

also records a carbon-intensity output of **1,838 gCO_2/kWh** against a referenced 2030 target of under 50 gCO_2/kWh, again without explanation. We note that the Scottish Government's own 2024 evidence assessment of this calculator records that it contains no in-built quality-control mechanisms — which makes independent expert review of these outputs all the more important.

3.2.5 Defect 4 — the maximum-loss scenario is ignored

The carbon calculations report a range of peat-carbon losses, but Chapter 11 calculates payback from the expected figures only and does not discuss the maximum-loss scenario at all. The maximum figures are very much larger:

Peat-carbon loss category	Expected	Maximum	Maximum vs expected
Total peat-carbon loss	261,360 tCO_2*	400,038 tCO_2	× 1.53
Soil organic matter loss	—	173,231 tCO_2	× 4.6
Drainage loss	6,456 tCO_2	51,725 tCO_2	× 8

** Chapter 11 total expected losses. We ask that the carbon payback be recalculated under the maximum-loss scenario.*

3.2.6 Defect 5 — the restoration contradiction and the permanent substation

The model input in Appendix 11-2 records, in answer to the question whether the hydrology of the site will be restored on decommissioning, the answer **"No"** — which triggers the calculator's own assumption of 100% carbon loss from all drained peat. Chapter 11 simultaneously argues that actual losses will be lower than the model outputs because of rehabilitation proposals. These two positions are irreconcilable as presented. Critically, the 220 kV substation is confirmed as permanently retained national grid infrastructure: the rehabilitation argument cannot apply to it in any scenario, and the permanent, non-restorable peat footprint beneath it is not separately identified or quantified.

3.2.7 Defect 6 — construction emissions are omitted

Several material categories of construction-phase emission do not appear as named categories in either calculation tool in Appendix 11-2: on-site plant fuel; workforce transport; borrow-pit excavation machinery; the Kennedy's Cross temporary access track (confirmed in the planning notice); road-upgrade works on the abnormal-load route; and dewatering. Their omission further understates the carbon cost side of the balance.

3.2.8 Defect 7 — unexplained lifecycle inputs and tool boundaries

The turbine lifecycle emission rate of **856 tCO_2/MW** is used without explanation, against a published range of 394–8,147 tCO_2/MW; the concrete volume (640 m^3 per turbine, 9,600 m^3 in total) is not derived; and the boundary between the Macauley Calculator and the TII Carbon Tool is not documented, raising the risk of either double-counting or omission. The embodied carbon of the permanently retained 220 kV substation is not clearly identified in the tool outputs.

3.2.9 Defect 8 — the restoration alternative is not quantified

Rehabilitation of this cutaway bog is already legally required under IPC Licence P0500-01, irrespective of whether this permission is granted. Yet the EIAR does not quantify the carbon benefit of full peatland restoration over the same 35-year period — even though the Irish emission-factor data needed to do so is cited within the EIAR itself. On a recovering peatland, the restoration (or "do nothing / do minimum") scenario is not a neutral baseline: rewetting, carbon sequestration and biodiversity recovery are themselves a climate and environmental

benefit, and the failure to weigh them is a material gap in the alternatives and carbon assessment.

3.2.10 Defect 9 — carbon released as air pollution is not quantified (Chapter 10)

Peatland disturbance is both an air-quality and a climate issue. Disturbing and draining peat releases carbon dioxide through oxidation, methane in anaerobic conditions, and particulate organic carbon through dust and erosion, and increases the risk of peat-fire emissions. Chapter 10 treats air-quality effects as temporary and localised and does not quantify these carbon emissions or assess their contribution to climate forcing, nor the interaction between drainage, peat drying, dust and fire (contrary to Article 3 of the EIA Directive and Holohan). Under the Climate Act and EU Climate Law (Regulation (EU) 2021/1119), Ireland must reduce emissions and protect carbon sinks; the failure to assess these emissions undermines the very basis on which a peatland wind farm is justified.

Carbon — our conclusion

> The most striking feature of the carbon case is that the EIAR's own documents contain the evidence that undermines its central conclusion: Appendix 11-1 records the statutory decarbonisation targets that make the static emission factor untenable; Appendix 11-2 records payback periods that exceed the project's life, a 1,838 gCO_2/kWh output against a sub-50 target, and a "no restoration" input that triggers 100% peat-carbon loss; and the maximum-loss and permanent-substation scenarios are not addressed. We respectfully submit that the Commission cannot, on this material, be satisfied that the development delivers a net climate benefit or that it is consistent with section 15 of the Climate Act and Coolglass — and that, the burden being on the applicant to demonstrate that benefit on a complete and reliable basis, the failure to do so is a ground for refusal.

3.2.11 Internal inconsistency — the turbine is defined for the carbon case but left undefined for noise

The carbon case and the noise case do not describe the same machine, and the difference is not neutral — it runs in the applicant's favour in both directions. **For the benefit, the turbine is defined precisely.** Chapter 11 states that the project comprises 15 turbines each rated at 6 MW (90 MW in total), and the entire lifetime carbon-saving figure is built on that rating: the energy yield is derived as 90 MW × a 0.35 capacity factor × 8,760 hours per year. **For the harm, the same turbine is not defined at all.** Chapter 12 gives no make, model or power rating, describes the turbines only by tip height ("approximately 220 metres"), and the noise assessment itself records "uncertainty regarding the final turbine model".

We respectfully submit that an applicant cannot define the machine precisely where definition supports its case, while leaving it undefined where definition would expose a risk. Where a flexible design envelope is used, the EIA Directive requires the realistic **worst case** to be assessed for each likely significant effect (the "Rochdale envelope" principle): for noise, the loudest credible turbine within the envelope; for carbon and yield, the least favourable. The assessment appears to do the opposite — to adopt the most favourable assumption for each. The consequence is that neither the benefit nor the harm is anchored to a single, consistent machine, and the two chapters cannot both describe the development that would actually be built.

This is not academic, and it bears directly on homes such as ours. The applicant's own predictions already place the worst-affected dwellings within about one decibel of the 40 dB(A)

limit. Our home lies among a cluster of dwellings at a range of distances from the proposed turbines — the nearest, T14, approximately 1,351 m away, with five turbines within approximately 1.85 km and all fifteen within approximately 3 km (the full distances are set out at section 3.6.2). The noise experienced at a home at these distances depends both on the combined contribution of all fifteen turbines and on the sound power of the particular machine finally chosen. Because that machine is left undefined, neither we nor the Commission can know whether the turbine actually built will be the one assessed, or a higher-output, higher-sound-power machine within the same envelope. Where the applicant's own margin of compliance is already a fraction of a decibel, the choice of machine is capable of being decisive.

We are not acousticians and we put forward no figure of our own. We ask only that the Commission require the applicant, before any decision is made, to:

- define the single, specific turbine — make, model, rated power and guaranteed sound-power level, with tolerances — on which the application is to be determined;
- assess both the carbon and energy case and the noise and shadow-flicker case against that same defined turbine, and against the realistic worst case of any design envelope relied upon; and
- model and disclose the resulting cumulative noise at the dwellings nearest the development, including our home at the distances set out at section 3.6.2, and have that modelling independently verified.

Until the project is assessed as one consistent, defined, worst-case turbine, we respectfully submit that the EIAR does not provide the complete, precise and reliable basis the Commission requires (EIA Directive; Holohan, C-461/17), and that the precautionary principle (Article 191 TFEU) requires the inconsistency to be resolved before, and not after, any consent.

Part 3 (continued) — Peat stability, ground conditions and the other strongest grounds

3.3 Peat stability and ground conditions (Land, Soils and Geology)

This is a peatland site, and the foundation and ground-investigation evidence concerns us greatly. On the applicant's own figures, **13 of the 15 turbines (T1–T11, T13 and T14) require piled foundations** and only two (T12, T15) use excavate-and-replace; none is a true gravity base. Each piled turbine uses **16 reinforced-concrete piles, 1,200–1,600 mm in diameter and 18 metres long** — in the order of 208 piles, or roughly 3,744 linear metres of piling, driven through peat and into the ground beneath. Despite this, the applicant carried out only **62 trial pits and drilled no boreholes**, and did not prove bedrock.

Two further matters are, in our submission, serious:

- The permanent **220 kV substation is sited in the deepest peat on the site (5–5.5 m) in Cooldorragha townland**, while the EIAR represents that deeper peat areas have been avoided by the layout. That is a direct internal inconsistency.
- Substantial **State-archived geological data was not consulted** — at least six borehole records totalling approximately 1,734.5 m of subsurface logging within or adjacent to the site, none referenced in the EIAR's desk-study sources. That archive records **karst** at the depth of the proposed piles (Drillhole D-12: "rotten rock and clay, only 5% core recovery, cavities and mud" at roughly 7.5–22.6 m, the same vertical range as the 18 m piles), and the underlying Waulsortian limestone is classified by the GSI as karstified.

