
GORTLOUGHRA WIND FARM LIMITED

**GORTLOUGHRA WINDFARM,
AN TSEITHE BEAG (SHEHY BEG),
GORTLOUGHRA, CLOGHBOOLA AND
INCHINROE, CO. CORK**

RESPONSE REPORT FOR REQUEST FOR FURTHER INFORMATION (RFI)

August 2026

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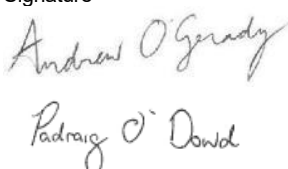
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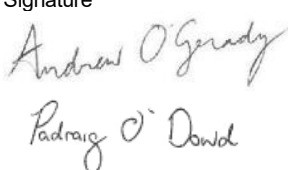
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GORTLOUGHRA WIND FARM LIMITED

GORTLOUGHRA WINDFARM,
AN TSEITHE BEAG (SHEHY BEG), GORTLOUGHRA,
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RESPONSE TO RFI FROM AN COMISIÚN PLEANÁLA

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Appendix 1: Ecological Appendix (Response Report to An Coimisiún Pleanála RFI; Bats (and other survey data) 2026; Invasive Species Management Plan; Kerry Slug Derogation Licence Application; and Whooper Swan Acoustic Survey Report)

Appendix 2: ACP Correspondence Re Soils & Geology Point 1

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INTRODUCTION

On behalf of our Client, Gortloughra Wind Farm Limited, we hereby submit information in response to An Coimisiún Pleanála to their Request for Further Information (RFI) issued on 5th October 2025. The RFI consisted of a total of 8 main points, the responses to which are outlined in this report.

An application was submitted an application to Cork County Council on 20th March 2025 (Cork County Council Ref: P25/00142) for an eight-turbine wind farm, met mast and all associated infrastructure, located in the townlands of An tSeithe Beag (Shehy Beg), Gortloughra, Cloghboola and Inchinroe, Co. Cork. Cork County Council issued a decision to refuse planning permission on 14th May 2025. We therefore made a first party appeal on behalf of our client on 10th June 2025 to An Coimisiún Pleanála (ACP). We received an RFI dated 5th October 2025 from ACP.

Planning permission is being sought by the Developer for:

- Erection of eight wind turbines with an overall ground to blade tip height of 175 m consisting of a rotor diameter of 150 m; and a hub height of 100 m.
- Construction of permanent Turbine Hardstands and Turbine Foundations.
- Construction of one Temporary Construction Compound with associated temporary site offices, parking areas and security fencing.
- Installation of a Meteorological Mast with a height of 100m.
- Development of one on-site Borrow pit.
- Construction of new permanent internal site access tracks and upgrade of existing internal site access roads to include passing bays and all associated drainage infrastructure.
- Development of a permanent internal site drainage network and sediment control systems.
- All associated underground electrical power and communications cabling connecting the wind turbines to the on-site substation.
- Biodiversity enhancement measures.
- Recreational community improvements including the erection of 4 No. permanent information boards relating to cultural heritage and upgrades to amenity tracks across the site.
- All associated site development works.

A 10-year planning permission and 40-year operational life from the date of commissioning of the entire wind farm is being sought.

The Planning application and EIAR also assesses the construction of an 110 kV On-site Substation and Control Building and 2 no. GCR Options along public roads:

- Option A: Dunmanway 110 kV substation or
- Option B: Carrigdangan 110 kV substation.

While not part of the planning consent for this planning application, this EIA also assesses the works at 18 No. locations along the TDR from Port of Cork to Site and the underground Grid Connection Route Options from the Site to either the Dunmanway or Carrigdangan 110 kV Substations.

Point 1 – Biodiversity (Including Ornithology)

Point 1 states:

“Habitats

- 1. You are required to provide an updated Habitat Map (EIAR Figure 6.8) based on data collected from additional survey and monitoring stops undertaken as part of the appeal. This map should be at an appropriate scale to allow for clear identification of habitat classification. The turbines shall also be correctly numbered as per the submitted layout drawings.*
- 2. In terms of the updated vegetation survey please provide justification/ rationale on how survey methodology aligns with Perrin 2014 (NPWS, IWM 79) upland survey guidelines.*
- 3. Provide an updated table of habitat loss/ damage showing the amount (quantitative) of habitats (including Annex 1) directly and indirectly impacted.*
- 4. Provide greater clarification on what does/ doesn't conform to Annex I habitat and clarify how much Annex is directly/indirectly impacted. The language in the appeal document isn't definitive in referencing habitat which isn't "excellent quality/example of Annex" but it doesn't conclude whether its Annex I or not.*
- 5. In terms of the habitat mitigation being proposed, you are required to provide an assessment of confidence in the effectiveness of the restoration measures proposed.”*

Response

- Figure 6.8 has been updated to provide a series of habitat map sheets (Habitat Map Sheet 1 to 15 in **Appendix 5**). All monitoring stop locations are illustrated on the Habitat Maps. The total extent of habitats, identified as key ecological receptors in the EIAR Biodiversity Chapter, as shown on the Habitat Map series, are set out in Table 2.1 of the Ecological Response Report for Habitat Points 1 – 5 in **Appendix 1**.

In addition to the habitat maps, a series of maps showing the extent of Annex 1 Habitat Condition & Non-Annex 1 habitat occurring within the redline boundary of the Gortloughra Wind Farm have been prepared and are contained in **Appendix 5**. All monitoring stop locations are also illustrated on this additional map series. The total extent of Annex 1 habitats and non-Annex 1 habitat, as shown on the map series, are set out in Table 2.2 of the Response to An Coimisiún Pleanála Further Information Habitat Items 1 – 5 in **Appendix 1**.

The turbines are labelled correctly as per the submitted layout drawings.

-
2. A rationale for the survey methodology has been provided in the Response to An Coimisiún Pleanála Further Information Habitat Items 1 – 5 contained in **Appendix 1**. A key output of the condition assessment is the Annex 1 Habitat Condition & Non-Annex 1 Habitat Map Series, referenced under Point 1 are contained in **Appendix 5**.
 3. Habitat loss calculations can be found in the Response to An Coimisiún Pleanála Further Information Habitat Items 1 – 5 contained in **Appendix 1**. The quantities of habitat loss have been identified in Table 4.1 and Table 4.2 shows the amount of Annex I habitat lost with their conditions.
 4. The Response to An Coimisiún Pleanála Further Information Habitat Items 1 – 5 report contained in Appendix 1 outlines a response to this point. The Annex 1 Habitat Condition & Non-Annex 1 Habitat Map series contained in **Appendix 5**, as referenced under Point 1 above, has been prepared to provide greater clarity on what does/doesn't conform to Annex 1 habitat. Areas considered to be representative of excellent quality and examples of Annex 1 habitat are those that are identified to be in Favourable Conservation Condition. These are shown on Annex 1 Habitat Condition & Non-Annex 1 Habitat Map series contained in **Appendix 5**. The methodology used to identify what Annex 1 habitat condition has been outlined. The extent of Annex 1 habitat and non-Annex 1 habitat that will be directly impacted and indirectly impacted by the proposed wind farm development is quantified under Item 3 above.
 5. A detailed response on the effectiveness of the habitat restoration being proposed is contained in the Response to An Coimisiún Pleanála Further Information Habitat Items 1 – 5 contained in **Appendix 1**. The response outlines the methodology for the confidence assessment and the evidence base for the effectiveness of the measures proposed:
 - Re-turving of heath sods;
 - Heather brash application;
 - Direct heather seed application;
 - Livestock density management; and
 - Fencing controls.

The Response to An Coimisiún Pleanála Further Information Habitat Items 1 – 5 in **Appendix 1** also outlines a confidence matrix in Table 6.1 which outlines the measures, evidence strength, key dependencies, timescales and confidence level.

Bats (and other survey data)

1. *In relation to ecological surveys, CIEEM advice on the lifespan of ecological surveys and reports considers that data over 3 years old may not be valid. An Coimisiún Pleanála requires you to provide a robust justification as to why data may still be valid and/ or provide updated data for bats in particular as the data is from 2020/2021.*

Response

1. A detailed account of the bat surveys undertaken for the proposed development is provided in Appendix 6.2 Volume IV of the EIAR and summarised in the Chapter 6 Biodiversity Volume II of the EIAR. Bat surveys were carried out during 2020 and 2021. In addition to the desktop study, the following surveys were undertaken within the Study Area of the Proposed Development:
 - roost surveys;
 - bat activity (walked transects); and
 - static detector (three survey rounds 2020 and three survey rounds 2021).

All surveys were compliant to SNH (2019) guidelines and NatureScot (2021) guidance.

In addition to this, an updated bat activity survey for Spring/Summer 2026 has been included as in **Appendix 1** of this response. The main purpose of the 2026 surveys was to investigate whether or not significant changes in bat activity have occurred at the site during the time between the completion of surveys in 2020/2021 and 2026. The results of the 2026 surveys are similar to those for the 2020/2021 monitoring in that the dominant activity category for all species detected at the proposed wind farm site is Low to Low/Moderate.

Roost surveys were undertaken in 2020 and 2021. Activity surveys were undertaken in June, July and September in 2020 and again in 2021 as well as Spring and Summer of 2026.

Three rounds of static detectors during April/May, June and September/October 2020 for at least ten nights per round per detector. A further three rounds of static detector surveys were undertaken in April/May, July and August 2021.

The survey types were determined most appropriate to establish a Baseline species assemblage, along with spatial and temporal distribution of species activity within the proposed planning boundary.

Designated Sites protected for bats

No European site designated for bats are located within 15km of the proposed wind farm site boundary. There are no Nationally designated sites within 10km of the proposed planning boundary for which bats are a qualifying feature.

