Our Case Number: ABP-316051-23

Planning Authority Reference Number:

An Bord Pleanála

John Reid and Dara Reid & Others
Shinglis
Ballymore
Co. Westmeath

Date: 05 May 2023

Re: Renewable energy development comprising 9 no. wind turbines and associated infrastructure. Umma More and adjacent townlands, County Westmeath.

Dear Sir / Madam,

An Bord Pleanála has received your observation or submission in relation to the case mentioned above and will take it into consideration in its determination of the matter. Please accept this letter as a receipt for the fee of €50 that you have paid.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the Local Authority and at the offices of An Bord Pleanála when they have been processed by the Board.

For further information on this case please access our website at www.pleanala.ie and input the 6-digit case number into the search box. This number is shown on the top of this letter (for example: 303000).

Yours faithfully,

Niamh Thornton
Executive Officer
Direct Line: 01-8737247

BL50A

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John Reid and Dara Reid
Shinglis
Ballymore
Co. Westmeath

2nd May 2023

To: An Bord Pleanála

Re: SID Reference Number 316051
Proposed Umma More Wind Farm, Co. Westmeath

Dear Sir, Madam,

Please find as set out below, our observations on the AASR and NIS in relation to the proposed wind farm comprising 9 no. wind turbines with a blade tip height of 185 meters and all ancillary infrastructure and works, at Umma More and adjacent townlands, Co. Westmeath.

1. Ornithology
2. Aviation
3. Noise and Vibration
4. Water and Drainage
5. Incomplete Planning Drawings / Inconsistencies
6. Archaeology and Cultural Heritage
7. Cumulative effect
8. Mammals
9. Photomontage
10. Major Accidents

- Appendix

I trust that these observations will be taken seriously.

Yours Sincerely,

John Reid & Dara Reid,

This document was prepared in collaboration with:
Mr. Ken Rourke, Ballynacurra, Ballymore, Co. Westmeath
Mr. Tom Scally, Raheen, Ballymore, Co. Westmeath
Ms. Chris Lord, Shinglis, Ballymore, Co. Westmeath

1. ORNITHOLOGY

The predominantly wetland habitat identified as the Umma More Renewable Energy Development is not suitable for wind energy development due to its importance to the Hen Harrier.

In addition to this annexed species, further noteworthy species have also been recorded, including Barn Owl (RED list species), wetland birds including Lapwing (breeding) (RED list species), Snipe (breeding) (RED list species), the highly threatened Curlew (RED list Species), Woodcock (RED list Species), Golden Plover (RED list species) (Annex 1 of the EU Birds Directive), Redwing (RED list species), along with Kestrel (breeding) (RED list species), Wood Warbler (RED list species), Swift (RED list species) , Yellowhammer (RED list species), Grey Wagtail (RED list species), Whinchat (RED list species).

It supports many other species on the AMBER list including but not limited to Whooper Swan (Annex 1 of the EU Birds Directive), Greylag, Kingfisher, Skylark, Wigeon, Northern Wheatear, Mallard, Teal, Merlin, Goldcrest, Spotted Flycatcher, Greenfinch, Linnet & Brambling.

The aforementioned birds are critically endangered. They form part of the species listed as having either Red or Amber Status on the most recent Birds of Conservation Concern in Ireland 2020-2026 (Gilbert G, Stanbury A and Lewis L (2021). In addition the Hen Harrier is also classified as a species on Annex I of the EU Birds Directive. Please find attached National Parks and Wildlife Service Checklist of protected and threatened species in Ireland (2021).

Other birds of conservation significance include Peregrine Falcon (Annex 1 of the EU Birds Directive), Buzzard (Raptor of Wildlife Acts), Sparrowhawk (Raptor of Wildlife Acts).

We would also refer you to the results of the *2015 National Survey of Irish Breeding Hen Harrier in Ireland*[1] compiled by Department of Arts, Heritage and the Gaeltacht, wherein a specific 10 km grid habitat, N25 on the Longford/Westmeath border is indicated as lands which form part of the Hen Harrier habitat. *The 2015 National Survey* confirms the Shinglis, Ballymore – Ballyclamay, Moyvore areas as confirmed breeding sites.

These breeding sites have remained active year on year as evidenced in the 2023 National Breeding Hen Harrier Survey to be published shortly.

The proposed Umma More Windfarm lies 2.1km south west of Grid N25 and forms part of the Hen Harrier hunting grounds as recorded on Biodiversity Ireland, IRSG (Irish Raptor Study Group) and BirdWatch Ireland databases. Refer to Biodiversity Ireland maps indicating 2021 - 2023 observation of both male and female in Umma More, Ballynacurra and Raheen town lands demonstrating continued activity in the Ballymore area.

Due to the vulnerable status of the aforementioned birds, we are aware that the specific location of these birds may not be accessible to the public on the above mentioned Websites. However the exact location of these birds is within the control of personnel from Bird Watch Ireland, Biodiversity Ireland, the Irish Raptor Study Group and the National Parks and Wildlife Service.

OBSERVATIONS ON AASR AND NIS REPORTS

- NIS Appendix 5 –Ornithology Fails to acknowledge the presence of several significant bird species identified above and recorded on Biodiversity Ireland, IRSG (Irish Raptor Study Group) and BirdWatch Ireland's Barn Owl Project including but not limited to; Hen Harrier, Barn Owl, Curlew, Woodcock, Wood Warbler, Yellowhammer, Greylag, Wigeon, Kingfisher, Northern Wheatear, Goldcrest & Brambling.

- Vantage Point Locations; Page 15 of 57 of the AASR documents states; *'Data on bird observations and flight activity was collected from a scanning arc of 180° and a 2km radius by an observer at the fixed vantage point locations for two 3-hour watches separated by a minimum 30 minute break (ie. 6 hours total) per month.'*
  Two West facing vantage points VP1 & VP3 with a radius of 2Km were ill-suited for observing species such as the Hen Harrier and Barn Owl who's preferred hunting habitat is rough grassland, hedgerows & field margins & therefore screened from view. The lack of an East facing vantage point resulted in gaps in visibility resulting in the non-detection of significant numbers of noteworthy species. Refer to NIS Appendix 5 Map. Fig. 7.1 Vantage point locations.

- Lapwing. AASR Appendix 1, Page 21 of 57 states *'No breeding activity was recorded, and this species* (Lapwing) *is therefore not dependant on the Wind Farm Site for breeding'*.
  The applicant's statement above is incorrect. It has been confirmed directly by Biodiversity Ireland that breeding Lapwing are in existence within the town lands on which the planning application is made. The aforesaid species are logged on their database.

- Barn Owl. The EIAR failed to detect the presence of breeding Barn Owl within the proposed Wind Farm and adjacent lands.

  Of the species of owl resident in Ireland only barn owl and long-eared owl are purely nocturnal. As a result any flights would not be observable and systematic flight path mapping would not be possible, therefore, neither was selected as Target Species.

  The proposed Ummamore Wind farm site is an important habitat for breeding Barn Owl with 15 sites recorded with Biodiversity Ireland, BirdWatch Ireland's Barn Owl Project and the Irish Raptor Study Group. Six breeding nest sites within the proposed wind farm boundary are currently being monitored by Birdwatch Ireland's Barn Owl Project coordinators.

  The Barn Owl is protected under the Wildlife Act, 1976-2000, as amended (Republic of Ireland). They are a Red-listed Species in BoCCI (Bird of Conservation Concern in Ireland) (Gilbert G, Stanbury A and Lewis L (2021) due to a decline of over 50% in their population during the past 25 years. Furthermore, they are listed as a Species of European Conservation Concern (SPEC3) having an unfavourable conservation status in Europe.

