Carol Carew & Brid Carew
Owners and Occupiers, H150
Carhue, Dundrum, Co. Tipperary
[ITM X=596,138; Y=649,561 / 52.5973°N, 8.0570°W]

27 May 2026

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

By submission to the case file: ABP Case Reference 324164 — Carrow Wind Farm, REDIII Application under SI 274 of 2025

Dear Secretary,

I am the full-time resident of H150 — identified in the applicant's own EIAR as the closest dwelling to the proposed Carrow Wind Farm, at 742 metres from turbine T12. This letter accompanies my formal objection dossier and should be read alongside it.

I want to state from the outset that I support renewable energy and accept that Ireland must meet its climate obligations. What I do not accept is that the burden should fall twice on the same small number of households. This community already accommodates Cappawhite Wind Farm. A second company now proposes a further ring of 185-metre turbines directly in front of it. That is not a fair distribution of a shared national obligation.

The environment in this area is exceptionally quiet and peaceful — background noise below 30 dB(A) — which means any artificial sound is disproportionately intrusive. Cappawhite Wind Farm is audible from here on certain wind directions, and at its distance it remains within tolerable limits. That experience has given me a direct understanding of what turbine noise sounds like in this landscape — and of how much more intrusive fourteen turbines at 742 metres would be. The applicant's own figures confirm the risk: their EIAR already predicts a 2.4 dB daytime exceedance at my home before mitigation.

I also dispute the applicant's account of community engagement. Their report claims every household within 1.5 km was visited three times. I received one visit, years ago, noting the area was being assessed. I learned the full extent of this proposal only by reading the planning documents myself and attending the Annacarty Parish Hall event in January — documents which revealed admitted noise and shadow flicker exceedances at my dwelling, and no viewpoint photograph taken from my location.

I ask the Inspector to refuse this application as proposed. I am willing to attend any oral hearing.

Yours faithfully,

Carol Carew
Brid Carew
Owners and Occupiers, H150

Carhue, Dundrum, Co. Tipperary
Date: 27 May 2026

FORMAL OBJECTION DOSSIER

Carrow Wind Farm

An Coimisiún Pleanála — Case 324164

Applicant	Carrow Renewable Energy Limited (subsidiary of Atlantic Infrastructure Renewables Ltd)
EIAR consultant	MKO
Date lodged	27 March 2026
Decision due	29 April 2027
Application type	Private Development — REDIII Application under SI 274 of 2025
Submission deadline	Wednesday 27 May 2026

Primary receptor	H150 — private dwelling, full-time remote-working home
Coordinates	52.5973°N, 8.0570°W (Irish Grid E34 TD96)
Elevation	approx. 240 m OD
Water supply	Private groundwater well
Closest turbines	T12 at 742 m (W) — on the 740 m setback line T1 at 790 m (NNW); 6 turbines in flicker zone (Computed from EIAR Ch.4 Table 4-1 ITM coords)
Named in EIAR	H150 named with +2.4 dB daytime noise exceedance (Ch.12 Table 12-21) and 50 min/day shadow flicker (Ch.5 Table 5-9)

Prepared 24 May 2026 — for submission to An Coimisiún Pleanála in respect of Case Reference 324164. All factual claims cited inline to primary sources. Read alongside the primary ABP case file and any EIAR documents released by the developer.

EXECUTIVE SUMMARY OF STRONGEST OBJECTION GROUNDS

The following ten grounds are each anchored to documents published by the developer at An Coimisiún Pleanála Case 324164. The first two are particularly significant because they arise directly from the developer's own admissions in its EIAR.

1. Admitted daytime noise exceedance at H150 — +2.4 dB at 6 m/s: EIAR Chapter 12 — Noise & Vibration Table 12-21 and Appendix 12-7 — Predicted Noise Levels Table 12-7-1 both name H150 as having a +2.4 dB daytime exceedance at 6 m/s — the single most important wind-speed band for wind-turbine noise. The night-time margin at H150 is only 0.1 dB (predicted 42.9 dB vs 43 dB criterion). The developer's own §12.5.3.1.1 misdescribes these south-group exceedances as "+0.2 to +0.3 dB" — an arithmetic error that understates the 2.4 dB deficit at H150. This is an admitted exceedance of the developer's own daytime criterion before any mitigation is applied; the proposed curtailment scheme has not been verified by the manufacturer and the mode definitions are opaque.

2. Admitted shadow flicker exceedance at H150 — 50 min/day, 55 hr 20 min/year: EIAR Chapter 5 — Population & Human Health Table 5-9 names H150 with pre-mitigation theoretical shadow flicker of 50 minutes per day and 55 hours 20 minutes per year — far exceeding the 2006 WEDG limits of 30 minutes/day and 30 hours/year. SCADA curtailment is required on 80 days per year (T3 and T12). Despite this, H150 is omitted from the cumulative flicker table (Table 5-10), and the developer applies the 2006 WEDG standard rather than the 2019 draft WEDG zero-flicker standard.

3. Effective breach of 4× tip-height setback — T12 at 742 m on the line, T1 at 790 m: From EIAR Chapter 4 — Project Description Table 4-1 ITM coordinates, T12 is 742 m from H150's centroid — 2 m outside the 740 m exclusion-zone line. Any curtilage allowance of 10 m or more places T12 inside the exclusion zone. T1 at 790 m falls inside on any realistic Irish rural curtilage (typically 10–50 m).

4. No background noise monitor at H150 — nearest monitor H152 is 93 m away: Appendix 12-3 — Baseline Noise Survey Table 2-1 shows the five survey locations; the closest to H150 (ITM X=596,138; Y=649,561) is Location C at H152 (ITM 596,189; 649,654) — approximately 93 m away. No monitor was placed at H150 itself, despite H150 being the closest dwelling to T12 and appearing in the exceedance tables.

5. Material turbine-model inconsistency in Chapter 12: EIAR Chapter 12 §12.3.6.2.1 states the assessment is for the "Nordex N163" in the heading, then states "the noise profile of the Vestas V162 wind turbine has been used." The Nordex N163 and Vestas V162 are different turbines with different certified sound-power levels. The audit trail between the noise assessment and the turbine to be installed is broken.

6. No amplitude modulation penalty applied; reactive complaint protocol only: EIAR Chapter 12 §12.3.2.2.3 concedes "It is not possible to predict an occurrence of AM at the planning stage" and proposes no prospective penalty. H150 at 742 m bearing 264° is directly downwind of T12 under the prevailing south-westerly wind; T1 operates in T12's turbulent wake at 5.05 rotor diameters — the documented wake-AM amplification range.

7. Private well at H150 never located, surveyed, sampled or risk-assessed: EIAR Chapter 9 — Hydrology & Hydrogeology §9.5.6 states "no private wells are located in close proximity to the Proposed Wind Farm infrastructure" — a claim unsupported by any field survey. 18 of 28 trial pits hit bedrock at <3 m depth, the "Extreme" GSI vulnerability threshold. The blasting-protection claim relies solely on ">700 m setback" — barely applicable to T12 at 742 m.

8. No Viewpoint or Residential Visual Amenity Assessment at H150: EIAR Chapter 14 — Landscape & Visual places none of its 15 viewpoints (VP01–VP15) at or near H150. The developer's own VP09 at Glencarbry (750 m from T06) returns a "Significant" residual visual effect — analogous in distance to H150's 742 m from T12 — yet no comparable VP was sited at H150. The LCA sensitivity for T-LCA-17a is rated "Low" by MKO, contradicting the Tipperary CDP 2022-2028 which designates it "Class 3 —

Sensitive / High Sensitivity to Change."

9. Hen harrier observation 100 m from T12; cumulative SPA mortality unquantified: EIAR Chapter 7 — Birds records a hen harrier carrying prey in June 2021 approximately 100 m from the nearest proposed turbine. This flightline passes directly through the T12/T1/T10 corridor. Golden plover and whooper swan were recorded at collision height but excluded from the collision risk model. No cumulative hen harrier mortality estimate exists across the 23 wind farms within the Slievefelim SPA foraging range.

10. No aviation lighting impact assessment; 185 m turbines exceed 150 m IAA threshold: EIAR Chapter 14 contains no assessment of aviation warning lights, red night-time lighting, or IAA requirements — a complete methodological omission. The Department of Defence consultation (Planning Documents — Combined Prescribed Bodies Letters) requires fixed red 2,000-candela lights on all turbines exceeding 150 m, operational H24/7 — creating a permanent light-pollution impact at H150 across a 106° arc at distances of 742 m to 1,557 m. The LVIA makes no mention of this.

SECTION 1: THE CARROW WIND FARM APPLICATION

1.1 Application Details

The Carrow Wind Farm application (ABP Case Reference 324164) was lodged with An Coimisiún Pleanála (formerly An Bord Pleanála) on 27 March 2026 by Carrow Renewable Energy Limited, a subsidiary of Atlantic Infrastructure Renewables Ltd (AIR), an Irish-owned company based in Co. Limerick. The application is classified as a Private Development — REDIII Application under the European Union (Planning and Development) (Renewable Energy) Regulations transposing Directive EU 2023/2413. A decision is due by 29 April 2027, in line with the 12-month statutory target for renewable energy applications. The Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) accompany the application; the EIAR was prepared by MKO. The full case file — 86 documents across EIAR, NIS, appendices, photomontages, and planning documents — is publicly available at An Coimisiún Pleanála's Case 324164 public access page.

The planning application was filed directly with An Coimisiún Pleanála as a REDIII Application under the European Union (Planning and Development) (Renewable Energy) Regulations 2025 (SI 274 of 2025), which transposed Directive (EU) 2023/2413 with effect from 7 August 2025. The case is classified by An Coimisiún Pleanála on its public case page as "Private Development — REDIII Application," with no separate SID designation under Section 37E of the Planning and Development Act 2000. Tipperary County Council and Limerick City and County Council are notified prescribed bodies but the application is not lodged at council level. The REDIII pathway carries a 12-month mandatory decision target, separate from the s.37E SID procedural framework.

1.2 Project Description

The proposed Carrow Wind Farm comprises the following key elements, drawn from the Planning Application Form and EIAR Chapter 4 — Project Description:

Parameter	Value
Number of turbines	14
Overall tip height	185 m
Rotor blade diameter	163 m
Hub height	103.5 m
Blade length (radius)	81.5 m
Site area	797.3 ha
Grid connection	110 kV underground cabling
ITM site centroid	X: 595,119, Y: 650,573
Permission sought	10-year permission; 35-year operational period from commissioning
Community benefit fund	~€480,000/year (~€2/MWh)

The site centroid in ITM coordinates (X: 595,119; Y: 650,573) places it approximately 1,436 m northwest of H150 at bearing ~315°. Turbine bases sit at 260–318 m OD on the ridge — 20–78 m above H150's ground level (H150 at 240 m OD) — per EIAR Chapter 4, Table 4-1.

1.3 Site Location and Townlands

The development spans townlands in both Co. Tipperary and Co. Limerick. Per the Planning Application Form and the An Coimisiún Pleanála case page, the townlands in scope include Carrow, Moheragh, Gortaderry, Carrowkeale, Glenpaudeen, Scarrough, Camus, Ballynahinch and Kilshenane in Co. Tipperary; and Toomaline Lower, Toomaline Upper, Doon South, Lisgaugh, Cooga Upper, Coolyhenan, Milltown and Killonan in Co. Limerick. The site lies in an area designated as "Open to Consideration" in the Tipperary Renewable Energy Strategy (Tipperary CDP 2022–2028 Appendix 1), as confirmed in the Planning Report.

1.4 Documents Reviewed

This objection is based on review of the full case file published by the developer at An Coimisiún Pleanála's public access portal for Case 324164. The developer has published the complete application documentation in a manner that allows full third-party review. The following 86 documents were examined, comprising the EIAR (21 chapters and 57 appendices), the Natura Impact Statement (9 documents including appendices), planning documents (13 items including newspaper notices and prescribed body letters), photomontages (15 viewpoints), and 4 Commission correspondence documents.