Bat Roost surveys

The cover of broadleaved trees at the proposed site at Gortloughra is low; no large, mature trees were recorded during the site surveys. No trees with suitability as roosting or resting places for bats were recorded at the Site. No dwellings or other buildings are present within the proposed Site at Gortloughra and its environs. Structures present within the Site are limited to five culverts over the small watercourses draining the Site. Three of the culverts did not support any features of potential use by roosting bats. Two of the culverts supported some crevices that would be of potential use by bats but neither culvert had any associated habitat features such as scrub or riparian woodland that would be favoured by roosting bats (Section 4.2.1.2 of Appendix 6.2 of Volume IV of the EIAR). No evidence of bats was observed at any culvert within the proposed site.

Bat Activity Surveys

During the 2020 activity surveys, a total of three species of bats were recorded: common pipistrelle, soprano pipistrelle and Leisler's bat. Typically, low numbers were recorded during 2020 survey. The most commonly recorded species was common pipistrelle, followed by Leisler's and soprano pipistrelle. No bat species were recorded within the site during the three activity surveys conducted across the bat activity survey season in 2021 (See results of surveys in Table 1 (Table 4-3 in Appendix 6.2 of the EIAR).

Table 1: Analysis BatLogger Data - Survey Results

	29/06/2020	23/07/2020	11/09/2020	03/06/2021	24/07/2021	28/09/2021
Common pipistrelle (CP)	5	6	9	0	0	0
Soprano pipistrelle (SP)	0	2	0	0	0	0
Leisler's (Lei)	0	0	3	0	0	0
Total	5	8	12	0	0	0

Bat Activity Surveys

A total of 71 nights of static detector surveys were undertaken across the 3 prescribed windows for monitoring in 2020. There was a total of 49 nights of surveys in 2021.

This is a combined total of 120 nights of surveys across the survey period. During static surveys, a total of nine species of bats were recorded in both 2020 and 2021: common pipistrelle, soprano pipistrelle, Nathusius pipistrelle, Leisler's bat, Natterer's bat, Daubenton's bat, whiskered bat, brown long-eared bat and lesser horseshoe bat. The most commonly recorded species for 2020 and 2021 was common pipistrelle, followed by Leisler's and soprano pipistrelle, with lower levels brown long-eared bat and myotis spp. (Daubenton's bat, Natterer's bat and whiskered bat) detected.

A total of 15 nights monitoring was completed per monitoring point during spring, amount to a total of 120 nights of spring monitoring at the proposed development site. A total of 26 nights monitoring was completed per monitoring point during summer, amounting to a total of 208 nights of summer monitoring at the proposed development site. The combined total number of monitoring nights during the 2026 bat activity year amounts to 328 nights. The species recorded in 2026 were: Myotis species; Leisler's bat; Soprano pipistrelle; Common pipistrelle; Nathusius pipistrelle; Brown long-eared bat; Lesser horseshoe bats (only recorded during spring when 1 no. pass was detected at T4).

The Ecobat analysis of the 2020 results showed all nine of the static detector locations (GL1-GL9) recorded at least one night of high bat activity for at least one species of bat. The species identified as having nights of high activity are Leisler's bat, common pipistrelle, soprano pipistrelle, Daubenton's bat and brown long eared bat. The 2026 surveys identified very low median bat pass per hour for all species at all turbine monitoring points.

During static detector surveys of 2021 a total of eight species of bat were recorded, all of which are the same of the previous (2020) year, excluding lesser horseshoe bat. Furthermore, all nine of the static locations (GL1-GL9) recorded at least one night of high bat activity for at least one species of bat. The species identified as having nights of high activity are Leisler's bat, common pipistrelle, soprano pipistrelle, Daubenton's bat, brown long eared bat and Natterer's bat.

The EcoBat analysis of the 2020 and 2021 results further identified a potential roost for Leisler's bat, common pipistrelle and soprano pipistrelle within the vicinity of the Study Area. Based on the locations of the detectors that recorded these early emergences, the potential roosts for the previously mentioned species are likely beyond, the southeast/ eastern area of the Site. However,

roost assessments carried out in 2020 and 2021 confirmed there are no roosts within or adjacent to the proposed wind farm.

Turbines T02, T03, T06, T08 and T09 are all located within open upland areas of heath and bog. They are distant from any nearby linear features such as forestry edges or streams. T06, in its current location is the closest turbine to a forestry edge, approx. 185m. Static locations GL1, GL9, GL7, GL4 and GL8 2020 and GL2, GL3, GL6, GL8 and GL9 provide representative data of how bats use this open habitat surrounding these turbine locations. The assessments show there is a potential moderate risk for Leisler's bats, a potential low to moderate impact risk for common and soprano pipistrelle and a low impact risk for Nathusius' pipistrelle at these proposed turbine locations in the absence of mitigation, based on this conservative assessment.

Turbine T01, T04 and T05 are located within open upland areas of heath and bog adjacent to first order streams. T05, in its current location, is the closest turbine to a first order stream, approx. 40m from the first order stream. Bat activity along linear features, such as streams, is higher than that of open areas. Static locations GL2, GL8 and GL6 2020 and locations GL1, GL4 and GL5 2021 provide representative data of how bats the first order streams within the Study Area. The assessments show there is a potential moderate impact risk for common pipistrelle, and a potential low to moderate impact risk for Leisler's bat, soprano pipistrelle and Nathusius' pipistrelle at these proposed turbine locations in the absence of mitigation, based on this conservative assessment.

Turbine 7 was located within improved grassland and moved in 2021 boundary between an agricultural field and plantation bog heath. The assessments show there is a potential moderate impact risk for Leisler's bats and common pipistrelle, and a potential low impact risk for soprano pipistrelle Nathusius' pipistrelle at these proposed turbine locations in the absence of mitigation, based on this conservative assessment.

The potential impacts to bats were assessed in sections 6.6.3.1.5, 6.6.3.2.6, 6.6.3.2.10, 6.6.4.4 and 6.6.6 Chapter 6 Volume II of the EIAR. Typical potential effects on bats during the construction and decommissioning phase relate to the direct loss of or disturbance to roost sites supports by buildings and other structures or trees. Given that no roost sites exist within the Proposed Development site, there will be no potential for the construction and decommissioning phase to result in direct effects to bats.

Impacts that may arise during the operation phase relate to collision mortality, barotrauma and other injuries to bats. Analysis of baseline surveys at the Site has found that Turbines T02, T03,

T07, and T09 present a potential moderate risk for Leisler's bats, a potential low to moderate impact risk for common and soprano pipistrelle and a low impact risk for Nathusius' pipistrelle. Turbine T01, T04 and T06 a potential moderate impact risk for common pipistrelle, and a potential low to moderate impact risk for Leisler's bat, soprano pipistrelle and Nathusius pipistrelle.

Detailed mitigation measures were provided in Appendix 6.2 Volume IV of the EIAR and Section 6.7 Chapter 6 Biodiversity Volume II of the EIAR. These included in particular cut-in speeds restrictions and the feathering of blades to prevent 'idling' during low wind speeds for all turbines. As all current turbine locations are in open areas, distant from surrounding forestry edges and treelines (T06 being the closest turbine to a forestry edge with a separation distance of 185m), no tree felling is required within the turbine buffer zones.

The resulting effect of the Development on local bat populations, with implemented mitigation measures, is considered to be a Slight to Imperceptible Residual Negative Reversible Effect and in the Local Context with the favourable conservation status (FCS) of bat species being unaffected and all species confirmed or expected on or near the study areas are predicted to persist.

Conclusion

SNH (2021) guidelines state that pre-application surveys should be carried out within a single calendar year. This must cover a full season of bat activity, typically from spring (April) through autumn. The guidelines also note that if a single year is not possible, surveys can be split over two successive calendar years, but this requires a specific justification. While it is recognised that these surveys are now over 3 years old it must also be noted that two full years of comprehensive SNH (2019/2021) compliant surveys were completed to support the application.

SNH guidelines specify a minimum for 10 nights for each of the three survey windows across a full year of monitoring equating to 30 nights of the surveys in total. NIEA (2024) guidelines specify 30 nights of surveys for a low risk site, 40 nights for a moderate risk site and 50 for a high risk site. A combined total of 120 nights (79 night year 1 and 49-nights year 2) of static detector surveys were undertaken across the survey period which significantly exceeds the requirement in both guidance documents. It must be noted also that both guidance documents specify 1 detector per turbine location. However, for the proposed 8 turbine wind farm 9 static detectors were deployed during both years of surveys.

The Biodiversity Chapter of the EIAR identifies that the bat activity levels with the Site (as a worst case scenario) range from low to moderate and the proposed turbines have been sighted within

areas of expected lower activity (open space), in order to reduce the potential for impact to the bat population of the area. Furthermore, with the implementation of extensive mitigation outlined above potential risk of fatality from collision and/or barotrauma events to foraging and/or commuting high risk species such as pipistrelle species and Leisler's bat have been significantly reduced (Behr, O. et al., 2017).

The assessment has been undertaken in regard to all the latest available guidance and the mitigation proposed include those that have been previously described in guidance relating to windfarms and/or have direct evidence supporting their efficacy at reducing / avoiding impacts.

The resulting impact of the Proposed Development on local bat populations, with implemented mitigation measures, will not affect the favourable conservation status (FCS) of bat species and all species confirmed or expected on or near the Study Areas are predicted to persist.

The 2026 survey confirmed that the activity recorded during 2026 is lower than that recorded in 2020/2021. It highlights that 2020/2021 impact assessment represents a worst-case scenario which can be relied upon to provide a robust assessment of the impact of the proposed wind farm to local bat populations.