  According to the study *Bird Sensitivity Mapping for Wind Energy Developments and Associated Infrastructure in the Republic of Ireland* authored by BirdWatch Ireland *'...owls have been identified as being at particular risk of collision as a result of wind energy development (Langston & Pullan 2003). Specifically, their large size and nocturnal or crepuscular hunting behaviour puts them at greater risk of collision than other species (EURAPMON 2008).*P 63 of 126

  The availability of prey rich foraging habitat is a primary factor which influences distribution and breeding success, with rough grassland, grassy margins of field boundaries and woodland edge being important... (Shawyer 1998). Mature trees with hollow cavities and purpose built nest boxes & ruined structures are used for nesting (Lusby et al. 2009) P62 of 126 of the above document.

  The proposed removal of mature hedgerow and mature trees, drainage of species-rich wetlands, displacement due to on-site construction, barrier effects, the fragmentation of existing habitats & disturbance of existing nest sites will have a significant negative effect on the continued breeding of these species in the area.
  It should be noted a Barn Owl nest in the vicinity of the applicant's Wind Mast and substation entrance at Umma More was destroyed in 2022.

  A breeding Buzzard's nest, again in the vicinity of the Applicants Wind Mast and substation entrance at Umma More was destroyed in 2021 resulting in the loss of the hatched chicks.

The NPWS and the Barn Owl project coordinators were notified contemporaneously.

- Whooper Swans. AASR Appendix 1, Page 22 of 57 states, *'No pathways for direct or indirect effects exist. Therefore, whooper swan is not considered further in this assessment and the Wind Farm Site is not of significance to this species.'*
  The applicant's statement above is incorrect. Map identified as NIS Appendix 5, Ornithology, figure 7-4-1 indicates a number of sightings where Whooper Swans travelled North to South & South to North on a defined flight path in line with Turbines T1, T2, T3 and between Turbines T4 & T5.

  According to BirdWatch Ireland's study titled *Bird Sensitivity Mapping for Wind Energy Developments and Associated Infrastructure in the Republic of Ireland*, page 77 of 126 states *'this species* (the Whooper Swan) *has been identified as being at particular risk of disturbance displacement and collision as a result of wind energy development (Langston & Pullan 2003).'*

  Recorded on Biodiversity Ireland and known locally for over sixty years, a Whooper Swan flight path runs North-East to South-West. See figures 1 & 2 below. This flight path traversing the Umma More Windfarm is utilised by Whooper Swan daily over the winter months. The Whooper Swan has known poor flight manoeuvrability and must be considered as a collision High Risk.

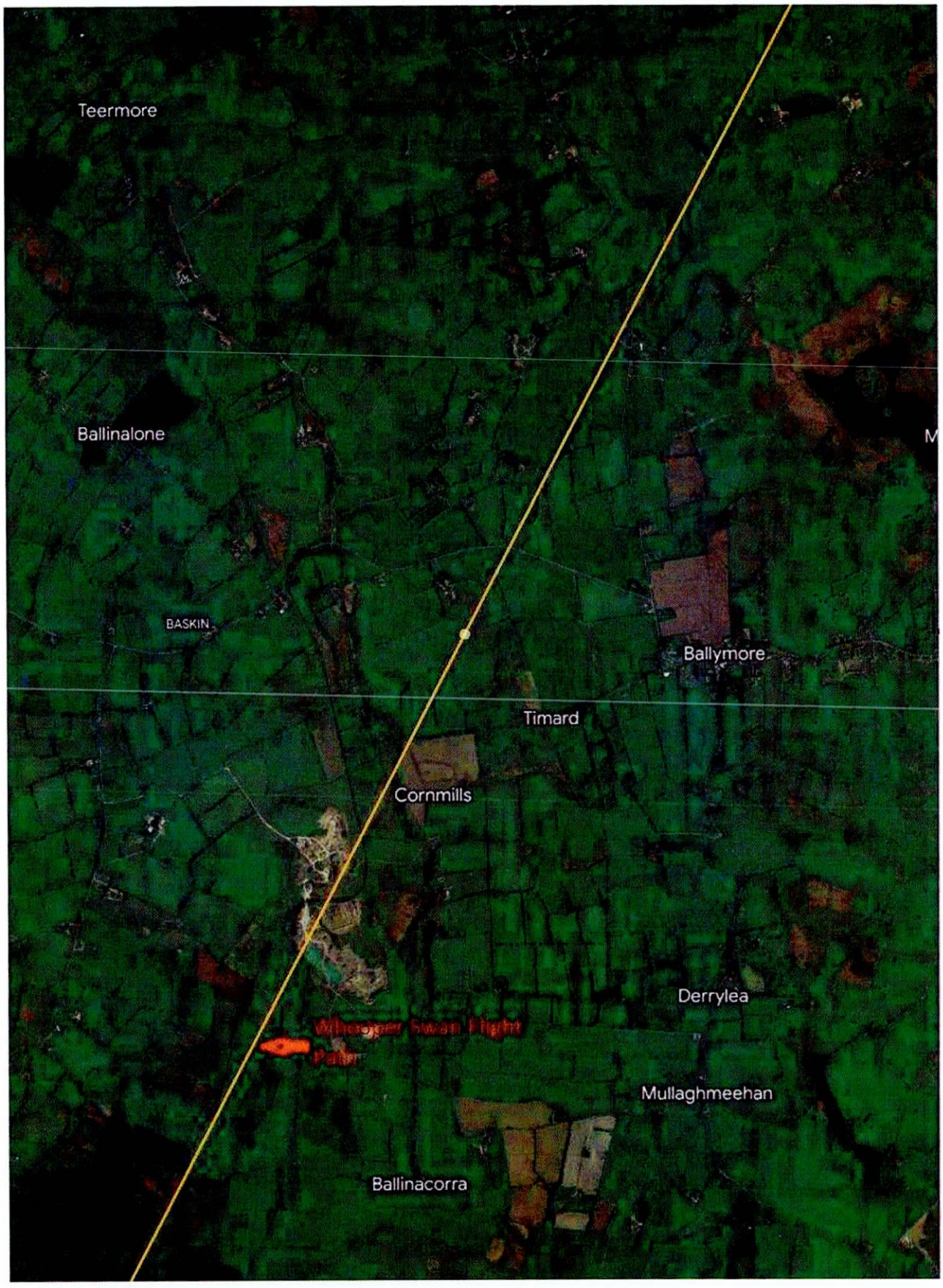


Figure 1. Wide view of North-East to South-West Whooper Swan flight path over proposed Umma More Windfarm