Peat systems are hydrologically sensitive and can respond unpredictably to loading, drainage and excavation; a flat bog is not a risk-free bog, and the present baseline is an artificial, disturbed one. The failure to use best available information is contrary to the standard confirmed in O'Grianna v An Bord Pleanála [2014] IEHC 632, and the unresolved karst and peat-stability uncertainty engages the precautionary principle directly. Derrybrien — where a construction-phase peat slip displaced some 450,000 tonnes of peat — is the reason this must be **resolved before, not after, consent.** We are not Geologists, however we could find this information available on publicly available sources, the developers are two very large companies, they have more time and resources available than ordinary residents – the burden of responsibility lies with them.

3.4 Hydrology and water quality (Water Framework Directive)

The application engages the non-deterioration obligation of the Water Framework Directive (transposed by S.I. No. 272 of 2009), and the receiving waters are already under pressure. The Brosna_100 surface water body is at "Moderate" status and at risk of failing its WFD objectives; downstream Blackwater (Shannonbridge) waters have deteriorated to "Poor" status, with peat extraction already identified as a pressure. There is no groundwater-quality monitoring data for the aquifers underlying the site, and the proposed drainage retention depends on the continued operation of pumping — most likely to fail precisely when it is most needed, during coincident peak rainfall and high river levels (the Brosna already overflows and floods local roads approximately 800 m south of the site).

We also draw attention to a specific and serious omission. The summary water-quality table (Chapter 9, Table 9-14) omits three parameters that were in fact measured on every one of the 18 surface-water samples — **Total Phosphorus, Total Nitrogen and Total Oxidised Nitrogen** — which are precisely the parameters most relevant to the WFD eutrophication assessment. The Appendix 9-2 laboratory certificates record Total Phosphorus values that exceed the S.I. No.

272/2009 threshold (for example, 0.10 and 0.13 mg/L P), none of which is disclosed in the chapter, whose narrative nonetheless concludes that the watercourses meet “Good” status for phosphorus. We respectfully submit this materially misrepresents the baseline.

Given the hydrological connection of this peatland to downstream waters and European sites, we submit that the EIAR does not demonstrate WFD compliance or remove reasonable scientific doubt for the purposes of Appropriate Assessment.

Furthermore, we ask what will happen to the existing septic tank in the ‘tea-rooms’ [existing structure (wellbeing facility) with walls, foundation, roof, gutters, electricity, plumbing, kitchen, toilets, office] what is the plan for this existing septic tank in this sensitive landscape, Lemanaghan bog?

3.5 Birds and the living landscape (Ornithology)

This ground matters to us personally, because the birds at issue are the birds we watch ourselves. **County Offaly is the most important county in Ireland for Whooper Swan** (2020 International Whooper Swan Census, BirdWatch Ireland under contract to NPWS), and we regularly watch Whooper Swans moving between Lough Boora and Lemanaghan. We are concerned that the impact assessment makes selective and incomplete use of the survey data:

- Chapter 7 itself concedes **three separate significant impacts for Whooper Swan and three for Lapwing**.
- **Curlew** — the only Irish bird on the IUCN Red List of Threatened Species, with a national breeding population of just 123–138 pairs — were recorded as **2,746 individuals across 68 survey events** in the applicant’s own Waterbird Distribution and Abundance Surveys, yet are effectively absent from the Collision Risk Model. We have photographed Curlew and Lapwing on these lands ourselves.
- A five-season Golden Plover record of **1,197,740 bird-seconds at collision height** is set against a developer-commissioned avoidance rate that reduces predicted Golden Plover mortality by a factor of five.

We do not dispute that field surveys were carried out; we dispute the selective use of their results in the formal assessment, and we say the collision and disturbance risk to protected and Red-Listed species has been understated.

3.6 Residential amenity, human health and shadow flicker

As parents living within the receiving environment, our concerns here are immediate. The applicant’s own modelling identifies **58 dwellings exceeding the shadow-flicker threshold of 30 hours per year / 30 minutes per day**, and the assessment relies on SCADA-based turbine shutdown to manage those exceedances over a 35-year operational life — a measure whose feasibility, reliability and enforceability are not proven at application stage. Multiple schools are identified within the receiving environment, yet there is no school-specific assessment of noise, shadow flicker, visual movement or cumulative school-day exposure, and vulnerable groups (including children, autism classes and those with sensory sensitivities) are acknowledged as relevant but not assessed. Corbeg is mischaracterised as a serviced village, and agricultural and equine receptors are not mapped or assessed.

Human health in EIA is not confined to proof of direct disease; it includes living conditions, sleep, annoyance, stress and wellbeing, and the European Court of Human Rights has recognised that environmental nuisance can engage the right to respect for the home and family life (López Ostra

v Spain). The interactions between noise, shadow flicker, visual movement, schools, vulnerable residents and amenity are required to be assessed together (Article 3 of the EIA Directive; Holohan), and they have not been. The best interests of children are a primary consideration. A general conclusion of "no significant effect", reliant on **post-consent mitigation**, **does not meet that standard.** We believe all conditions and mitigation should be clear and resolved as part of the planning process – not afterwards. Where do we us residents turn to afterwards?

3.6.1 Operational turbine noise — questions we ask the Commission to resolve

We are residents, not professionals in acoustics, and the law does not require us to be. It is not for us to prove whether or not this development will harm us. **The burden lies on the applicant** to demonstrate, on complete and reliable information, that the development will not cause unacceptable noise — and **An Coimisiún Pleanála may not grant permission unless it is satisfied that the applicant has discharged that burden.** The protection of residential amenity and human health is a core purpose of the planning system and a matter the Commission is obliged to consider, and to be satisfied upon, before consent. We therefore put forward no noise calculation of our own. We set out, from the applicant's own assessment, why we respectfully say the Commission cannot yet be satisfied, and we ask the Commission to require the applicant to put the matter beyond reasonable doubt.

On the applicant's own figures, the predicted operational noise reaches **39.4–39.7 dB(A)** at the most affected receptors against a **40 dB(A)** limit, with around twenty dwellings within 2 dB, and about four within roughly 1 dB, of that limit. The applicant's own case is therefore that compliance at the worst-affected homes is achieved only by a fraction of a decibel. That very small margin is the heart of our concern, because we understand it leaves little room for the ordinary factors that can affect wind-farm noise in practice. Without putting forward any figures of our own, we ask the Commission to require the applicant to demonstrate, and to have independently verified, how the predicted levels would hold when the following are taken into account:

- **A turbine that is not yet fixed.** The noise chapter does not state a turbine make, model or power rating — it describes the turbines only by tip height ("approximately 220 metres") and itself records "uncertainty regarding the final turbine model" — while the carbon chapter commits to a specific 6 MW machine. We ask: against which single, defined turbine has the noise been assessed; what is its guaranteed sound-power level and tolerance; and could a louder turbine within the chosen design envelope cause the 40 dB(A) limit to be exceeded?
- We believe asking An Commission Pleanala to grant permission for wind trubines, whose specification is not defined in Chapter 12, is incomplete.
- **Real weather conditions.** We ask the Commission to be satisfied that worst-case meteorological conditions — including the calm, stable night-time conditions common over open bog — have been fully modelled, given that the assessment is recorded as not having fully addressed them.
- **The character of the noise, not only its level.** We are concerned about low-frequency noise and the periodic "swish/thump" (amplitude modulation) that residents near other wind farms describe, which we understand a single dB(A) figure may not fully capture. We ask the Commission to require a specific assessment of low-frequency noise and amplitude modulation, and of their effect indoors and at night.
- **Reliance on turbine shutdown.** The assessment relies on SCADA-based turbine shutdown to manage exceedances over a 35-year life. We ask the Commission to require evidence that such shutdown is technically reliable, monitored and **enforceable** for the lifetime of the development, rather than simply assumed. How can we be

guaranteed they will be shut down? Is it only if complains occur? Is the process of complaints accessible to all? Will someone answer the telephone at 2AM and turn off a turbine if we cannot sleep with the noise? Are necessary shutdowns legally binding as a condition as part of planning? Who monitors/regulates shutdowns? If a Windfarm requires shutdowns – perhaps a better design is needed, perhaps this is not the correct area for a windfarm.

How are shutdowns accounted for in the carbon calculations? Given the sensitive carbon store of peatlands, these calculations are very important.

- **Cumulative noise with other wind farms.** Given the concentration of wind energy in the area, we ask the Commission to require a cumulative noise assessment in accordance with the Institute of Acoustics Good Practice Guide.