Even with the worst-case scenario approach adopted for the 2026 activity categories, those assigned for 2026 fall below the activity categories and associated risk scores assigned to the 2020/2021 data. As such the results of the 2026 monitoring demonstrate that the findings of the impact assessment set out in the 2021 Bat Report continue to be relevant, are representative of a worst-case scenario assessment and can be relied upon to inform a thorough and robust assessment of the potential impact of the proposed wind farm to local bat populations.

Invasive species

- 1. You are required to clarify the presence / absence of Third Schedule invasive species (European Communities (Birds and Natural Habitats) Regulations 2011) within the development footprint. Should a third schedule species be recorded within the proposed windfarm site, the turbine delivery route, or the grid connection, a site specific and project specific Invasive Species Management Plan shall be submitted to An Coimisiún Pleanála.*

Response

It is noted that Section 6.5.6.7 of the EIAR Chapter 6 states "No non-native invasive species were identified within the proposed development site." This should state "No non-native invasive

species were identified within the proposed wind farm site". non-native invasive species have been identified along the proposed turbine delivery route.

Japanese Knotweed occurs along the proposed turbine delivery route.

Rhododendron ponticum and *Prunus laurocerasus* occur along the proposed grid connection route.

Section 6.7.1.2.2 sets out measures for the proper treatment and management of Japanese Knotweed such that the project does not present a risk of spreading this non-native invasive species.

A Site-Specific Invasive Species Management Plan has been prepared and is contained in **Appendix 1**.

Birds

1. You are required to provide scientific justification on the lack of need for nocturnal surveys in view of the recordings of Whooper Swan at Lough Nambrackderg.

Response

The following criteria was utilised to select target species for the current study. Scottish Natural Heritage (SNH) guidance (SNH, 2017) on the assessment of the effects of wind farms on ornithological interests notes that there are four important species lists from which target species can be drawn, as follows:

- Species listed on Annex 1 of the Birds Directive (EC, 2009)
- Red-listed birds of Conservation Concern
- Schedule 1 of the Wildlife and Countryside Act 1981 (not applicable in Ireland) and;
- Regularly occurring migratory species.

As an Annex I species Whooper Swan (*Cygnus cygnus*) were identified as a target species for the ornithology surveys undertaken.

Bird surveys of the study area were carried out over 5 years during the winters of 2019/2020, 2020/2021, 2021/2022, 2022/2023 and 2023/2024, as well as the summers of 2020, 2021, 2022, 2023, and 2024.

The field surveys comprised two main elements; vantage point (VP) watches and targeted distribution and abundance surveys which comprised:

- VP watches undertaken over 5 years at three VPs (winter 19/20, winter 20/21, winter 21/22, winter 22/23, winter 23/24, summer 2020, summer 2021, summer 2022, summer 2023, summer 2024).
- Transect surveys (winter 19/20, winter 20/21, winter 21/22, winter 22/23, winter 23/24, summer 2020, summer 2021, summer 2022, summer 2023, summer 2024);
- Hinterland surveys (winter 19/20, winter 20/21, winter 21/22, winter 22/23, winter 23/24, summer 2020, summer 2021, summer 2022, summer 2023, summer 2024).
- Breeding wader transects (summer 2020, summer 2021, summer 2022, summer 2023, summer 2024).

The total survey effort over the 5-year survey period (5 x summer seasons, and 5 x winter seasons) was 1,147 hours and 9 minutes or 4,129,740 seconds. Thus, the combined survey effort required for all seasons exceeds that required by SNH guidance (SNH, 2025)¹ and the 5 years of surveys is significantly greater than the 2 years of surveys required under this guidance document.

Details of all Whooper Swan observations across all 5 years of surveys are provided in section 7.3.3.4 Chapter 7 Volume II of the EIAR. Throughout the five-year survey period, no records of Whooper Swan within the 500m buffer zone from the proposed turbines were made. Whooper Swan were recorded six times across the five-year survey period during monthly VPs at Lough Nambrackderg. **Error! Reference source not found.** below provides details of these observations. The observations shaded in grey were also recorded as hinterland records.

Table 1: Observations of Whooper Swan during VP surveys recorded outside the site on Lough Nambrackderg over the five years of surveys.

Season	VP number	Date	Number of individuals
Winter 20/21	3	16/10/2020	4
Winter 20/21	3	10/11/2020	4
Winter 21/22	3	05/11/2021	5
Winter 23/24	3	25/10/2023	5
Winter 23/24	3	06/11/2023	2
Winter 23/24	3	04/11/2023	2

¹ NatureScot (2025), *Recommended bird survey methods to inform impact assessment of onshore windfarms*.

No other sightings of Whooper Swan were made during VP surveys across the five-year survey period with no observations in winter 2019/20 or winter 2022/23.

A total of five years of monthly hinterland surveys were carried out between October 2019 and September 2024. The HVPs detailed in Appendix 7.4 Volume IV of the EIAR, were checked regularly across this period. The surveys were carried out in suitable habitats including woodlands, peatlands and wetlands in the area surrounding the proposed wind farm site. This comprised of 33 hinterland vantage points at sites in the surrounding area. These hinterland vantage points (HVP) were chosen as they had suitable habitat for the following target species including Whooper Swan: raptors, waders, waterfowl, swans, geese, barn owl, wildfowl and other waterbirds. Additionally, checks were made in the general area surrounding the Site.

The five years of Hinterland surveys indicate Whooper Swan are present in the surrounding Hinterland, as 72 observations were made across six of the 33 hinterland sites. The full results of all these hinterland surveys are provided in Appendix 7.4 Volume IV of the EIAR. **Error! Reference source not found.** below provides a breakdown of all observations of Whooper Swan recorded across the 33 hinterland sites and the surrounding area outside the wind farm site over the 5 full years of surveys. It must be noted however that a total of 55 of these 72 observations were recorded at sites > 14km from the proposed development. Toon Valley located 14.48km northeast of the proposed wind farm site accounted for 38 of these observations (52.78%) alone. An Gearagh was the second most frequented site with 13 observations. Followed by Lough Allua with 11 separate observations.

Table 2: Whooper Swan record during monthly hinterland surveys conducted between October 2019 and September 2024².

Hinterland Site	An Gearagh	Gougane Barra	Inchisine	Lough Allua	Lough Nambrackderg	Toon Valley	Total per season
Distance and direction	19.85m NE	7.97km NW	16.97km NE	6.19km N/NE	1.08km N	14.48km NE	
Summer 2021	1						1
Summer 2022						1	1
Summer 2023						2	2
Winter 19/20	3			3			6
Winter 20/21	3	1		4	1	7	16
Winter 21/22	2		1		2	8	13
Winter 22/23	2		3	2		12	19

² Table only includes the 6 hinterland sites of the 33 sites surveyed where Whooper Swan were recorded on 1 or more occasions over the 5 years of surveys.

Winter 23/24	2	1		2	1	8	14
Grand Total	13	2	4	11	4	38	72

Over the five-year period Whooper Swan were recorded on 4 occasions at Lough Nambrackderg during monthly hinterland surveys with no observations during winter 2019/20 or winter 2022/23. Two observations were recorded in winter 21/22 both of the same flock of 5 individuals and on the same day the 5th of November 2021 and one each during winter 20/21 (4 individuals) and 23/24 (2 individuals). All four hinterland records were duplicated as VP observations.

The largest flocks were recorded at Toon Valley (14.48km NE) with flock sizes ranging from 61 to 148 individuals recorded. The next highest flock size was recorded at Inchisine (16.97km northeast of the site). The largest flock within 10km of the proposed wind farm site was recorded at Lough Allua (6.19km N/NE) on the 29th of December 2023 where a flock of 14 individuals were recorded. The largest flock at Lough Nambrackderg was a flock of 5 individuals on the 5th of November 2021.

Results of nocturnal acoustic surveys Spring 2024

The Whooper Swan Acoustic Survey Report accompanying this Further Information response presents the methodology and findings of an automated acoustic detector survey undertaken between March and April 2024 to provide supplementary information on whooper swan activity at the proposed Gortloughra wind farm site.

Four AudioMoth automated acoustic detectors were deployed by suitably qualified ecologists from Fehily Timoney in March and April 2024. Detectors were deployed at this time to coincide with the typical passage period for whooper swan (i.e., as they leave for their breeding grounds following the 2023/24 non-breeding season).

To coincide with nocturnal activity periods, detectors were set to record between sunset and sunrise. During each night, detectors recorded data for 595 seconds with 5 seconds to reset between each recording file.

Detectors were checked every two weeks across two recording periods between March and April. During each check, acoustic detector settings were verified to ensure consistency and accuracy between recording periods. The detectors were spaced across the Site to maximise coverage. Further details regarding parameters and locations of the acoustic detectors deployed between March and April 2024 are provided in Table 1 of the Whooper Swan Acoustic Survey Report.

From the four detectors deployed across the survey duration, one indeterminate detection of whooper swan was identified during data analysis. This detection was recorded on 25th March 2024 at 20:10 at Location 2. After manually verifying the detection from the audio recording, the vocalisation was determined to be a potential but unconfirmed whooper swan call (specifically, a single potential call by a single individual). No other whooper swan detections were recorded.

Conclusion

All of the sites where Whooper Swan were recorded were located to the north of the proposed development with no records at hinterland sites to the south of the site. The main clusters of activity were recorded > 14km to the north east of the site (An Gearagh, Inchisine and Toon Valley), which accounted for 73.33%³ of all observations and Lough Allua 6.19km to the NNE of the site (14.67%). These two areas to the northeast accounted for 88.00 % of all observations. Throughout the five-year survey period, no records of Whooper Swan were recorded within the 500m buffer zone from the proposed turbines were made. Whooper Swan were recorded six times across the five-year survey period during monthly VPs at Lough Nambrackderg with flock sizes ranging from 2 to 5 individuals. Over a five year period this equates to just over 1 record per year of the species 1 km north of site.