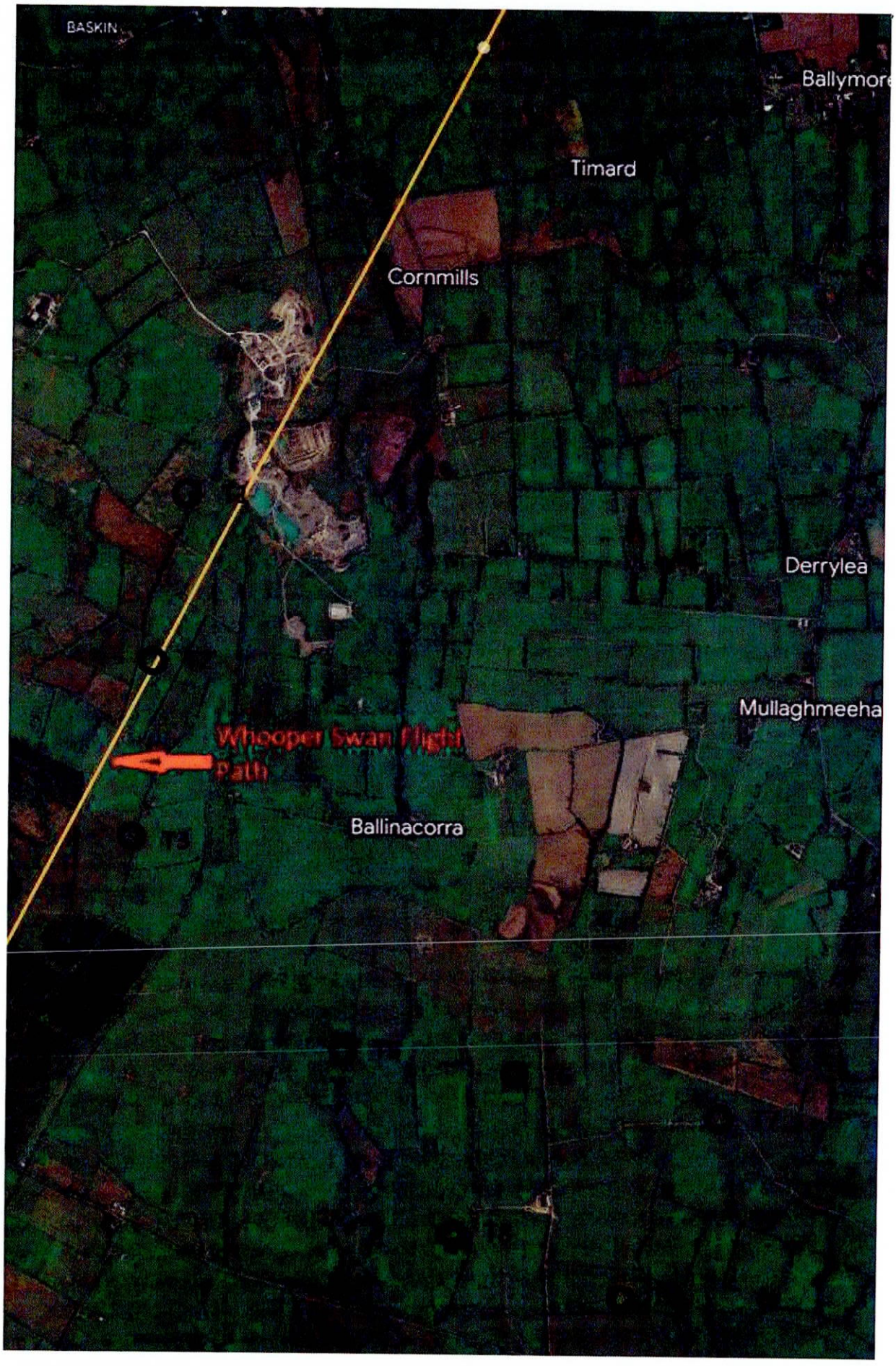


Figure 2. Close up view of North-East to South-West Whooper Swan flight path over proposed Umma More Windfarm

The applicant's maps verify the Whooper Swan flight path from the North-East identified above but also identify an additional flight path on the North-West of the site. These observations confirm the Proposed Wind Farm site as an active flight path for populations of Whooper Swan. See NIS Appendix 5, Ornithology Figures and appendices, figure 7-4-1.

Please also refer also to Biodiversity Ireland for Whooper Swan records.

- Greylag Goose *'... this species has been identified as being at particular risk of disturbance displacement and collision as a result of wind energy development (Langston & Pullan 2003).'*
Bird Sensitivity Mapping for Wind Energy Developments and Associated Infrastructure in the Republic of Ireland. BirdWatch Ireland. Page 87 of 126
Greylag Goose records for the Umma More Wind farm site are available on Biodiversity Ireland.

According to Bird Sensitivity Mapping for Wind Energy Developments and Associated Infrastructure in the Republic of Ireland by BirdWatch Ireland, *'The potential impact of wind energy developments on protected bird populations is not simply limited to collision with turbines.... The main impacts of wind energy developments on birds are generally via four main categories; collision (Barrios & Rodríguez 2004; Drewitt & Langston 2006; Douglas et al. 2011; Pearce-Higgins et al. 2009), disturbance displacement (Madders & Whitfield 2006; Pearce-Higgins et al. 2009), habitat loss or damage and barrier effects. Each of these potential effects may interact (Drewitt & Langston 2006), causing an increase in the impact or a decrease in potential exposure (e.g. a reduction in abundance caused by habitat loss may reduce collision risk).'*

This document goes on to say...*' In an investigation of the avoidance of wind farms by birds, 7 out of 12 studied species occurred at lower abundances around turbines compared to control areas (Pearce-Higgins et al. 2009). Buzzard Buteo buteo, Hen Harrier (Circus cyaneus), Golden Plover (Pluvialis apricaria), Snipe (Gallinago gallinago), Curlew (Numenius arquata) and Wheatear (Oenanthe oenanthe) were most affected, showing decreases in breeding densities of 15-53%.'*

The proposed Wind Farm hosts all of the above species as recorded on Biodiversity Ireland, IRSG (Irish Raptor Study Group) and Birdwatch Ireland's Barn Owl Project

Irish breeding populations of waders are at greater threat from wind energy developments generally through habitat loss and disturbance, *' Breeding waders were identified by an EU assessment of wind energy impacts as being particularly susceptible to disturbance displacement and barriers to movement (European Bird Sensitivity Mapping to Wind Energy Development - Guidance Document 42 Commission 2011')*

1. Habitat loss or damage, disturbance displacement nor barrier effects on birds of local, county and national value have not been adequately addressed in this NIS.
2. The valuable resource of local knowledge on species, roosts, nest sites and species movements was not tapped into and has resulted in considerable gaps and omissions in the SSAR and NIS reports.
3. The Bioiversity Ireland website, the BirdWatch Ireland website and the IRSG website should have been consulted for records of species within and in the vicinity of the proposed Umma More Wind Farm.
4. The applicant claims: *"The data provided is robust and allows clear, precise and definitive conclusions to be made on the avian receptors identified within the Wind Farm Site."*[2] As evidenced in the above paragraphs the survey data in incomplete and not wholly accurate.

2. AVIATION

Abbyshrule airfield is North of the proposed Umma More Wind Farm and is in the direct flight path with Birr Airfield. (Figure 3)

In poor visibility, low cloud, fog, heavy rain etc. aircraft are forced to fly low using flying VFR (visual flight rules), this is where a pilot must always have a constant visual of the ground. Therefore a pilot would have to resort to flying at 500 feet, the legal VFR in poor visibility.

The total height of the proposed turbines is 185m (606.95 feet), therefore a pilot flying VFR would have to fly directly through and under the blades of the turbines. (Figure 4)

Also, when a pilot becomes disorientated due to bad weather he/she is trained to follow landmarks i.e. roads, rivers, railway lines etc. The Dungolman River is one such landmark feeding. It discharges into the river Inny & flows parallel to Abbeyshrule airfield. (Figure 5) The river facilitates navigation back to the airfield and safe landing.

Abbeyshrule is also a flight training facility with many inexperienced students training solo in the area. Inexperience, coupled with foul weather, disorientation and a possible Wind Farm to contend with in conditions described above could easily end in tragedy.

In 2020 alone the UK had a total of 532 reported incidents relating to wind turbines and aviation.

Example, In South Dakota in 2014 a Piper PA- 32R-300 airplane was destroyed after colliding with the blade of a wind turbine and took the lives of the pilot and three passengers.

The U.S National Transportation Safety Board (NTSB) released its preliminary report on the accident where it stated:
'The wreckage of the airplane was scattered in a radius surrounding the base of a wind turbine. The airplane was fragmented. One turbine blade exhibited impact damage and was broken into several large pieces, several of which remained attached to the turbine nacelle. The remaining two turbine blades exhibited impact damage.'

On the day of the accident heavy fog, wind gusts and rain were reported in the area.

A beacon light at the top of the turbine tower is no guarantee a wind turbine will be seen in poor visibility. Even if the beacon is spotted at the last minute allowing evasive action, a pilot will instinctively turn right or left avoid the obstacle and into the path of other turbines.

The Umma More Wind Farm application does not identify any consultation with Abbeyshrule airfield or Birr airfield.

