Ballydermot Wind Farm, Co. Offaly and Co. Kildare

SID Section 37B 4th Pre-Application Consultation Meeting

An Coimisiún Pleanála

27th August 2026

Meeting Agenda

- Substitute Consent and IPC Licence
- Strategic Infrastructure Criteria
- Policy Context
- Pre-Application Consultation Clarification
- Environmental Impact Assessment
  - Update on Biodiversity
  - Update on Ornithology
  - Noise
  - Shadow Flicker
  - Landscape and Visual
  - Cultural Heritage
  - Other Material Assets
- Consultation with Statutory Bodies & the Public
- Consideration of Documentation – Application Contents & Completeness Check
- Feedback & Discussion



Substitute Consent and IPC Licence

Substitute Consent

- Ballydermot substitute consent application submission – 20th August 2026
- Application included an rEIAR and rNIS – assessing peat extraction and ancillary activities since 1988
- Exceptional circumstances for ACP to grant permission demonstrated in Planning Report

Integrated Pollution Control Licence (IPC) - Ref. P0503-01

- Application granted in May 2000 for an IPC licence for Allen Bog Group, within which the Proposed Project is located.
- The IPC Licence is managed by Bord na Móna, with a Compliance Officer located who manages the day-to-day compliance requirements

Strategic Infrastructure Criteria

Planning and Development Act 2000 (as amended)*	SID Determination Criteria	Ballydermot Wind Farm (ABP-316466-23)
7th Schedule	An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total power output greater than 50MW	The Ballydermot Wind Farm will comprise up to 47 no. wind turbines with an installed capacity above 50MW. As such, the proposal exceeds the generating capacity thresholds specified in the 7th Schedule.
Section 37A(2) **One (or more) of which must be satisfied**	The development must be of strategic economic or social importance to the State or the Region in which it would be situate	Due to the scale of the Proposed Project, it is our opinion that the project is of strategic economic and social importance to the Eastern and Midlands Region and the state. The capital investment required for a project of this scale will cumulatively represent a significant economic contribution to the Region and the State as a whole.
	The development would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework or in any Regional Spatial and Economic Strategy in force in respect of the area in which it would be situate	The Ballydermot Wind Farm is in accordance with the promotion of renewable energy as set out in provisions of the Revised National Planning Framework (2025),Climate Action Plan (2025) and Eastern and Midlands Regional Spatial and Economic Strategy. The proposal will significantly contribute towards meeting sustainable renewable energy targets and objectives at Local, Regional and National Levels.
	The development would have a significant effect on the area of more than one planning authority	The Ballydermot Wind Farm is located within the functional area of two separate planning authorities, Kildare County Council and Offaly County Council.

*noting the Planning and Development Act 2024 target implementation date of September 30th 2026

Policy Context - Planning

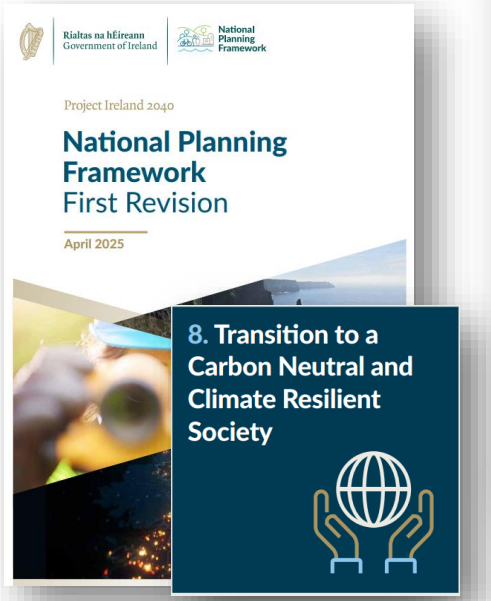
The Climate Action and Low Carbon Development (Amendment) Act 2021
- Climate neutrality by 2050.
- 51% GHG emissions reduction by 2030.

Climate Action Plan 2025
- **Key Targets:** 6GW Onshore Wind by 2025, 9GW of onshore wind and 80% Renewable Electricity Share by 2030.
- *'In relation to peatlands, some of Ireland's cutaway bogs are suitable to facilitate the generation of energy, most notably wind/biomass'*

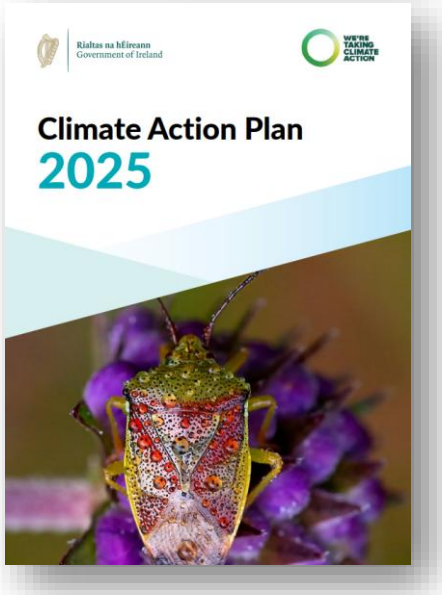
National Planning Framework – First Revision
- **National Strategic Outcome 8:** Transition to a Low Carbon And Climate Resilient Society.
- **National Policy Objective 70:** Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050.

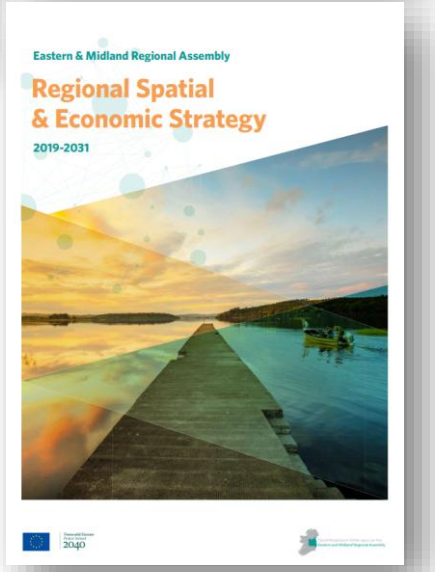
'*Opportunities also exist for co-location of renewable technology in areas, alongside transport infrastructure corridors, within forestry lands, and on industrial and post-industrial peatlands*'
'*in relation to peatlands, some of Ireland's cutaway bogs are suitable to facilitate the generation of energy, most notably wind/biomass.*'

Eastern and Midland Regional and Spatial Economic Strategy:
- *'Local authorities should harness the potential of renewable energy in the Region across the technological spectrum from wind and solar to biomass and, where applicable, wave energy, **focusing in particular on the extensive tracts of publicly owned peat extraction areas** in order to enable a managed transition of the local economies of such areas in gaining the economic benefits of greener energy.'*









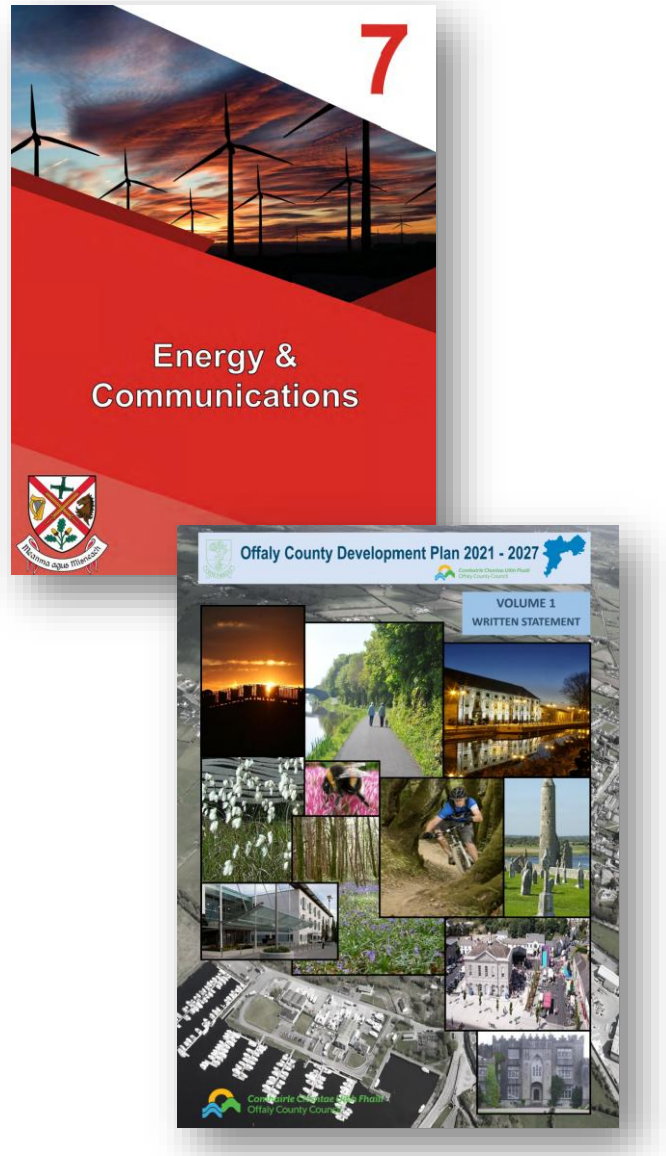
Policy Context – Local Policy

Kildare County Development Plan 2023-2029

- **Policy EC P2**
  "Promote renewable energy use generation and associated electricity grid infrastructure at appropriate locations within the built environment and open countryside to meet national objectives towards achieving a net zero carbon economy by 2050."
- **Policy EC 066**
  "Facilitate the delivery of necessary integration of transmission network requirements to allow linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner."