We make no assertion of our own as to the precise noise levels; that is a matter for qualified assessment. Our point is one the Commission is best placed to test, and on which the burden lies on the applicant: where the applicant's own case shows compliance only by fractions of a decibel, the assessment must be complete, precise, reliable and independently verified **before consent,** because once the turbines are built the noise cannot be undone. The requirement for complete and reliable information (EIA Directive; Holohan) and the precautionary principle (Article 191 TFEU) point firmly toward resolving this uncertainty now, rather than after a permission has issued. We ask An Commission Pleanala to consider the high residential area surrounding Lemanaghan bog ,and consider that this is not a good place for a windfarm.

3.6.2 The effect on our own home

Our home is located at: Lemanaghan, Ballycumber, Tullamore, Co. Offaly, R35 W9P3.

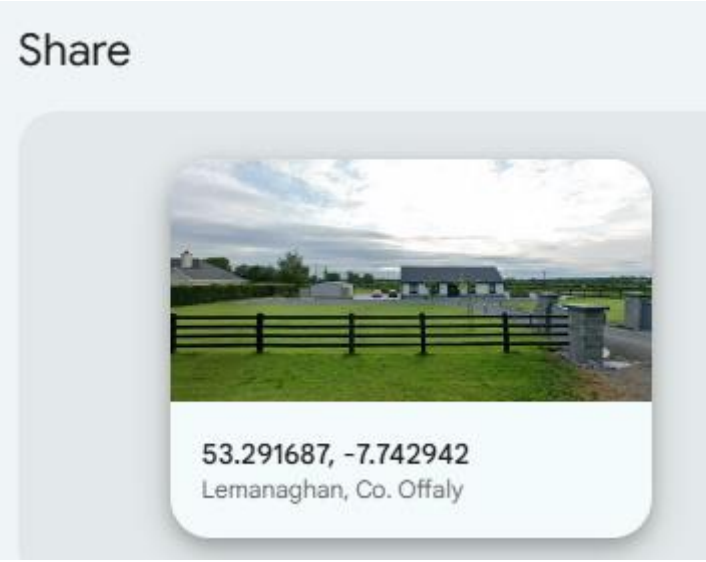

Image shows co-ordinates of our family home

This is not abstract for us. We have set out below the distance from our home to each of the fifteen proposed turbines. The nearest, T14, is approximately **1,351 m** away; five turbines lie

within approximately 1.85 km, and all fifteen lie within approximately 3 km. The distances are set out below.

Turbine	Distance (m)	Distance (km)
T14	1,351 m	1.35 km
T5	1,370 m	1.37 km
T12	1,496 m	1.50 km
T13	1,764 m	1.76 km
T4	1,843 m	1.84 km
T6	1,844 m	1.84 km
T15	2,127 m	2.13 km
T9	2,199 m	2.20 km
T7	2,280 m	2.28 km
T8	2,311 m	2.31 km
T3	2,382 m	2.38 km
T11	2,612 m	2.61 km
T2	2,658 m	2.66 km
T10	2,918 m	2.92 km
T1	2,986 m	2.99 km

We are not acousticians, and we do not put forward any noise figure of our own for our home. But we respectfully ask that it not be assumed that, because the nearest turbine is more than a kilometre away, our home is automatically unaffected. We understand that the noise from multiple turbines is **cumulative** — that the contributions of all fifteen turbines combine — and the applicant's own assessment already predicts other dwellings to lie within one to two decibels of the 40 dB(A) limit. We therefore ask the Commission to require the applicant to:

- model and disclose the specific predicted **cumulative** operational noise level at our home (at the location identified above), from all fifteen turbines together, for a single, defined worst-case turbine and under realistic worst-case conditions, including calm night-time conditions; and
- have that prediction independently verified before any decision is made.

Why getting this right matters for our home

We raise this not to assert any particular outcome — that is not our role, and we are not qualified to do so — but because the **consequences would fall on our family** and could not be reversed. Our home is where our children sleep; the night-time background here is very quiet; and once the turbines are built the noise cannot be undone. The peaceful enjoyment of the home and of family life is protected under Article 8 of the European Convention on Human Rights, and the European Court of Human Rights has held that environmental nuisance can engage that right (López Ostra v Spain, as noted above); residential amenity, sleep and human health are material planning considerations; and the World Health Organisation has identified night-time noise as a recognised influence on health.

It is for the applicant to prove, and for the Commission to be satisfied, that our family's sleep and our peaceful enjoyment of our home will not be subjected to unacceptable harm — it is not for us, as residents and not professionals in this field, to prove that they will. Where the applicant's own assessment shows compliance at neighbouring homes only by a

fraction of a decibel, and where the turbine itself is left undefined, we respectfully submit that the Commission cannot be satisfied of that on the assessment as it stands. The cumulative noise specific to the **exact turbines** that will be erected in relation to our home must be modelled, disclosed and independently verified, and the Commission must be positively satisfied that there will be no unacceptable effect on our family's sleep and on the enjoyment of our home, **before** any consent issues — not afterwards, when it would be too late for our family. Where doubt remains, the precautionary principle (Article 191 TFEU) requires that it be resolved in favour of caution.

3.6.3 Fire risk, emergency response and the safety of our family

We have read the EIAR, and we have been unable to find within it any fire safety report, emergency response plan, or assessment of the risk of a major fire — whether a fire originating in the turbines and their electrical infrastructure, or a fire in the peat of the bog itself. This concerns us greatly, because the law specifically requires it. Following the 2014 amendment to the EIA Directive (Directive 2014/52/EU), the assessment must address the vulnerability of the project to, and the risk of it causing or contributing to, **major accidents and disasters** — a category that includes fire — and the resulting significant effects on the population, human health, cultural heritage and the environment. We respectfully ask the Commission to confirm whether any such assessment has been carried out; and, if it has not, we submit that the EIAR is incomplete on a matter going to human safety and cannot, as it stands, support a grant of permission.

Fire on this bog is not a hypothetical risk — it is a documented and recurring one, recognised by the State, by the operator and by the local authority:

- In **May 2011**, extensive peat and gorse fires swept the Midlands. National media (RTÉ News) specifically named Lemanaghan, "between Ferbane and Clara," as one of the fire locations; the Tullamore Tribune ("Bog Fires Rage Across Offaly") reported that **residents had to be evacuated because of the smoke**, that up to 450 Bord na Móna staff and six units of the Offaly Fire Service were deployed, and that the fires **spread quickly in dry, windy conditions and burned for several days**. The fires were the subject of Dáil Éireann debate that same month.
- Bord na Móna itself issued a formal public **bog-fire warning** (Offaly Independent, April 2014), urging the public to alert the Gardaí and fire service to any bog fire.
- A peat fire was recorded at **Lemanaghan Bog as recently as June 2023**, showing that the risk persists under present, post-extraction conditions — it is not confined to the industrial past.
- Offaly County Council's own **Climate Change Adaptation Strategy 2019–2024** identifies increased bog fires, and "stretched emergency services in dealing with bog fires," as a recognised risk in the county.

We say this also from our own lives here: anyone who has seen fire take hold in dry bog knows how fast it spreads, how far the smoke carries, and how stubbornly peat smoulders — often for weeks, and below the surface where it cannot easily be reached. Families in this area have already had to leave their homes because of it. That is the reality this application does not appear to grapple with.

The proposed development adds new ignition sources, and new consequences, to a landscape with this known history. We are not fire engineers and we do not attempt to quantify anything; but we understand that wind turbines contain large quantities of lubricating and hydraulic oil and substantial electrical equipment, that they generate electricity carried by high-voltage cabling to a

permanent 220 kV substation, and that turbine and electrical fires — though uncommon — do occur. We also understand that a fire in a turbine nacelle, set well over a hundred metres above the ground, cannot readily be reached or extinguished from the ground, and that burning material can fall to the peat below. At the same time, the extensive drainage and excavation proposed may dry the surrounding peat and make it easier to ignite, while removing the wet conditions that help suppress fire in an intact bog. These are matters for the applicant to assess, and for the Commission to be satisfied upon — not for us to prove.