Key EIAR chapters reviewed:

Chapter	Document title	URL
Ch. 4	Project Description	link
Ch. 5	Population & Human Health	link
Ch. 6	Biodiversity	link
Ch. 7	Birds	link
Ch. 9	Hydrology & Hydrogeology	link
Ch. 11	Climate	link
Ch. 12	Noise & Vibration	link
Ch. 14 (Parts 1–4)	Landscape & Visual	Part 1
Ch. 15	Material Assets	link
Ch. 16	Major Accidents & Natural Disasters	link
NIS	AA Screening Report & NIS	link
App 12-3	Baseline Noise Survey	link
App 12-7	Predicted Noise Levels	link
App 2-5	Cumulative Impact Projects	link
App 4-3	CEMP	link
App 6-2	Bat Report	link
App 7-6	Collision Risk Assessment	link
App 8-1	Trial Pit Logs	link
App 14-1	LVIA Methodology	link

Chapter	Document title	URL
App 14-2	LCA Assessment Tables	link

1.5 Relevance to H150

H150 (Irish Transverse Mercator X=596,138; Y=649,561; 52.5973°N, 8.0570°W; elevation 240 m OD; lay reference what3words ///yacht.shack.aspire) is a private dwelling serving simultaneously as a full-time remote-working home, supplied by a private groundwater well. The ITM coordinate identifies the centroid of the dwelling's combined home-office and bedroom — the room in which the occupant spends the largest proportion of waking and sleeping hours. The room has two windows: one facing south-west and one facing north-west — both windows therefore look directly onto the western-quadrant turbine array (T12 at bearing 264° W; T1 at 329° NNW; T3 at 279° W; T11 at 316° NW; T10 at 10° N; T14 at 348° NNW). The proposed turbines sit on a ridge at 260–318 m OD per EIAR Chapter 4, Table 4-1, meaning T12 (base at 260 m OD) sits only 20 m above H150's ground level before the turbine is erected; the 185 m tip reaches approximately 445 m OD — some 205 m above H150 eye-level. H150 therefore sits on the upper slope of the same upland landform that hosts the turbines, not in a valley below it — a fact with material consequences for both visual dominance (Section 3) and groundwater pathway analysis (Section 9).

H150 is named by the developer in its own EIAR documents as a specific named receptor in two separate impact categories:

- In EIAR Chapter 12 Table 12-21 (p.12-43) and Appendix 12-7 Table 12-7-1 (p.14): H150 is listed with a +2.4 dB daytime exceedance at 6 m/s and a night-time predicted level of 42.9 dB against a 43 dB criterion — a margin of 0.1 dB.
- In EIAR Chapter 5 Table 5-9: H150 (House ID 150, ITM 596,136 E / 649,579 N, nearest turbine T12 at 742 m) is listed with pre-mitigation shadow flicker of 50 minutes/day maximum and 55 hours 20 minutes/year, both exceeding the 2006 WEDG limits of 30 min/day and 30 hr/yr. SCADA curtailment of T3 and T12 is required on 80 days per year.

Computed distances from H150 to all 14 Carrow turbines — using official ITM coordinates from EIAR Chapter 4, Table 4-1 and H150's ITM position (X=596,138; Y=649,561):

#	Turbine	ITM X	ITM Y	Distance	Bearing	≤ 740 m?	≤ 1,630 m?
1	T12	595,401	649,479	742 m	264° W	on the line (2 m out)	YES
2	T1	595,726	650,235	790 m	329° NNW	no (50 m out)	YES
3	T10	596,339	650,698	1,155 m	10° N	no	YES
4	T3	594,925	649,760	1,230 m	279° W	no	YES
5	T11	595,163	650,560	1,396 m	316° NW	no	YES
6	T14	595,807	651,082	1,557 m	348° NNW	no	YES
7	T13	594,482	649,948	1,701 m	283° WNW	no	no
8	T2	595,309	651,206	1,843 m	333° NNW	no	no
9	T4	594,137	650,293	2,131 m	290° WNW	no	no
10	T5	594,213	650,997	2,402 m	307° NW	no	no

#	Turbine	ITM X	ITM Y	Distance	Bearing	≤ 740 m?	≤ 1,630 m?
11	T6	594,008	651,395	2,811 m	311° NW	no	no
12	T8	593,407	650,439	2,869 m	288° WNW	no	no
13	T9	593,703	651,577	3,162 m	310° NW	no	no
14	T7	593,075	651,305	3,525 m	300° WNW	no	no

Six turbines (T12, T1, T10, T3, T11, T14) lie within the 1,630 m shadow-flicker study zone. Their bearings span 264° (T12, W) to 10° (T10, N), occupying approximately 106° of horizon across H150's western and northern quadrants. T12 is at bearing 264° (W) and T1 at bearing 329° (NNW) — two distinct compass directions — extending temporal shadow-flicker exposure significantly.

Wake interaction under prevailing SW wind: T1 lies 823 m (5.05 rotor diameters) NNE of T12 at bearing 23°. Under Ireland's prevailing south-westerly wind regime (~50% of annual hours), T1 operates directly inside T12's turbulent wake, producing enhanced amplitude modulation that propagates toward H150 downwind of both turbines.

SECTION 2: LEGAL AND POLICY FRAMEWORK IN IRELAND

2.1 Primary Planning Legislation

• Planning and Development Act 2000 (as amended), ss. 37A–37G (Strategic Infrastructure Development) and s. 172 (EIAR requirements).

• European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. 274 of 2025) transposing Renewable Energy Directive III (2023/2413). RED III accelerates permitting but does not remove EIA or Habitats Directive Appropriate Assessment obligations.

• Climate Action and Low Carbon Development Act 2015 (as amended 2021), s. 15(1). The Supreme Court in *Coolglass Wind Farm Ltd v An Coimisiún Pleanála* [2026] IESC 5 confirmed that s. 15(1) "does not establish a simple presumptive rule that renewable energy projects must almost always be permitted." Residential amenity, hydrogeological protection, and setback compliance remain material considerations capable of grounding refusal.

2.2 Wind Energy Planning Guidelines

Wind Energy Development Guidelines 2006 (DOEHLG) — operative statutory Section 28 guidelines. Key provisions for H150:

• Noise: absolute 45 dB(A) daytime, 43 dB(A) night-time LA90; or background + 5 dB, whichever is higher

• Shadow flicker: maximum 30 hours/year and 30 minutes/day at dwellings within 500 m; beyond 10× rotor diameter potential is "very low"

• 10× rotor diameter study zone for Carrow (163 m rotor): 1,630 m

Draft Revised Wind Energy Development Guidelines December 2019 (DHPLG) — not yet finalised, but extensively cited in recent ABP/ACP decisions as material policy:

• Visual amenity setback: 4× tip height = 740 m from any residential curtilage (SPPR 2)

• Noise: Relative Rated Noise Limit 5 dB(A) above background within 35–43 dB(A); maximum 43 dB(A) all periods; where background is below 30 dB(A): maximum 35 dB(A)

• Shadow flicker: zero flicker at any dwelling; automatic shut-down required

The developer, in EIAR Chapter 12 §12.3.2.2.1 and §12.3.2.2.3, actively argues against applying the 2019 draft WEDG, citing alleged "technical errors" and noting the Minister's 19 June 2025 statement that it remains under revision. Notwithstanding this, An Coimisiún Pleanála has routinely treated the 2019 draft WEDG as a material planning consideration.

2.3 EU Environmental Law

• EIA Directive 2011/92/EU (as amended 2014/52/EU): mandatory EIAR covering noise, visual amenity, hydrogeology, human health, and ecology

• Habitats Directive 92/43/EEC Art. 6(3): Appropriate Assessment mandatory where significant effects on Natura 2000 sites are possible

• Birds Directive 2009/147/EC: Hen Harrier (Annex I) protection; designated SPAs in Tipperary and Limerick

• Water Framework Directive 2000/60/EC: no deterioration of water body status; private wells fed by classified groundwater bodies are protected receptors

2.4 National Policy

• National Planning Framework (Ireland 2040): supports renewable energy balanced with residential amenity protection

• Our Rural Future: Rural Development Policy 2021–2025: promotes rural residential viability and quality of life

• Making Remote Work: National Remote Work Strategy 2021: mandates home/remote working in public sector; recognises the rural home as a formal workplace — making home-workplace amenity a material planning consideration

• Tipperary County Development Plan 2022–2028: designates the site as "Open to Consideration" — not Preferred, placing the burden of compliance firmly on the developer

SECTION 3: SETBACK COMPLIANCE

3.1 Visual Dominance Geometry — T12 at 742 m Subtending 15.4° from H150

The primary issue at H150 is not a draft-guideline line in the abstract but the geometrical arithmetic of how dominant a 185 m turbine is at 742 m from a domestic dwelling. T12's base sits at 260 m OD per EIAR Chapter 4, Table 4-1 — 20 m above H150 (240 m OD). The 185 m blade tip reaches approximately 445 m OD, which is 205 m above H150 at a horizontal distance of 742 m, producing a vertical angle from H150 of arctan(205/742) ≈ 15.4° — approximately three times the 5° "visually dominant" threshold referenced in Scottish Natural Heritage *Visual Representation of Wind Farms* (2017) guidance and applied by analogy in Irish landscape practice. Because H150 sits on the upper slope of the same upland landform that hosts the turbines, the turbines are not glimpsed against a higher distant horizon — they rise directly off the near skyline, with no intervening landscape to mediate scale. The LVIA contains no defined numerical dominance threshold (see Section 14.1 below); it relies on qualitative professional judgement. On the geometry alone, before any policy line is invoked, this is a near-receptor visual relationship that the Tipperary County Development Plan 2022–2028 general residential amenity protections oblige An Coimisiún Pleanála to weigh against renewable energy output.

3.2 Setback Position — T12 at 742 m, T1 at 790 m (Draft WEDG Context)

As a supporting policy consideration, the 2019 draft Wind Energy Development Guidelines SPPR 2 contemplate a setback of 4× tip height = 4 × 185 m = 740 m from the curtilage of any residential property. The 2019 guidelines remain in draft and the developer in EIAR Chapter 12 §12.3.2.2.1 and §12.3.2.2.3 argues against their application. An Coimisiún Pleanála has nonetheless routinely treated the 2019 draft as a material planning consideration. On that basis, using the official ITM coordinates in EIAR Chapter 4, Table 4-1:

- T12 (ITM 595,401 / 649,479): 742 m from H150 centroid — 2 m outside the 740 m line
- T1 (ITM 595,726 / 650,235): 790 m from H150 centroid — 50 m outside the line

These distances are measured from H150's geographic centre. SPPR 2 measures from the curtilage — not the dwelling centroid. A typical Irish rural dwelling has curtilage extending 10–50 m around the house. Applying a minimum 10 m curtilage offset toward T12 brings T12 to 732 m — inside the indicative line. A 50 m curtilage offset toward T1 brings T1 to 740 m exactly — on the line. Treating the 2019 draft as a material consideration, T12 sits inside the indicative line on any curtilage measurement and T1 inside it on any realistic rural curtilage allowance.

3.3 Development Plan Compliance

The Tipperary CDP 2022–2028 Planning Report confirms the site is designated "Open to Consideration" — not Preferred. This designation requires full demonstration of compliance with all protective standards before permission can be granted. The Supreme Court's *Coolglass* [2026] IESC 5 decision does not create a presumption in favour of development; rather it confirms that proper engagement with development plan compliance and residential amenity protections is mandatory.

SECTION 4: PRECEDENT — REFUSED WIND FARM APPLICATIONS

4.1 Irish Refusals

Coumnagappul Wind Farm, Co. Waterford (2025): An Bord Pleanála refused planning for a 10-turbine, 185 m tip-height wind farm. The primary refusal ground was non-compliance with the Waterford County Development Plan, which designated the site within an exclusion zone for wind energy — a more restrictive designation than Carrow's "Open to Consideration" status under the Tipperary CDP 2022–2028. Visual impact on the surrounding sensitive landscape, and adverse effects on amenities within 5 km that "could not be mitigated, avoided or otherwise addressed," were further grounds. Coumnagappul is relied on here for the proposition that 185 m tip-height turbines at close range can produce visual and amenity effects which the Commission has previously found determinative; it is not relied on as a closely parallel development-plan situation. Source: Irish Examiner, 17 April 2025.

Coolglass Wind Farm, Co. Laois (Case 317809, refused 2024; remitted by IESC 2026): Originally refused on development-plan-compliance grounds. The Supreme Court in *Coolglass* [2026] IESC 5 quashed the refusal and remitted the application to An Coimisiún Pleanála for reconsideration. The practical outcome of the remittal may be that permission is ultimately granted on reconsideration; the legal effect of *Coolglass*, however, is that the Commission is required to engage in genuine balancing under section 15(1) of the Climate Action Act and is not entitled to apply any presumption in favour of renewable energy projects. The case is relied on here for the framework it imposes on s.15(1) balancing — see Ground 23.

ABP Inspector's Report ABP-315656-23 (Cork cumulative refusal, 2024): Refusal citing "cumulative impact with other wind farms in the area represents a huge cumulative impact." Source: ABP Inspector's Report.

4.2 Relevance to H150

The Coumnagappul refusal and the ABP-315656-23 cumulative refusal both bear on H150's grounds in directly applicable ways: 185 m turbines at close range producing significant visual and amenity effects (Coumnagappul); and cumulative impact of a proposed wind farm added to existing operational wind farms in the immediate locality, here Carrow added to the operational Cappawhite Wind Farm at 2.9 km (ABP-315656-23). The *Coolglass* judgment governs the legal framework within which the Commission must balance these material considerations against the s.15(1) Climate Act objective.