During the automated acoustic detector survey undertaken between March and April 2024 there was one indeterminate detection of whooper swan at Location 2 (specifically, a single potential call by a single individual). No confirmed whooper swan detections were recorded. This survey covered the spring passage season, when whooper swan activity levels would likely be highest across the Site. The survey findings therefore suggest that airspace over the Site was not subject to frequent nocturnal migratory flight activity by whooper swan, and did not identify any evidence of larger whooper swan flocks passing through airspace over the Site.

Other protected species

1. *Kerry Slug: As disturbance of this species has been identified in the EIAR, An Coimisiún Pleanála will require a valid derogation under Regulation 54 of the EC (Birds and Natural Habitats) Regulations 2011, as amended in line with recent advice from the National Parks and Wildlife Service (Applications for Regulation 54 Derogations for Annex IV species: Guidance for Applicants).*

³ Percentage of all hinterland observations (72) plus the three additional VP observations at Lough Nambrackderg not also recorded during hinterland surveys at the same site (total 75 total unique observations)

Response

1. A derogation licence under Regulation 54 of the EC (Birds and Natural Habitats) Regulations 2011, as amended was submitted to the National Parks and Wildlife Service (NPWS).

DEC Ltd. submitted and sought the derogation licence application on behalf of Gortloughra Wind Farm Ltd. It is noted that DEC Ltd. have held numerous Annex II and Annex IV species derogation licences in past.

The licence application was assessed by the NPWS Wildlife Licencing Unit and was granted by them on 8th July 2026.

Refer to **Appendix 1** for the Kerry Slug Derogation Licence including the terms and conditions of the awarded licence.

Point 2 – Soils and Geology

Point 2 states:

1. *Notwithstanding the site investigations undertaken as part of the Peat Stability Risk Assessment (PSRA) (i.e. peat probes, gouge cores etc.), the Commission has concerns regarding the adequacy of the geotechnical investigations carried out on site. Trial pits should be excavated at turbine locations and other key locations (i.e. borrow pit etc.) to investigate the underlying mineral soil lithology and subsoil/bedrock interface. Noting that the turbine foundations will likely require rock breaking and dewatering, groundwater level monitoring and sampling should also be undertaken to fully establish a conceptual site model for flow regimes (both groundwater and surface water) within the site. Both the Water Framework Directive (WFD) Assessment and the PSRA should be updated to have regard to the further site investigations.*
2. *As detailed in Section 5 of the submitted PSRA, it is stated that loading of the peat during or after construction will be avoided at all times, but particularly at the following locations where a Safety Ratio of below 1.0 was calculated with a traffic loading of 20kP:*
 - *To the west and south of T01,*
 - *East of T02, and,*
 - *North of T08 (Figure 14).*

From a review of the submitted layout plans, it is proposed to provide settlement ponds (SP05 and SP17) at locations proximate to areas of the site that have been attributed a Safety Ratio of below 1.0 (traffic loading of 20kP). You are required to therefore demonstrate that the provision of these settlement ponds will not intensify the potential for slope instability at these locations. If deemed necessary, revised drainage proposals shall be submitted to mitigate any potential risk. Noting, the additional mitigation measures outlined within the PSRA, the updated PSRA shall have due regard to the finalised drainage proposals for the proposed development (see further point below under Hydrology & Hydrogeology). The updated PSRA shall also include the original Laboratory Test Results (Appendix 3) which do not appear to have been enclosed with the application.

3. *It is noted throughout the EIAR that the existing access roads within site will be upgraded from a width of c. 3m to 4.5m. These details have informed the calculations for the excavation required for road construction within Table 2.1 of the Peat & Spoil Management Plan (Management Plan 3 of CEMP). However, the submitted cross sections for the new and upgraded site roads show a minimum surface width of 5m, minimum clearance of 6m and an additional c. 1m on either side for the associated drainage channels. Therefore, it is likely that the calculations for the volumes*

of peat that require excavation and storage are underrepresented. You are required to clarify this discrepancy. You are also required to examine the estimated volumes of excavated peat for the turbine foundations and the temporary and permanent hardstands given the peat depths recorded across the site (i.e. peat depths in excess of 1.6m recorded at T04 and T06).

4. *Noting the estimated volume of material to be extracted from the proposed borrow pit, detailed drawings (including plan and section diagram) of the proposed borrow pit shall be submitted by way of further information.”*

Response

1. EcoQuest Environmental Limited prepared a response to this point which was submitted to ACP on 13th March 2026 via email. ACP acknowledged receipt of the submitted information in an email dated 30th March 2026. The response outlined the geotechnical surveys carried out to date as part of the EIA and that further intrusive surveys are not considered necessary at this stage. A copy of this response is contained in **Appendix 2**.
2. To mitigate any possibility of the ponds being located in an area of localised instability (with a designated Safety Ratio of below 1.0), the two ponds have been moved further from the higher risk areas. SW05 has been moved approximately 55m north and SP17 has been moved approximately 55m west as shown on revised drawings Drawing No. No. 6460-JOD-GLWF-XX-DR-C-0202 and No. 6460-JOD-GLWF-XX-DR-C-0208 included in **Appendix 3**.
3. Drawing No. 6460-JOD-GLWF-XX-DR-C-0401 submitted with the original application was incorrect and should be based on a road width of 4.5m and not 5m. This drawing has been updated to show the correct width of 4.5m and is contained in **Appendix 3**. The Spoil Management Plan has been updated to take account of the side slopes of 0.5m on either side of the new site access tracks and 0.5m on one side of upgraded access roads. The lengths of clean and dirty water drains have been added to the calculations and the totals updated. Additionally, the upgraded roads had been counted as being 4.5m wide in the original calculations, were in reality, spoil will only be generated from the upgrade of existing access roads which will be 1.5m width as shown on Drawing No. 6460-JOD-GLWF-XX-DR-C-0401. The total amount of peat spoil from the revised calculations is 36,188m³ and the amount to be deposited in the borrow pit is estimated to be 4,531m³ leaving an excess capacity of 7,694m³. The peat depths at Turbine Foundation locations and Turbine Hardstands are average depths of peat (ranging from 0.2m to 2.6m) as areas of deeper peat were only encountered in localised areas in the geotechnical surveys undertaken on site. The updated Spoil Management Plan is contained in **Appendix 6**.

4. A plan and sections of the proposed borrow pit has been prepared by Jennings O'Donovan & Partners and is included in **Appendix 3** as Drawing No. 6460-JOD-GLWF-XX-DR-C-0405 titled 'Proposed Borrow Pit Plan & Sections'.

Point 3 – Hydrology and Hydrogeology

Point 3 states:

1. *You are required to submit a set of revised site layout drawings which are overlain by detailed drainage drawings. The site-specific drainage drawings shall include the following information:*
 - i. *Site contours,*
 - ii. *River network (including buffer zone),*
 - iii. *Additional streams and mapped drains as per Figure 9.7A of EIAR.*
 - iv. *Location of drain diversions,*
 - iv. *Existing and proposed culverts (including the specific type of proposed culvert at each location),*
 - v. *Watercourse crossings,*
 - vi. *Silt fences (double/triple fences if necessary),*
 - vii. *Location of check dams,*
 - ix. *Direction of flow within drainage channels,*
 - x. *Settlement ponds*
 - xi. *Overland flow discharge,*
 - xii. *Treated water discharge, and,*
 - xiii. *Location of wheel wash facilities.*
2. *You are required to submit site specific drawings for Water Course Crossing No. 1 (i.e. north of the proposed borrow pit). Noting the site's topography at this location and the extent of works proposed at this location (i.e. new access road), existing and proposed plans and section diagrams shall be submitted. Details of all mitigation measures to protect surface water quality should be included on the submitted drawings.*
3. *From a review of the site layout drawings, it would appear that a number of the proposed settlement ponds are located upgradient of drainage channels located adjacent to the turbine hardstand areas. This includes SP11A at T03, SP23 at T04, and SP18A at T08. You are required to clarify that the location of each settlement pond has been carefully considered to ensure that surface water drainage can be effectively treated and discharged on site.*
4. *It is noted that an extensive area of fill is proposed to the south of the access tracks between SP22 and SP23A. Noting the proximity of the proposed drainage channel to an existing EPA*

mapped watercourse, you are required to submit detailed drawings (including section diagram) to illustrate the relationship between the access track, area of fill, drainage channel and the EPA mapped watercourse. The drawings shall also include details of the proposed mitigation measures i.e. silt fences etc.