We therefore respectfully ask the Commission to require the applicant to demonstrate, and to be positively satisfied upon, the following before any decision is made:

- **The assessed risk of fire** over the 35-year life of the development — both from the turbines, cabling and substation, and from ignition of the surrounding peat — having proper regard to the documented fire history of this bog.
- **The emergency plan** if a fire breaks out at Lemanaghan: who responds, how, and within what time, given the rural location and the limited local road network.
- **Consultation and capability:** whether the Offaly County Council Fire Service (and An Garda Síochána and the National Ambulance Service) have been consulted and briefed on this specific development, and whether the specialist training and equipment needed to deal with turbine fires and peat fires have been provided and funded.
- **Warning and evacuation:** how residents would be warned and, if necessary, evacuated — as families here were in 2011 — and how access for emergency vehicles and a safe route out for residents would be assured on the local roads.
- **Protection of heritage:** how the exceptional and irreplaceable archaeology of the bog — some 491 recorded monuments and buried organic remains (see section 3.7) — would be protected from fire, noting that a peat fire near Mountdillon in 2006 threatened the Corlea heritage site and took a week to extinguish.
- **Protection of birds/wildlife:** Areas have been designed with fencing for protected birds, if a fire breaks out – how are these areas secured?
- **Carbon:** since a peat fire releases the very carbon this development is said to save, how that risk has been reconciled with the carbon case (sections 3.2 and 3.2.10).

These are not questions we, as residents, can or should be required to answer — we are not fire engineers, and the burden does not lie on us. It lies on the applicant to assess this foreseeable risk fully, and on the Commission to be satisfied, before any permission, that there is a credible, resourced and tested plan to protect human life, homes and heritage in the event of fire. Above all, this is about the safety of our family and our neighbours, and we ask that it be treated with the seriousness it deserves.

3.7 Archaeology, cultural heritage and the monastic landscape

The Lemanaghan peatlands hold one of the densest concentrations of wetland archaeology in the county, and among the highest densities anywhere — some **491 recorded monuments**, spanning more than 5,000 years, associated with Saint Manchan and the monastic heritage we live alongside (the discovery of the Tumbeagh Bog Body and associated trackways shows the potential for further, as-yet undiscovered, archaeology). We are concerned that the cultural-heritage assessment understates this integrated landscape significance and contemplates mitigation — such as floating roads and cabling over sensitive deposits — that is no substitute for avoidance. The applicant's own documents acknowledge that turbine **T05** lies on the boundary of an area designated "Not Deemed Suitable for Wind Energy Developments" for the protection of the monastic site. This is the very same Lemanaghan Conservation Plan and development-plan

protection that constrained our own family home (Part 2), and it must apply with far greater force to a 220-metre turbine array. As residents, we are also conscious that these heritage and landscape concerns do not stand in isolation: for families like ours they combine with the cumulative noise, shadow-flicker and visual effects described above to alter, permanently, the place in which we live.

This protection is not theoretical; it has real and practical consequences, as we know from our own experience. When we sought permission for a single house on a pasture field in this townland, we were required — as a condition of further information, and subject to the approval of the National Monuments Service — to commission and pay for a licensed archaeological investigation of the entire site (John Purcell Archaeological Consultancy, February 2018; **Excavation Licence 18E0058**). That investigation involved the machine-excavation of trial trenches, down to subsoil, across the whole of the site, precisely because, in the assessing archaeologist's words, it lay "in an area of high archaeological potential adjacent to an important ecclesiastical settlement."

That report explains why such testing is the standard here: buried archaeology in this landscape is generally invisible at the surface. In the archaeologist's own words, wooden structures and unmarked burials "can only be detected through archaeological excavation," so that "ground disturbance may uncover buried archaeological sites, features or artefacts." The same report records that Bord na Móna's own peat operations in this area required archaeological resolution before they could proceed: toghers, medieval platforms and a brushwood trackway were excavated by the Archaeological Wetland Unit under the Bord na Móna Archaeological Mitigation Project, so that peat production could resume only in areas that had been "cleared of archaeology."

We respectfully ask the Commission to weigh the obvious comparison. If a single dwelling, on a pasture field with no monuments upon it, required licensed pre-development archaeological **excavation** (not desk study) across the whole site before permission could issue, it is difficult to see how anything less could suffice for 15 turbine foundations (13 of them piled to 18 metres), kilometres of access roads, cable trenches and borrow pits, and a permanent 220 kV substation — works involving far greater and far deeper ground disturbance, across approximately 1,111 hectares of the same high-potential landscape, and reaching into the peatland where those very trackways were found. We are not archaeologists; we ask only that the standard recorded in our own report be applied consistently. In particular, we ask the Commission to require the applicant to demonstrate, and to be satisfied, that licensed, pre-development archaeological testing and, where necessary, excavation will be carried out at every turbine and every associated work location — agreed with the National Monuments Service, and completed **before construction** rather than merely monitored during it — so that the irreplaceable buried archaeology of this landscape is not destroyed before it is even found. This is the same standard to which our family was held for a single house; at our expense, we believe, a development of this scale with large developers must be held to at least the same standard, and, given its scale, to a far higher one. Our house was not isolated in this approach to archaeology in Lemanaghan, planning premission back as far as 2002 for single dwellings required employment of archaeological expertise. We ask that the same standard be applied here, especially given the recent find of human remains in St. Mellas Cell, Lemanaghan.

3.8 Turbary rights — a legally protected interest, not assessed

Turbary rights at this bog are legally protected property rights — profits à prendre under the Land and Conveyancing Law Reform Act 2009, protected under Articles 40.3 and 43 of the Constitution — and they are a "material asset" for EIA purposes and an ongoing lawful land use.

The applicant expressly acknowledges active turbary at the site, yet the EIAR does not identify or map turbary rights, does not assess them as a receptor (contrary to Holohan), and does not assess the interdependence between the proposed drainage and re-wetting works and the exercise of those rights. Reliance on a draft rehabilitation plan to be finalised after consent offends the rule that effects must be assessed before consent (Wells, C-201/02). We submit this is a material omission that renders the assessment incomplete.

3.9 Cumulative concentration, grid curtailment and project segmentation

This proposal cannot properly be assessed in isolation. There are in the order of 229–233 turbines operational, approved or proposed within County Offaly, and approximately 284–288 across the interconnected Midlands peatlands — a concentration that raises landscape-capacity, cumulative-impact and Just Transition concerns the EIAR does not adequately address. The climate benefit relied upon is further undermined by grid constraints: EirGrid's own published data records approximately 2,181 GWh of wind energy (around 14% of available wind) dispatched down across the island in 2024, and public reporting (based on EirGrid data) estimates approximately 1,169 GWh of wind unused in the first ten months of 2025, of an estimated value in the order of €414 million. Finally, the scale of the transmission and export infrastructure proposed — a 220 kV GIS substation, an IPP control building and dedicated export works — together with the adjoining Bellair lands advanced by the same developer partnership within the same Boora bog group (official mapping in case LS19.313412 describes the lands as part of the "Boora Bog Group"), raises a serious concern of project splitting and segmented assessment, contrary to the EIA Directive's requirement to assess the whole project and its cumulative effects.

3.10 Alternatives and the wrong-place objection

The assessment of reasonable alternatives is, in our submission, too narrow and developer-led. It does not genuinely test a restoration-led alternative, lower turbine numbers or heights, the omission of the most sensitive turbines (including T05), or lower-impact technologies and locations avoiding peat and heritage sensitivity. It does not assess the documented and recurring risk of peat fire at this site (including the large-scale Midlands fires of 2011 and subsequent years), and it does not adequately contextualise the escalation to 220-metre turbines in this open, low-lying and culturally sensitive landscape. National need does not answer the site-specific question, and on the evidence the site-specific case has not been made.

Part 4 Wind Monitoring Data, Meteorological Data, WindCube/LiDAR Data, Transparency and Adequacy of Assessment

As concerned local residents with a direct interest in the receiving environment, surrounding landscape and wider community of Lemanaghan Bog, we wish to raise concerns regarding the transparency, accessibility and use of extensive wind monitoring and meteorological information associated with monitoring infrastructure that has existed within the Lemanaghan area over a prolonged period.

Chapter 4.11.1.10 of the EIAR refers to the proposed decommissioning of an existing 100m-high anemometry (meteorological) mast and associated instrumentation located within the proposed development site.

In addition, Offaly County Council Planning Application Reference Number: 2475, relating to the retention of this mast, states that its purpose was:

"to assess the suitability of the company's adjacent lands for wind farm development"

and further states that the monitoring campaign was intended:

"to ensure that a comprehensive and robust dataset representing the wind regime in Lemanaghan Bog is recorded"

with the information intended to:

"feed into the design, extent and operation of any wind farm development in the area."

These statements are highly significant.

The monitoring infrastructure was not described as temporary equipment collecting limited information. Rather, the applicant's own documentation indicates that it was retained specifically to gather substantial site-specific information intended to directly inform future wind farm development decisions.

The documentation reviewed by us includes, amongst others:

- Chapter 3 — Site Selection and Reasonable Alternatives;
- Chapter 4 — Description of the Proposed Project;
- Chapter 7 — Birds;
- Chapter 12 — Noise and Vibration;
- Appendix 7-6 — Collision Risk Assessment;
- Appendix 7-7 — Bird Monitoring Programme;
- Appendix 12-3 — Noise Modelling Assumptions and Inputs;
- Offaly County Council Planning Application Reference Number: 2475.