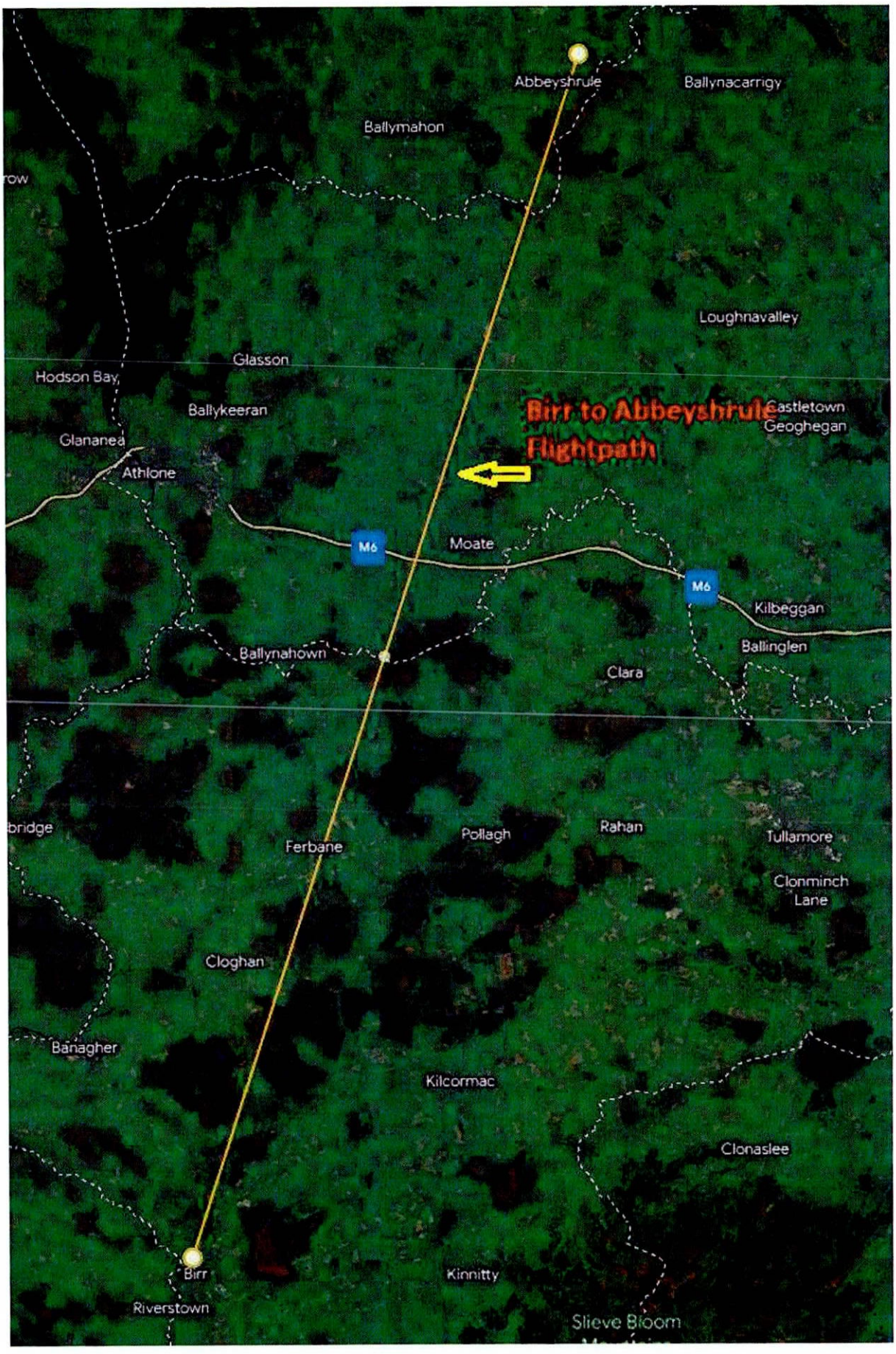


Figure 3. Aviation flight path linking Birr airfield and Abbeyshrule airfield crosses over the proposed Umma More Wind Farm.

See flight path maps below.

Figure 4. Aviation flight path over the proposed Umma More Wind Farm

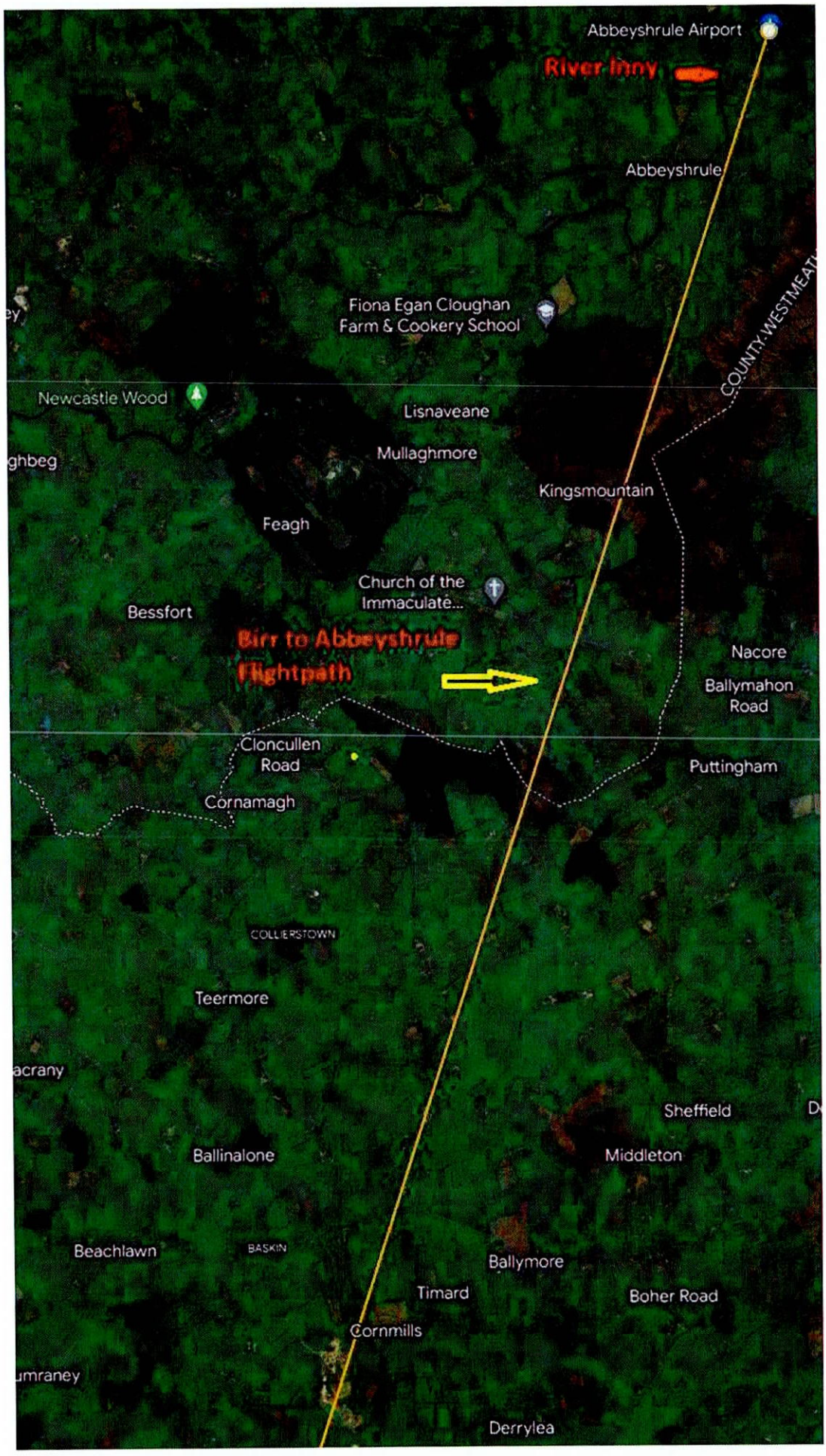


Figure 5. Map indicating flight line between Birr airfield and Abbeyshrule airfield.