Offaly County Development Plan 2021-2027

- **Policy CAEP-25**
  "It is Council policy to encourage and facilitate the production of energy from renewable sources, such as from bioenergy, waste material, solar, hydro, geothermal and wind energy, subject to proper planning and environmental considerations."
- **Policy CAEO-04**
  "It is an objective of the Council to ensure the security of energy supply by supporting the potential of the wind energy (and other renewable) resources of the. County in a manner that is consistent with proper planning and sustainable development of the area"



Local Wind Energy Zoning

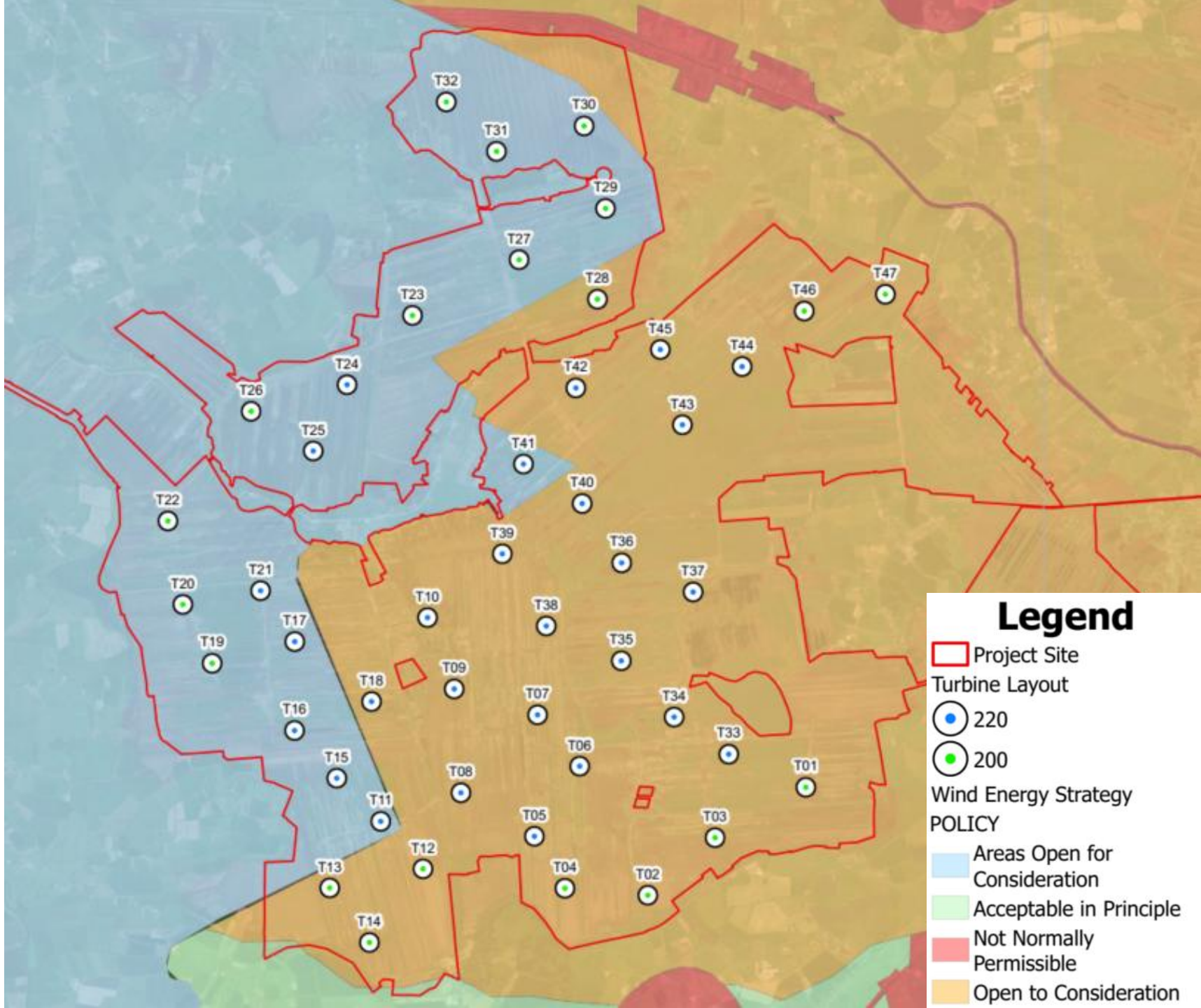
County Offaly Local Authority Renewable Energy Strategy

- **Wind Energy Designations:**
  'Areas Deemed Open for Consideration'

County Kildare Wind Energy Strategy 2023-2029

- **Wind Energy Designations:**
  'Open to Consideration'

Variation No. 4 of the KCDP was adopted on 27th April 2026 and introduces an updated Landscape Character Assessment. The variation makes amendments to the WES but does not alter the existing wind energy designation of the site.



Pre-Application Consultation Clarification

- Likely Future Receiving Environment has been considered throughout the EIAR impact assessment chapters

- Clear timelines and two baseline assessments proposed to be used:
  - Current Baseline
  - Likely Future Receiving Environment

- Particular consideration has been given in
  - Chapter 6 (Biodiversity),
  - Chapter 7 (Ornithology),
  - Chapter 9 (Water)
  - Chapter 11 (Climate)

Biodiversity - Key Ecological Receptors Identified

- European and Nationally Designated Sites
- Raised Bog
- Bog Woodland and Scrub
- Cutover Bog and associated revegetating secondary habitats
  - Secondary *Calluna*-dominated communities
  - Poor fen and flush
  - Reed and large sedge swamp
- Treelines
- Depositing/lowland rivers
- Aquatic and Fisheries Species
- Basil thyme
- Round-leaved wintergreen
- Badger
- Otter
- Pine marten
- Irish stoat
- Red squirrel
- Marsh fritillary
- Bat species
- Other Invertebrates (including bees, butterflies, moths and hoverflies)

The Proposed Project layout and design have been constraints led. It has been developed to avoid or reduce impacts to these receptors wherever possible

Biodiversity – Mitigation and Enhancement

Avoidance / Mitigation by Design

- Early identification of constraints
- Avoidance of the most ecologically-sensitive areas during the early design stages
- Examples include avoidance of uncut raised bog, marsh fritillary habitat, badger setts.
- Watercourse buffers were incorporated into the design

Minimisation

- The project has been sensitively designed to minimise potential impacts, e.g. sensitively designed watercourse crossings, incorporation of boardwalks

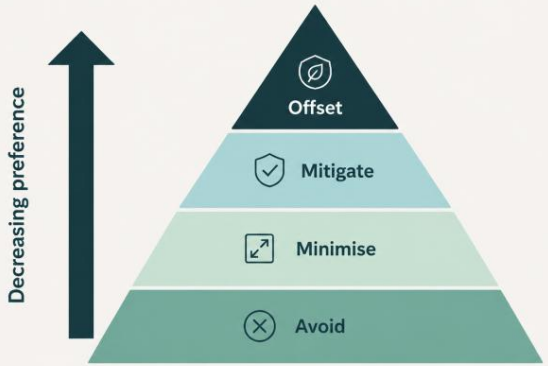
Mitigation

- For all habitats identified as KERs, loss has been compensated through planting or restoring areas of equal amounts, at a minimum. In most cases these areas are greater than that being lost.

Enhancement

- Any of the enhancement measures have been designed to minimise potential adverse effects – peatland enhancement around the peripheries of the site, woodland planting only on dry cutaway peatland and areas of existing conifer plantation
- Enhancement is being undertaken in large blocks of habitats, minimising potential edge effects and creating habitat connectivity where possible.

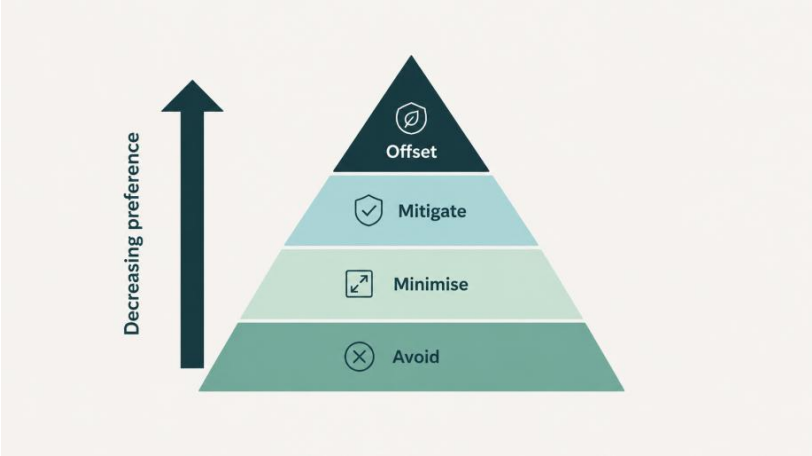
Ornithology



➢ **Key Findings:**

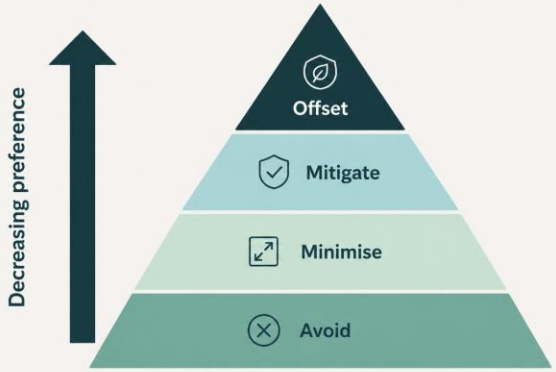
- **Collision Risk**
  - Golden Plover
    - ➢ Potentially **significant collision risk** impacts will be mitigated through **deterring** site use and **attracting birds to low-risk areas** (e.g. offsetting areas).
    - ➢ Avoidance considered at early design stage, however no individual turbine gives rise to high collision risk, with effect relating to the scale of the site.
    - ➢ **Three step approach** proposed to allow a prediction of no significant effect, i.e. deterrence, attraction and monitoring/curtailment (if needed).
- **Habitat Loss**
  - Potentially significant habitat loss impacts: **Golden Plover (roosting), Whooper Swan (roosting), *Hen Harrier (opportunistic roosting)*** and **Breeding waders**.
  - This will be offset through a combination of **enhancement and compensation**.
  - It is envisaged that all the above enhancement and compensation can be achieved **in Lodge Bog and Killina Bog.**