Following detailed review of these documents, it is apparent that meteorological information informed elements of the assessment process.

For example, the Noise and Vibration chapter explicitly states:

"Figure 12-4 shows the distribution of wind speed and direction recorded at the Met Mast unit..."

The same chapter further notes that a variety of wind speed and weather conditions were encountered during survey periods.

Furthermore, Chapter 4 confirms that the Proposed Project itself includes a permanent 145m meteorological mast equipped with wind monitoring equipment at multiple heights, demonstrating the importance of such information to the operation and design of the Proposed Project.

The issue therefore is not whether monitoring information existed, nor whether it informed elements of the assessment process. The documentation itself indicates that it did.

The issue is whether the underlying datasets, methodologies, assumptions, analyses and outputs generated through this substantial monitoring campaign have been made available in a sufficiently transparent manner to permit meaningful examination by members of the public and by the decision-maker.

Such monitoring information may reasonably be expected to influence:

- turbine selection and dimensions;
- turbine siting, spacing and layout;
- wind resource assessment;
- wake effect modelling;
- operational assumptions;
- projected energy yield and capacity factors;
- noise modelling and predictions;
- shadow flicker assessment;
- ecological assessments;
- collision risk assumptions;
- bird migration and flight behaviour analysis;
- bat activity assessments and mitigation measures;
- residential amenity and human health assessments;
- broader understanding of baseline receiving environmental conditions.

Of particular concern is the assessment of bats.

Bat activity and movement patterns are frequently influenced by local meteorological conditions including wind speed, temperature, humidity and atmospheric stability. Wind farm mitigation measures may also depend upon assumptions relating to turbine operational restrictions and cut-in speeds under particular weather conditions.

We therefore respectfully seek clarification as to whether local meteorological datasets informed bat assessments, bat mitigation strategies, operational restrictions or assumptions relating to turbine operation and bat protection measures.

Our concern is heightened because our review of ecological information within this application has already demonstrated that underlying datasets can contain substantially more detailed and meaningful information than is represented within summary chapters alone.

We have found this particularly in relation to bird information, where underlying survey datasets appear to provide a significantly more detailed understanding of environmental conditions and activity than is reflected within summary text.

This raises concern that summary chapters alone may not necessarily provide a complete picture of environmental conditions or the assumptions upon which conclusions have been reached.

Additional concern arises from local observations and photographic evidence indicating the apparent presence of WindCube/LiDAR wind measurement equipment within Lemanaghan Bog.

WindCube/LiDAR systems are not incidental infrastructure. Such systems are capable of collecting highly detailed information relating to:

- wind speed;
- wind direction;
- turbulence;
- atmospheric stability;
- wind shear profiles;
- vertical wind behaviour across varying heights.

This information can directly influence turbine design, turbine spacing, wake modelling and environmental predictions.

Despite extensive review of the application documentation and EIAR, we have been unable to identify any associated datasets, outputs, methodologies or analyses relating to this equipment.

Cross-referencing of Meteorological Information Across the EIAR

Following review of Chapters 3, 4, 7 and 12 together with Appendix 7-6 (Collision Risk Assessment), Appendix 7-7 (Bird Monitoring Programme) and Appendix 12-3 (Noise Modelling Assumptions and Inputs), meteorological information appears to be referenced and utilised throughout aspects of the assessment process.

However, despite references to the use of monitoring information, we have been unable to identify a clear and transparent chain of evidence showing:

- where the complete monitoring datasets are presented;
- which assessments relied upon those datasets;
- which assumptions were derived from those datasets;
- whether the same datasets informed multiple chapters;
- whether WindCube/LiDAR information formed part of the assessment process;

- how the information collected translated into the environmental conclusions ultimately presented throughout the EIAR.

The issue therefore is not whether monitoring information existed, nor whether it informed aspects of the application.

The issue is whether there is sufficient transparency to allow both the public and the decision-maker to understand how the extensive monitoring campaign translated into the environmental conclusions ultimately presented.

If site-specific meteorological information informed noise modelling, turbine operational assumptions, ecological assessments, collision risk modelling, bat assessments, projected energy yield calculations, residential amenity assessments or other environmental conclusions, then members of the public should reasonably be able to identify:

(a) where those datasets are presented;
(b) where those datasets were applied;
(c) what assumptions were derived from them; and
(d) how those assumptions influenced conclusions.

At present, we have been unable to establish this chain of evidence.

As concerned residents, we respectfully submit that meaningful public participation depends not only upon access to conclusions but also upon reasonable access to the information and assumptions underpinning those conclusions.

We respectfully note that the objectives of:

- Directive 2011/92/EU as amended by Directive 2014/52/EU (Environmental Impact Assessment Directive);
- the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters;
- the Planning and Development Act 2000 (as amended);

place significant emphasis upon transparency, access to environmental information and effective public participation.

We are not suggesting non-compliance. However, we respectfully submit that where substantial site-specific datasets appear to have informed environmental conclusions, but those datasets cannot readily be identified or examined, questions may arise as to whether the public has been afforded a full opportunity to understand, evaluate and meaningfully engage with the information underpinning the EIAR.

We therefore respectfully request clarification on the following:

1. What information was collected by the existing 100m meteorological mast and associated instruments?
2. Over what period was monitoring undertaken?
3. What equipment and methodology were used?
4. Was WindCube/LiDAR equipment deployed within Lemanaghan Bog?
5. If so, what information was collected?
6. Were meteorological datasets used in determining turbine locations, dimensions, layout or spacing?
7. Were these datasets used in noise modelling, shadow flicker assessments or wake effect modelling?
8. Were these datasets used in ecological assessments, including bird and bat assessments?
9. Were local meteorological datasets used in determining bat mitigation measures, operational restrictions or turbine cut-in assumptions?
10. Were these datasets used in projected energy yield calculations, capacity factors or operational assumptions?
11. Has An Coimisiún Pleanála been provided with these datasets as part of its assessment process?
12. If so, where can members of the public examine and independently analyse them?
13. If such information has not been provided, how can the adequacy and robustness of environmental conclusions be fully assessed?

Meaningful public participation requires access not only to conclusions but also to the evidence upon which those conclusions rely. Without access to baseline information and the underlying information informing predictive modelling, members of the public are effectively being asked to accept conclusions without being afforded a genuine opportunity to understand, interrogate or challenge the evidence supporting them.

Given the scale, permanence and potential consequences of this proposed industrial development within a highly sensitive peatland landscape of ecological, archaeological, cultural and community importance, a particularly high standard of transparency should reasonably be expected.

If such information exists but cannot readily be located or examined by the public, serious questions arise regarding whether the EIAR provides a sufficiently transparent and robust basis upon which informed assessment and decision-making can occur.