3. NOISE & VIBRATION

Appendix 11-2 Operational Noise Report.

The operational noise report states that it is only based on predictions as there was no information given on the make or model of the wind turbine therefore the technical data on the mechanical noise, swish noise and infrasound was not available to ascertain the true noise output of the three noise sources that will be omitted if the wind farm becomes operational.

High Court Ruling. The High Court in 2021, overturned planning permission granted to a subsidiary of Bord Na Mona for a wind farm development in Co Longford. The judge quashed the permission on grounds including that the planning application did not contain the level of detail required to allow the board grant permission. Permission was overturned due to the lack of detail of the actual design of the wind turbines in the planning application.

The judge said the effect of the lack of detail was equivalent to seeking planning permission for a house "*on the basis it could be anything from a one-storey bungalow to a 10-storey mansion*".

4. WATER & DRAINAGE

It is noted that the proposed application would require substantial drainage works, modifications to existing drainage channels and ponds on the land by virtue of the location of the lands within the Dungolman river basin flanked by Baskin hills and Milltown esker systems. These wet grasslands and extensively drained, improved (reclaimed) grasslands are intersected by multiple watercourses, (Dungolman River 020, Mullenmeehan Stream 010 and feeder streams converging at the Dungolman 030 at the *Meeting of the Waters* located at proposed turbine T3. The Dungolman River 030 is chief tributary to the Tang River, which in turn discharges into Lough Ree SAC.

According to GIS EPA Soil Map of Ireland, the soils within the boundaries of this application are predominantly classified as Fen peat, Basin peat, Surface water Gleys (periodic or long-term waterlogging), Ground water Gleys (basic deep poorly drained mineral), Lacustrine type soils (soils formed in the bottom of ancient lakes), Peaty Gleys (basic poorly drained mineral soils with peaty topsoil), Alluvium (soils of floodplains and deltas), soils typically associated with a river basin.

Five of the nine proposed turbines and the proposed wind mast are located on the above wetland type soils.

See attached soils map belos with proposed wind turbines indicated. (Figure 6).

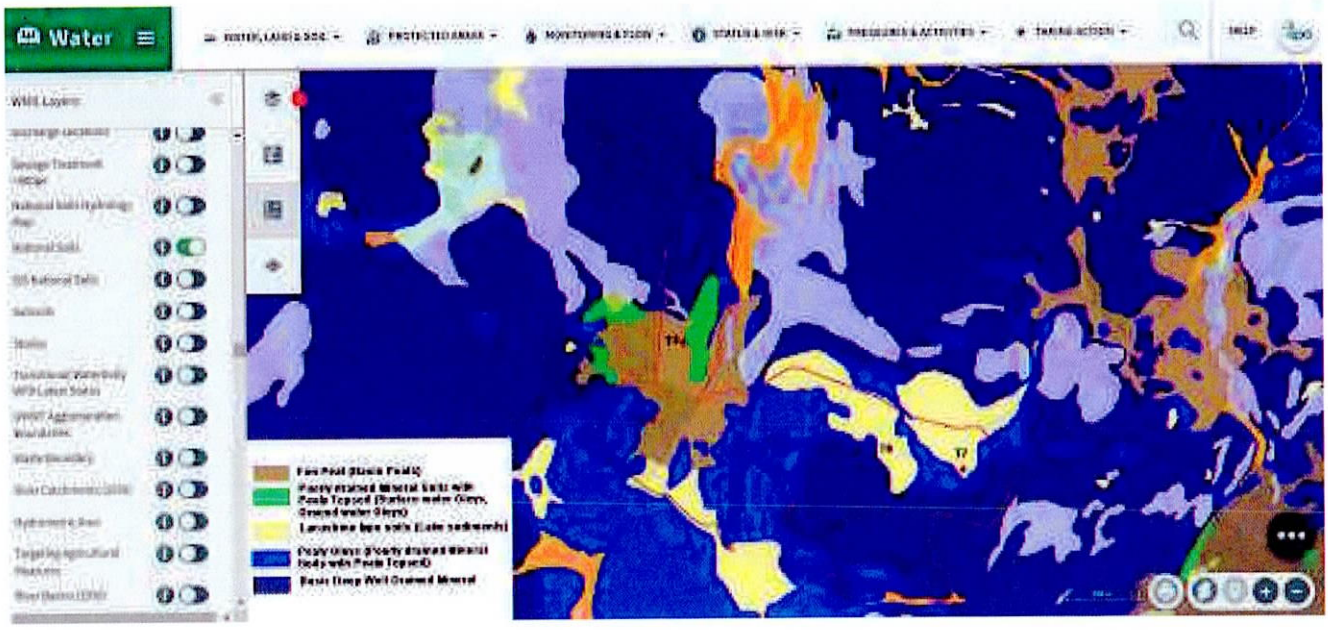


Figure 6

Discharge to river from proposed settlement ponds, proposed/modified drainage channels, 9nr. deep excavations for turbine foundations (size), the redistribution of resultant mineral soil & fen peat, run-off from approximately 7km of new / improved roadways, removal of existing trees, hedgerows and aquatic buffers (riparian margins) are likely to have a significant impact on the hydrology, ground and surface water, and has the potential to have a significant negative impact individually or in combination with other plans or projects on adjoining watercourses and Natura sites within a 15Km radius.

The Teagsc Drainage manual 2022 states:
'The drainage of mineral soils affects a reduction in greenhouse gas emissions... directly through lower nitrous oxide emissions, which tend to be higher in poorly drained soils... However the drainage of organic & peat dominated soils will result in substantial CO_2 emissions to the atmosphere, that would dwarf any non CO_2 benefit'

The document goes on to state *'In this context, further drainage of peat soils cannot be justified and a significant programme of water table management is required on those organic soils that were previously drained. Future iterations of the CAP could see measures targeted to rewetting of organic soils. This will involve proposing suitable locations and liaising with landowners to establish a workable programme of rewetting, and thereafter managing existing drainage features (open and field drains) on selected sites to manipulate the depth of the water table and reduce CO_2 emissions to the atmosphere. This water table management regime will also help prevent the release of sediment, carbon and nutrients, and have benefits for biodiversity.... If dealing with vulnerable habitats or wetlands then any benefits yielded will come at too high a cost to the wider environment and cannot be justified. Such works must be avoided.'* [3]

It is noted that:

1. The applicant has not adequately addressed the management of discharges to river from existing drains within the site.
2. A Section 4 Discharge License is required for discharges to river from settlement ponds and modified / rerouted drainage channels. As communicated by the Environmental Section of Westmeath County Council, April 27th 2023.
3. Drainage/reclamation of any lands which exceeds 0.1 hectares of wetland areas requires planning permission.

4. Land drainage works that (a) exceed 15 hectares, (b) the works are to be carried out within (or may effect) an NHA, a proposed NHA, an SAC, an SPA or a nature reserve or (c) the proposed works may have a significant effect on the environment, screening by Department of Agriculture, Food and the Marine, DAFM is required.
5. Planning drawing D503 refers to peat and spoil repositories. According to the Teagsc Soil Drainage Manual 2022 [3] *'drainage of peat soils cannot be justified'.*
6. The Dungolman 030 and Dungolman 020 are classified as 'AT RISK' (Figure 7) on the latest EPA River Waterbodies Risk maps & also classified as POOR on the river Waterbody WFD latest status[4] (Figure 8)
7. Furthermore, the AASR and the NIS fail to acknowlege this area is a proposed area for restoration for Westmeath County Council for the third cycle of the River Basin Management Plan. 2022-2027.