Ornithology - Proposed Mitigation (Step 1)



- **Mitigation – up to 250m from turbine bases (wintering golden plover)**
  - **Integrated mitigation approach to deter golden plover from turbines.**
  - It is proposed to encourage scrub within 250m of turbines, but outside the proposed bat buffers (50m) **to avoid attracting bats**.
  - Bat buffer– Areas within bat buffer need to be **maintained as open habitat** to discourage bat flight activity around turbines. It is not anticipated that golden plover will use open areas of less than 10 hectares (Leitão & Peris, 2015). Bat buffer area is less than 10ha.
  - 50m to 250m - A **mosaic habitat including scrub** which ensures no open areas >10ha is to be established around each turbine to make the habitat unsuitable for golden plover and to decrease the associated flight activity.
  - Offsetting areas to attract golden plover away from turbines, i.e. into **low-risk areas**.
  - Any areas of Annex I habitats which overlap with the 250m radius of turbines will be retained.

Ornithology - Proposed Offsetting Measures (Step 2)



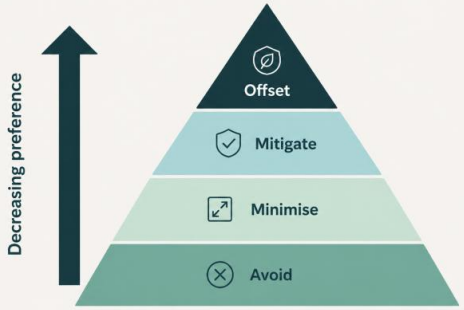
An integrated approach to compensation and enhancement in line with NPWS recommendations:

- **Offsetting – Lodge Bog (breeding waders, wintering golden plover and wintering whooper swan)**
  - Measures proposed for these species at Lodge Bog are **scrub removal and management** to create/maintain open habitat, addition of **open water habitats** and **scrapes** and **erection of predator-proof fencing** in wader breeding areas (e.g. PCAS cells, historical breeding wader enhancement area in NW of Lodge Bog).

- **Offsetting – Killina Bog (breeding waders and wintering golden plover)**
  - Suitable open habitat is to be created in Killina Bog, which would include the **removal of forestry** from this area.
  - Ongoing **mowing** and **scrub management** will be required.
  - Other measures could include the creation of small areas of open water, e.g. **wader scrapes** (or similar to above).

  - **Monitoring of offsetting areas against key targets will be put in place and measures will be adapted as required to ensure the efficacy of mitigation for the lifetime of the project**

Ornithology – Monitoring and Curtailment (Step 3)



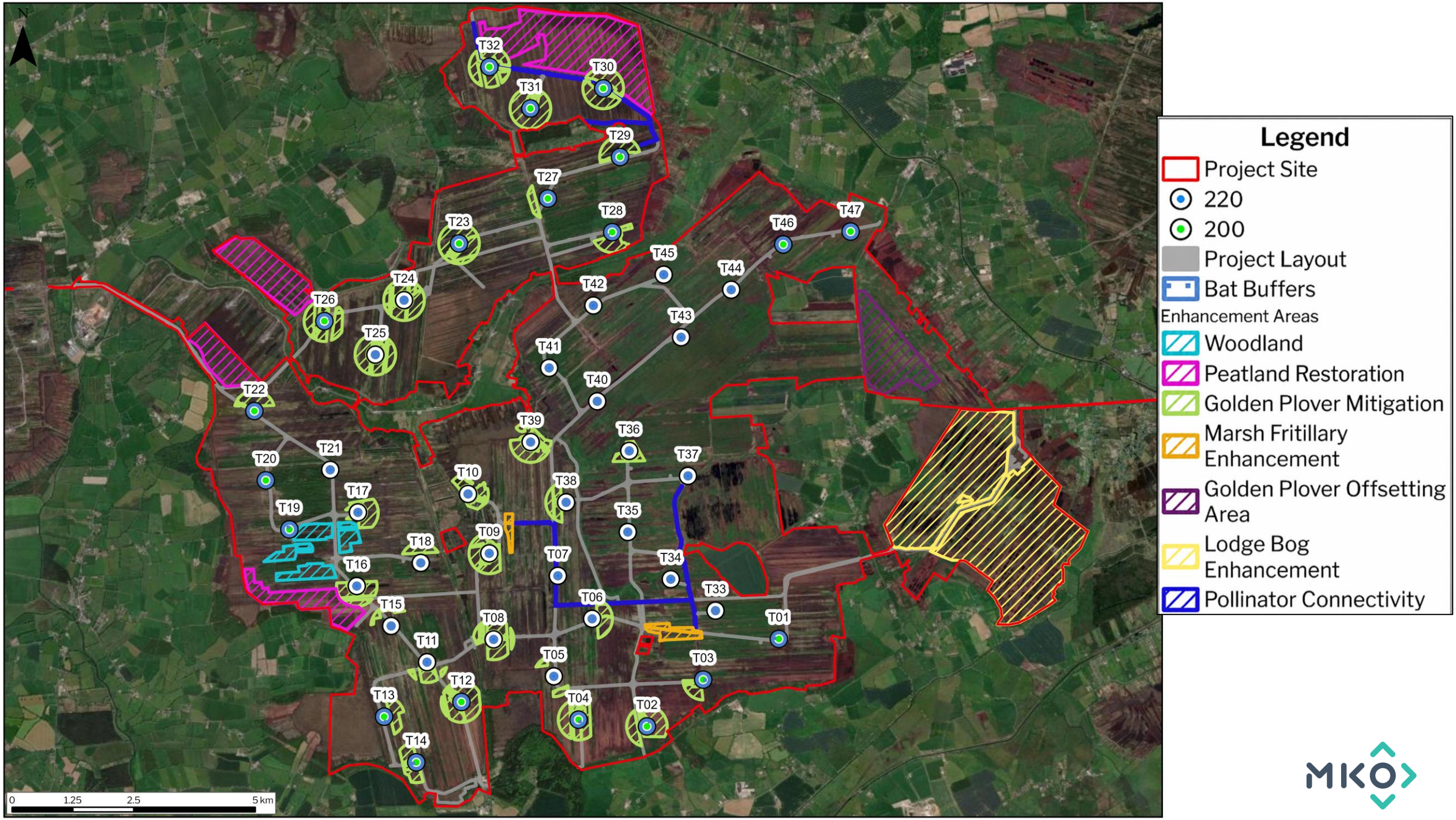
Monitoring

1. **Fortnightly carcass searches** during the winter seasons over the lifetime of the Proposed Wind Farm.

2. **Monthly vantage point surveys:** At required number of VP locations to provide coverage of the consented turbine envelope throughout the Project Site for the lifetime of the Proposed Wind Farm.

Curtailment (if mortality threshold reached)

1. Threshold for curtailment: If mortality levels representing a **1% increase in background mortality** of the regional population are reached through collision with the Proposed Turbines, then curtailment (for the turbine/turbines which caused mortality) will come into effect for the remainder of the winter season.


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Project Layout
Bat Buffers
Enhancement Areas
Woodland
Peatland Restoration
Golden Plover Mitigation
Marsh Fritillary Enhancement
Golden Plover Offsetting Area
Lodge Bog Enhancement
Pollinator Connectivity
MKO

Noise and Vibration

Applicable Guidance - Operational:

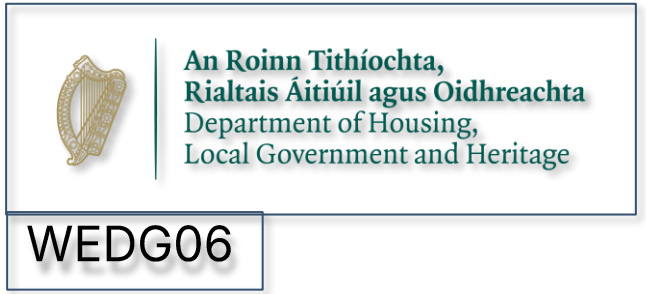
- Department of Housing, Local Government and Heritage
  - *Wind Energy Development Guidelines (**WEDG, 2006**)*

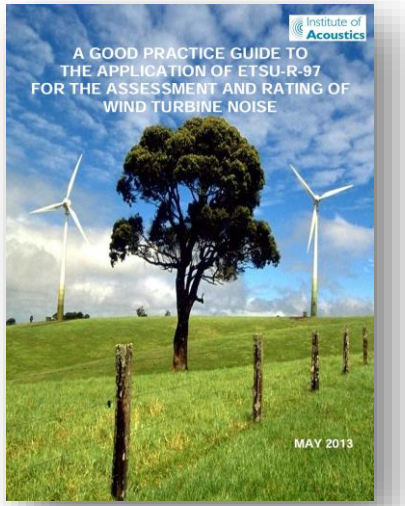
Supplementary and Best Practice Guidance