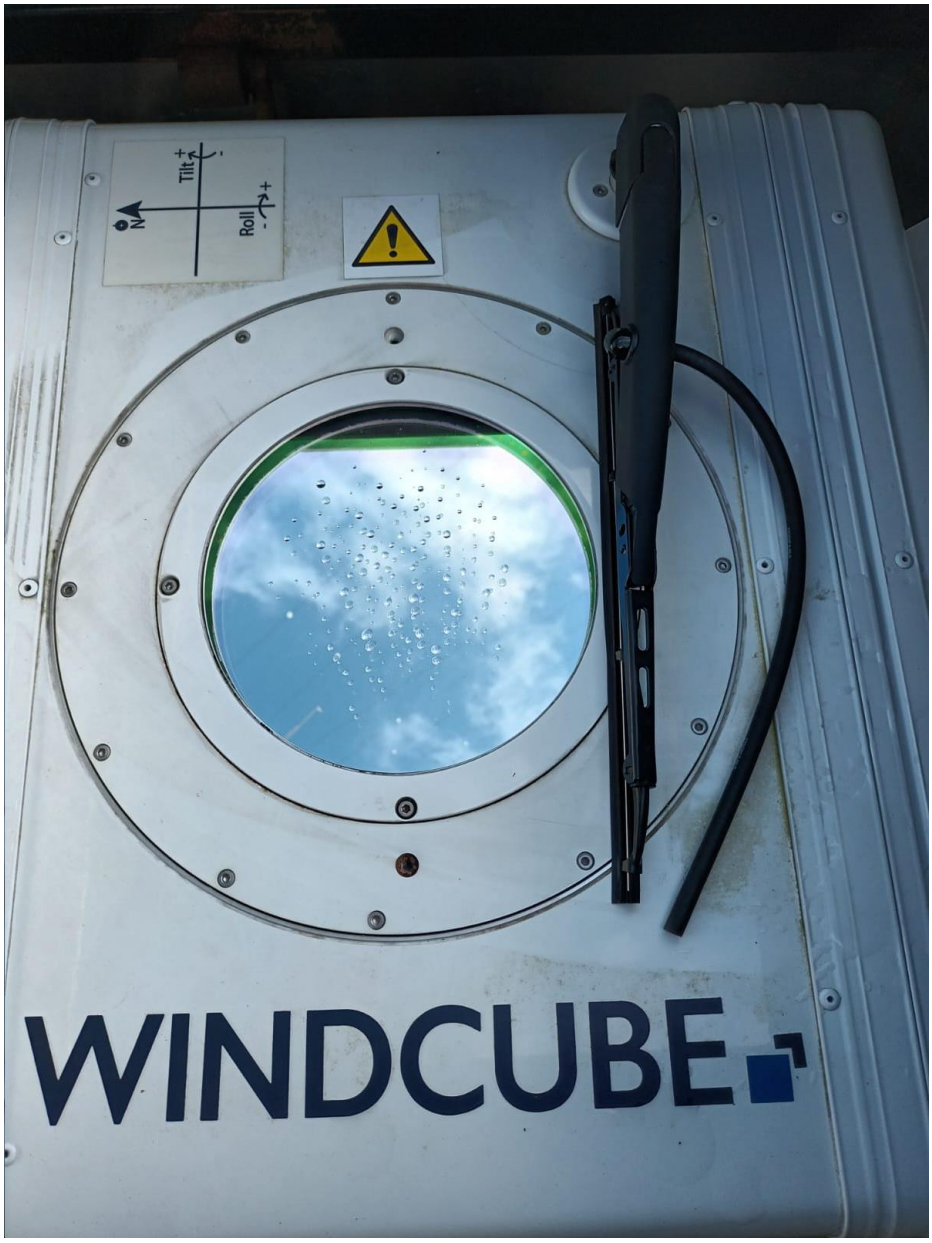

Figure A: Wind Monitoring Equipment (WindCube), Photographed at Lemanaghan Bog. The above image shows a **WindCube wind monitoring device** photographed within Lemanaghan Bog. This equipment is used to collect wind-related data and may form part of the assessment process informing proposed wind energy development. Clarification is respectfully requested as to whether data collected from this equipment, together with any associated wind measurement mast(s) within Lemanaghan, has been included within the planning application documentation and made available for public review and comment. Given the significance of this information in informing the proposed development, the public should have the opportunity to fully examine and consider any such data as part of the planning process.

Figure B: Wind Measurement Mast and Monitoring Infrastructure, Lemanaghan Bog
The above image shows a **wind measurement mast and associated monitoring infrastructure** photographed within Lemanaghan Bog. Such equipment is typically used to collect wind and environmental data which may inform proposed wind energy developments. Clarification is respectfully requested as to whether all data gathered from this mast, together with any associated **WindCube monitoring equipment**, has been included within the planning application documentation and made available for public review and comment. Given the importance of this information in informing the proposed development, the public should have the opportunity to fully assess any such data as part of the planning process.

Figure C: Environmental and Monitoring Equipment, Lemanaghan Bog
The above image shows environmental monitoring equipment and associated infrastructure photographed within Lemanaghan Bog. Clarification is respectfully requested as to whether data gathered from this equipment, together with the nearby **WindCube monitoring system and wind measurement mast**, has been included within the planning application documentation and made available for public review and comment. Given the potential importance of such information in informing the proposed development, the public should have the opportunity to fully examine and consider any data relied upon within the planning process.

Figure D: Monitoring Equipment and Associated Environmental Instrumentation, Lemanaghan Bog

The above image shows monitoring equipment and associated environmental instrumentation photographed within Lemanaghan Bog. Clarification is respectfully requested as to whether data collected from this equipment, together with associated **WindCube systems and wind measurement mast(s)** within the area, has been included in the planning application documentation and made available for public review and comment. Given that such information may contribute to the assessment of the proposed development, the public should have the opportunity to fully examine and consider any supporting data relied upon in the planning process.

Part 5 — Summary and request

We began by saying that this is not opposition to renewable energy, and we end the same way. We accept the importance of climate action. Our objection is to the selection of Lemanaghan Bog — an environmentally sensitive, archaeologically exceptional, culturally significant, hydrologically connected and recovering landscape, and our family home — for an industrial development of this scale, where the significant environmental, cultural, hydrological, carbon, residential and cumulative concerns have not been resolved.

We respectfully ask the Commission to:

(1) **Refuse** permission for the proposed development, having regard to its scale and nature, the sensitivity of the receiving peatland, monastic and cultural landscape, the conflict with the Lemanaghan Conservation Plan and the Offaly County Development Plan, the unresolved peat, hydrological and cumulative concerns, the deficiencies in the assessment of alternatives, climate benefit, residential amenity and human health, and the failure to demonstrate that this site is suitable; or, in the alternative,

For the reasons set out above, and on our own analysis of the applicant's own documents, we respectfully ask the Commission to **refuse permission**, on the grounds that the EIAR does not provide the complete, precise, integrated and reliable assessment required by the EIA Directive (including the major-accident and disaster (fire) assessment that appears to be absent); that a net climate benefit consistent with section 15 of the Climate Act 2015 (as amended) and Coolglass has not been demonstrated; that significant uncertainty as to peat stability, karst, hydrology and water-quality deterioration has not been resolved (precautionary principle); that fire risk, protected and Red-Listed bird species, residential amenity and human health, the exceptional archaeological and monastic landscape, and legally protected turbary rights have not been adequately assessed; and that the cumulative and segmentation concerns have not been addressed — such that the development would be contrary to the proper planning and sustainable development of the area.

(2) This is not a case for Further Information

We are conscious that, where an application is deficient, the Commission may in some circumstances seek further information rather than refuse. We respectfully submit that this is not such a case, and that it would not be appropriate to keep this application alive through further information.

The deficiencies set out in this observation are not points of detail or clarification. They go to the completeness and reliability of the environmental assessment itself — the carbon and climate case; the peat-stability and karst evidence; the water-quality baseline; the assessment of protected and Red-Listed birds; human health, noise and shadow flicker; the major-accident and fire risk; turbary rights; and cumulative and segmentation effects. We believe, to cure them, the applicant would not be supplying "further information" on an otherwise sound assessment; it would be carrying out, for the first time, assessments that should have been in the application when it was lodged. That is, in substance, a new and complete environmental assessment — and properly the subject of a fresh application, not the patching-up of this one.

Several matters support our submission that further information would not be an appropriate response to these deficiencies, and that the application should instead be refused.

First, the obligation to submit a complete, robust and reliable application rests entirely with the applicant — a large, well-resourced developer supported by specialist consultants. Peat extraction at this site ceased in 2020, and the applicant has had approximately five years, and ample expertise, with which to prepare a complete application. The deficiencies identified cannot reasonably be attributed to any lack of opportunity, time or resources.

Second, the public — including our family — is entitled to participate in the planning process on the basis of a full and complete environmental assessment. Permitting the substantive assessment to be revised or reconstructed after the public consultation stage would undermine the integrity of public participation and deprive affected parties of a fair opportunity to comment on the development as actually proposed. We understand that any such significant alteration would, in any event, require fresh public notice and a further opportunity for submissions.

Third, the principle of fairness and consistency must apply equally to all applicants. As outlined in Part 2, we as a family were required to apply, redesign and reapply before securing permission for a single dwelling, and permission was refused where the planning authority considered the proposal inadequate. A development of this scale, promoted by a developer with vastly greater resources, should be held to at least the same standard, rather than being afforded repeated opportunities through requests for further information to remedy an application that ought to have been complete at the time of submission.

Fourth, allowing substantial further information in cases such as this risks undermining the integrity of the planning process itself. Where developers are permitted to submit materially incomplete applications and subsequently reconstruct or repair them through extensive further information requests, it creates an incentive for large-scale applicants to advance premature or deficient proposals in the expectation that deficiencies can later be corrected during the assessment process. That approach is inconsistent with the purpose and structure of the statutory planning code, which requires that an application, particularly one requiring Environmental Impact Assessment and Appropriate Assessment, be **complete**, transparent and legally compliant at the time it is lodged.

It is neither fair nor efficient for An Coimisiún Pleanála to be required to adjudicate upon applications that fall materially below the required standard, particularly where the applicant is a major commercial developer with substantial financial and professional resources. The burden of ensuring legal and environmental compliance rests with the applicant, not with the Board, the planning authority, or members of the public who are then forced to analyse evolving documentation over a prolonged process.