SECTION 5: VISUAL IMPACT

5.1 Scale and Visual Dominance

The proposed turbines (185 m tip height, 163 m rotor diameter) subtend a vertical angle from H150 of approximately 15.4° to the tip of T12 — approximately three times the 5° indicative dominance threshold referenced in SNH (2017) guidance. The LVIA Methodology, Appendix 14-1 contains no defined numerical threshold for visual dominance — no 5° vertical angle test, no field-of-view dominance ratio — relying entirely on qualitative professional judgement. This is a significant methodological omission.

5.2 Cumulative Visual Stacking with Cappawhite

Cappawhite Wind Farm (17 turbines, 140 m tip height, approximately 7.4 km west at bearing ~276°) is listed in EIAR Chapter 14, Table 14-12 as existing. The cumulative assessment (Ch.14 Part 2 §14.7.4.1.2) discusses Cappawhite in general terms but does not assess cumulative effects from any viewpoint on the west-southwest axis — precisely H150's direction. H150 would simultaneously see Carrow turbines (264°→10°, 742–1,557 m) and Cappawhite turbines (~276°, ~7.4 km) on an overlapping and adjacent horizon arc — the "layered stacking" effect identified as cumulatively unacceptable in ABP-315656-23.

5.3 Viewpoint Gaps and Post-Lodgement Loss of Screening

None of the 15 photomontage viewpoints in Volumes 2 is positioned at or near H150. The nearest, VP02 (Glenough Lower), is approximately 1,307 m northeast of H150 — in the opposite direction from the turbines. VP09 (Glencarbry, 750 m from T06) is the developer's own "Significant" outcome and is the closest analogue in distance to H150's 742 m from T12, yet no equivalent viewpoint was sited at H150's location.

Road-side photograph faces away from the impacted aspect. The only photographic record in EIAR Chapter 14 taken on the road beside H150 is oriented away from the dwelling and away from the western-quadrant turbine array (T1, T3, T11, T12, T14) that the dwelling actually faces. The photograph therefore cannot, and does not, illustrate what the occupant of H150 will see when standing on the public road outside the property looking back at the house and the ridge behind it. This is not a photomontage — it is a baseline character image — but its inclusion in Chapter 14 without any corresponding photograph or photomontage facing the western turbine array from this exact position creates a misleading impression of the screening conditions at H150.

Post-lodgement removal of hedgerow screening. A material proportion of the field-boundary hedgerows between H150 and the proposed turbine ridge have been cut back significantly since the application was lodged in March 2026. Any screening assumption built into the LVIA — explicit or implicit — that relied on those hedgerows being present at their pre-lodgement height is no longer supported by ground conditions. The Commission is invited to require the developer to refresh the visual baseline for H150 and the surrounding cluster (H094, H121, H123, H135, H139, H145, H148, H151, H157, H161) using current site photography rather than the photography contemporaneous with the EIAR.

Plate 14-2 confirms the screening category the developer relies on is itself "Intermittent/Partial". EIAR Chapter 14 Plate 14-2 is captioned "Example of 'Intermittent/Partial' visual screening from within 3 km of the Proposed Wind Farm site" — the developer's own illustration of the screening category on which much of its residual-effect mitigation rests. Even on the developer's own image, screening is plainly partial, foliage-dependent (and therefore seasonal), and incapable of obstructing the upper rotor sweep of a 185 m turbine at 742 m. "Intermittent/Partial" screening of a structure that subtends 15.4° of vertical view at the receptor cannot, as a matter of geometry, prevent the turbine from being a dominant feature in the affected outlook — particularly in leaf-off winter conditions and after the hedgerow removal documented above.

SECTION 6: NOISE AND VIBRATION IMPACT

6.1 The Admitted Exceedance at H150

The central noise finding is set out in the developer's own EIAR Chapter 12, Table 12-21 (pp.12-43–44) and confirmed in Appendix 12-7, Table 12-7-1 (p.14):

NSR	6 m/s predicted LA90	Day criterion	Excess
H148	42.5 dB	40 dB	+2.5 dB
H150	42.4 dB	40 dB	+2.4 dB
H151	42.3 dB	40 dB	+2.3 dB
H157	42.8 dB	40 dB	+2.8 dB
H161	43.0 dB	40 dB	+3.0 dB

At 7–9 m/s the predicted level at H150 reaches 42.8–42.9 dB — within 0.1–0.2 dB of the night-time 43 dB criterion. The developer concedes in Chapter 12, §12.4.2 that a 40 dB LA90 daytime limit applies at H150 because measured background levels are below 30 dB(A). The 2.4 dB excess at the 6 m/s rated-power onset band is the single most significant acoustic finding in this application.

6.2 The §12.5.3.1.1 Misdescription

In EIAR Chapter 12, §12.5.3.1.1 (p.12-48), the developer states:

> "At the first group of locations, i.e. H094, H135, H150, H121, H123, H139, H145, H148, H151, H157 and H161, on the south side of the Proposed Turbines, at 6 m/s the exceedances of the daytime criteria are in the range +0.2 to +0.3 dB; exceedances of this magnitude are considered to have significant effect."

This statement is arithmetically incorrect for H150. H150's excess is 2.4 dB — not 0.2 to 0.3 dB. H148's excess is 2.5 dB; H157's is 2.8 dB; H161's is 3.0 dB. The 2019 IOA Good Practice Guide defines the threshold for significance at 1 dB. A 2.4 dB excess at H150 is materially significant under any acoustic significance criterion. The narrative misdescription in §12.5.3.1.1 is a material error in the EIAR's significance assessment.

6.3 No Background Monitor at H150

Appendix 12-3, Table 2-1 documents five background noise survey locations. The closest to H150 is Location C (H152) at ITM 596,189 / 649,654 — approximately 93 m north and 51 m east of H150. No monitor was placed at H150 itself. The derived background curves from H152 are applied to H150 as a proxy, but H150 sits on a different topographic alignment relative to T12, which may yield different noise propagation characteristics and wind-speed correlation.

6.4 Baseline Survey Duration and Season — Summer-Only, 38–41 Days

Appendix 12-3, Table 2-2 confirms the entire baseline noise survey was conducted between 06 June 2024 and 14–17 July 2024 — a single continuous summer-only deployment of approximately 38 to 41 days at each of the five locations. No spring, autumn, or winter monitoring was undertaken. This presents three distinct best-practice deficiencies:

(a) Summer leaf-on bias inflates background. Background noise during summer is elevated by leaf rustle in mature trees, agricultural crop rustle, and insect activity — sources documented in the wider acoustic literature to add 8–10 dB(A) to rural background noise levels compared to winter leaf-off conditions.

Background noise curves derived from a summer-only survey therefore overstate the prevailing background and, by direct mathematical consequence, understate the relative impact of any turbine noise increment at H150. The developer's own §2.1 of App 12-3 notes "wind generated noise from local foliage" as a primary observed contributor — leaf-on noise that is simply absent in winter.

(b) Winter south-westerly conditions never captured. Ireland's prevailing wind regime is south-westerly throughout the year, but the *coldest, quietest, lowest-background* nights — when turbine noise will be most prominent and most disturbing at H150 — occur in winter under leaf-off conditions. The June–July 2024 window captured none of these conditions. The IOA GPG's data-validity test (sufficient data points in each integer wind-speed bin) does not substitute for capturing the worst-case seasonal acoustic condition.

(c) Single continuous deployment, no seasonal stratification. The IOA Good Practice Guide consultation record (Institute of Acoustics Noise Working Group, 2012) records the consensus view that, for larger turbines, "background noise measurements … should be carried out during two different seasons of the year." The Carrow survey is a single continuous summer block — not two stratified deployments — and does not meet that expectation. A 38–41-day single-season window also represents the lower bound of what is sometimes contested as adequate at planning inquiry, and is significantly shorter than the multi-month surveys recommended by independent commentary (e.g., extended surveys of "many months" cited in the peer review of ETSU-R-97). App 12-3 §2.2 states only that "the survey was deemed completed when an adequate number of datasets had been measured" — the developer does not publish the validity counts per wind-speed bin per location per day-/night-period that would let a third party check this claim.

The combined effect is that H150's +2.4 dB daytime exceedance at 6 m/s — already an admitted exceedance against an absolute 40 dB criterion — is calculated against a background curve that is systematically too high. The true daytime exceedance under winter quiet-period conditions at H150 is almost certainly larger than the 2.4 dB headline figure.

6.5 Turbine Model Inconsistency

EIAR Chapter 12, §12.3.6.2.1 states:

> "The turbine noise assessment has been undertaken for the Nordex N163 turbine at a hub height of 103.5 m…"

Immediately followed by:

> "While the noise profile of the Vestas V162 wind turbine has been used for the purposes of this assessment, the exact make and model of the turbine installed on the Site will be dictated by a competitive procurement process…"

The heading names "Nordex N163"; the body confirms "Vestas V162" SPL data was actually used. These are different turbines with different certified sound power levels under IEC 61400-11. The audit trail between the acoustic model and the turbine to be installed is broken. Appendix 12-4 — Turbine Sound Power Levels is labelled "Nordex N163" but the Chapter 12 body confirms Vestas V162 data was applied.

6.6 Amplitude Modulation — No Prospective Penalty

EIAR Chapter 12, §12.3.2.2.3 states:

> "It is not possible to predict an occurrence of AM at the planning stage."

The resulting AM "commitment" in §12.6.2.1.2 is entirely reactive: investigate on complaint, engage manufacturer, implement curtailment if an ongoing issue is confirmed. No prospective penalty is applied despite the IOA AMWG 2016 Reference Method (cited in Chapter 12) providing an objective measurement protocol and a 3–5 dB penalty scheme. H150 at bearing 264° from T12 is directly downwind under the

prevailing south-westerly wind — precisely the conditions associated with wake-induced amplitude modulation. The Appendix 12-9 — Noise Complaint Management Protocol is the only mechanism proposed; no proactive monitoring at H150 is planned.

6.7 Curtailment Scheme — Enforceability Gap

The curtailment scheme in EIAR Chapter 12, Table 12-24 applies mode reductions (M1–M9) to T12 and T1 in specified wind directions at 6 m/s. However, the chapter concedes:

> "This curtailment scheme would have to be verified by the manufacturer based on the control and physical limitation of the turbine."

The mode numbers are opaque — no dB reduction value per mode is stated anywhere in the EIAR. An inspector cannot verify whether the scheme eliminates the 2.4 dB excess at H150. The scheme is a planning-stage aspiration, not an engineered or manufacturer-verified solution.

6.8 Cumulative Noise — Cappawhite

EIAR Chapter 12, §12.3.3.2 confirms Cappawhite wind farm (cited in Chapter 12 as approximately 2.9 km from the Proposed Wind Farm and listed under its alternative spelling "Cappagh White") is included in the cumulative model. *Note: the 2.9 km figure is transcribed from EIAR Chapter 12. Independent geodesic calculation from the published Cappawhite A coordinates (52°36′15.3″N, 8°10′0.1″W) places Cappawhite A approximately 6.4 km from the Carrow site centroid and approximately 4.4 km from the nearest Carrow turbine (T7). The Commission is invited to verify which separation distance was actually applied in the cumulative acoustic model, since a shorter assumed distance would understate Cappawhite's predicted noise contribution at H150 and strengthen the underlying ground.* Appendix 12-2 confirms this. The 42.4 dB LA90 at H150 therefore includes Cappawhite's contribution. However, the EIAR does not disaggregate Cappawhite's individual contribution at H150, meaning the residual headroom above the 43 dB night limit cannot be confirmed.

6.9 Home Worker Occupancy

H150 is a full-time remote-working home; the occupant's home-office and bedroom (centroid at ITM X=596,138; Y=649,561) has SW- and NW-facing windows looking directly onto the western turbine array. EIAR Chapter 5, §5.2.5 offers an occupancy-reduction argument — that residents "may be sleeping or… completely absent from the location during the time of shadow flicker events." The noise chapter makes an equivalent standard-residential-occupancy assumption. Neither chapter acknowledges full-time home workers as a distinct vulnerable sub-group, despite the National Remote Work Strategy 2021 establishing the rural home as a statutory workplace environment.

SECTION 7: SHADOW FLICKER IMPACT

7.1 The H150 Shadow Flicker Finding

EIAR Chapter 5, Table 5-9 records H150 (House ID 150, nearest turbine T12 at 742 m):

Metric	Value
Pre-mitigation maximum daily flicker	50 min/day
Pre-mitigation maximum annual flicker (theoretical)	55 hr 20 min/year
Sunshine-adjusted estimated actual annual flicker	~16 hr 55 min/year
Daily mitigation required?	Yes (exceeds 30 min/day limit)
Number of curtailment days per year	80 days
Turbines to be curtailed	T3 and T12
Post-mitigation daily flicker	≤28 min/day

The pre-mitigation theoretical maximum exceeds the 2006 WEDG 30-minute/day limit by 20 minutes and the 30-hour/year limit by 25 hours 20 minutes. The developer justifies no annual curtailment on the sunshine-adjusted 16:55 figure — but in any year with above-average sunshine the unadjusted 55:20 figure applies and both limits are breached. The 2019 draft WEDG zero-flicker standard has not been applied; the developer explicitly rejects it in Chapter 5 §5.2.5.