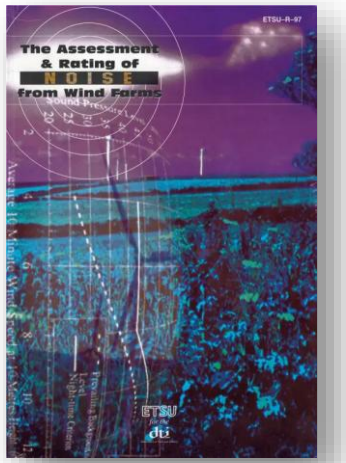
- *The Assessment and Rating Of Noise from Wind Farms 1996 (**ETSU R 97**)*
- *Institute of Acoustics Good Practice Guidance & supplementary notes 2013 (**IOA GPG** & **SGN**)*
- *Assessment and Rating of Wind Turbine Noise 2026 (**ARWTN**)*

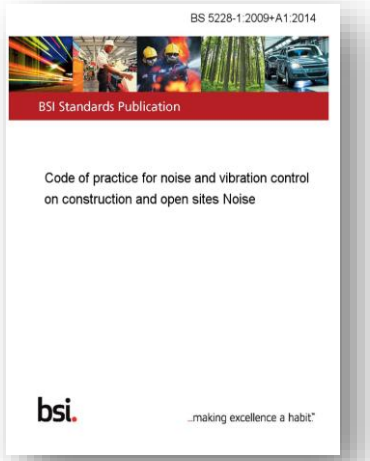
Applicable Guidance – Construction

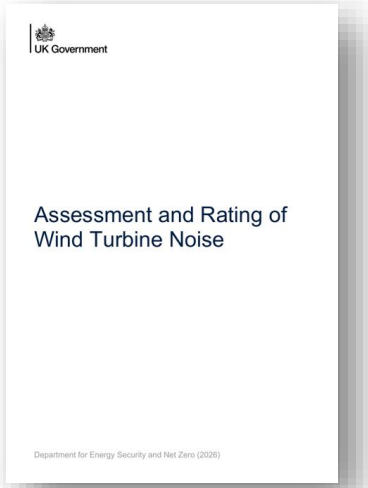
- ***BS 5228**: Code of practice for noise and vibration control on construction and open sites.*
- *TII (NRA, 2014): Good Practice Guidance for the Treatment of Noise and Vibration in National Road Schemes*
- *National Highways: Design Manual for Roads and Bridges Sustainability & Environment Appraisal LA 111 Noise and Vibration (**DMRB**)*





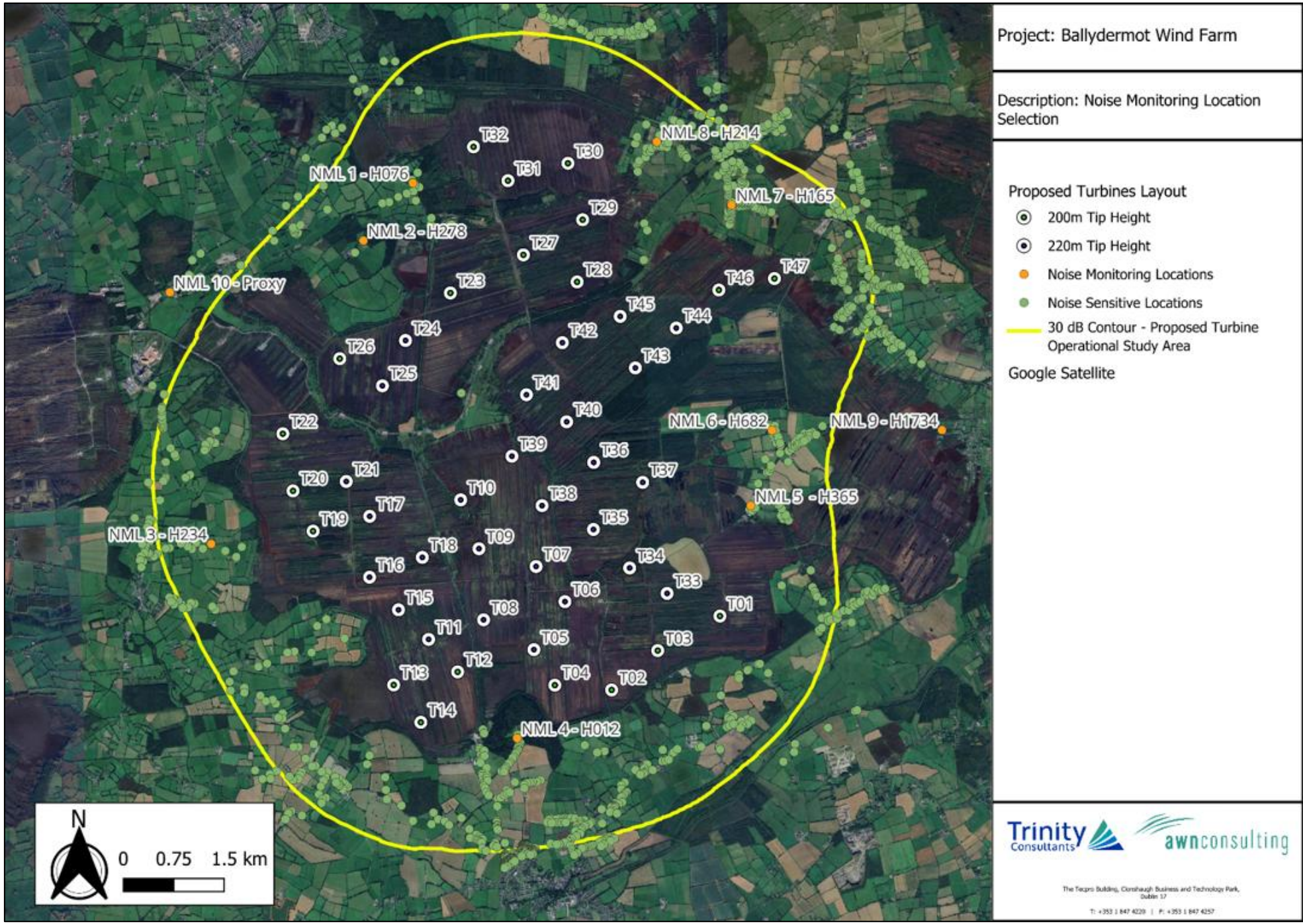






Baseline Noise Survey

- 10 Locations
- Consistent Noise Environment
- Study Area:
  - Operational Turbine ~ 30 dB Contour



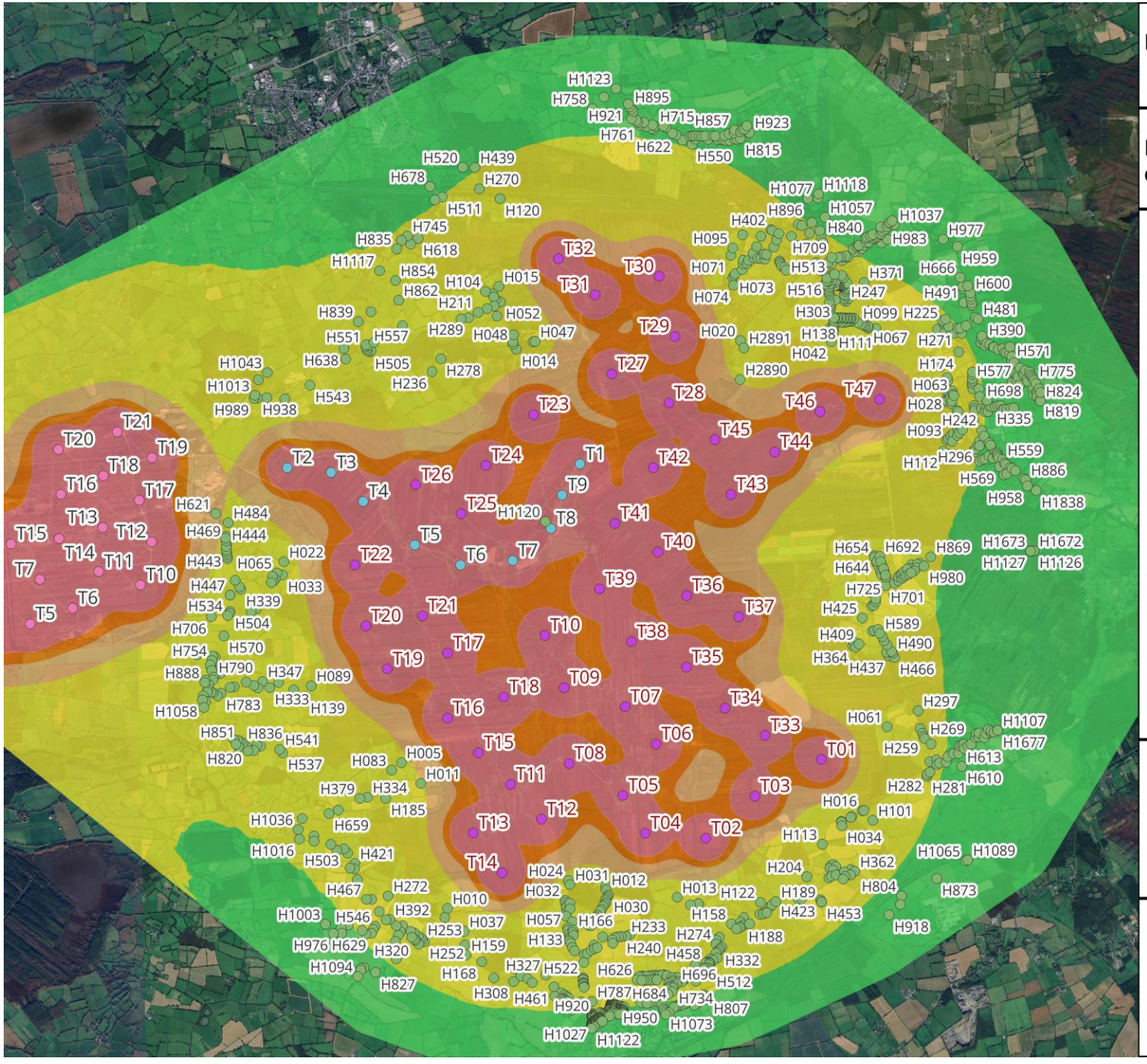
Turbine Operations (1/2)

Objective:

- Confirm the Proposed Turbines can operate within defined turbine noise limits with or without mitigation.