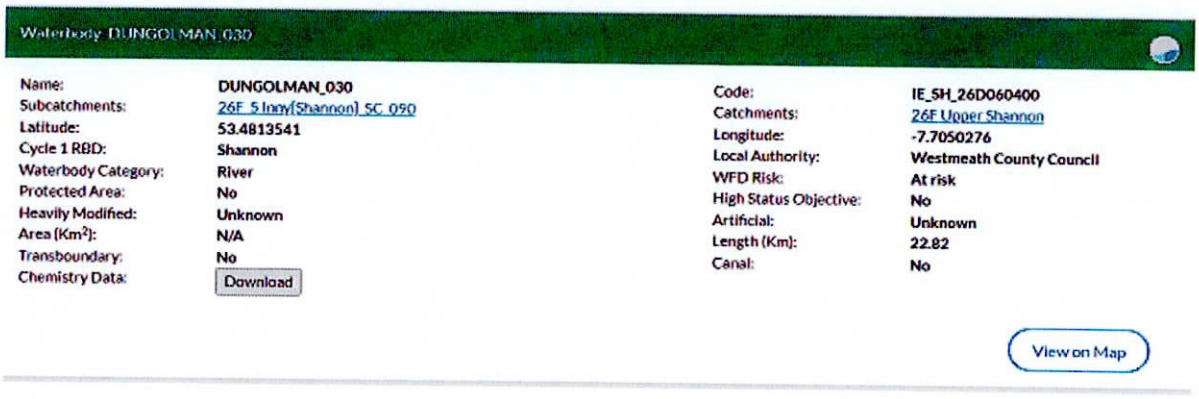


Figure 7.

Water
WATER, LAND & SOIL
PROTECTED AREAS
MONITORING & FLOW
STATUS & RISK
PRESSURES & ACTIVITIES
TAKING ACTION
HELP
Results
Keep Previous Results
River Waterbody WFD Latest Status
IE_SH_26D060400
European_Code
Name
Status
Period_for_WFD_Status
River Waterbodies Risk
IE_SH_26D060400
Code
Name
URL
Projection
EXPORT
DUNGOLMAN_030
MULLENMEEHAN STREAM_010

(Figure 8)

5. INCOMPLETE PLANNING DRAWINGS / INCONSISTENCIES

Appendix 4-1 Detailed Site Layout Planning Drawings & Appendix 6 Detailed Design Drawings (NIS)

S.I. No. 600 / 2001 – Planning and Development Regulations, 2001, Section 23 (a) states, *'site or layout plans shall be drawn to a scale of not less than 1:500 (which shall be indicated thereon), the site boundary shall be clearly delineated in red, and buildings, roads, boundaries, septic tanks and percolation areas, bored wells, significant tree stands and other features on, adjoining or in the vicinity of the land or structure to which the application relates shall be shown'.*[5]

In addition to project splitting, there are inconsistencies in the planning application.

1. There are two completely different drawings for the substation, road access, 110kV underground electrical cable, track, and boundary treatments. Drawing *Site Layout Sheet 5 of 6, drawing number 201050 – 1* shows one arrangement and *Proposed Drainage Layout, drawing number 51553-0-0223-Rev A* shows a completely different design.

There is a very significant inconsistency between the planning application and the setbacks from residential properties identified in the planning application, versus the policy objectives identified in the Westmeath County Development Plan 2021 – 2027. On the applicants drawings the setback distances between the proposed wind turbines and dwellings are as follows;

Dwelling to T1 = 730m
Dwelling to T2 = 830m
Dwelling to T3 = 780m
Dwelling to T4 = 740m
Dwelling to T5 = 750m
Dwelling to T6 = 680m
Dwelling to T7 = 800m
Dwelling to T8 = 1000m
Dwelling to T9 = 770m

The set back distances required by Policy Objective 10.143 of the Westmeath County Development Plan obliges Westmeath County Council to provide the following setback distances between the wind turbines and residential dwellings as follows;
'More than 2000 metres, where the tip height of the wind turbine blade is greater than 150 metres.'

The applicants would appear to be relying on the 2006 wind energy development guidelines which are not a statutory document, and which have been noted by a number of ministers as being out of date and requiring revision. (and indeed that process has been started a number of times by respective Ministers). The Westmeath County Development plan is a statutory document and An Bord Pleanala must ensure the applicants are obliged with the policy objectives identified therein including policy objective 10.143 (setback distances) and policy objective 10.147 (noise monitoring) *'Noise (including consistency with the World Health Organization's 2018 Environmental Noise Guidelines for the European Region)'*

2. Discrepancies in size and shape of substation and construction compound on drawing *Site Layout Sheet 5 of 6, drawing number 201050 – 11* & drawing *Proposed Drainage Layout, drawing number 51553-0-0223-Rev A.*
3. 110kV underground cable and track omitted from the latter drainage drawing above.

4. An existing structure within the proposed Wind Farm site boundary as indicated on *Site Layout Sheet 5 of 6, drawing number 201050 – 11 is not indicated on Proposed Drainage Layout, drawing number 51553-0-0223-Rev A.*
5. A 50m protection buffer zone for watercourses is proposed on the Site Layout drawings. It should be noted in relation to point 3 above, the proposed 110kV underground cable and track are sited within the 50m protection buffer zone for watercourses and run parallel with the main watercourse Dungolman 030 within a 10m distance. Site Layout Sheet 5 of 6, drawing number 201050 – 11.
6. There are inconsistencies between *EIAR Volume 3 – Appendices, Appendix 4-4 Harvest Management Plan* drawings and the Proposed Site Layout drawings. The 10m machine setbacks to Aquatic Zones (AZ) (stream / river) indicated on the Harvest Management Plan is not consistent with the 50m aquatic buffer zones to rivers and streams indicated on proposed site layout drawings and drainage site layout drawings.

In addition to the above, the planning application drawings are incomplete in that Site Layout drawings do not indicate:

(a) All buildings adjoining or in the vicinity of the land or structure to which the application relates.
(b) Septic tanks and percolation areas, bored wells, significant tree stands and other features on, adjoining or in the vicinity of the land or structure to which the application relates.
(c) Details of proposed substation, road access, 110kV underground electrical cable, track, and boundary treatments located within the planning application boundary.
(d) Details of all hedgerows and trees to be removed.

S.I. No. 600 / 2001 – Planning and Development Regulations, 2001, Section 23 (f) states, *'plans and drawings of floor plans, elevations and sections shall indicate in figures the principal dimensions (including overall height) of any proposed structure and the site, and site or layout plans shall indicate the distances of any such structure from the boundaries of the site,'* [5]

The planning drawings are incomplete in that Site Layout drawings do not indicate;

(a) Details of, and dimensions relating to 4 number proposed road openings:
Opening 1: At junction of Regional road R390 and Local road L5363 Baskin Low.
Opening 2: At local road L5363 at Baskin Low
Opening 3 & 4: At local road L5363 at Baskin Low & Baskin High.
(b) Details of existing entrance upgrade not provided.
(c) Sightlines at new road openings onto regional and local roads.
(d) Sightlines at site entrance and temporary new roads are not indicated on site layout drawings.
(e) Distances from (but not limited to) proposed turbines, roads, spoil management areas, new/redirected drains and temporary roads to site boundaries.
(f) Site sections indicating heights of proposed turbines and related infrastructure in relation to existing site contours.
(g) Levels to proposed road not indicated.

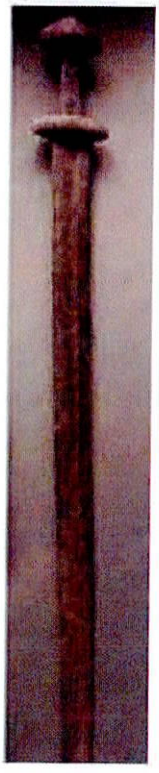
As levels to approximately 7km of proposed roads and tracks and levels to soil managements areas are not indicated on *NIS Appendix 4. Drainage Drawings*, it is not possible to assess if the project individually or in combination with other plans or projects will have an effect on a Natura site within a 15km radius.

A Traffic Impact Assessment should be prepared with respect to the potential traffic impact on the operation of the Regional and local road network with consideration to the Transport Infrastructure Ireland (TII) & Guidelines for Traffic Impact Assessment (1997) as published by the Chartered Institute of Highways & Transportation.