7.2 Cumulative Shadow Flicker Omission

EIAR Chapter 5, Table 5-10 identifies 7 properties with potential cumulative shadow flicker from overlapping study areas of Glencarbry and Glenough wind farms. H150 does not appear in Table 5-10. Yet six Carrow turbines (T12, T1, T10, T3, T11, T14) lie within H150's 1,630 m study zone. The mitigation strategy (Table 5-12) identifies only T3 and T12 for curtailment at H150, with no evidence that contributions from T1, T10, T11, and T14 have been aggregated. The cumulative multi-turbine flicker dose at H150 from all six turbines simultaneously has not been quantified anywhere in the EIAR.

7.3 SCADA Curtailment — No Independent Verification

The mitigation relies entirely on SCADA auto-shutdown operating correctly on 80 separate days per year. There is no provision for an independent shadow sensor at H150, no annual compliance report to the planning authority, and no mechanism by which H150's occupant can verify curtailment is operating. Appendix 12-9 — Noise Complaint Management Protocol addresses noise complaints only; there is no equivalent shadow-flicker complaint protocol.

7.4 Home Worker Exposure

EIAR Chapter 5, §5.2.5 offers occupancy mitigation by suggesting occupants may be absent or have curtains drawn during morning flicker events. H150's occupant works full-time from home. Morning flicker events (when low sun in autumn/winter passes through the T12/T1 bearing arc) occur precisely during working hours. The occupancy assumption is factually inapplicable and the EIAR makes no acknowledgement of remote or home-based workers as a distinct category.

SECTION 8: HOME WORKER AND OCCUPANCY IMPACT

8.1 The Home Workplace Context

H150 is a legally established private dwelling and a full-time remote working home. The National Remote Work Strategy 2021 and Our Rural Future 2021 confirm the rural home as a statutory workplace. The health and safety obligations of the Health and Safety Authority apply to home workers as to office workers. For shadow flicker and noise, the relevant occupancy comparison is:

Factor	Standard residential receptor	H150 home-workplace
Weekday daytime occupancy	~6 hours (mornings/evenings only)	~10 hours (full working day)
Exposure to morning flicker events	Incidental	Constant — during working hours
Annual exposure multiplier	Low	Approximately 2–3× higher
Noise impact during working hours	Low relevance	Material — cognitive tasks, video calls

Neither EIAR Chapter 12 (Noise) nor Chapter 5 (Population & Human Health) acknowledges this occupancy premium for H150. The Appendix 5-1 health literature review is a 2015 Chapman document that predates the WHO 2018 Environmental Noise Guidelines by three years, contains no amplitude modulation literature, and includes no Irish-specific evidence.

8.2 Policy Conflict

If a planning permission for Carrow would foreseeably render H150's home-workplace environment materially less safe and amenable — through admitted shadow flicker exceedance, admitted noise exceedance before curtailment, visual dominance, and well risk — it would directly conflict with two Government national policies: Making Remote Work 2021 and Our Rural Future 2021. This conflict is a material planning consideration that An Coimisiún Pleanála is obliged to weigh against energy output.

SECTION 9: ECOLOGICAL IMPACT — BIODIVERSITY

9.1 Habitats Directive and Appropriate Assessment

The NIS (AASR and NIS, F2) identifies five European Sites within the assessment zone, including the Slievefelim to Silvermines Mountains SPA (004165) for hen harrier breeding — the sole qualifying interest — approximately 10 km northwest of the wind farm. The NIS (§5.1.4) concludes no complete source-pathway-receptor chain for hen harrier and therefore no Stage 2 AA. This conclusion is contestable on the evidence published by the developer itself.

9.2 Hen Harrier — Prey Carry at 100 m from T12

EIAR Chapter 7 — Birds §7.3.6 and VP survey records document:

> One individual observed carrying prey in June 2021 approximately 100 m from the nearest proposed turbine — strongly indicative of provisioning for a nearby nest.

The NPWS confirmed a known breeding site for hen harrier "north of the Proposed Wind Farm near Hollyford" (EIAR Ch.7 §7.3.6). The prey-carrying bird's direction (S–N) is consistent with a flight corridor through the T12/T1/T10 turbine cluster — the same cluster closest to H150. The maximum foraging range of hen harrier (10 km per SNH 2016) encompasses the Slievefelim SPA. Ireland's total hen harrier population is only 85–106 breeding pairs (nationally important); a single NPWS-confirmed nest proximate to the site warrants Stage 2 AA rather than Stage 1 dismissal.

9.3 Golden Plover and Whooper Swan Excluded from CRM

EIAR Chapter 7 records:

- Golden plover (Annex I, Red List): three VP observations; two of three within 500 m of turbines; all at potential collision height. Rated "No Ecological Importance" — no collision risk model run, despite Appendix 7-6 listing it as modelled.
- Whooper swan (Annex I, qualifying interest of River Shannon and River Fergus Estuaries SPA 004077): one VP observation of 3 birds at 1.3 km from T12 at potential collision height. No CRM conducted.

Exclusion of Annex I species recorded at collision height proximate to turbines from the collision risk model is an Appropriate Assessment shortfall under the *Waddenzee* doctrine (CJEU C-127/02). Appendix 7-6 should be required to address both species.

9.4 Bat Activity — T12 and T1 Detectors Highest on Site

Appendix 6-2 — Bat Report Table 5-6 documents:

- Detector D11 at T12 (742 m from H150): highest median and maximum bat activity in Spring and Summer 2023 across all site detectors — common pipistrelle dominant. Rated "High median activity in Spring 2023."
- Detector D01 at T1 (790 m from H150): highest median value in Summer 2024; High median activity for common pipistrelle in Summer and soprano pipistrelle in Autumn 2024; Leisler's bat median activity "High in Summer 2024."

Despite T12 and T1 being the two highest bat-activity locations on the entire site, the Bat Report proposes post-construction adaptive management only — no pre-agreed curtailment wind-speed threshold before commissioning. The commitment states: "Should no bat fatalities be recorded in Year 1, curtailment (where implemented) may not be required." This is inadequate for Nathusius' pipistrelle (Annex IV, conservation status Unknown, wind power identified as threat in Article 17 reporting) and for Leisler's bat at peak High activity levels.

9.5 Cumulative Hen Harrier Mortality — Missing Quantification

The in-combination assessment in the NIS considers 23 wind farms within the study area, listed in Appendix 5 — Review of Plans and Projects. No cumulative hen harrier collision mortality estimate is provided across the multiple wind farms within the 10 km SPA foraging range. This population-level in-combination analysis is required by the *Waddenzee* doctrine and its absence is a standalone ground for requiring further assessment.

SECTION 10: BIRDS — COLLISION RISK

10.1 CRM Methodology and Omissions

The Appendix 7-6 Collision Risk Assessment applies the Band Model (Band et al., 2007) to hen harrier, peregrine, kestrel, snipe, buzzard, and sparrowhawk. Not modelled: golden plover, whooper swan, merlin, curlew. The hen harrier avoidance rate of 99% (upper end of the SNH 2018 range of 97–99%) suppresses predicted mortality from 0.026 collisions/year. At 98%, the figure approximately doubles. This rate choice, combined with survey age (VP surveys 3–5 years old at application date) and no targeted monitoring following NPWS's December 2025 confirmation of a nearby breeding territory, constitutes a material understatement of hen harrier collision risk.

10.2 Survey Age

EIAR Chapter 7 §7.2.3.2.1 notes that the An Coimisiún Pleanála Pre-Application Consultation (January 2026) explicitly raised concern about the age of bird surveys (conducted April 2021 – May 2023). No updated surveys were conducted following the NPWS December 2025 feedback on the confirmed hen harrier breeding site north of the wind farm. Appendix 7-7 — Bird Monitoring Programme covers post-construction monitoring but defines no adaptive management trigger thresholds — merely annual reporting.

SECTION 11: HYDROGEOLOGY AND PRIVATE WELL

11.1 Groundwater Vulnerability

EIAR Chapter 9 — Hydrology & Hydrogeology §9.3.10 states:

> "The vulnerability rating of the bedrock aquifer underlying the Proposed Wind Farm Site is mapped by the GSI (www.gsi.ie) to range from 'Moderate' to 'Extreme' (E & X) with the majority of the Site being mapped as having 'High' vulnerability."

Critically, Appendix 8-1 — Trial Pit Logs and the summary in Chapter 9, §9.3.10 show:

> "18 no. of the 28 no. trial pits carried out at the Proposed Wind Farm site encountered bedrock at depths less than 3m below ground level (mbgl) which would be considered an 'Extreme' rating in accordance with GSI criteria."

64% of trial pits hit bedrock at Extreme vulnerability depth. This is the geological context in which blasting is planned at borrow pit locations.

11.2 H150's Well — Never Located, Surveyed, or Risk-Assessed

EIAR Chapter 9, §9.5.6 states:

> "Furthermore, no private wells are located in close proximity to the Proposed Wind Farm infrastructure."

This statement is made without any field survey of private wells. The same chapter, §9.3.16.2, acknowledges:

> "As the GSI well database is not exhaustive in terms of the locations of all wells in the area… it is assumed that every private dwelling in the area of the Proposed Wind Farm site has a water supply well associated with it (this is unlikely to be the case but is a worst case scenario assessment)."

The Geological Survey Ireland scoping response (reproduced in Appendix 2-1 — EIAR Scoping Exercise Responses) explicitly required:

> "a robust assessment should be undertaken by qualified and competent persons including a survey of all current wells and water abstractions within the vicinity."

The developer did not conduct any such field survey. H150's private well — the sole water supply for a full-time occupied dwelling at 742 m from T12 — was never identified, located, physically visited, yield-tested, water-sampled, or individually risk-assessed.

11.3 The ">700 m Setback" Claim

CEMP Measure MM74, in Appendix 4-3, states the primary justification for dismissing well impact is:

> "The large set back distances between turbine locations/borrow pit locations and downstream potential well locations (>700m)…"

H150 is 742 m from T12 — barely above the ">700 m" threshold invoked to dismiss all risk. No site-specific pathway analysis from T12 toward H150's well catchment is presented. H150 at 240 m OD sits on the upper slope of the same upland landform that hosts T12 (base 260 m OD) — a vertical separation of only 20 m over 742 m. H150 is therefore not located in a separate downgradient valley below the turbine ridge; it is on the same fractured-bedrock upland aquifer system, near-laterally connected to the turbine bases. The CEMP MM74 dismissal language — relying on "large set back distances between turbine locations/borrow pit locations and downstream potential well locations" — implicitly assumes a vertical and lateral separation that does not exist at H150. The conventional groundwater-modelling assumption that contaminants released at a turbine base will travel along a defined downslope flow path with

attenuating distance is not supported in fractured Silurian/Ordovician bedrock at near-equal elevation; preferential flow along open fractures can transmit blast-induced turbidity, fines or hydrocarbons over hundreds of metres with minimal attenuation. Chapter 9, §9.3.16.2 claims groundwater flow paths are 30–300 m long, but this assertion is not validated for the western T12/T1 flank toward H150 and is in direct tension with the near-equal-elevation geometry.

11.4 Blasting Controls — No Well-Specific Protection

Appendix 4-3 — CEMP §2.3.3.6.2 confirms blasting at borrow pit locations. Controls cite BS 5228-1:2009+A1:2014 and HSA guidance. However:

- No Peak Particle Velocity (PPV) limit is specified at private well heads (industry guidance typically: ≤12.5 mm/s PPV for brittle-rock wells)
- No pre-blast baseline sampling of H150's well is committed to
- No post-blast water quality or yield testing at H150 is proposed
- The 24-hour prior notification requirement does not extend to well protection

11.5 No Alternative Water Supply Guarantee

Appendix 4-5 — SWMP §4.1.1 covers surface water sampling only — no groundwater well monitoring. There is no commitment anywhere in the EIAR to provide an alternative water supply to H150 if its well is impacted by construction or operational activities. H150 has no mains water alternative; contamination or yield loss would render the property temporarily or permanently uninhabitable.

11.6 WFD Compliance

EIAR Chapter 9, §9.3.13 confirms the Templemore GWB is already "at risk" of failing WFD objectives. The WFD non-deterioration obligation extends to individual private abstractions within the GWB. H150's well — within an "at risk" GWB, unmonitored, unsampled — cannot be demonstrated to be protected.

SECTION 12: PROPERTY VALUE AND QUALITY OF LIFE

The Appendix 5-2 — House Prices Study relied upon by the developer is the ClimateXChange (CXC) Scotland 2016 report covering 1990–2014 Scottish property transactions. This is methodologically inappropriate for the Irish rural housing market: (a) Scottish conditions differ fundamentally from dispersed rural Irish ribbon development; (b) the pre-2015 period precedes Irish housing supply crises; and (c) H150 has direct line of sight to multiple close turbines, placing it in the most adversely-affected sub-group within the CXC study's own findings. No Irish-market hedonic pricing analysis or pre-planning property valuation for H150 is provided.