Methodology:

- Thresholds:
  - 45 dB L_{A90} (day), and
  - 43 dB L_{A90} (night).
- Noise criteria are based on the background survey
- Predicted turbine noise and proposed limits are Cumulative



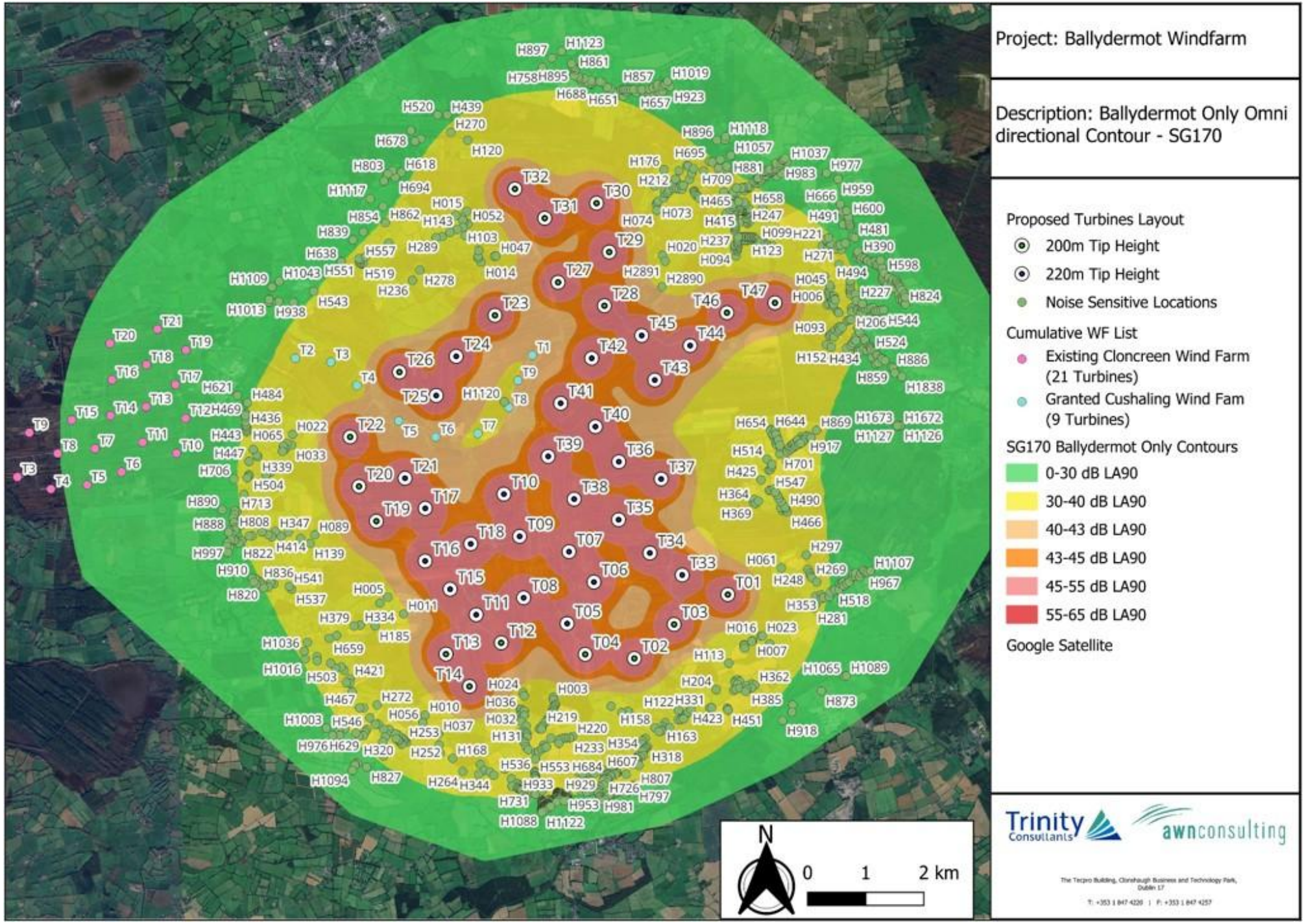
Turbine Operations (2/2)

Assessment Summary:

- Assessment has confirmed predicted Proposed Turbine noise is within the derived noise criteria
- No mitigation necessary

Post-planning:

- Best practice for demonstrating compliance and ongoing controls for noise management.
- Commitment to monitoring turbine noise for compliance assessments.
- Commitment to manage and investigate noise complaints



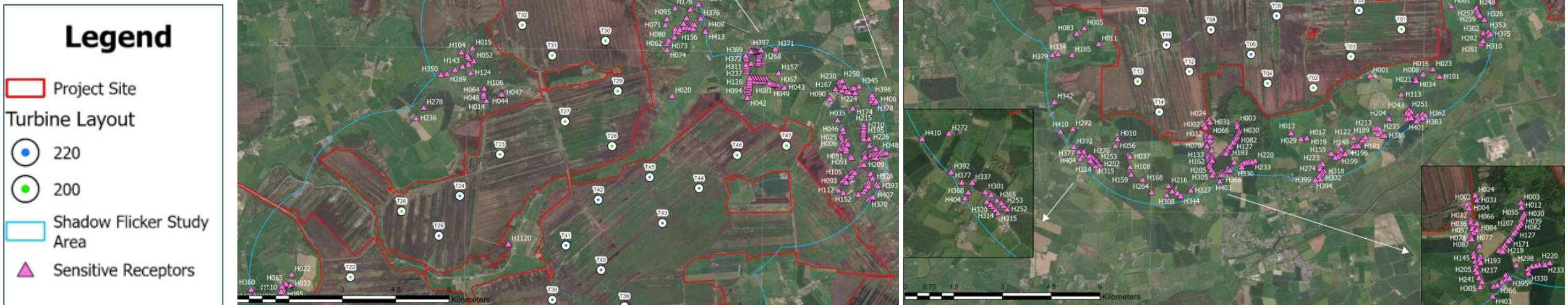
Fixed Plant Operations

- **Threshold 35 dB L_{Aeq}**
- **Onsite Substation:**
  - Nearest NSL H1675~ 394 m.
  - Noise Impact: 29 dB L_{Aeq}
- **Offsite Substation:**
  - Nearest NSL H2009 ~298 m.
  - Noise Impact: 31 dB L_{Aeq}



Shadow Flicker

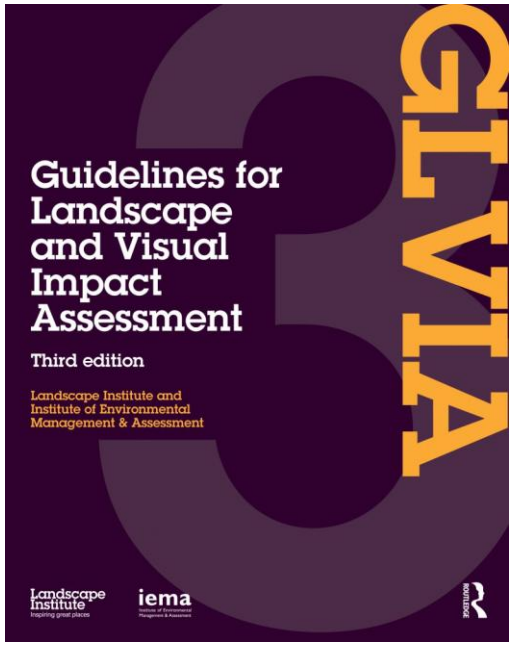
- Software will be used to predict potential shadow flicker durations on Sensitive Receptors within 10 times RD of turbines (i.e., 1.7km)
- Shadow Flicker survey to be conducted once wind farm is operational to confirm predictions
- Mitigation measures to ensure compliance with thresholds include installation/planting of screening and/or wind turbine control



Landscape and Visual Impact Assessment

- Landscape and Visual Impact Assessment (LVIA) commenced as part of multiple early-stage feasibility studies
- LVIA has been an iterative process to inform project design
- Landscape and Visual Assessments following best practice methods, standards and guidance for LVIA









Residential Receptors – Key Findings

Key Findings

- Due to flat landscape characteristics and mature boundary vegetation surrounding the Proposed Wind Farm there is limited visibility of approx. >10 turbines from any group of residential receptors.
- Potential for ‘Surrounding Effects’ in the Townland of Lullymore with views of turbines in two separate directions from a linear arrangement of residential receptors on the R414 Regional Road.