- 5. New access tracks are proposed which cross an existing EPA mapped watercourse to the south of T07. From a review of the submitted plans, it would appear that the proposed dirty water drains on either side of this access track discharge directly into this watercourse. You are required to respond to this issue and submit revised proposals which ensure the protection of surface water quality at this location.*
- 6. Noting the results of the surface water monitoring on 3rd June 2023, you are required to provide a rationale for the elevated levels of ammonia recorded on site.*
- 7. You are required to updated your WFD Assessment to have regard to EPA Water Quality In Ireland Report, 2019-2014. Table 4 of the WFD Assessment would appear to be incorrect, whereby Bandon_20 (IE_SW_20B020200) is identified as being "At Risk" of failing to achieve the WFD Objective. The Applicant shall also clarify this discrepancy.*
- 8. You are required to clarify that Lough Nambrackderg has been considered in the WFD assessment using the EPA Guidance for Undesignated water bodies.*
- 9. It is outlined within the Peat and Spoil Management Plan (Management Plan 3 of CEMP) that controlled quantities of peat shall be side-cast adjacent to access roads. Given the location of the existing and proposed internal roads relative to on-site watercourses, you are required to clearly identify the locations where it is proposed to side cast peat and spoil and provide suitable mitigation measures, where necessary, to avoid the siltation of nearby drainage ditches or watercourses.*
- 10. You are required to submit a layout and section diagram of the proposed temporary spoil management areas. Noting their location upgradient of an existing watercourse, the submitted plans shall include details of the proposed mitigation measures to protect surface water quality.*

Response

1. EcoQuest Environmental Limited have updated their layout drawings with the detailed drainage features listed. These are contained in **Appendix 5** of this Report. The Planning Layout Drawings have been updated for the changes in the drainage. Refer to Drawings 6460-JOD-GLWF-XX-DR-C-0200 to 6460-JOD-GLWF-XX-DR-C-0211 contained in **Appendix 3**.
2. A site specific drawing for Watercourse Crossing 01 numbered as 6460-JOD-GLWF-XX-DR-C-0403 has been prepared by JOD and is contained in **Appendix 3**. It is proposed that WC01 will be a culvert of 1000mm width an estimated 390mm freeboard.
3. The drainage layout drawings have been updated so that all settlement ponds have been sited to follow the gradients of the Site, are located downgradient of drainage channels and can be effectively treated prior to discharge via level spreaders or buffered outfalls. These changes are shown on the updated layout drawings 6460-JOD-GLWF-XX-DR-C-0201 to 6460-JOD-GLWF-XX-DR-C-0211 contained in **Appendix 3**.
4. JOD has produced a drawing showing a section through the access track at the location in question, located between T03 and T04. This is included in **Appendix 3** as Drawing No. 6460-JOD-GLWF-XX-DR-C-0404 titled Section Through Access Track Between T03 & T04. The drawing shows the section with the existing ground profile and proposed road profile and the location of the proposed silt fences designed to prevent any potential silt runoff into the watercourse at the bottom of the slope.
5. The access track at that location is an existing access road which will be upgraded. Widening will take place on the upper side of the road to reduce works on the downhill side and reduce the risk of silt ending up in the watercourse. Existing drainage measures on the downslope side of the road will be left in-situ. Drawing No. 6460-JOD-GLWF-XX-DR-C-0209 (contained in **Appendix 3**) has been amended to show the dirty water drains not running towards the watercourse.
6. Section 9.3.9 of Chapter 9 of the EIAR contained in **Appendix 4** has been updated to include the following rationale for the elevated ammonia levels recorded.
A likely potential cause for the elevated ammonia as N concentrations may be due to the peatland soils and organic-rich catchment area. Decomposition of organic matter in peat and soils can release ammonia, especially under anaerobic or reducing conditions. The localised acidic peatland conditions are likely influencing the water quality as limited nitrification in acidic conditions results in ammonia persistence rather than conversion to nitrate. Other local activities such as forestry and sheep grazing (manure or fertiliser) could also influence ammonia

concentrations. Ammonia exceedances were episodic and localised; they were not persistent across all monitoring rounds. Other nitrogen forms (nitrate, nitrite, total N) were generally below detection limits, suggesting ammonia is from organic matter rather than widespread pollution. There is no evidence of significant urban or industrial pollution sources.

7. The Water Framework Directive Report has been updated by EcoQuest Environmental and is contained in **Appendix 6**.

Point number 7 notes that the WFD Assessment should be updated "to have regard to EPA Water Quality in Ireland Report, 2019 - to 2014". This is assumed to be a report title error. It is assumed that the actual report being referred to is the EPA Water Quality in Ireland Report, 2019 - to 2024. The EPA Water Quality in Ireland Report, 2019 - to 2024 was published in October 2025, approximately seven months after the WFD Assessment was finalised in March 2025. Therefore, it was not previously possible for the WFD Assessment to have regard to the EPA Water Quality in Ireland Report, 2019 - to 2024, since this document was not published when the WFD Assessment was prepared. However, the WFD Assessment has been updated in April 2026 to include the latest data from the EPA Water Quality in Ireland Report, 2019 - to 2024.

Point number 7 also notes that "Table 4 of the WFD Assessment would appear to be incorrect, whereby the Bandon_20(IE_SW_20B020200) is identified as being "At Risk" of failing to achieve the WFD Objective." Table 4 of the WFD Assessment did not identify the Bandon_20(IE_SW_20B020200) as being "At Risk" in the WFD Assessment that was finalised in March 2025. The only waterbodies in Table 4 which were identified as being "At Risk" of failing to meet their WFD Objective were the Lee(Cork)_040 (IE_SW_19L030300) and the Caha_020 (IE_SW_20C010700). The Bandon_20(IE_SW_20B020200) was clearly identified as "Not at Risk" in Table 4 of the WFD Assessment. It is considered that this observation is an error. However, since the release of The EPA Water Quality in Ireland Report, 2019 - to 2024 (EPA, October 2025) the status risk status of the Bandon_20(IE_SW_20B020200) has in fact changed to "At Risk". This change is reflected in Table 4 of the updated WFD Assessment which was finalised on 3rd April 2026 and contained in **Appendix 6**.

8. Regarding Lough Nambrackderg, Table 3 in the updated WFD Assessment (**Appendix 6**) has been updated to note that at Lough Nambrackderg is an undesignated WFD lake within the existing Shehy More windfarm site. Multiple paragraphs have been inserted below Table 3 confirming that the lake lies within the Lee, Cork Harbour and Youghal Bay Catchment Area. No rivers, streams or drainage features within the Site boundary are hydrologically connected to Lough Nambrackderg. LiDAR-derived runoff modelling confirms that no proposed turbine

locations, hardstands, borrow pits, access tracks or associated infrastructure fall within the drainage basin of Lough Nambrackderg or the wider Lee, Cork Harbour and Youghal Bay Catchment Area. The Site is hydrogeologically upgradient of receiving waters within the Dunmanus-Bantry-Kenmare Catchment Area and is not hydraulically connected to Lough Nambrackderg. No bedrock or superficial aquifer pathway exists which would facilitate groundwater flow from the Proposed Development area towards Lough Nambrackderg. There is no indirect hydrological linkage via downstream receiving waters that could give rise to secondary or backwater connectivity. Accordingly, and consistent with EPA guidance on the assessment of plans and projects under the Water Framework Directive, Lough Nambrackderg is screened out from further detailed WFD assessment as there is no potential for deterioration in status nor risk of preventing achievement of WFD objectives.

9. JOD has prepared Drawing No. 6460-JOD-GLWF-XX-DR-C-0200 to 6460-JOD-GLWF-XX-DR-C-0210 contained in **Appendix 3** which shows the proposed locations for sidecasting of materials and proposed temporary storage areas near turbine locations. These locations have taken into consideration the slopes on site, the locations of watercourses as well as habitats. The temporary spoil areas have been located on areas classified as 'Unfavourable Bad', 'Unfavourable Inadequate' or 'Non Annex' as classified by the project ecologist Doherty Environmental. The constraint hierarchy from least to highest use the following scale from which temporary spoil areas have been identified as shown on **Figure 1** below:

- 1) Non-Annex
- 2) 4010_Unfavourable bad
- 3) 4010_Unfavourable inadequate
- 4) 7130_Unfavourable bad
- 5) 7130_Unfavourable inadequate
- 6) 4010_Favourable
- 7) 4060_Favourable

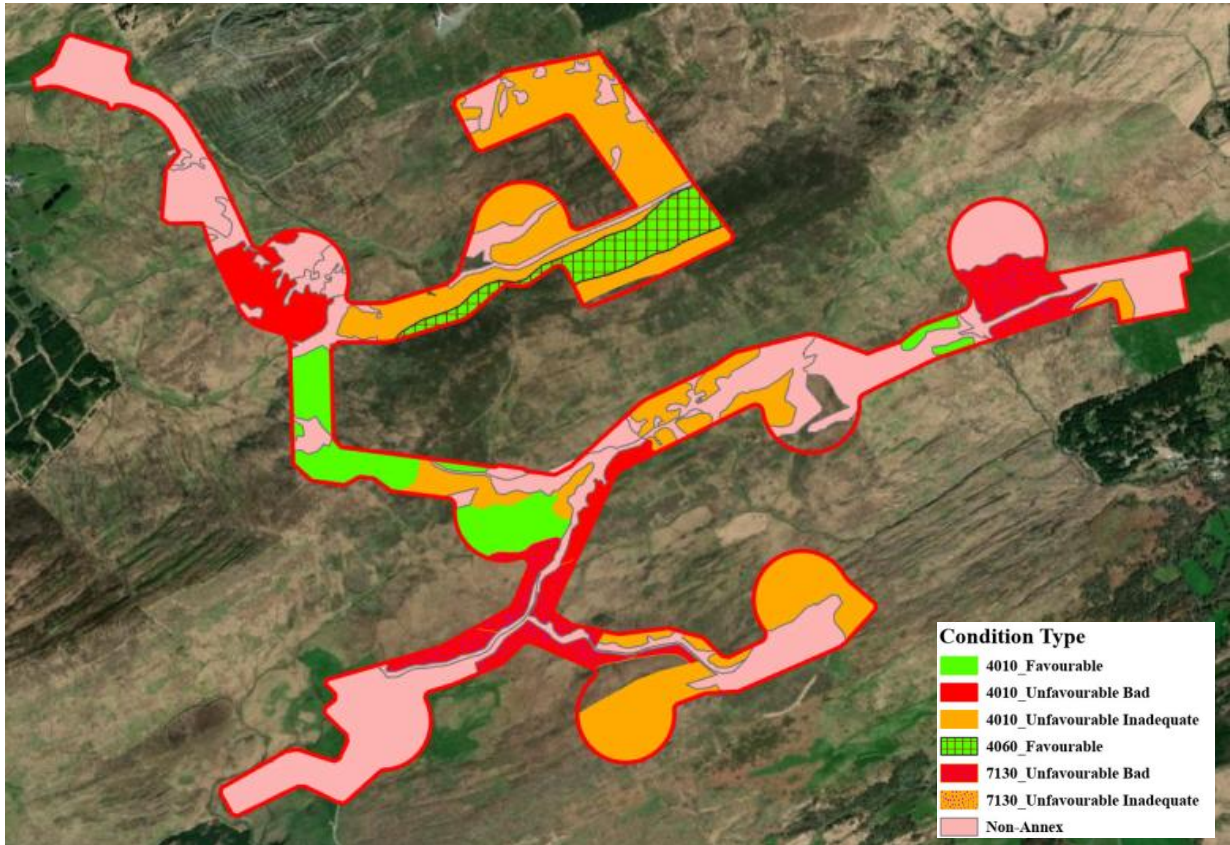


Figure 1: Annex 1 Condition & Non Annex Habitat Areas

10. JOD have prepared drawings contained in **Appendix 3** showing the plans and sections of both proposed temporary spoil deposition areas 01 and 02. Drawing No. 6460-JOD-GLWF-XX-DR-C-0405 shows the plan and sections for the proposed Spoil Deposition Area 01 and Drawing No. 6460-JOD-GLWF-XX-DR-C-0406 shows the plan and sections for the proposed Spoil Deposition Area 02. Silt fences will be constructed downstream of Spoil Deposition Area 01 to prevent silt runoff