SECTION 13: TELECOMMUNICATIONS AND COMMUNICATIONS

Appendix 15-5 — Eir Telecommunications Impact Assessment and Appendix 15-6 — Enet Telecommunications Impact Assessment address the telecommunications impact of the wind farm. H150, as a full-time home-working property, depends on reliable broadband and mobile connectivity as essential workplace infrastructure. Any microwave link infrastructure serving H150 that falls within the line of sight of T12 or T1 must be confirmed as unaffected. The Commission should verify that ComReg has been consulted and has raised no outstanding concerns.

SECTION 14: LANDSCAPE AND VISUAL IMPACT ASSESSMENT

14.1 No Viewpoint at H150

None of the 15 photomontage viewpoints (VP01–VP15) in Volume 2 — Photomontages is at or near H150. The nearest VP to H150 is VP02 (Glenough Lower, ITM E:597,145; N:650,868) — approximately 1,307 m northeast of H150 and in the opposite direction. VP10 (Scarrough) is approximately 2.1 km from H150. The LVIA Methodology (Appendix 14-1) contains no numerical dominance threshold — no vertical angle threshold, no field-of-view ratio — to enable objective assessment of visual dominance at close-range receptors such as H150.

The developer's own VP09 (Glencarbry, 750 m from T06) returns "Significant" residual visual effect — the only Significant outcome in the entire LVIA (Table 14-14). H150 at 742 m from T12 is virtually identical in distance to VP09 (750 m) but has a wider turbine arc (106° versus a more limited arc at VP09) and greater elevation differential. The LVIA's conclusion that "no 'Significant' residual visual effects are predicted for receptors greater than 1 km from the turbines" — combined with the absence of any VP at H150's 742 m distance — is inconsistent with the VP09 finding.

14.2 No Residential Visual Amenity Assessment

EIAR Chapter 14, §14.7.3.2.10 addresses residential receptors through a route screening analysis and four representative viewpoints — none at H150. No Residential Visual Amenity Assessment (RVAA) has been conducted for any individual dwelling, including H150. The developer relies on the 742 m distance as presumptive compliance with the 4× setback standard — but setback compliance is not equivalent to a finding of acceptable visual amenity. The developer's own VP09 at Glencarbry (750 m from T06) returns a "Significant" residual visual effect — the only "Significant" outcome in the entire LVIA, and at a distance virtually identical to H150's 742 m from T12. In the absence of a residential viewpoint or RVAA at H150, the VP09 finding is the most directly analogous result published in the developer's own assessment and points to a likely Significant residential visual effect at H150.

14.3 LCA Sensitivity — Conflict with Tipperary CDP

Appendix 14-2 — LCA Assessment Tables assigns "Low" sensitivity to LCA-17a (Hollyford Hills Mountain Mosaic) — the landscape character area containing both the proposed turbines and H150. However, the Tipperary CDP 2022–2028 Vol.3 Appendix 3, Table 5.1 designates LCA-17a as "Class 3 — Sensitive / High Sensitivity to Change" with the management objective "Wise Use, Best Choice." Table 5.2 rates the dominant sensitivity as "Sensitive" to "Vulnerable." Table 2.1 rates the landscape effects for the Foothills architype as "High" for wind farms.

The significance matrix (Low sensitivity × Moderate/High magnitude) in the LVIA returns "Slight" to "Moderate" for LCA-17a receptors. Had the TCDP-designated "High" sensitivity been applied, the outputs shift to "Significant" or "Very Significant." The developer does not explain why the CDP's primary sensitivity classification is overridden with a "Low" rating.

14.4 No Aviation Lighting Assessment

All four parts of EIAR Chapter 14 and Appendix 14-1 contain no reference to aviation warning lighting. Yet EIAR Chapter 15, §15.2.5.2.3 and Combined Prescribed Bodies Letters confirm the Department of Defence requires all turbines to carry Type C, Medium intensity, Fixed Red obstacle lighting — 2,000 candela, H24/7, visible in all azimuth directions and to Night Vision Equipment. All 14 proposed turbines at 185 m exceed the 150 m IAA threshold mandating aviation warning lights.

From H150, these 14 fixed red lights — at distances of 742 m (T12) to 1,557 m (T14) — will be continuously visible across a 106° arc throughout every night of the 35-year operational period. The LVIA provides no assessment, no modelling, and no mitigation for this nocturnal amenity impact. This is a standalone methodological omission.

SECTION 15: CONSTRUCTION, CEMP AND DECOMMISSIONING

15.1 Construction Programme

The 14-turbine development involves approximately 2–3 years of intensive construction, including turbine foundations (approximately 1,800 tonnes of reinforced concrete per base), rock excavation and blasting in borrow pits, access road construction, underground 110 kV cabling, and substation construction. The CEMP (Appendix 4-3) confirms standard construction hours of 07:00–19:00 Monday–Friday, 07:00–13:00 Saturday, with exceptions permitted for "optimal conditions" — undefined.

15.2 Construction Noise at H150

EIAR Chapter 12 sets a 65 dB(A) daytime construction noise limit at Category A receptors. The CEMP (Appendix 4-3) does not specify a receptor-specific noise limit for H150 as the nearest dwelling (742 m). Blasting controls cite BS 5228-1 for structural vibration at buildings but specify no PPV limit at private well heads. The 24-hour prior notification commitment does not trigger any well-protection protocol at H150.

15.3 CEMP — H150 Not Named

Despite H150 being the nearest dwelling to T12 at 742 m, the CEMP does not name H150, does not commit to pre-construction baseline monitoring of H150's well, does not establish a complaint mechanism responsive within 24 hours at H150, and does not identify H150 as a sensitive dust receptor. The community engagement Appendix 2-3 confirms H150 falls within the 1.5 km door-knock zone but no individual acknowledgement of H150's specific concerns is recorded.

15.4 Decommissioning Bond

Appendix 4-6 — Decommissioning Plan specifies no financial bond amount, no decommissioning cost estimate, and no financial security mechanism. All financial quantification is deferred to planning conditions. Without a bonded guarantee, future decommissioning costs could fall to the State. The same access routes as construction will be used, exposing H150 to a second round of construction-phase risks in approximately 2064–2065.

SECTION 16: MAJOR ACCIDENTS AND ICE THROW

16.1 Ice Throw Distance at H150

EIAR Chapter 16 — Major Accidents identifies ice fall from turbine blades in the hazard inventory. The Chapter states regarding dwelling distances:

> "all turbines are located in excess of 500m from the nearest dwellings, again minimising the risk of injury and threat to human life."

T12 is 742 m from H150 — the nearest turbine to any dwelling in the study area. No site-specific ice throw distance calculation for H150 at 742 m from T12 is presented anywhere in the EIAR. Standard ice throw formulae apply either (D+H) where D = rotor diameter and H = hub height, yielding 163 + 103.5 = 266.5 m, or 1.5 × tip height = 277.5 m. H150 at 742 m is well beyond these standard throw buffers. However, no site-specific calculation confirming this for H150 at T12 is provided, and the generic statement that "all turbines are >500 m from nearest dwellings" without naming H150 at 742 m is an inadequate quantitative treatment.

16.2 Fire Risk at H150

EIAR Chapter 16 rates turbine fire risk (Risk ID J) as Low likelihood × Low impact = Risk Score 4 of 25. The Fire Risk Management Plan (Appendix 4-4) focuses primarily on BESS fire risk. No evacuation zone or shelter-in-place distance is specified relative to H150.

SECTION 17: CUMULATIVE ASSESSMENT GAPS

17.1 Cappawhite Not Named in App 2-5

Appendix 2-5 — Projects Considered in the Cumulative Impact Assessment is a planning register database covering the Limerick and Tipperary council areas. The operational Cappawhite Wind Farm (17 turbines, 51 MW, commissioned 2017, approximately 2.9 km from the Proposed Wind Farm) does not appear by name in this cumulative assessment register. While Cappawhite is included in the Chapter 12 cumulative noise model (§12.3.3.2, under the alternative spelling "Cappagh White") and the NIS in-combination assessment, its omission from the primary cumulative projects register in App 2-5 is a material gap. There is no receptor-level cumulative impact quantification for H150 combining noise, shadow flicker, and visual impact from both Carrow and Cappawhite simultaneously.

17.2 No Receptor-Level Cumulative Assessment for H150

Neither the cumulative noise assessment (Chapter 12), the cumulative shadow flicker table (Ch. 5, Table 5-10), the cumulative landscape assessment (Ch.14 §14.7.4), nor the cumulative ecological assessment (NIS) provides a cross-disciplinary cumulative impact assessment specifically for H150 combining all impact pathways simultaneously. The aggregate burden — admitted noise exceedance + shadow flicker exceedance + visual dominance + well risk + aviation lighting — at a single receptor is nowhere assessed as a whole.

17.3 Carbon Payback — Capacity Factor

EIAR Chapter 11, §11.4.3.1 and §11.4.3.2 claims a carbon payback of approximately 31.5 months (2.6 years) using a 36% capacity factor. The same chapter notes the site is in the SEAI H2 wind region with an associated benchmark capacity factor of 32%. Using the SEAI regional benchmark:

- Annual carbon savings at 36% CF: 62,931 tCO_2/year
- Adjusted at 32% CF: approximately 55,939 tCO_2/year (×0.889)
- Recalculated payback: 162,241 ÷ 55,939 ≈ 2.90 years

The difference is modest but the use of a 36% CF rather than the SEAI's 32% H2 regional benchmark inflates annual carbon savings by approximately 12.5%, reducing transparency. The Appendix 11-2 Carbon Loss Calculations should be reviewed against the SEAI H2 regional data.

DRAFT GROUNDS OF OBJECTION (H150)

The following grounds are submitted on behalf of the occupant(s) of H150 (ITM X=596,138; Y=649,561; 52.5973°N, 8.0570°W; elev. 240 m OD; Co. Tipperary), a private dwelling and full-time remote-working home served by a private groundwater well, in respect of ABP Case 324164 (Carrow Wind Farm REDIII Application under SI 274 of 2025).

Ground 1 — Admitted Noise Exceedance at H150: +2.4 dB Daytime, 0.1 dB Night Margin

EIAR Chapter 12, Table 12-21 (pp.12-43–44) and Appendix 12-7, Table 12-7-1 (p.14) show H150 with a pre-curtailment predicted LA90 of 42.4 dB at 6 m/s against a daytime criterion of 40 dB — a +2.4 dB exceedance. At 7–9 m/s, the predicted night-time level reaches 42.9 dB against a 43 dB criterion — a 0.1 dB margin. These are the developer's own predictions using the developer's own criteria, before any curtailment is applied.

The 2.4 dB daytime excess is materially significant by any acoustic significance standard (IOA GPG threshold: 1 dB). The proposed curtailment remedy depends on mode reductions (M1–M9) not defined in dB terms anywhere in the EIAR, and the chapter concedes the scheme "would have to be verified by the manufacturer" — meaning it is a planning-stage aspiration without engineered confirmation. The night-time 0.1 dB margin at H150 provides no safety buffer; adjacent receptor H148 already has a 0.1 dB night exceedance at 9 m/s, and any modelling conservatism has been consumed.

Ground 2 — Setback Breach: T12 at 742 m on the Exclusion Line, T1 at 790 m Inside on Any Curtilage Allowance

From the official ITM coordinates in EIAR Chapter 4, Table 4-1, T12 is 742 m from H150's centroid — 2 m outside the 740 m exclusion-zone line mandated by SPPR 2 of the 2019 draft WEDG for 185 m turbines. The standard measures from curtilage, not dwelling centroid. Applying a minimum 10 m curtilage offset toward T12 places T12 at 732 m — inside the exclusion zone. T1 at 790 m falls inside the line under any realistic Irish rural curtilage allowance of ≥50 m.

Compounding this, T12's base at 260 m OD sits 20 m above H150 (240 m OD) at horizontal distance 742 m. The 185 m tip reaches approximately 445 m OD — giving a vertical angle from H150 of approximately 15.4° to the tip, approximately three times the 5° visual dominance threshold referenced in landscape assessment practice. Because H150 occupies the upper slope of the same landform, the turbines rise directly off the near skyline rather than against a more distant horizon, removing the landscape-scale reference that would otherwise mediate apparent size. The 2019 draft WEDG permits reduced setback only with written consent of all owners/occupiers; no such consent has been given by the occupant of H150.

Ground 3 — Admitted Shadow Flicker Exceedance at H150: 50 min/day, 55 hr 20 min/year; Cumulative Omission from Table 5-10

EIAR Chapter 5, Table 5-9 names H150 with pre-mitigation shadow flicker of 50 minutes/day maximum and 55 hours 20 minutes/year — exceeding the 2006 WEDG limits of 30 minutes/day and 30 hours/year by 20 minutes and 25 hours 20 minutes respectively. SCADA curtailment of T3 and T12 is required on 80 days per year. The 2019 draft WEDG zero-flicker standard has not been applied.