Permitting extensive reconstruction of an application by way of substantial further information also prejudices public participation rights. Members of the public are entitled, under both Irish and EU law, to assess and comment upon a **complete** proposal during the statutory consultation period. Where core aspects of the assessment are altered, expanded or corrected only after submissions have closed, the public is effectively denied a meaningful opportunity to engage with the development as actually proposed.

In those circumstances, accepting substantial further information would not merely clarify minor matters; it would facilitate the curing of fundamental deficiencies that should have precluded the application from being regarded as complete in the first place.

Finally, and with respect, we ask the Commission to weigh the legal security of any decision it may make. We are not lawyers, but we understand that a permission granted on an environmental assessment that is incomplete or unreliable — or following further

information that reconstructs that assessment after the public-consultation stage — would be vulnerable to legal challenge and would not rest on a secure foundation. The consequences of an inadequate assessment of a peatland wind farm are not hypothetical: at Derrybrien, the failure to carry out an adequate environmental impact assessment led to findings against the State by the Court of Justice of the European Union, to substantial financial penalties, and ultimately to the development being decommissioned. In our respectful submission, a refusal now, on a demonstrably incomplete application, is both the lawful and the prudent course; granting a permission that may not withstand scrutiny would serve neither the proper planning and sustainable development of the area nor the integrity of the process.

We therefore respectfully submit that the appropriate and proportionate course, on the application as it stands, is **refusal**.

We make this submission privately, as a resident family who have read the application and examined the evidence. We ask only that this landscape be afforded protection at least as rigorous as that applied to our own home — and, given the scale of what is now proposed, very much more so.

Finally, we ask you to review Part 6, our photographic evidence.

Part 6 Lemanaghan – Landscape, Heritage & Place

Lemanaghan – A Landscape of Heritage, Memory and Identity

This is not an empty landscape. Lemanaghan is a place of heritage, memory and identity – a landscape shaped by generations of people who have lived, farmed and belonged here. The open skyline, bogland habitats, historic sites and quiet character of this area are not accidental features; they form the very essence of place.

The beauty of Lemanaghan lies not only in its physical appearance, but in the relationship between landscape, history and community. Ancient pathways beneath the peat, monastic connections, wildlife habitats, changing skies and seasonal landscapes all contribute to a place of exceptional cultural and environmental value.

The photographs included within this submission capture moments that define Lemanaghan: winter frost across the bog, uninterrupted horizons, skies untouched by industrial structures, rare natural events and places where nature and history exist together. These are not isolated scenes; they are part of a living landscape that continues to shape the lives and wellbeing of the people who live here.

Landscape is more than scenery. It forms part of people's sense of place, identity and quality of life. Once industrialised on the scale proposed, the character of this landscape cannot simply be restored. The permanent introduction of large-scale turbines and associated infrastructure would fundamentally alter the visual, cultural and environmental character of Lemanaghan.

We have already lost too much of our heritage over time. The loss of historic structures, changes to traditional landscapes and the disappearance of elements of our shared history remind us that what remains should not be taken for granted. Protection of Lemanaghan is not only about preserving the past; it is about safeguarding a legacy for future generations.

Some landscapes are extraordinary because of what they already are, not because of what can be built upon them.

We ask only for consistency: that the protection this landscape was afforded when it constrained a single family dwelling be afforded to it now, when something vastly larger is proposed in the same place. We leave you with these images on the following pages and hope you can see Lemanaghan through our lens.

> *Lemanaghan is our home. We are temporary guardians of something far older than ourselves. We ask the Commission to protect it.*

Respectfully submitted,

Aoife Phelan & Trevor Phelan
Aoife Phelan & Trevor Phelan
Lemanaghan, Ballycumber, Tullamore, Co. Offaly, R35W9P3
In respect of An Coimisiún Pleanála Case Reference PAX19.324161

Appendices relied upon: (1) Offaly County Council Planning Report, Reg. Ref. 15/73; (2) An Bord Pleanála Inspector's Report, ABP-301833-18.

Figure 1

Wildfire Incident – Lemanaghan Bog (18th July 2018)
*Recorded wildfire conditions have occurred within Lemanaghan Bog during periods of prolonged hot and dry weather. The above photograph shows a wildfire incident on **18th July 2018**, which was reported to the **Offaly Fire Brigade Service**, who attended the scene. This event demonstrates that fire incidents have occurred in the Lemanaghan landscape and highlights the sensitivity of bog and peatland environments during periods of elevated temperatures and dry conditions.*

Figure 2

Morning light across Lemanaghan reveals a landscape where history and nature exist side by side in quiet harmony.

Figure 3

The winter beauty of the bogland reminds us that extraordinary places are often found in the simplest natural details.

Figure 4

The skyline of Lemanaghan is defined by its openness, peace and uninterrupted horizons – a landscape character that cannot easily be replaced once lost.

Figure 5

Generations have lived beside this historic landscape. The relationship between the monastic site, bog and surrounding environment forms part of Lemanaghan's unique identity.

Figure 6

St. Mellas Cell, Beneath the ground and throughout the landscape, Lemanaghan continues to reveal traces of its past, reminding us that heritage still remains to be discovered and protected. This image was taken by me, with my family on St. Manchans patron day, we pilgrimed to St. Mellas Cell – in the tree roots you can see human remains, this discovery was reported by me to

Offaly Heritage Officer, National Museum and National Monuments Service. Triggering a trail of events that would see these remains carbon dated.

Figure 7

We have already lost too much of our history. Protection of what remains is not only about the past, but about preserving a legacy for future generations.

Figure 8

The Northern Lights over Lemanaghan demonstrate the rare beauty of this landscape. Some places are extraordinary because of what they already are, not because of what can be built upon them.

Figure 9

Local Community Walking the Pilgrim's Path, Lemanaghan

This image shows local people walking the historic Pilgrim's Path in Lemanaghan, demonstrating the continued community, cultural and recreational importance of this landscape and its enduring connection to local heritage and identity.

Figure 10

Apparent Ground Investigation Activity, Lemanaghan Bog – 24th March 2022
This image appears to show ground investigation or test excavation activity taking place within Lemanaghan Bog on ***24th March 2022****. Given the archaeological significance of peatland environments and the known history of archaeological discoveries within Lemanaghan, clarification is requested as to whether archaeological assessment and appropriate survey measures were completed in advance of such works. The public should be assured that areas of potential archaeological importance are appropriately assessed and protected prior to ground disturbance.*

Figure 11

Buzzard in flight, Lemanaghan Bog – 27th March 2022
This image show's a buzzard flying over Lemanaghan bog. Buzzards are protected under the EU Birds Directive and the Irish Wildlife Act.

Figure 12

Whooper Swans, Lemanaghan Bog
This image shows a flock of large white whooper swans flying low over a flooded bog pool. The whooper swan is a migratory winter visitor to Ireland that is protected under Annex I of the EU Birds Directive and the Wildlife Acts, and it is widely regarded as one of the bird species most vulnerable to wind farms through both collision risk and disturbance-related displacement from feeding and roosting sites.

Figure 13

A vivid rainbow descending behind a cluster of trees with St. Mellas Cell Enclosure against an open, undeveloped skyline with no built structures interrupting the horizon.