6. ARCHAEOLOGY AND CULTRUAL HERITAGE

"Swords have appeared at an old crossing on the border of two territories on the bank of Dungolman River;' Swords of the Viking Age. Author Ian G. Pearse. 2002.

This 9th century Dungolman sword, unearthed by the Board of Works during river drainage works on the Dungolman is housed & on display at the National Museum of Ireland due to its cultural importance.



Dungolman: Ath Duine Cólman, Ford of the Fort of Colman.
Clan Colmáin; Kings of Uisneach.

In the first millennium AD, Uisneach became the chief palace and assembly site of the Clann Cholmain Kings, who ruled over the Kingdom of Mide with some even becoming High Kings of Ireland. [6]

A ridge of Eskers formed during the ice age run from Ballynacurra to Ballymahon and runs parallel to the Dungolman River or as it was once known, the Inneoin. [7] These Eskers and river formed a natural protective barrier and formed the natural boundary between the ancient provinces of Connacht & Mide.

The established ancient passage way to Uisneach traversed up along the river Shannon to Athlone, and continued across land to the Dungolman river ford (part of a river or stream sufficiently shallow to be fordable by foot passengers), and continued from there to the ancient royal site of the Hill of Uisneach. Such is its cultural and archaeological importance; the Hill of Uisneach is listed on the UNESCO tentative list (2010) as part of the Royal Sites of Ireland.

Figure 8.1

Such is the archaeological and cultural interest in the area and its association with Clan Colmáin, Kings of Uisneach, archaeologist and a leading authority on the Tain Bo Culaigne Paul Gosling, visited the Dungolman river valley in 2020 and corresponded via email stating;

'FORDING POINT
As I look back over this material this morning, I now notice the following which is potentially even more interesting. Under the year AD 1155 in said Annals of the Four Masters is the following:
'An army was led by Muircheartach, son of Niall Ua Lochlainn, to Ath-Duine-Calman on the Inneoin; and he took the hostages of Teathba, and he gave a full restitution of the cattle of the men of Meath to such as he had before plundered. He also gave the kingdom of Meath, from the Sinainn to the sea, to Donnchadh, son of Domhnall Ua Mealeachlainn, after which he returned home to his house.
Now that was a days work by Niall, and the likelihood is that it all took place at your ford!'

This Dungolman ford is within the direct vicinity of proposed Wind Turbine 'T1'

In addition to the above, monument WM02 3-085--- Westmeath's only Bronze age burnt mound or Fulacht Fia was identified upriver from the proposed site in 2014, since then multiple Fulacht Fia, ancient cooking sites have been identified on lands within proximity to the river & immediately adjacent to the proposed Wind Farm site.

(a) As such, on-site appraisal of lands within the development site should be conducted for burnt mounds and other potential archaeological sites prior to any on-site development works.

(b) On-site appraisal of the circular tree lined enclosure at Umma More, coordinates 53.462950, -7.710648 is required prior to any on-site development works.

7. CUMULATIVE EFFECT.

Ch 12 Landscape and Visual (part 2)

During the period 2012-2015 it was widely published that 2000 nr. options were signed by farmers and landowners in the midlands.

In addition to the proposed Umma More Wind Farm, options have been signed to the North-West, North and North-East of Ballymore village. In the region of 9 to 12 wind turbines are proposed. Turbine height; 185m.

A two-year ornithology survey and a roads and transport survey have been completed in the above areas. A planning application is due to follow shortly.

This proposed development above was not included in the cumulative ZTV map.

In addition to the known proposed wind farm above, landowners have also been approached in the Clare Hill area South of Ballymore village and also Rathskeagh, East of Ballymore village. In essence encircling a rural village in close proximity to the ancient Royal Site of Uisneach, on the UNESCO Tentative List for Ireland

In an area identified as an area of Low Wind Capacity in the Westmeath County Development Plan 2021-2027, the above developments if granted, would facilitate the development of one of the largest combined industrial wind farms in the midlands.

The combined effect of the above group of (known) projects will have significant adverse effects on population and human health, biodiversity, species and habitats, land, soil and water, cultural heritage and landscape and visual amenity.

8. MAMMALS

OTTER. Legal Status: Wildlife Act 1976 / 2000, EU Directive 92/43 Annex II, Annex IV, Bern Convention Appendix III

A survey carried out on behalf of the applicant of the Umma More Wind Farm site confirmed the Annex IV species Otter are active within the proposed Wind Farm site boundary. However the EIAR Volume 1 – Non – Technical survey and Main Report, Chapter 6 Biodiversity, Page 6-96 Section Otter, states *' No holts or resting places were recorded within the Wind Farm Site.'*

The applicant's statement above is incorrect. It has been confirmed directly by Biodiversity Ireland that breeding Otter are in existence within the town lands on which the planning application is made. The aforesaid species are logged on their database.

Also, see attached video link to an Otter family with pups as recorded at Umma More. Other recordings are available on request. https://www.dropbox.com/s/w0vfc0t3huiqmvf/VID-20220919-WA0002.mp4?dl=0

(a) A comprehensive Otter-specific survey of the waterways and adjoining lands should be conducted by the applicant to identify existing Holts within the site.

(b) It has also been confirmed by Biodiversity Ireland that breeding Hare, Fox and Badger are in existence within the town lands which the planning application is made and adjoining townlands. The aforesaid species are logged on their database.

9. MAJOR ACCIDENTS

VOLUME 1B, CHAPTER 16 MAJOR ACCIDENTS states *'The Proposed Development has low potential to cause natural disasters or major accidents'*.

It is factually incorrect. In mid March 2021 a wind mast was erected on the proposed Wind Farm site where it toppled 2 days later. On 30th March 2021 a second wind mast was erected, this subsequently collapsed 8 months later in January 2022.

According to GIS EPA Soil Map of Ireland, the soils within the boundaries of this application are classified as Fen peat, Basin peat, Surface water Gleys, Ground water Gleys (basic deep poorly drained mineral), Lacustrine type soils (which formed in the bottom of ancient lakes), Peaty Gleys (basic poorly drained mineral soils with peaty topsoil). Soil typically associated with a river basin.

The collapsed masts were erected on soil types defined as Surface water Gleys, Ground water Gleys, (basic deep poorly drained mineral) at a distance of approximately 300m from proposed turbine, T5. The applicant proposes to erect considerably larger structures, turbines T5 and T6 on lands of the same unstable soil type requiring considerable excavations and drainage.

Teagsc's Manual on Drainage and Soil Management states; *'The drainage of mineral soils affects a reduction in greenhouse gas emissions ...directly through lower nitrous oxide emissions, which tend to be higher in poorly drained soils,..... However the drainage of organic & peat dominated soils will result in substantial CO_2 emissions to the atmosphere, that would dwarf any non CO_2 benefit.'* The document goes on to state *'In this context, further drainage of peat soils cannot be justified and a significant programme of water table management is required on those organic soils that were previously drained. Future iterations of the CAP could see measures targeted to rewetting of organic soils.'*[8]

From an environmental point of view the development poses a significant risk to biodiversity, land, soil, water and landscape but also poses a significant risk to human health.

10. PHOTOMONTAGE

Volume 2 – Photomontage Booklet

By ROB PREECE
PUBLISHED: 12:35, 22 August 2012 | UPDATED: 17:04, 22 August 2012

How wind farm developers 'use camera tricks to make turbines look smaller than they really are'

- Leading architect claims councils are being 'tricked' into approving turbines
- Alan MacDonald, from Inverness, says turbines can be made to look four times smaller than they really are
- Developers use wide-angle lenses to make objects in the pictures look smaller, Mr MacDonald says
- Scottish National Heritage intends to revise its guidance to developers

Alan MacDonald, an architect based in Inverness, Scotland, warned that people were being 'misled' because images submitted as part of planning applications were often little more than 'artifice'.

His claims raise fears that councillors may approve developments which are far more imposing on the countryside than they expect.