Further, Chapter 5, Table 5-10 lists 7 properties for cumulative shadow flicker from Glencarbry and Glenough wind farms — H150 is not among them, despite being surrounded by six Carrow turbines within 1,630 m. The single-turbine mitigation (T3 and T12 curtailed) has not accounted for simultaneous contributions from T1, T10, T11, and T14 also within the study zone. The multi-turbine cumulative flicker dose at H150 from all six Carrow turbines has not been quantified.

Ground 4 — Misdescription of South-Group Exceedances in §12.5.3.1.1: "+0.2 to +0.3 dB" Is Incorrect for H150 (+2.4 dB)

EIAR Chapter 12, §12.5.3.1.1 (p.12-48) states: "at 6 m/s the exceedances of the daytime criteria are in the range +0.2 to +0.3 dB." H150's excess is 2.4 dB — not 0.2–0.3 dB. The correct range for the south group at 6 m/s spans approximately +2.3 dB (H151) to +3.0 dB (H161). The narrative in §12.5.3.1.1 systematically understates the magnitude of the exceedance by an order of magnitude, directly undermining the EIAR's significance conclusion. An inspector relying on §12.5.3.1.1 alone would not appreciate that H150 has a 2.4 dB deficit before any curtailment.

Ground 5 — Baseline Noise Survey Methodologically Inadequate: Summer-Only, 38–41 Days, No Monitor at H150

The Appendix 12-3 Baseline Noise Survey departs from best practice in four compounding ways:

Defect 1 — No monitor at H150. Table 2-1 confirms five monitoring locations (A-E at H227, H201, H152, H164, H200). H150 — the closest dwelling to T12 and a named receptor in the developer's own noise exceedance table (Ch.12 Table 12-21) — was not monitored. The nearest monitor is Location C at H152, approximately 93 m north and 51 m east of H150. H150's background noise curve is therefore inferred from a different dwelling on a different topographic alignment.

Defect 2 — Summer-only deployment of 38–41 days. Table 2-2 confirms all five monitors were deployed continuously between 06 June 2024 and 14–17 July 2024 — a single continuous summer-only window of 38 to 41 days per location. No spring, autumn, or winter monitoring was undertaken at any location. Summer leaf-on conditions, crop rustle, and insect activity are documented in the wider acoustic literature to add 8–10 dB(A) to rural background noise levels compared to winter — a fact directly acknowledged in the survey itself, which records "wind generated noise from local foliage" as a primary observed source (App 12-3 §2.1). Background curves derived from a summer-only window systematically overstate background and understate the relative impact of any added turbine noise — particularly at H150 where leaf-off conditions in winter combined with prevailing south-westerly winds will produce the lowest-background, most-acoustically-prominent turbine noise. The IOA Noise Working Group's own consultation record states background noise measurements for larger turbines "should be carried out during two different seasons of the year" — Carrow's survey is a single season only.

Defect 3 — Wind correlation mast >3 km from H150. The single wind measurement mast at ITM 593,211 / 650,916 is over 3 km from H150 and is used to derive standardised 10 m wind speeds for the entire study area, applying a fixed surface roughness of z=0.05 m per IEC 61400-11. H150 sits on a westerly-exposed upland slope at 240 m OD; the proxy mast cannot accurately represent H150's actual wind exposure.

Defect 4 — No published validity counts. App 12-3 §2.2 states "the survey was deemed completed when an adequate number of datasets had been measured" — but neither the per-location validity counts per wind-speed bin, nor the day-vs-night data split, nor the quiet-period filtering retention rate is published in Appendix 12-3. The IOA GPG requires sufficient data points per integer wind-speed bin to define both day-time and night-time background curves; the third-party reviewer cannot verify this has been achieved.

Cumulative effect. The +2.4 dB daytime exceedance at H150 (Table 12-21) is already an admitted exceedance against a 40 dB absolute criterion. It is calculated against a background curve produced by (i) the wrong dwelling, (ii) the wrong season, (iii) a proxy wind mast 3 km away, with (iv) no published validity counts. The true winter quiet-period exceedance at H150 is almost certainly larger than 2.4 dB.

Ground 6 — No Amplitude Modulation Penalty Applied; Reactive Complaint Protocol Only

EIAR Chapter 12, §12.3.2.2.3 concedes no prospective AM penalty is applied. The Appendix 12-9 — Noise Complaint Management Protocol is the only operative mechanism — entirely reactive. H150's home-office and bedroom (centroid ITM X=596,138; Y=649,561) has windows facing SW and NW — both windows are oriented directly into T12 at bearing 264° (W) and T1 at bearing 329° (NNW). Under Ireland's prevailing south-westerly wind regime, T12 is directly upwind of the SW-facing window and T1 operates in T12's turbulent wake at 5.05 rotor diameters NNE, with both turbines' noise propagating toward the receptor's most-used room. Under the IOA AMWG 2016 Reference Method cited in Chapter 12, a 3–5 dB penalty scheme applies where Other Amplitude Modulation is present. No such penalty has been modelled at H150.

Ground 7 — Turbine Model Inconsistency in Chapter 12: Nordex N163 Header, Vestas V162 Sound Power Data Used

EIAR Chapter 12, §12.3.6.2.1 and Appendix 12-4 are titled "Nordex N163" but the Chapter 12 body text confirms: "the noise profile of the Vestas V162 wind turbine has been used." These are different machines with different IEC 61400-11 certified sound power levels. The audit trail between the noise model and the

turbine to be installed is broken. No binding condition ensures the installed turbine's certified SPL will not exceed the Vestas V162 values used in the assessment.

Ground 8 — No Viewpoint or Residential Visual Amenity Assessment at H150 in LVIA (Chapter 14)

None of 15 photomontage viewpoints (VP01–VP15) in Volume 2 Photomontages is at or near H150. The LVIA (Chapter 14) contains no Residential Visual Amenity Assessment for any individual dwelling. The developer's own VP09 (Glencarbry, 750 m from T06) is the only "Significant" outcome in the entire LVIA — at a distance virtually identical to H150's 742 m from T12. VP09's conclusion:

> "turbines [appear] at large scale relative to the landscape and prominent within the views"

is directly applicable by analogy to H150's geometry, yet H150 has no dedicated VP and the LVIA implicitly assumes it is adequately represented by viewpoints at 1.3–2.1 km in different directions.

Ground 9 — Wrong LCA Sensitivity in Chapter 14: "Low" vs Tipperary CDP Class 3 "High Sensitivity to Change"

Appendix 14-2 — LCA Assessment Tables assigns "Low" sensitivity to LCA-17a (Hollyford Hills Mountain Mosaic). The Tipperary County Development Plan 2022–2028, Vol. 3, Appendix 3, Table 5.1 designates LCA-17a as "Class 3 — Sensitive / High Sensitivity to Change" with management objective "Wise Use, Best Choice." Table 2.1 rates wind farm landscape effects for the Foothills architype as "High." The developer provides no reasoned justification in Appendix 14-1 or Chapter 14 for overriding the CDP's primary Table 5.1 classification. Correcting from "Low" to the CDP's "Sensitive/High" across the significance matrix would shift multiple outputs from "Slight"/"Moderate" to "Significant"/"Very Significant," including outputs for receptors near H150.

Ground 10 — No Aviation Lighting Impact Assessment in Chapter 14

EIAR Chapter 14 (all four parts) and Appendix 14-1 contain no assessment of aviation warning lighting despite all 14 turbines at 185 m exceeding the 150 m IAA threshold that mandates warning lights. The Combined Prescribed Bodies Letters confirm the Department of Defence requires fixed red 2,000-candela lights, H24/7, on all turbines. From H150, 14 such lights spanning 106° of the western and northern skyline at distances of 742–1,557 m will be permanently visible throughout every night of the 35-year operational period. The LVIA does not acknowledge this impact, does not model it, and proposes no mitigation.

Ground 11 — Wake-Induced Amplitude Modulation Under Prevailing SW Wind: T12→T1 at 5.05 Rotor Diameters

T1 lies 823 m (5.05 rotor diameters) NNE of T12 at bearing 23° ITM. Under Ireland's prevailing south-westerly wind regime (~50% of annual hours), T1 operates directly inside T12's turbulent wake — squarely within the 5–7 D wake-interaction range documented in peer-reviewed literature. T1 operating in T12's wake produces enhanced blade-loading variability, increased turbulence intensity, and amplified blade-pass amplitude modulation that propagates downwind toward H150. EIAR Chapter 12 does not model this wake-induced AM enhancement at H150. The noise assessment treats each turbine's emission independently; the compounding effect of T1 in T12's wake, with H150 downwind of both, is not assessed.

Ground 12 — Home Worker Occupancy Not Assessed in Noise or Shadow Flicker Chapters; Office/Bedroom Windows SW and NW Facing

H150's home-office and bedroom — at ITM X=596,138; Y=649,561, within 1.5 m of the EIAR coordinate for receptor H150 — is the room in which the occupant spends the largest proportion of waking and sleeping hours. The room has two windows, one facing south-west and one facing north-west. The SW window

looks directly toward T12 at bearing 264° W (742 m, the closest turbine, with admitted +2.4 dB daytime noise exceedance); the NW window looks directly toward T1 at bearing 329° NNW (790 m), T11 at 316° NW, and T14 at 348° NNW. Six of the fourteen turbines are visible from these two windows.

Neither EIAR Chapter 12 (Noise) nor Chapter 5 (Population & Human Health) acknowledges full-time home workers as a distinct vulnerable sub-group. Chapter 5 §5.2.5 explicitly assumes residents may be absent or have curtains drawn during morning shadow-flicker events — an assumption directly contradicted by H150's occupancy and by the window orientation, which means the occupant cannot avoid line-of-sight to the turbines simply by being in their habitual office/bedroom. A full-time home worker at H150 is exposed to noise and shadow flicker for approximately 2–3 times the daily duration of a commuting household, during precisely the periods identified as most adverse, and from precisely the room with most-exposed window orientations. This is a material gap in the EIAR's occupancy and exposure assessment.

Ground 13 — Cumulative Noise, Flicker and Visual Assessment: Cappawhite Absent from App 2-5; No Receptor-Level Cumulative Impact for H150

Appendix 2-5 — Cumulative Impact Assessment does not name Cappawhite Wind Farm (17 turbines, 51 MW, 2.9 km from the proposed wind farm) as a discrete project. Cappawhite is addressed in the cumulative noise model (Chapter 12, under the alternative spelling "Cappagh White") and NIS, but the primary cumulative projects register omits it by name. No cross-disciplinary receptor-level cumulative impact assessment for H150 — combining noise, shadow flicker, visual impact, and ecological impact simultaneously — exists anywhere in the EIAR.

Ground 14 — Hen Harrier Observation 100 m from T12; Inadequate Stage 1 AA; No Stage 2 AA

EIAR Chapter 7 §7.3.6 records a hen harrier carrying prey approximately 100 m from the nearest proposed turbine (T12) in June 2021 — strongly indicative of provisioning for a nearby nest. NPWS confirmed a known hen harrier breeding site north of the wind farm near Hollyford. The prey-carrying bird's S–N flight direction passes through the T12/T1/T10 corridor. The Slievefelim to Silvermines Mountains SPA (004165) is approximately 10 km from the site — within the 10 km maximum foraging range of hen harrier. The NIS §5.1.4 declines Stage 2 AA on the basis of low survey density, relying on a circular argument that dismisses the evidence of the prey-carry observation.

Ground 15 — Golden Plover and Whooper Swan Recorded at Collision Height; Excluded from Collision Risk Model

EIAR Chapter 7 records golden plover (Annex I, Red List) at collision height within 500 m of turbines on all three VP observations, and whooper swan (Annex I; qualifying interest of SPA 004077) at potential collision height 1.3 km from T12. Appendix 7-6 lists neither species in the collision risk model. This is an Appropriate Assessment shortfall under the *Waddenzee* doctrine (CJEU C-127/02).

Ground 16 — Highest Bat Activity at T12 (D11) and T1 (D01); No Pre-Construction Curtailment Commitment

Appendix 6-2 — Bat Report Table 5-6 confirms that detectors D11 (at T12) and D01 (at T1) recorded the highest bat activity on the entire site — including High median activity for common pipistrelle, soprano pipistrelle, and Leisler's bat across multiple seasons. Despite this, no pre-agreed curtailment wind-speed threshold is committed to before commissioning. Curtailment is deferred to post-construction adaptive management, conditional on fatality evidence. This approach is inadequate for Annex IV species (Nathusius' pipistrelle) and for Leisler's bat at demonstrably peak activity levels.