Example: Limited Visibility of many turbines from any given location representing closest residential receptors



*Image Extracts from 2020 LVIA Study. Not Reflective of the current Turbine Layout and Design of the Proposed Project

Tip Height Analysis(2021 - LVIA Design Analysis Study)

Key Finding:

- **Tip height scale matters most at the site perimeter**
- **Lower perimeter tip height reduces visual dominance**
- **Height difference between outer and inner turbines is not readily discernible**

Design Intervention:

- **Two tip heights adopted deliberately as LVIA mitigation:**
- **Graduated profile balances yield against scale effects:**

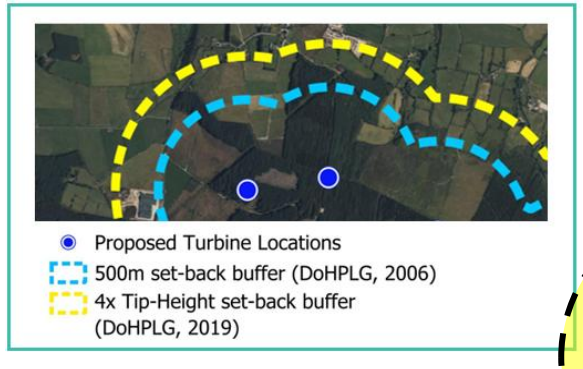






Figure 11 - Snip of Overlay Wireframe Image from VP17

e.g. Omission of Visually Separate and Disconnected Turbines (2021 - LVIA Design Analysis Study)

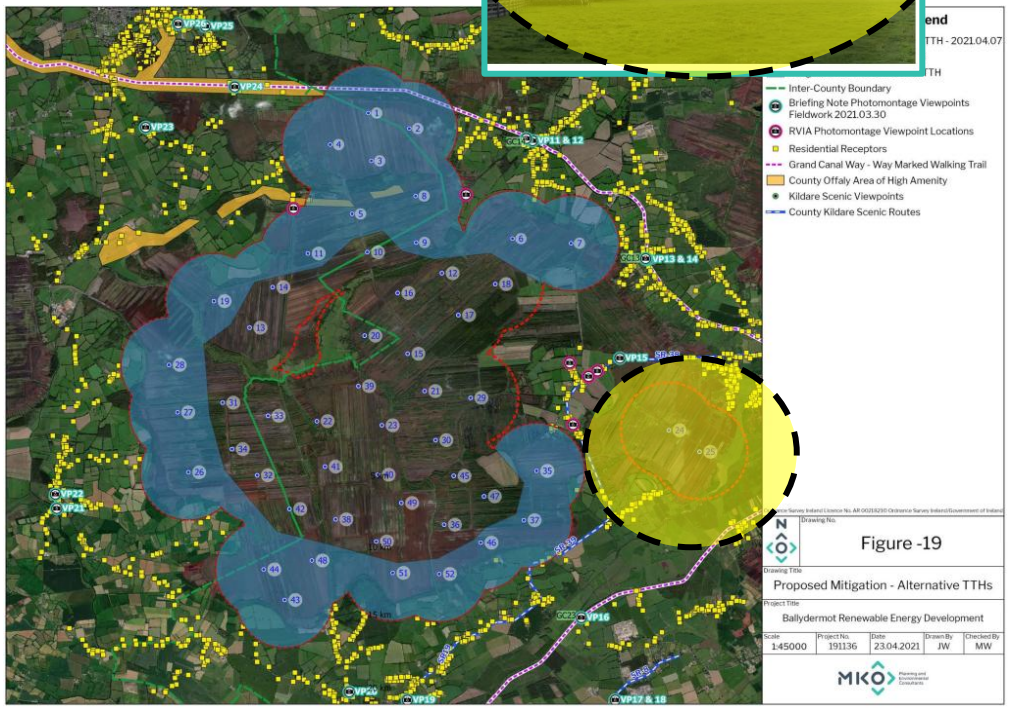


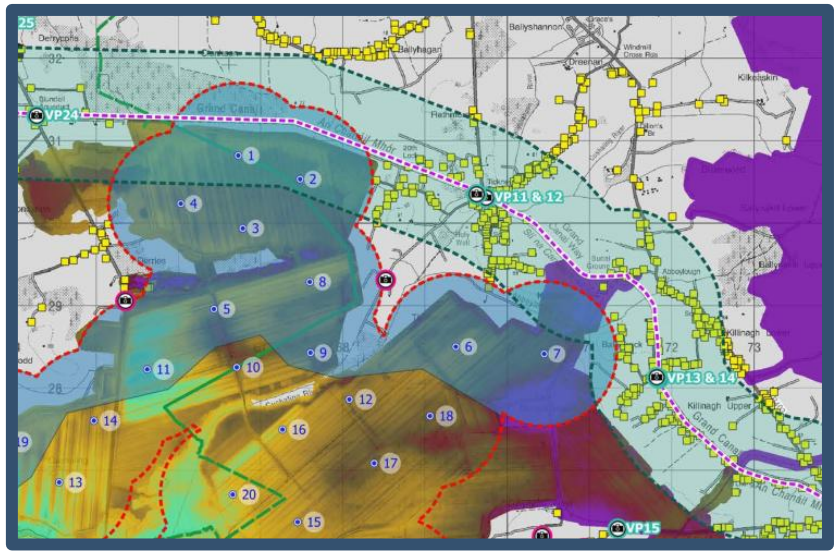
*Image Extracts from 2021 LVIA Study. Not Reflective of the Current Turbine Layout and Design of the Proposed Project

Implement an Appropriate Setback of Proposed Turbines from amenity at the Grand Canal (2021 - LVIA Design Analysis Study)





Example Set-back Distance from amenity at the Grand Canal (800 Metres)



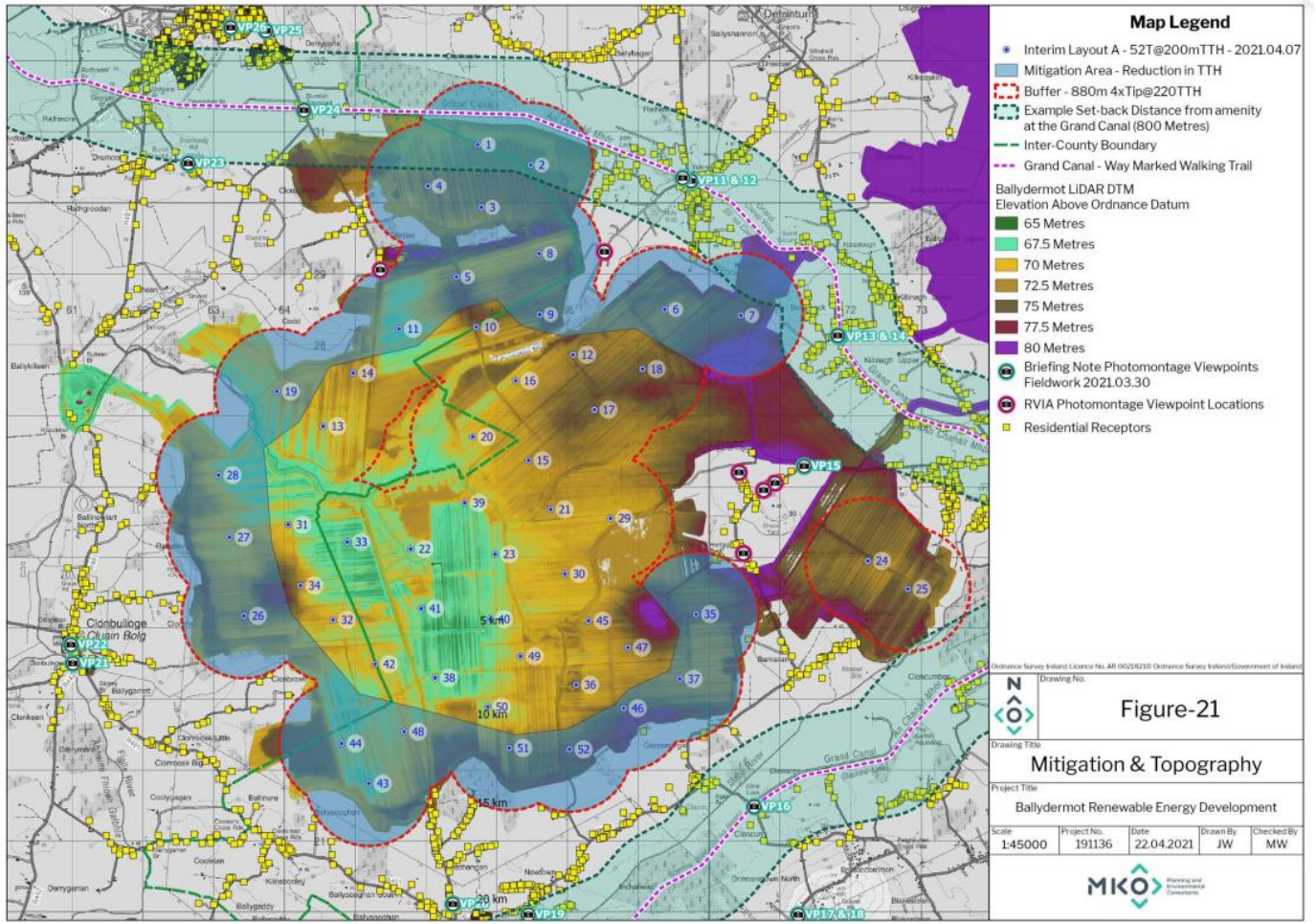


*Image Extracts from 2021 LVIA Study. Not current Turbine Layout and Design of the Proposed Project