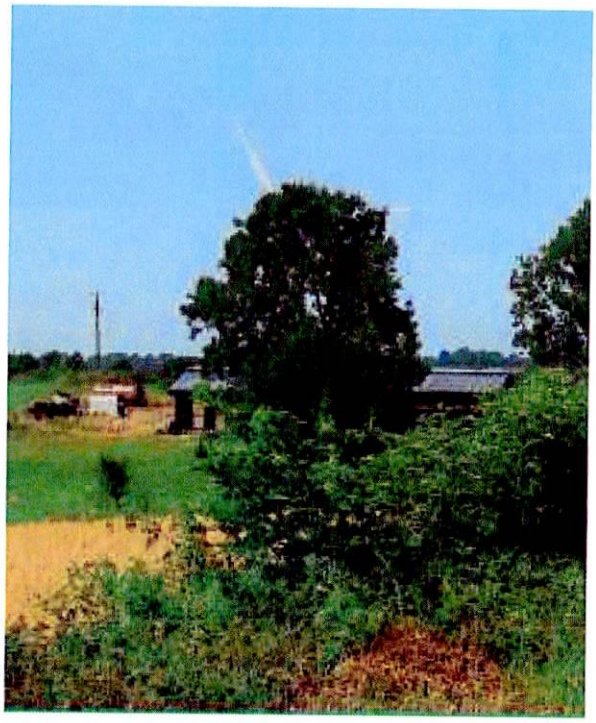
Mr MacDonald, a member of the Royal Institute of British Architects, said small changes to the size of the photograph, the angle at which it is taken, the zoom on the camera and how the image is presented could all make turbines appear smaller than they actually are.

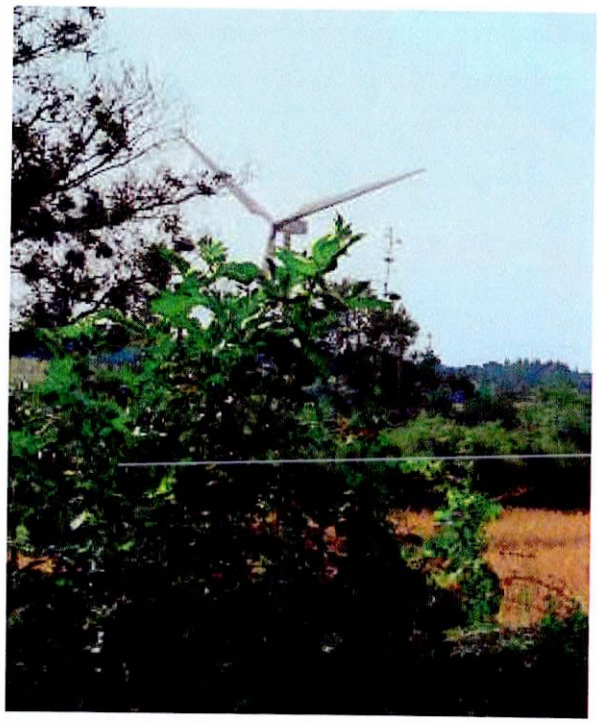
'Local people are being misled about the potential visual impact of such large structures,' he told the Daily Telegraph.

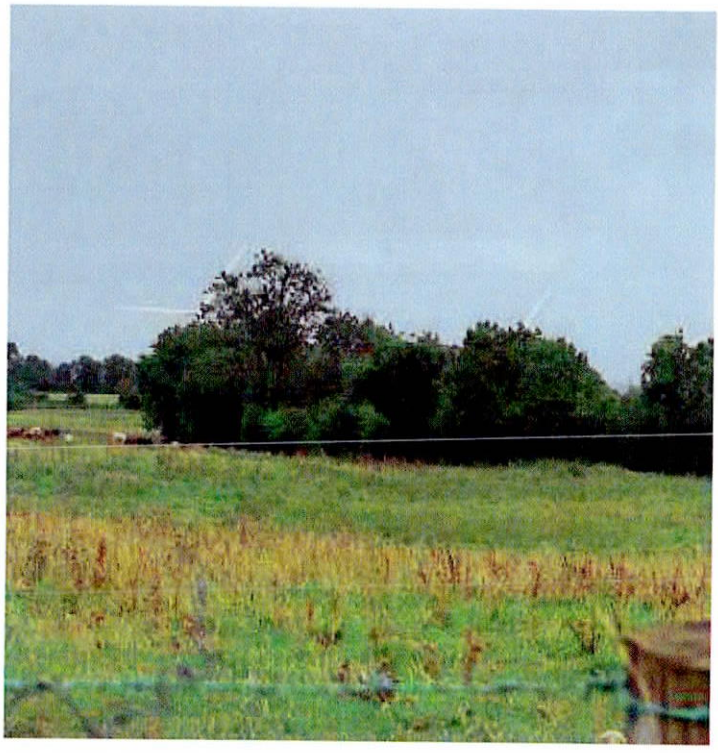
See examples of Unna More photomontage discrepancies below.

When the same image above is zoomed in below, houses and trees are dwarfed at the size and scale of the wind farm, wind turbines.

Wind turbines are practically hidden behind trees. Examples below.





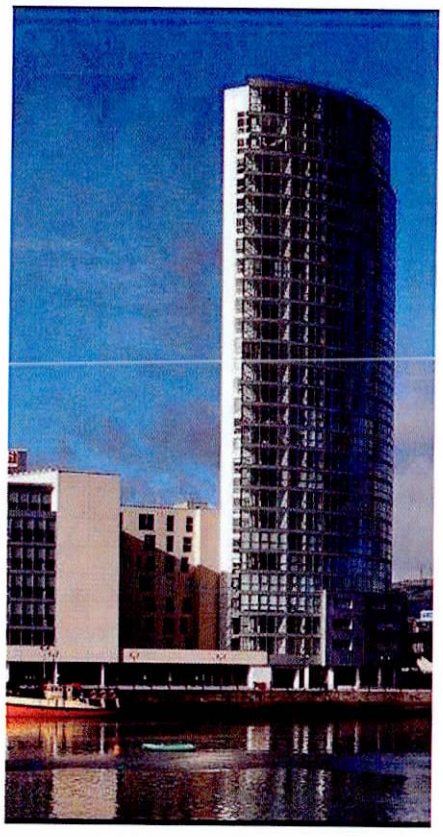


The image below shows a wind turbine height in comparison to surrounding trees. The trees in front of the wind turbines furthest away are dwarfed by the turbine.

However, the tree close to the nearest turbine is not dwarfed. The turbine is clearly positioned in the corn field and not the valley.

Given the stated height of the wind turbines as 185m this would leave the tree in the foreground approximately 66m high.

The true scale of this development cannot be underestimated and has not been given a true representation in the photomontage section. The Umma More windfarm planning application is for 9nr. wind turbines at 185m in height. To give a sense of size, the Obel Tower in Belfast is 85m high and dwarfs the eight story buildings around it. The proposed wind turbines for the Umma More windfarm are another 100m higher.



The County Development Plan 2021 – 2027 identifies this area of Westmeath as the Western Lowlands and as having low wind energy capacity.
An Industrial Wind Energy Development of this nature, height and scale as proposed by the applicant in this low lying region of the midlands would be inconsistent with the character with the area.

APPENDICES

1. https://www.npws.ie/sites/default/files/publications/pdf/IWM93.pdf
2. Umma More Planning Application: Section 7.2.4 Field Surveys.
3. https://www.teagasc.ie/media/website/environment/soil/Teagasc_Drainage_Manual_2022.pdf
4. https://gis.epa.ie/EPAMaps/Water
5. (https://www.irishstatutebook.ie/eli/2001/si/600/made/en/print#part1)
6. https://uisneach.ie/history/
7. https://iso.ucc.ie/Tain-cualnge/Tain-cualnge-names.html
8. *https://www.teagasc.ie/environment/soil/soil-drainage/*