Ground 17 — H150's Private Well Never Located, Surveyed, or Risk-Assessed; 18 of 28 Trial Pits at "Extreme" Vulnerability Depth

EIAR Chapter 9, §9.5.6 states no private wells are in close proximity, without any field survey. The GSI scoping response in Appendix 2-1 required "a survey of all current wells and water abstractions within the vicinity" — not conducted. Appendix 8-1 — Trial Pit Logs confirm 18 of 28 trial pits encountered bedrock at <3 m — the "Extreme" GSI vulnerability threshold — directly at the turbine locations closest to H150. The ">700 m setback" dismissal in CEMP MM74 is barely applicable at H150's 742 m distance from T12.

Ground 18 — Blasting Controls Inadequate: No PPV Limit at Private Wells, No Pre/Post-Blast Quality Testing

Appendix 4-3 — CEMP §2.3.3.6.2 confirms blasting at borrow pit locations. Vibration controls reference BS 5228-1 for structural impacts on buildings — not on groundwater well infrastructure. No Peak Particle Velocity limit applicable at well heads is specified. No pre-blast or post-blast water quality sampling of H150's well is committed to anywhere in the CEMP or SWMP (Appendix 4-5). This is a material omission given that blasting in fractured bedrock is a documented risk pathway for well-yield disruption and water-quality deterioration.

Ground 19 — No Binding Alternative Water Supply Commitment

H150's private groundwater well is its sole water supply — no mains connection exists. Appendix 4-3 — CEMP contains no commitment to supply alternative water to H150 in the event of well contamination or yield loss. CEMP MM74 is a statement of no-impact rather than a mitigation measure. Loss of H150's well would render the property temporarily or permanently uninhabitable.

Ground 20 — Carbon Payback Period Inflated by Capacity Factor (36% vs SEAI H2 Regional 32%)

EIAR Chapter 11, §11.4.3.1–11.4.3.2 claims a 2.6-year carbon payback using a capacity factor of 36%. The same chapter acknowledges the site is in the SEAI H2 wind region with an associated benchmark capacity factor of 32%. Applying the SEAI regional benchmark to the same 162,241 tCO_2e total carbon loss figure yields an annual saving of approximately 55,939 tCO_2/year and a payback period of approximately 2.90 years — not 2.6 years. The use of a 36% CF rather than the SEAI benchmark inflates annual savings by approximately 12.5% and reduces the stated payback period by approximately 13%, misrepresenting the project's climate contribution. Appendix 11-2 should be reviewed against the SEAI H2 regional capacity factor.

Ground 21 — Ice Throw Not Specifically Assessed for H150 at 742 m from T12

EIAR Chapter 16 references ice throw in the hazard inventory but provides no site-specific calculation of ice throw distance for H150 at 742 m from T12. The generic statement that "all turbines are located in excess of 500m from the nearest dwellings" is factually correct for H150 (742 m > 500 m), but it does not constitute an ice throw risk assessment for the closest receptor. While H150 is likely beyond standard ice throw buffers (1.5 × 185 m = 277.5 m), the quantification has not been completed and the EIAR provides no documented basis for concluding H150 is outside the risk zone.

Ground 22 — Development Plan Designation "Open to Consideration"; Tipperary CDP Sensitivity Rating Incorrect in LVIA

The Planning Report confirms the Tipperary CDP 2022–2028 designates the site as "Open to Consideration" — not Preferred or Priority. This designation requires full demonstration of compliance with all protective standards. The LVIA assigns "Low" sensitivity to LCA-17a despite the CDP's Table 5.1 designating it "Class 3 — Sensitive / High Sensitivity to Change." These two designations — development

plan compliance and LCA sensitivity — are both material considerations that cumulatively indicate a higher burden of proof on the developer. Per *Coolglass Wind Farm Ltd v An Coimisiún Pleanála* [2026] IESC 5, the s.15(1) Climate Act duty does not override this burden.

Ground 23 — Coolglass [2026] IESC 5 Climate Duty and Proportionate Balancing

The Supreme Court in *Coolglass Wind Farm Ltd v An Coimisiún Pleanála* [2026] IESC 5 confirmed a real, outcome-oriented s.15(1) Climate Action Act obligation on An Coimisiún Pleanála — but explicitly held this "does not establish a simple presumptive rule that renewable energy projects must almost always be permitted." The Court required the Commission to genuinely weigh and balance climate objectives against material planning considerations including residential amenity, hydrogeological protection, and setback compliance.

It is acknowledged that the practical outcome of *Coolglass* was to quash An Coimisiún Pleanála's refusal and remit the application for reconsideration, and that proper engagement with s.15(1) on remittal may result in permission being granted in that case. The *Coolglass* framework, however, cuts both ways: the same obligation of genuine balancing that may favour renewable projects in some cases requires the Commission, in others, to attach proper weight to admitted exceedances and material planning concerns when they arise from the developer's own EIAR. This submission identifies admitted noise exceedances, admitted shadow flicker exceedances, effective setback line proximity, inadequate well protection, absence of RVAA, and incorrect LCA sensitivity — each constituting a material planning consideration capable of grounding refusal under a properly conducted *Coolglass* balance. The Commission is respectfully asked to undertake that balancing exercise, treating these grounds as genuinely counterweighting the project's energy output rather than as matters to be displaced by a presumption that *Coolglass* expressly rejected.

Ground 24 — Decommissioning Bond Not Quantified in the EIAR

Appendix 4-6 — Decommissioning Plan provides no financial bond amount, no decommissioning cost estimate, and no financial security mechanism. All financial quantification is deferred to planning conditions. Decommissioning a 14-turbine, 185 m tip-height wind farm — involving blade removal, tower deconstruction, foundation breaking, cable removal, and land restoration — at current cost rates represents a substantial liability. Without a quantified, secured bond, future decommissioning costs could fall to the State. The decommissioning process also represents a second construction-phase risk event for H150's well at approximately 2064–2065.

Ground 25 — Failure to Assess Amber-Listed Hirundines (Barn Swallow & House Martin) Despite Confirmed On-Site Presence

Barn Swallow (*Hirundo rustica*) and House Martin (*Delichon urbicum*) are both recorded by the developer's own ornithologists as present on site during the breeding season, yet neither species is assessed for impact anywhere in the application.

Recorded presence. Appendix 7-2 Species List, Table 7-2-2 lists both species under "Non-target species recorded during surveys". Appendix 7-3 Summary Data, Table 7-3-8 records Barn Swallow present April–September across multiple years and House Martin present May–September — confirming an active breeding-season presence overlapping the proposed construction and operational windows. Appendix 7-4 Survey Data (record K.052, VP3, 22/09/2021) records swallows actively engaging with a Kestrel at 150 m above ground level — i.e., foraging within the rotor-swept zone of the proposed 185 m tip-height turbines.

Conservation status. Both species are Amber-listed under Birds of Conservation Concern in Ireland 4 (2020-2026), per the BirdWatch Ireland and Biodiversity Ireland species profiles for Swallow and House

Martin. House Martin has been added to the UK Red List (2020) on the basis of declines and remains a species of European Concern. Both depend on rural farm buildings, sheds, barns, and domestic eaves for nesting — exactly the building stock surrounding the proposed turbines, including the eaves and outbuildings of H150 and neighbouring dwellings, where the occupant of H150 confirms active nesting colonies of both species.

The methodological loophole. EIAR Chapter 7 §7.5.2, Table 7-3, assigns importance levels as follows: Annex I species are "High" or "Medium"; Red-listed BoCCI species are "Medium"; "Any other species of conservation interest, including species on BirdWatch Ireland's Amber List of Birds of Conservation Concern" is rated "Low". The chapter then progresses focused species accounts only for species rated Medium or higher, scoping Amber-listed species out of any detailed collision risk, displacement or habitat-loss assessment. The result: two Amber-listed aerial-feeding hirundines that are confirmed present in rotor-swept airspace on site are given no individual species account, no collision risk model, no breeding survey of nest structures, and no mitigation. Neither species is mentioned anywhere in Chapter 6 (Biodiversity) or Chapter 7 (Ornithology).

Why this is material. Hirundines are aerial-pursuit insectivores that forage in the lower atmospheric layer (frequently 30–200 m AGL) — precisely the operational rotor-sweep zone of the Vestas V162 / Nordex N163 machines (35 m hub-to-blade-tip lower edge; 185 m upper). The international wind-turbine collision literature consistently identifies hirundines as an at-risk insectivorous group, in part because insect swarms aggregate around the warm nacelle. Confirmed on-site presence + confirmed in-rotor-zone behaviour + Amber BoCCI status + a known building-nesting population in the immediate dwelling cluster (H150 and surrounding farms) is precisely the combination that should trigger a focused species assessment under any defensible reading of the EIA Directive's "likely significant effects" test.

Information the EIAR should have contained but does not. (i) A breeding-season survey of farm buildings, outbuildings, sheds and domestic eaves within 1 km of each turbine, recording active hirundine nests by GPS; (ii) a collision risk model for both species using observed flight heights and project-specific avoidance rates; (iii) an assessment of cumulative loss of foraging airspace between Carrow and the operational Cappawhite wind farm; (iv) a mitigation strategy specifying construction-phase nest protection and operational-phase monitoring of nesting structures within 500 m of turbine bases.

Ground 26 — Material Defects in the Community Engagement Programme: Stated "Every House Within 1.5 km" Methodology Not Delivered

Appendix 2-3 — Community Engagement Report sets out the developer's own stated methodology and counts. The Commission is respectfully asked to treat the following discrepancies as material to the procedural validity of the consultation process.

Stated methodology. §2.1 ("Door-to-Door Engagement") states: "Given the rural nature of the area in question and the relatively low density of houses, it was decided that door-to-door consultation would be merited at every house within a 1.5km radius of the Proposed Wind Farm." The report then states that three rounds of door-knocking were carried out — "21–22 March 2024", "26–28 August 2025", and "12–15 January 2026" — with 103 homes visited on each occasion, plus an additional leaflet drop on 12–15 January 2026 advertising the Public Information Event at Annacarty Community Hall on 21 January 2026.

The H150 receptor falls squarely within the stated 1.5 km zone. H150 sits at 742 m from T12 — well inside the 1.5 km radius that, on the developer's own methodology, defined which households were entitled to direct in-person consultation. On the developer's own count of 103 homes, H150 should have been visited on four separate occasions: three rounds of door-to-door consultation (March 2024, August 2025, January 2026), plus the PIE leaflet drop (12–15 January 2026).

Material defect — H150 received no door-to-door call. The occupant of H150 — a full-time remote-working resident present at the dwelling during normal working hours throughout each of the

consultation windows — confirms that no representative of the developer, Community Liaison Officer, or any agent of the project called to the property on any of the four stated dates, nor on any other date. The only engagement the H150 occupant has received in respect of this application is attendance at the open Public Information Event at Annacarty Community Hall on 21 January 2026 — a public meeting attended by self-selection, not the targeted in-person door-knock that the methodology in §2.1 mandates for every dwelling within 1.5 km.

Three implications follow. First, the developer's repeated claim that "103 homes were visited" on each round (App 2-3 §2.1) is, on the evidence of at least one named receptor within the 1.5 km zone, factually overstated. Second, the developer's repeated representation that the consultation programme "elicited positive feedback from individuals, households and groups" (App 2-3 p.9) cannot be invoked as evidence that the closest dwellings to the largest impact turbines have been consulted — H150, the dwelling with the +2.4 dB admitted noise exceedance, the 742 m setback, the 50 min/day shadow flicker, and the private groundwater well, was not visited in person at any of the three stated rounds. Third, the absence of door-to-door engagement at H150 means the EIAR Chapter 5 "Population and Human Health" baseline contains no record of the occupant's full-time home-working status, the private groundwater dependence, the office/bedroom orientation, or any of the site-specific characteristics that should have been gathered during the very consultation process the developer has represented as comprehensive.

Why this is material to the planning decision. The EIA Directive (2014/52/EU) and the Aarhus Convention require that the affected public is given early and effective opportunity to participate in the environmental decision-making process. Where the developer has set its own consultation standard ("every house within a 1.5 km radius"), advertised that standard to the Commission as evidence of procedural rigour, claimed completion of that standard across three rounds and 103 homes per round, and that standard has demonstrably not been met at the dwelling that is the developer's own most-impacted named receptor (H150), the procedural foundation on which the EIAR is laid is materially compromised.

Ground 27 — Failure to Assess Red-Listed, Wildlife Acts–Protected Barn Owl: Contemporaneous Resident Observation Within 1.2 km of T12 Contradicts the Developer's 5.9 km Reliance

Barn Owl (*Tyto alba*) is a Red-listed species under Birds of Conservation Concern in Ireland 4 (2020-2026) and is statutorily protected under the Irish Wildlife Acts 1976 and 2000. Notwithstanding this dual high-protection status, the developer has not undertaken a Barn Owl-appropriate survey, has not designated the species as a Key Ornithological Receptor, and has relied on materially outdated and now factually incorrect distance data.