Point 4 - Noise

Point 4 states:

1. *Although some reference to Amplitude Modulation (AM) is provided within Chapter 10 (Noise) of the EIAR, you are required to clearly specify the proposed mitigation measures that shall be employed should AM arise.*
2. *Section 10.4.2 (Operational Noise Assessment) of the EIAR refers to the noise contour maps included in Appendix 10.4 for the 8 no. turbines based on a maximum sound power output at a wind speed of 12ms^{-1} at 10 m height. However, Map Nos. 1 and 2 indicate that the turbines are operating at wind speeds of 8ms^{-1} . You are therefore required to clarify these discrepancies.*
3. *In terms of the noise contour maps provided in Appendix 10.4 of the EIAR (i.e. Map Nos. 1 and 2), it is unclear whether the receptors have been correctly identified. For example, the involved landowner (H67) located to the south of T07 is identified as H53 on the noise contour map. You are required to ensure that the identification of receptors is consistent throughout the EIAR and a revised site contour map shall be submitted which clearly identifies each receptor to allow for an assessment of the potential noise impacts during each phase of the proposed development. You are required to also clearly identify the involved landowners on the revised maps.*

Response

1. There are seven properties within 5dB of the 43dB lower fixed limit, when all of the turbines are operating at their maximum noise levels. There is an inherent conservatism in the prediction noise modelling when it is carried out in line with ETSU-R-97 and the IOA Good Practice Guide.

The turbines to be installed on this site are able to operate in various modes. If specific conditions arise that AM is generated, the maximum AM penalty will be up to 5dB. The operator can amend the operating mode of one or more turbines in certain wind speeds and wind directions to sufficiently mitigate the generation of AM or reduce the overall noise level in compensation to achieved set noise limits.

2. Section 10.4.2 of Chapter 10 of the EIAR has been amended to state that the noise contour maps in Appendix 10.4 for the 8 no. turbines are based on a maximum sound power output at a wind speed of 8ms^{-1} at 10m height. The updated Chapter 10 can be found in **Appendix 4** and the updated Noise Contour Map (EIAR Appendix 10.4) can be found in **Appendix 6**.

3. It has been confirmed that the receptors included in the Chapter have been correctly identified in the Noise Chapter. The overall House/receptor list has been updated (refer to the response for Point 8) to reflect the list used in the Noise assessment, which was correct.

Point 5 – Air & Climate

Point 5 states:

“It is noted within Chapter 15 of the EIAR that the tonnes of CO₂ losses as a result of the proposed development will be offset in approximately 16 months (1.3 years) of operation compared to traditional fuel mix. This projected timeline is based on losses of 108tCO₂eq. However, Table 15.8 (Carbon Losses) of the EIAR indicates that the total expected losses equate to 80,224+CO₂. You are therefore required to clarify this discrepancy.”

Response

The correct figure to use for the carbon payback calculation is 80,224 tCO₂e. It should be noted that the figure of 41,108 tCO₂e only covers emissions from the turbine lifecycle (manufacture, construction, decommissioning) whereas the figure of 80,224 tCO₂e as outlined in Table 15.8 of Chapter 15 Air and Climate covers the “Total losses of carbon dioxide” due to the wind farm (which includes losses due to backup, reduced carbon fixing potential, loss of soil organic matter and Dissolved Organic Carbon (DOC) and Particulate Organic Carbon (POC) leaching). The payback calculation should include all carbon losses caused by the development, not just one component of them. Table 15.8 in Chapter 15 Air & Climate has been updated and is included in **Appendix 4** and has been reproduced as **Table 4** below for ease of reference.

Table 4: Carbon Losses (Table 15.8 of Chapter 15)

Origin of Losses	Total CO ₂ Losses (tonnes CO ₂ equivalent)
	Vestas V150 6.0 MW
Turbine manufacture, construction and decommissioning	41,108
Losses due to Backup	35,657
Losses due to reduced carbon fixing potential	669
Losses from soil organic matter	460
Losses due to Dissolved Organic Carbon (DOC) and Particulate Organic Carbon (POC) leaching	2,330
Felling of Forestry	0

Origin of Losses	Total CO ₂ Losses (tonnes CO ₂ equivalent)
	Vestas V150 6.0 MW
Total Expected Losses	80,224

* Carbon sequestration describes the process in which carbon dioxide (CO₂) is removed from the atmosphere and subsequently stored through biological, chemical, or physical processes.

The carbon assessment shows that the proposed 8-turbine (48 MW) wind farm will result in total lifecycle emissions of 80,224 tonnes of CO₂ equivalent (t CO₂e) over its 40-year lifespan, including contributions such as 35,657t CO₂e from (Appendix 15.1 losses due to backup). Once operational, however, the project displaces fossil-fuel electricity on the grid and is estimated (Appendix 15.1 grid-mix of electricity generated) to save 30,464 tonnes of CO₂ per year. The carbon payback calculation is therefore $80,224 \div 30,464 = \mathbf{2.63 \text{ years}}$, meaning the project offsets all of its lifecycle emissions in just under three years which is very common for modern wind farms in Ireland.

Over the full 40-year period, the total avoided emissions are $30,464 \times 40 = 1,218,560$ tonnes of CO₂, and after subtracting the original lifecycle emissions ($1,218,560 - 80,224$), this results in a net saving of 1,138,336 tonnes of CO₂, or approximately 1.14 million tonnes avoided.

In terms of energy generation, Gortloughra Wind Farm estimates total lifetime output at 5,886,720 MWh (Appendix 15.1 Energy output from windfarm over lifetime (MWh), which equates to $5,886,720 \div 40 = 147,168$ MWh per year.

Using a typical household electricity demand of about 4.2MWh per year in Cork, this annual output could supply $147,168 \div 4.2 = \mathbf{35,000 \text{ homes}}$. Although Gortloughra Wind Farm has an initial carbon cost, it repays this within about three years and then provides decades of clean energy, ultimately delivering very substantial net carbon savings while supplying electricity equivalent to tens of thousands of homes.

Point 6 – Roads and Traffic

Point 6 states:

1. *“You are required to submit detailed drawings of the proposed site entrance which includes the following information as detailed in Section 2.2 of the submitted Traffic and Transport Assessment (Appendix 14.1 of EIAR):*
 - i. *Site levels/contours,*
 - ii. *Sightlines,*
 - iii. *Extended overrun area,*
 - iv. *Drainage details,*
 - v. *Location of access gates and fencing, and,*
 - vi. *Location of wheel washing facilities.*
2. *You shall submit a proposed boundary treatment elevation for the northern site access off the L8544 (construction and operational phase).”*

Response

1. JOD have produced drawings as Drawing No. 6460-JOD-GLWF-XX-DR-C-0213 and 6460-JOD-GLWF-XX-DR-C-0214 included in **Appendix 3** of this report which shows the required information for Point 1 above. Drawing No. 6460-JOD-GLWF-XX-DR-C-0213 shows the proposed layout of the site entrance during the construction phase and Drawing No. 6460-JOD-GLWF-XX-DR-C-0214 shows the proposed site entrance arrangement elevation during the operational phase of the Development.
2. JOD has produced a drawing as Drawing No. 6460-JOD-GLWF-XX-DR-C-0215 included in **Appendix 3** of this report which shows proposed boundary treatment for the site access on the L8544 in accordance with the information requested under Point 2 above.

Point 7 – Cultural Heritage

Point 7 states:

1. *“From the on-site observations, there are 2 no. unrecorded features of potential archaeological significance (standing stones) located immediately adjoining the access road between T08 and T09. These features are prominently located along the access road but do not appear to have been identified in Chapter 13 (Cultural Heritage) of the EIAR. You are therefore required to consider the significance of these features in the context of the proposed development and provide suitable mitigation measures given their proximity to the development footprint.*
2. *Within Section 13.3.4 (Turbine Delivery Route (TDR) Work Area) of the EIAR, it is noted that a visual inspection of TDR Location 7 from the adjacent roadside did not reveal any extant traces of the wedge tomb (CO093-052002) at the location recorded by the ASI. As noted by the Planning Authority's Archaeologist, the wedge tomb is clearly visible in the same field, c. 88m to the north-east of its marked location and it is clearly visible from the public roadside in many locations. Therefore, the findings of the your assessment should be updated to reflect the actual location of the Wedge Tomb on the ground.”*

Response

1. Two upright stones situated adjacent to the access road between T08 and T09 were recently erected by the landowner, potentially as marker features along the Shehy Highland Park. The photographs below were taken during archaeological site inspections when the mechanical excavator used to erect the stones was still in the area. The images show both stones shortly after they were erected with recent soil backfilling at their bases and adjacent machine tracks clearly evident. These two stones comprise modern features which are not archaeological in origin and, therefore, no archaeological mitigation measures are considered to be required.