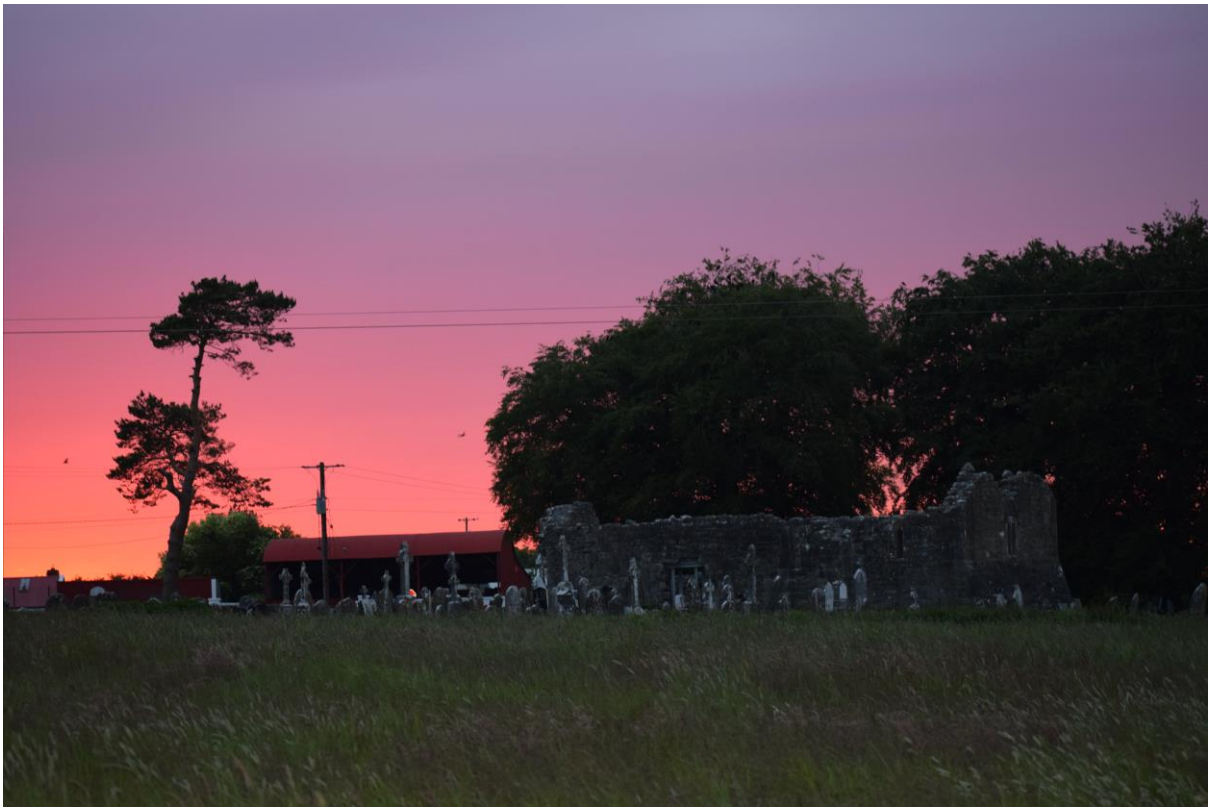

Figure 14

A dramatic pink and purple sunset sky across the monastic settlement at Lemanaghan, with the stone church and its surrounding graveyard of Celtic crosses and headstones silhouetted against the glowing horizon, framed by mature trees. The image illustrates the open, expansive skyline that forms the setting of this ecclesiastical heritage site, where the low ruins and the line of trees currently sit beneath an uninterrupted sweep of sky.

Figure 15

Lemanaghan Bog – 14th June 2022
The expansive open landscape of Lemanaghan bog, with dark stretches of cutaway and regenerating peatland interspersed with pools of open water, beneath a wide, open sky. The image documents a recovering wetland-and-peatland mosaic — the kind of flooded pools and rewetting bog habitat that supports specialised flora and fauna and provides feeding and roosting areas for water birds.

Figure 16

Ringed plover in flight – 14th June 2022
Plovers frequent open wet ground, bare peat, gravelly margins and the edges of bog pools — exactly the kind of habitat seen in your cutaway-bog photographs of Lemanaghan.

Figure 18

The photograph shows a small blue butterfly resting on bare, stony ground beside a yellow pea-family flower. The image documents the open, sparsely vegetated pioneer habitat with bird's-foot trefoil and low herbs that is colonising the Lemanaghan cutaway bog, which is exactly the warm, flower-rich ground that supports butterflies and other pollinating insects.

Figure 18

The photograph shows a recently fledged juvenile songbird perched on rock.

Figure 19

Heritage Event in Lemanaghan organised by local residents. This displays the links the current residents have to their historical and religious ancestors.

Figure 20

The photograph shows a group of whooper swans taking off and gathering on a flooded bog pool at Lemanaghan in low evening light. Significantly, the swans are using open water immediately in front of dark cutaway peat banks and the tea rooms in Lemanaghan — demonstrating that the flock relies on this wetland for roosting and feeding even in close proximity to existing industrial activity on the bog.

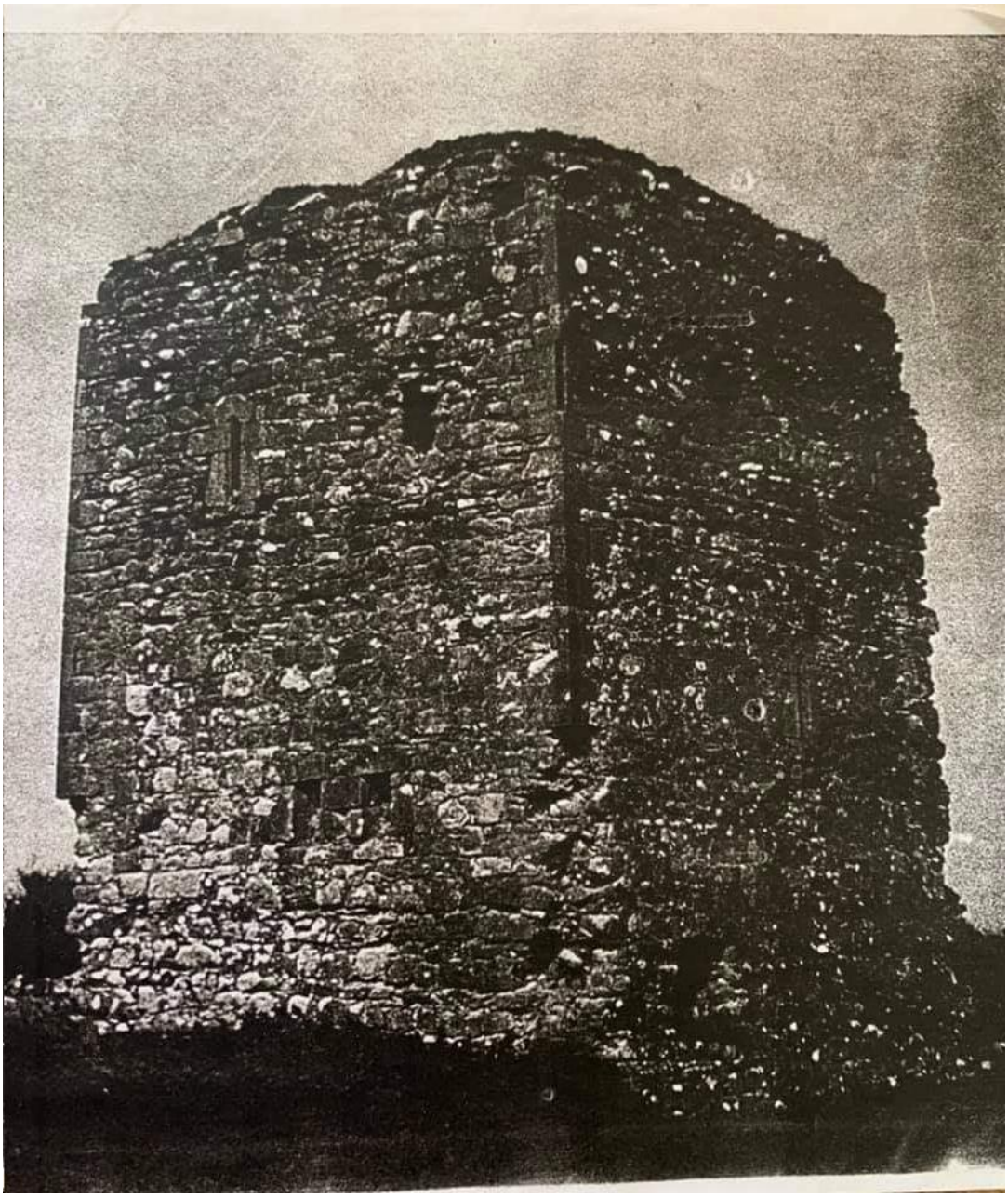

Figure 21

This is Lemanaghan Catstle. The image is valuable archival evidence of a historic built structure within the Lemanaghan complex, documenting the castle as part of the wider heritage landscape that also includes the monastic settlement and St. Mella's Cell. This underlines that Lemanaghan is a layered, multi-period archaeological and historic landscape.

Figure 22

*An extens*ive area of flooded bog at Lemanaghan in November 2022. The image documents the substantial open-water and reedbed habitat that has developed across the site, the kind of wetland mosaic that supports the swans, waders and other waterbirds seen in the other photographs. This shows the ecological value of the rewetted bog and a delicate water balance that turbine foundations, access tracks and associated drainage could disrupt, with knock-on damage to habitat and the wildlife depending on it.

Figure 23

The photograph is taken from inside St Manchan's Church at Lemanaghan, looking out through a window or door opening in the old stone wall, so that the rough masonry of the medieval church frames a view across the open bog landscape beyond. This "framed view" composition captures the direct visual and physical relationship between the historic ecclesiastical monument and the surrounding peatland, showing the bog as it is seen from within the heritage structure itself.

Figure 24

Our family walking together along a bog track at dusk, flanked by gorse and rough vegetation. The image documents the bog as a living, accessible local amenity that families use for walking and recreation, illustrating the everyday community and amenity value of the Lemanaghan landscape beyond its ecological and heritage importance.