The EIAR's own records of Barn Owl. EIAR Chapter 6 Biodiversity §6.3.1 tabulates Barn Owl as "WA, RL" — Wildlife Acts protected and Red-listed — recorded in hectads R84 and R94. EIAR Chapter 7 §7.3.2, Table 7-6, records Barn Owl as a confirmed breeding species in hectads R84 and R94 (the Carrow site lies within R94 and R95; the cable route extends into R84). Table 7-7 records Barn Owl as present in the wintering season in R65, R75 and R94. Section 7.3.2 expressly concedes that the farmland in the southern portion of the Proposed Wind Farm site lies in "an area of medium sensitivity with regards to … barn owl".

The 5.9 km claim is based on 16-year-old data. EIAR Chapter 7 §7.3.5 states: *"Barn owl were recorded in R84 and R94 during the barn owl project in 2009. The closest record of barn owl was 5.9km from the nearest proposed turbine (T12)."* This single sentence is the entirety of the spatial Barn Owl evidence base on which the EIAR relies, and it is drawn from a national database snapshot 16 years old at the date of the application.

Contemporary resident observation directly contradicts the 5.9 km claim. The objector, a full-time resident of H150, confirms direct personal observation of Barn Owl activity at H150 on multiple occasions in the past few years, typically at dusk or shortly after — flying close by H150 and resting in trees alongside the public road immediately adjacent to H150. One such observation location is at

approximately 52.592391°N, 8.051510°W (ITM X=596,510 Y=649,014). In February 2026, the objector photographed a Barn Owl roosting at dusk in a field-boundary tree on the road verge directly adjacent to dwelling H150 (ITM X=596,138; Y=649,561; 52.5973°N, 8.0570°W). That photograph is reproduced at Appendix A to this dossier. The roost tree is on the same hedgerow line that has subsequently been partially cut back since the Carrow Wind Farm application was lodged in March 2026 (see Section 5.3). The photograph is offered as direct, contemporaneous evidence that Barn Owl is actively using the airspace and roost habitat at H150 itself, not merely the wider hectad. Computed distances from the road-side sighting location at 52.592391°N, 8.051510°W to each proposed turbine using the developer's own ITM coordinates in EIAR Chapter 4 Table 4-1 are:

#	Turbine	Distance from sighting	Bearing
1	T12	1,202 m	293° WNW
2	T1	1,451 m	327° NNW
3	T10	1,692 m	354° N
4	T3	1,752 m	295° WNW
5	T11	2,050 m	319° NW
6	T14	2,184 m	341° NNW
7	T13	2,233 m	295° WNW
8	T2	2,499 m	331° NNW
9	T4	2,696 m	298° WNW
10	T5	3,034 m	311° NW

The sighting is 1.2 km from T12 — i.e. approximately five times closer than the developer's stated "closest record". Eight turbines lie within 2.5 km of the sighting; this is well within the typical 1–3 km Barn Owl foraging range from a nest site. The sighting is also only 661 m from H150, indicating that the Barn Owl is using airspace and field margins immediately surrounding the dwelling cluster that contains the developer's own most-impacted named receptor.

Three independent methodological defects in the EIAR's treatment of Barn Owl.

Defect 1 — No nocturnal survey was carried out. The ornithology survey programme described in §7.2.3.2 consists of daytime vantage-point watches following SNH (2017) raptor methods, designed and conducted between April 2021 and May 2023. The schedule "spread over the full daylight period, including dawn and dusk watches" still does not extend into true nocturnal hours. Barn Owl is an almost exclusively nocturnal hunter (active typically from one hour after sunset to one hour before sunrise). The developer's survey methodology was therefore structurally incapable of detecting Barn Owl activity, regardless of the actual population density on site. This is confirmed by the survey output: across all five vantage points, two breeding seasons, two non-breeding seasons and several hundred VP watch-hours, the raw survey records in Appendix 7-4 Survey Data contain zero Barn Owl observations. The conclusion that Barn Owl is not present is an artefact of the survey design.

Defect 2 — No nest-cavity survey of buildings was carried out. Barn Owls in Ireland predominantly nest in farm buildings, outbuildings, ruins, derelict structures, and church belfries. No survey of such structures within the proposed development footprint or its 1 km hinterland is reported in Chapter 7 or any appendix. This is the standard Barn Owl baseline method recommended in BirdWatch Ireland's Barn Owl Project guidance and adopted in defensible Irish wind-farm EIARs since at least 2015.

Defect 3 — Barn Owl is not designated a Key Ornithological Receptor. Chapter 7 §7.2.4.2 defines a KOR as a species occurring within the study area for which a pathway for a significant effect can be identified, and limits subsequent collision risk modelling, displacement assessment and mitigation to the KOR list. Barn Owl is omitted from the KOR list. As a result, no Collision Risk Model is run for Barn Owl, no displacement assessment is undertaken, and no operational mitigation, monitoring or condition specific to Barn Owl is proposed. The single Barn Owl reference in the mitigation section (§7.6.3) is incidental: the chapter notes that the four Kestrel nest boxes proposed at the margins of the site "could be used by barn owl and long-eared owl". This is mitigation by accident rather than by design.

Three under-assessed risk pathways. Barn Owl is exposed to three well-documented wind farm risks not modelled in the EIAR: (a) low-altitude hedgerow and field-margin hunting at heights of 1–3 m AGL with occasional ascent into the lower rotor sweep zone (35–100 m AGL), generating a collision risk profile distinct from the diurnal raptors actually modelled in Appendix 7-6 Collision Risk Modelling; (b) construction-phase displacement of breeding pairs nesting in farm buildings within 500 m of T12, T1, T11, T14 due to lighting, vehicle movements and percussive blasting; and (c) secondary rodenticide poisoning during the construction phase, where temporary elevations in rodent activity associated with site clearance prompt landowner anticoagulant use — a recognised threat to Barn Owl recovery in the Irish midlands.

Why this is material. A Red-listed, Wildlife Acts–protected species, confirmed-breeding in the hectad containing the site, with contemporaneous direct resident observation within 1.2 km of T12, has been excluded from the KOR analysis on the basis of an outdated 2009 NPWS extract that is on its face no longer accurate. The EIA Directive's "likely significant effects" test cannot be met by a survey methodology incapable of detecting the species, supported by reference data 16 years old. The current submission requests that the Commission, in light of the resident's contemporaneous observation, exercise its statutory power under section 7 of the Planning and Development (Strategic Infrastructure) Act 2006 (as substituted) to require the developer to undertake the additional Barn Owl-specific surveys set out below before any decision is made on the application.

- (a) A dedicated nocturnal Barn Owl survey using BTO/BirdWatch Ireland Barn Owl methodology, including listening points, nest-cavity inspection and dusk/dawn watch-points, conducted across two complete breeding seasons covering all dwellings, farm buildings, outbuildings, ruins and structures within 1 km of each proposed turbine and along the entirety of the cable route corridor;
- (b) A species-specific Collision Risk Model for Barn Owl using Band model parameters appropriate to nocturnal low-altitude raptors, with the contemporary resident observation at approximately 52.592391°N, 8.051510°W treated as the new "closest record" baseline in place of the outdated 2009 figure pending verification by the new nocturnal survey;
- (c) A pre-construction nest-survey condition requiring that no T12, T1, T10, T11, T13, T14, T2, T3 turbine base or cable trench shall be opened until a qualified ornithologist has confirmed and recorded the location of all active Barn Owl nests within 500 m, with breeding-season exclusion periods (March–August inclusive) where active nests are confirmed;
- (d) Construction-phase lighting and blasting controls — downward-shielded site lighting, blasting restricted to daylight hours outside the breeding season, and a 200 m buffer around any confirmed active nest;
- (e) A construction-phase rodenticide protocol prohibiting the use of second-generation anticoagulant rodenticides within 500 m of any active Barn Owl nest and requiring landowner liaison on rodent management for the duration of the construction window; and
- (f) Annual post-commissioning Barn Owl monitoring by acoustic detection and nest-occupancy survey across the same 1 km hinterland for the operational life of the wind farm, with results reported to An Coimisiún Pleanála and NPWS, and a binding curtailment trigger if breeding pair displacement is confirmed.

SUMMARY OF PRAYERS FOR RELIEF

This objection respectfully requests that An Coimisiún Pleanála:

1. Refuse planning permission for the Carrow Wind Farm REDIII application (Case 324164) on the grounds of admitted noise exceedance at H150 (Ground 1), effective setback breach at T12 and T1 (Ground 2), admitted shadow flicker exceedance at H150 (Ground 3), inadequate AA for hen harrier (Ground 14), failure to conduct a field survey of H150's private well as required by GSI scoping response (Ground 17), absence of a viewpoint or RVAA at H150 (Ground 8), and reliance on a 16-year-old NPWS extract for Barn Owl that contemporaneous direct resident observation within 1.2 km of T12 demonstrates to be factually incorrect (Ground 27).

2. Alternatively, if permission is granted, the Commission should attach conditions requiring all of the specific reliefs set out in Grounds 1–27 above, including in particular:

- Manufacturer-verified curtailment modes at T12 and T1 with stated dB reduction values
- Independent acoustic monitoring at H150 within six months of commissioning
- Shadow sensor installation at H150 with annual compliance reporting
- Pre-construction field survey of H150's private well (quality + yield baseline)
- PPV monitoring at H150's well head during all blasting events
- Binding alternative water supply guarantee enforceable against the developer
- Photomontage from H150's location and a Residential Visual Amenity Assessment benchmarked against the developer's own VP09 "Significant" residual visual effect at 750 m
- Revised LVIA significance outputs using Tipperary CDP's "Class 3 — High Sensitivity" rating for LCA-17a
- Stage 2 Appropriate Assessment for the Slievefelim to Silvermines Mountains SPA hen harrier qualifying interest
- Pre-agreed bat curtailment algorithms at T12 and T1 operational from commissioning
- Quantified and secured decommissioning bond
- Building-nesting hirundine survey within 1 km of each turbine, with species-specific collision risk model for Barn Swallow and House Martin
- Production of contemporaneous CLO door-knock logs and a reopened consultation window with mandatory in-person engagement at every dwelling within 1.5 km that was not visited
- Dedicated nocturnal Barn Owl survey across two breeding seasons, species-specific Collision Risk Model, pre-construction nest survey condition, construction-phase lighting/blasting and rodenticide controls, and annual post-commissioning Barn Owl monitoring

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This dossier was prepared for submission to An Coimisiún Pleanála on or before 27 May 2026 in respect of Case Reference 324164 (Carrow Wind Farm, REDIII Application under SI 274 of 2025). All factual claims are anchored to specific documents published by the developer at pleanala.ie/en-ie/case/324164. All EIAR quotations are taken verbatim from those published documents. The previous "EIAR access gap" designation has been removed throughout; the developer has in fact published the complete 86-document case file and it has been reviewed in full in preparing this submission.

Prepared: 27 May 2026 Primary receptor: H150, 52.5973°N, 8.0570°W, ITM X=596,138 Y=649,561, Co. Tipperary/Limerick

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APPENDIX A: PHOTOGRAPHIC EVIDENCE OF BARN OWL AT H150 (FEBRUARY 2026)

In support of Ground 27 — Barn Owl Reliance on 16-Year-Old NPWS Extract

The following photograph was taken at dusk in February 2026 by one of the objectors, Carol Carew, on the public road verge immediately adjacent to dwelling H150 (ITM X=596,138; Y=649,561; 52.5973°N, 8.0570°W; elevation 240 m OD; Co. Tipperary). The image shows a Barn Owl roosting on a branch of a mature field-boundary tree directly across the road from H150. The pale, upright form of the owl is visible against the dark foliage in the upper-middle portion of the frame. The objector identifies the bird as a Barn Owl (*Tyto alba*) on the basis of repeat sightings at and around this exact location over the past several years, the dusk/early-night activity window, the pale plumage tone, and the roost-tree position in field-boundary habitat — all consistent with the species' Irish ecology.

Photograph: dusk, February 2026, by Carol Carew, joint owner and occupier of H150 (with Brid Carew). Location: road verge at H150, ITM X=596,138; Y=649,561 / 52.5973°N, 8.0570°W / Co. Tipperary. The roost tree is on the same hedgerow line subsequently partially cut back after the Carrow Wind Farm application was lodged in March 2026 (see Section 5.3). The image is offered as direct, contemporaneous resident evidence of Barn Owl roost activity at H150 itself, contradicting the EIAR Chapter 7 §7.3.5 reliance on a 2009 NPWS extract stating that the closest record of Barn Owl was 5.9 km from the nearest proposed turbine — a record now 16 years out of date. Barn Owl is a Wildlife Acts–protected and Red-listed species. In the event that the Commission requires further verification of species identification, the objector is willing to make the original image file available for inspection by a qualified ornithologist and to provide a statutory declaration as to the location, date and circumstances of the photograph. The

Commission is asked to require the dedicated nocturnal Barn Owl survey, species-specific Collision Risk Model, pre-construction nest-survey condition and operational mitigation set out in Ground 27 before any decision is made on this application.

ABP Case: 324164 | Carrow Wind Farm REDIII Application