View of western upright stone adjacent to access road between T08 and T09 with recent ground backfilling and machine tracks visible



View of eastern upright stone adjacent to access road between T08 and T09 with recent ground backfilling and machine teeth marks on stone visible

2. As noted by the Planning Authority's Archaeologist, the location of wedge tomb CO093-052002- has been incorrectly recorded by the ASI. The location was subject to an archaeological re-inspection in November 2025, and this confirmed the presence of the extant wedge tomb in lands to the north-west of its recorded position (see Figure 1 and photograph below). The proposed TDR works in this area will entail vegetation trimming along the roadside in the south-west corner of the field (c.105m from the correct location of the wedge tomb) and the use of an existing stone-surfaced plot within a separate field to the west as a TDR load bearing area assuming the existing area has not been reinstated prior to construction of the Development (c. 115m west of the correct

location of the wedge tomb) (Figure 1). If it has been reinstated, works will be similar to those that have been carried out i.e. its current condition.

The site inspection confirmed the correct location of wedge tomb CO093-052002- and also confirmed that proposed TDR load bearing area was previously disturbed by the creation of the existing stone-surfaced area. A review of Google Earth imagery indicates that this creation of this stone surface was carried out in 2020. The use of this previously disturbed area and the roadside vegetation trimming works will not extend within 100m of the correct location of wedge tomb CO093-052002- and no direct effects on this archaeological site will occur. The proposed TDR works in this area will result in a temporary, negligible magnitude, indirect, not significant effect on the wider setting of this archaeological site. The correct location of Wedge Tomb CO093-052002- is situated within private lands at a distance of over 100m from proposed TDR works in this area. Given the disturbed nature of the proposed TDR load-bearing area combined with the distance of the correct location of Wedge Tomb CO093-052002- from the TDR works, no protective mitigation measures, such as the erection of protective fencing around the site, are considered to be required.

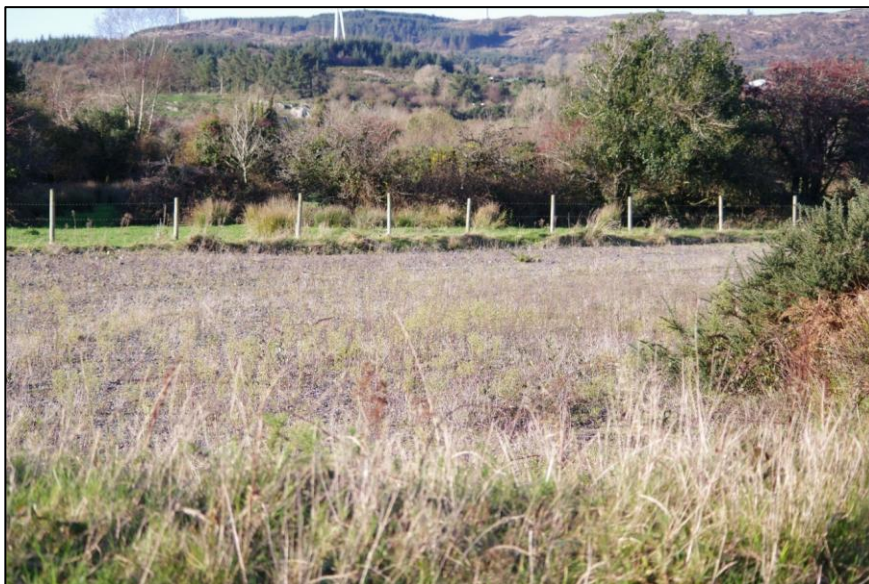
The record location of a fulacht fia site (CO093-052001-) is located within the same field as the wedge tomb and was outside the TDR study area that was reviewed as part of the EIAR. The recorded location of this archaeological site is 25m to the east of the proposed TDR load-bearing area in a separate field to the west (Figure 1). However, the ASI description of this fulacht fia notes that it was located c.100m to the north of wedge tomb CO093-052002- and that it was largely destroyed in 1960 due to road-metalling works. There is no road at the recorded location of the fulacht fia but an access road to a farmhouse is situated c.100m to the north of the correct location of wedge tomb CO093-052002- and is not present on pre-1960 Ordnance Survey maps. In addition, no surface traces of any potential archaeological features were noted during the inspection of the recorded location of this site. The location of fulacht fia CO093-052001- is, therefore, also likely to have been also incorrectly mapped by the ASI, perhaps based on an extrapolation of distance/direction from the incorrectly mapped wedge tomb. In any event, no TDR works are proposed at the location of the fulacht fia marked on the ASI mapping and the proposed works will have a neutral effect on this archaeological site and, therefore, no mitigation measures are considered to be required.



Figure 1: Location of proposed TDR works in relation to correct location of Wedge Tomb CO093-052002-



View of correct location of Wedge Tomb CO093-052002- from Public Road



View of previously disturbed TDR load bearing area

Point 8 - General

Point 8 states:

1. *"As per Section 2.5.2 (Wind Farms in the Area (Cumulative)) of the EIAR it is noted that there are 28 no. operational, permitted and proposed wind farms within 20km of the site. However, only 24 wind farms have been identified in the corresponding table (Table 2.1). In addition, Chapter 11 (Landscape and Visual) notes that there are 18 no. operational, 4 no. consented and 3 proposed wind farms (25 in total) within the 20km study area. You are required to clarify these discrepancies and ensure consistency throughout the entirety of the EIAR.*
2. *A total of 73 no. receptors have been identified in Chapter 10 (Noise) of the EIAR. Chapter 16 (Shadow Flicker) of the EIAR has also identified 73 no. receptors within the shadow flicker Study Area radius. The coordinates of each sensitive receptor and its distance to the closest proposed turbine are listed in Table 16.2 of the EIAR. However, this table identifies a total of 87 no. receptors. Furthermore, up to 83 no. receptors are identified in Figure 1.3 (Receptors within 2km of the Proposed Turbines) of the EIAR. However, there are a number of receptors in this Figure that appear to be omitted and include H16, H24, H25, H32, H43, H51, H52, H53, H54, H55, H56, H57, H58, H59, H63, H64, H66, H73, H74, H75, H79 and H81. You are required to therefore clarify these discrepancies and submit a revised receptor map which clearly identifies the location of each receptor within the identified study area. You are required to ensure that there is consistency throughout the EIAR in terms of the identification of receptors.*
3. *Having regard to this further information request, you are required to provide a summary of all amendments to the EIAR, NIS (if required) and other supporting information. All changes are to be clearly identified. You are also required to submit any errata/corrections to the EIAR, NIS and any other supporting information with its response to this further information request. As above, all changes are to be clearly identified."*

Response

1. JOD has reviewed the list of cumulative wind farm developments and prepared a consolidated inventory of wind farms located within a 20km radius of the Proposed Development. The updated cumulative list identifies a total of 27 no. wind farms within the study area, comprising 20 no. operational wind farms, 5 no. consented/permitted wind farms, and 2 no. proposed wind farms. These developments are summarised in **Table 2** below. Note that there are 26 wind farms plus Maughanaclea Wind Farm which has been proposed since the application was lodged.

The nearest wind farm is the Shehy More Wind Farm, located approximately 0.56km to the North-east, followed by the proposed Maughanaclea Wind Farm, located approximately 1.99km to the South-west of the Proposed Development.

The cumulative wind farm locations, together with their status, turbine numbers, and distances from the Proposed Development, are illustrated on the updated **Figure 2.1** in **Appendix 5**. The cumulative baseline presented in **Chapter 2** of the EIAR (**Table 2.1**) has been updated to reflect the revised dataset provided in **Table 2** below.

Table 2: Cumulative Wind Farms within 20km

	Wind Farm	Status	No. of Turbines	Approximate Distance to Nearest Turbine [km]	Direction from the Proposed Development
1	Ballybane WF	Operational	21	18km	South-west
2	Barnadivane WF	Consented / Permitted	6	18.7km	East
3	Carrigarierk WF	Operational	5	5.22km	East
4	Carrigarierk 2 WF	Consented / Permitted	3	5.74km	East
5	Cleanrath WF	Operational	11	9.8km	North-east
6	Coomatallin WF	Operational	4	16.61km	South-east
7	Currawee WF	Operational	7	13.05km	South-east
8	Derragh WF	Operational	6	9.79km	North
9	Derreenacrinnig WF	Proposed	7	7.08km	South-west
10	Garranareagh WF	Operational	4	19.58km	East
11	Gortyrahilly WF	Consented / Permitted	14	11.72km	North
12	Grousemount WF	Operational	38	9.89km	North-west
13	Inchamore WF	Consented / Permitted	5	18.49km	North
14	Kilgarvan II WF (Sillahertane)	Operational	10	11.75km	North
15	Kilgarvan I WF (Coomagearlachy)	Operational	15	16.63km	North-west
16	Kilgarvan II WF (Inchincoosh)	Operational	6	18.27km	North-west
17	Kilgarvan II WF (Lettercannon)	Operational	7	17.21	North-west
18	Kilgarvan Repower WF	Consented / Permitted	11	16.78km	North-west
19	Killaveenoge WF	Operational	10	12km	South-east
20	Kilvinane WF	Operational	3	17.7km	South-east
21	Midas WF (Coolknoohil)	Operational	11	14.02km	North
22	Lahanaght Hill WF	Operational	5	13.55km	South
23	Midas WF (Glanlee I)	Operational	6	15.39km	North
24	Midas WF (Inchee)	Operational	6	15.74km	North-west
25	Milane Hill WF	Operational	9	9.2km	South
26	Shehy More WF	Operational	11	0.56km	North-east
27	Maughanaclea Wind Farm	Proposed	14	1.99km	South-west