Horizontal Colour Palette for the Onsite/Offsite GIS Substation

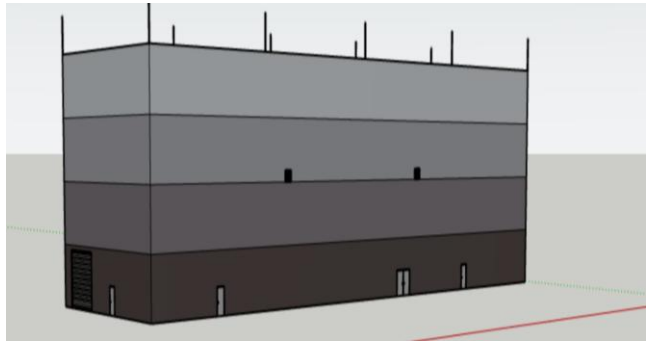
ONSITE SUBSTATION

Lodge Bog
- Graduated horizontal bands: darker earth tones at base to lighter above
- Non-reflective matte finish
- Breaks up perceived massing
- Visual assimilation without compromising restoration objectives

Palette (Top → Bottom):

RGB (168, 172, 175)
RGB (137,138,143)
RGB (100,95,99)
RGB (62,54,52)





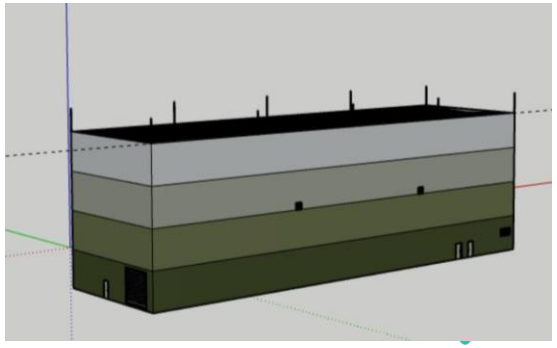
OFFSITE SUBSTATION

Agricultural landscape
- Graduated horizontal bands: dark green at base to light grey above
- Aligns with landscape context
- Breaks up perceived massing
- Existing vegetation screens lower components

Palette (Top → Bottom):

RGB (182, 186, 187)
RGB (145, 149, 134)
RGB (92, 100, 63)
RGB (53, 63, 28)





Baseline LVIA Assessments

Proposed Wind Farm - Large Scale, uninhabited cutover Peatland Site

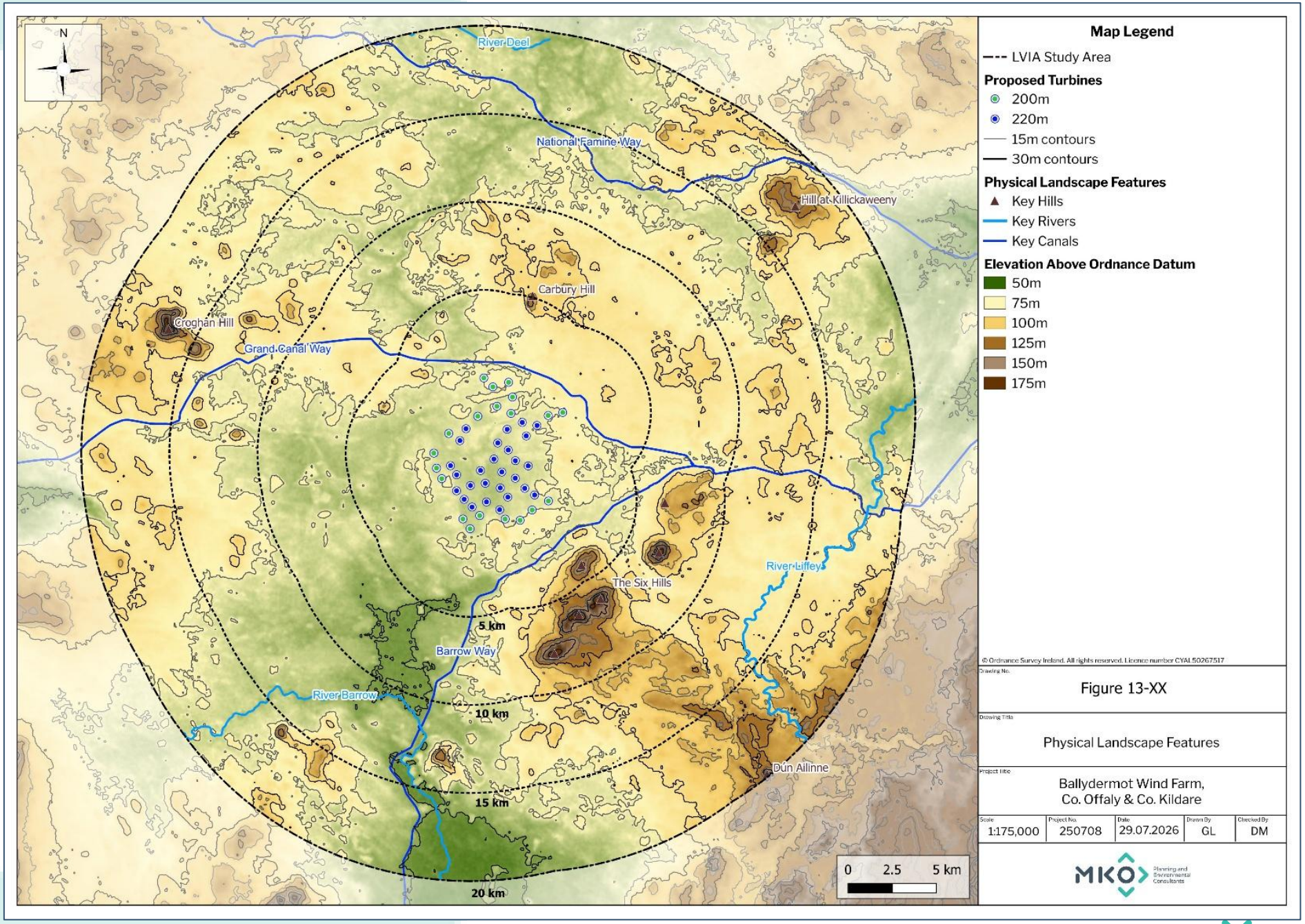
LVIA Study Area – 20km from the Proposed Turbines

Key Landscape Receptors:

- Grand Canal
- The Barrow Canal
- The Six Hills
- Dún Aillnne
- Croghan Hill

Key Visual Receptors:

- Scenic routes and Protected views
- Recreational trails and tourism destinations
- Key Settlements and Population centres
- Residential Receptors



Approach to the LVIA & Tools

ZTV & Receptor Mapping

Site Visits since 2020.