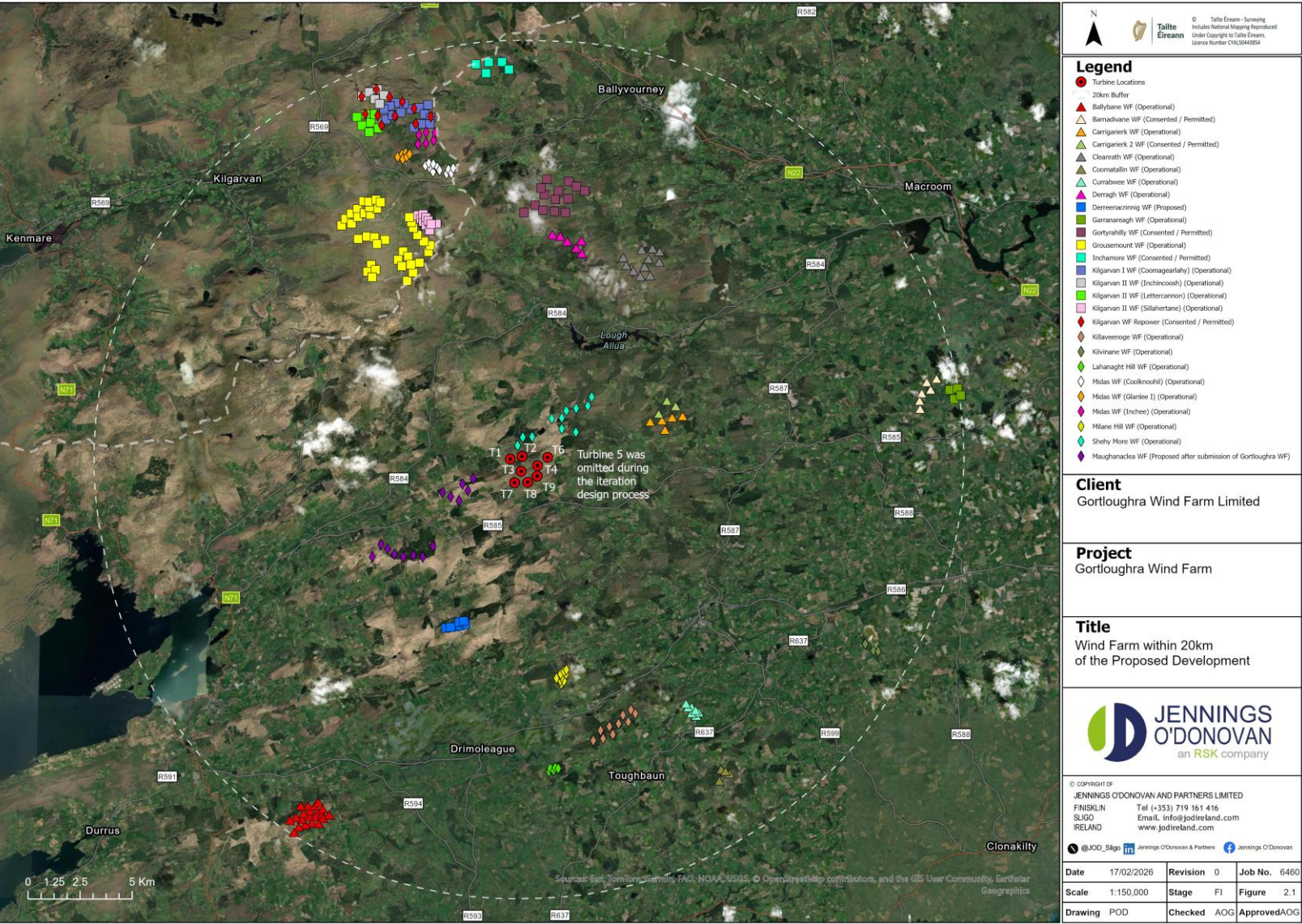


Figure 2: (Figure 2.1 of the EIAR): Wind Farms within 20km of the proposed Development



2. **Figure 1.3** of the EIAR which identified all the receptors within a 2km buffer has been updated. This is to be consistent with the list used in the Noise assessment. There are a total of 67 no. receptors within 2km of the proposed turbines. A further 6 receptors are slightly outside the 2km threshold but were added for completeness due to their proximity to the boundary used. Therefore, the receptor list used shows 73 no. receptors. The updated **Figure 1.3** is included in **Appendix 5** (reproduced below for ease of reference). The Shadow Flicker assessment has been updated to be consistent with this list (including **Table 16.2**) and can be found in **Appendix 4** and the detailed results (Appendix 16.1 of the EIAR) can be found in **Appendix 6**.

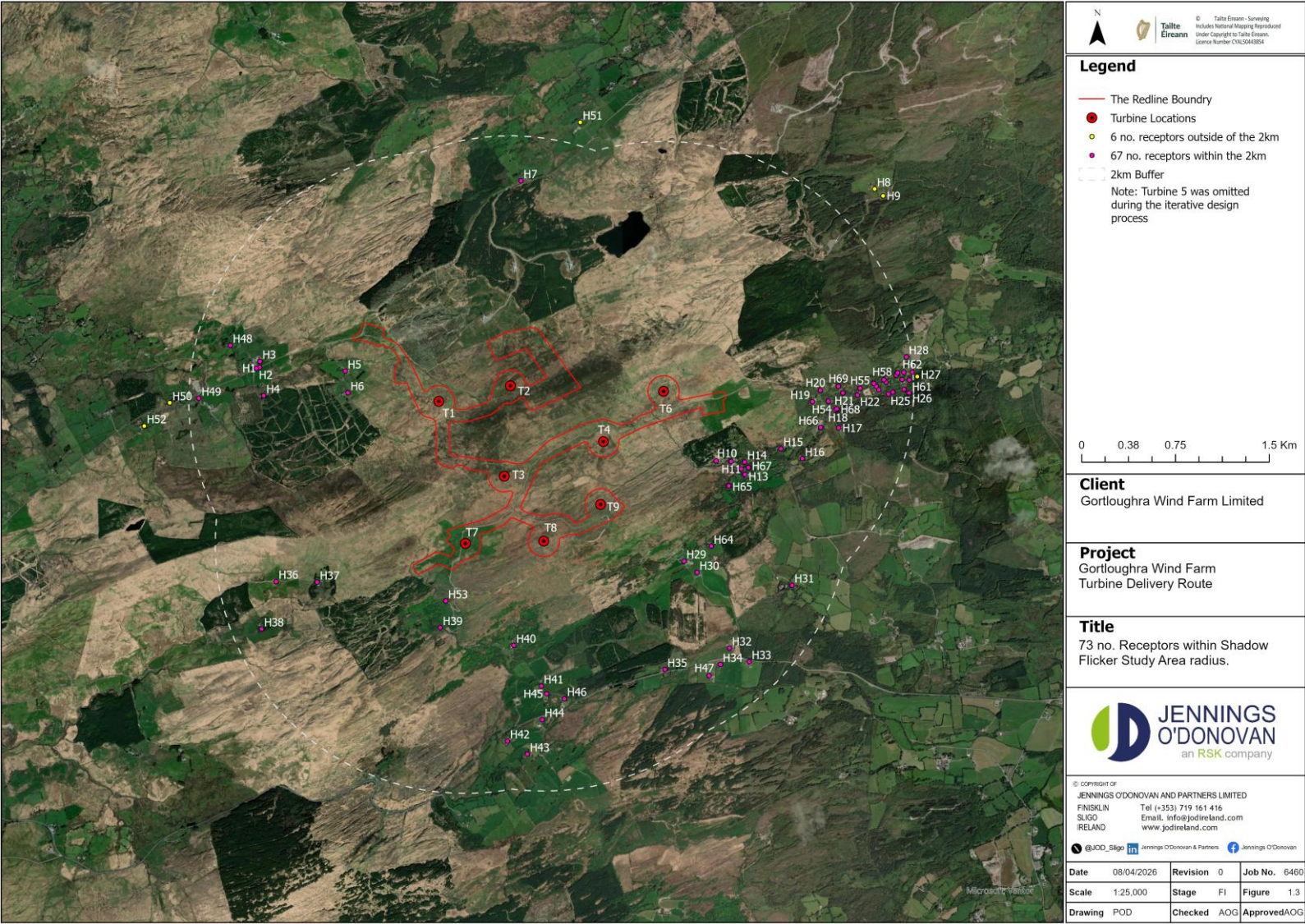


Figure 3: (Figure 1.3 of the EIAR): 73 no. Receptors within Shadow Flicker Study Area radius

3. A summary of all changes to documents of the planning application, including EIAR, NIS and planning drawings is provided in **Appendix 8**. The table contains a list of all documents and whether amendments have been made in the document and another column which outlines what changes have been made to the document.

Appendix 1 – Ecological Appendix (Response Report to An Coimisiún Pleanála RFI; Bats (and other survey data) 2026; Invasive Species Management Plan; Kerry Slug Derogation Licence Application; and Whooper Swan Acoustic Survey Report)

Appendix 2 – ACP Correspondence Re Soils and Geology

Appendix 3 – Planning Drawings

Appendix 4 – Updated EIAR Chapters

Appendix 5 – Updated EIAR Figures

Appendix 6 – Updated EIAR Appendices

Appendix 7 – Updated Natura Impact Statement (NIS)

Appendix 8 – Summary of Changes to Application Documents