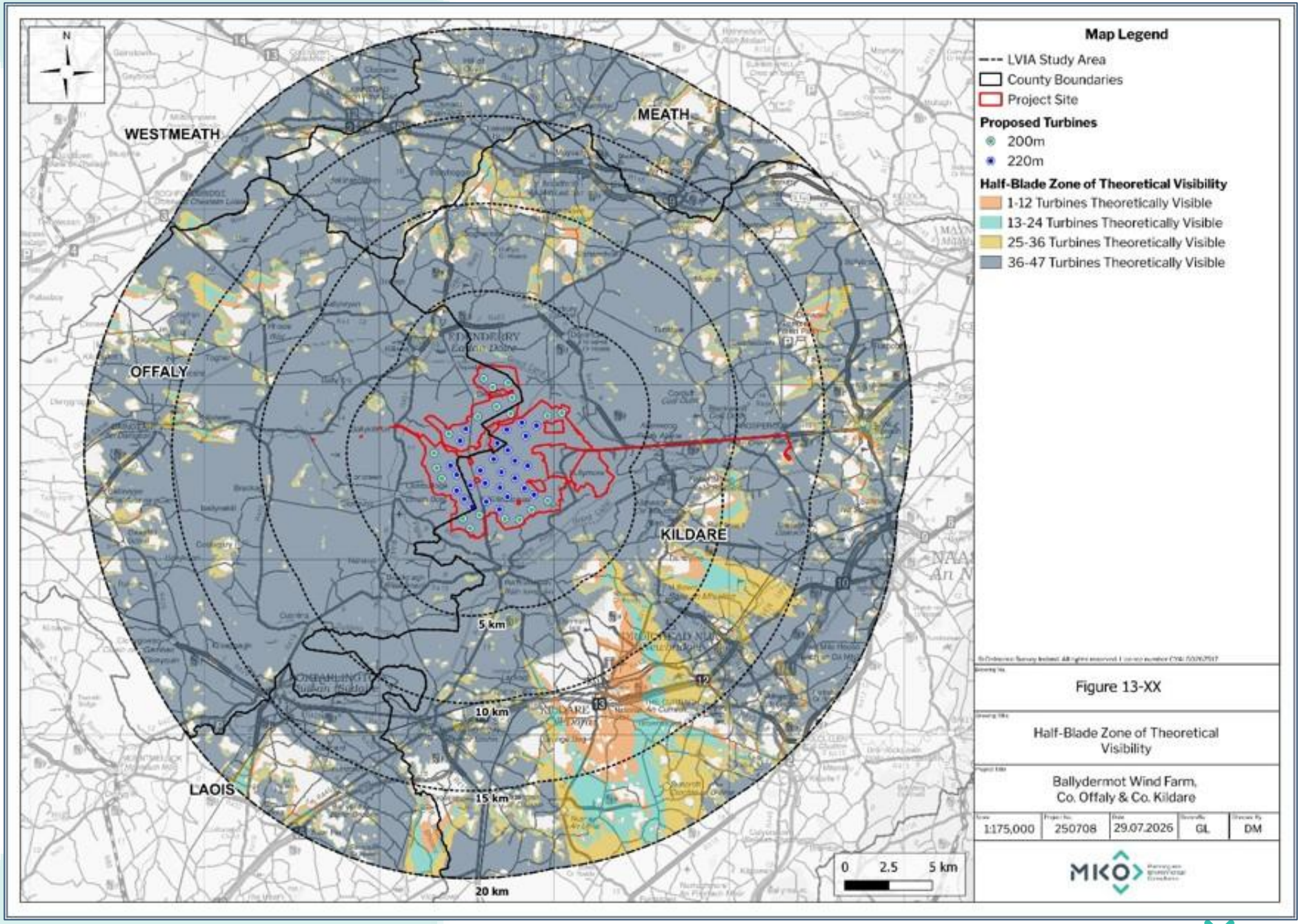
Verified Photomontages

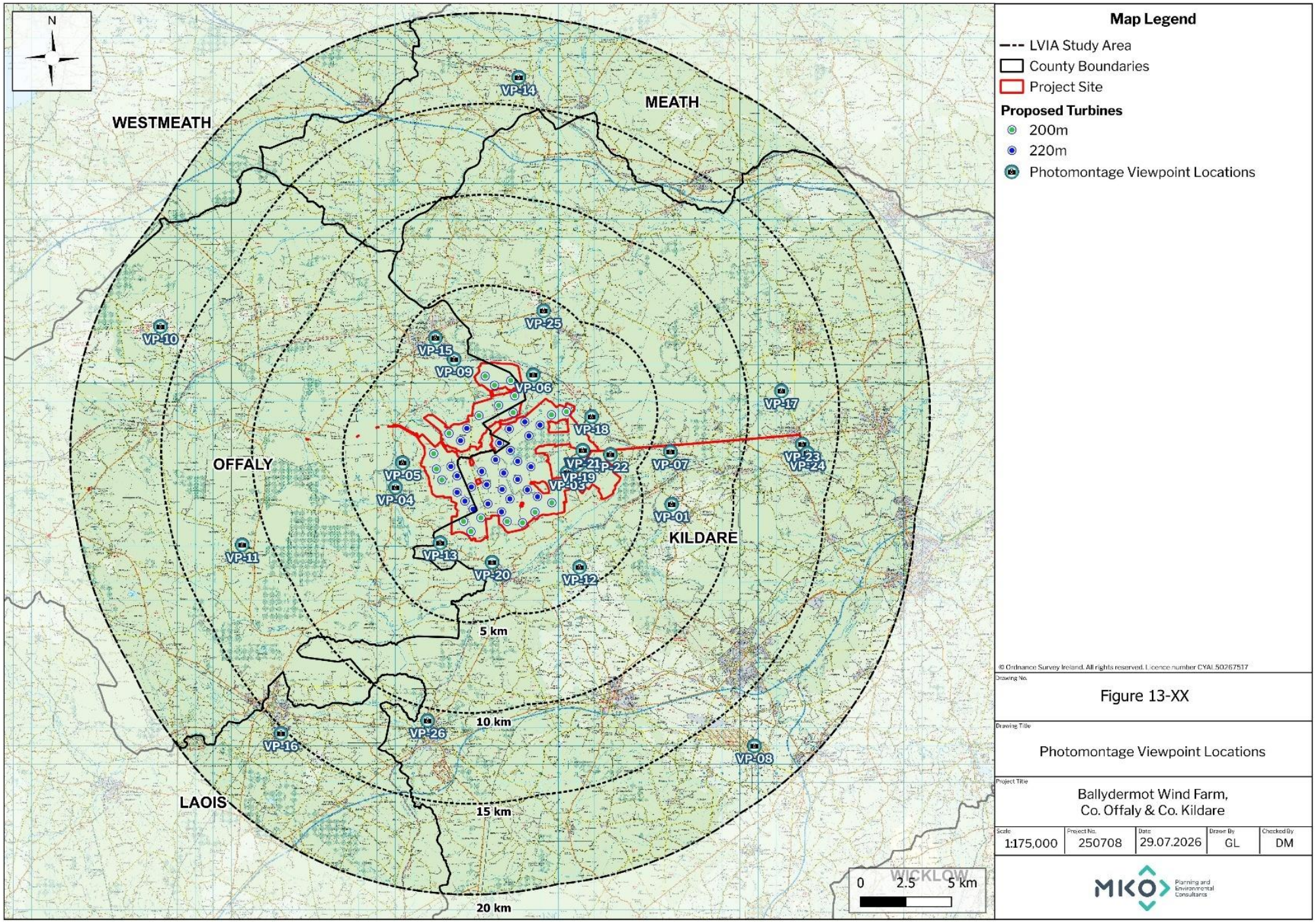
Route Screening Analysis conducted in 2026.

Assessment of Cumulative Effects with all other wind farms within 20km

Impact assessment process balancing sensitivity with magnitude of change

Focus on highest sensitivity receptors where greatest change will occur, including assessment of residential receptors.





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Drawing No.

Figure 13-XX

Drawing Title

Photomontage Viewpoint Locations

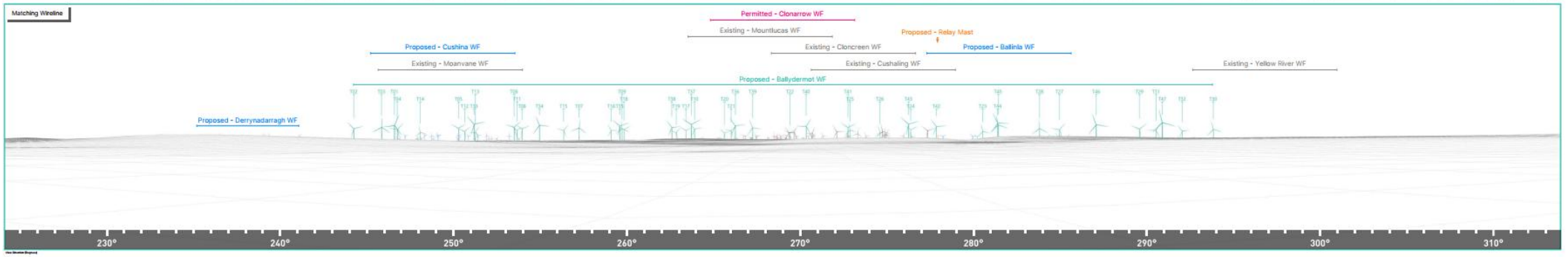
Project Title

Ballydermot Wind Farm,
Co. Offaly & Co. Kildare

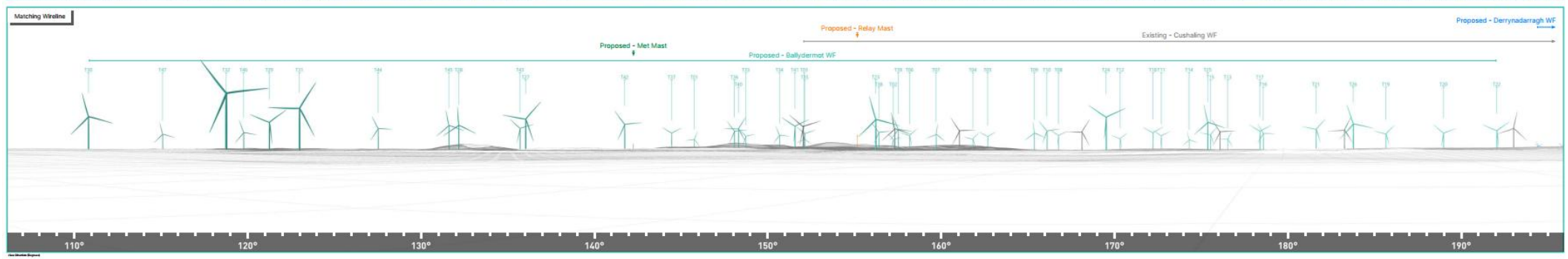
Scale	Project No.	Date	Drawn By	Checked By
1:175,000	250708	29.07.2026	GL	DM

MKO Planning and Environmental Consultants

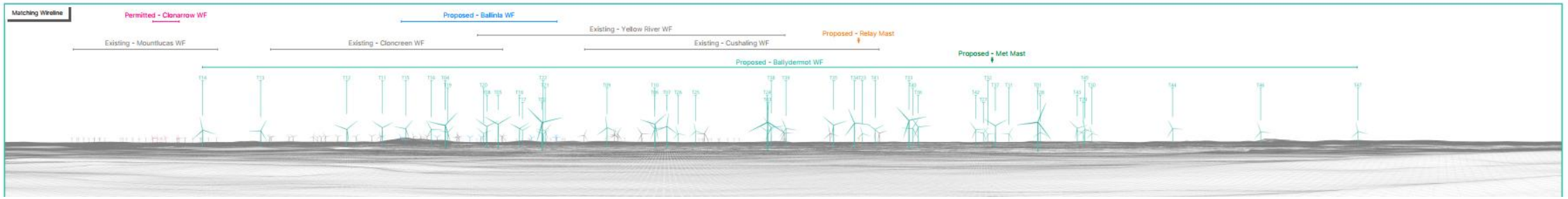

Proposed Photomontage with Cumulative at 90°


Matching Wireline
Permitted - Clonarrow WF
Existing - Mountlucas WF
Proposed - Relay Mast
Proposed - Cushina WF
Existing - Cloncreen WF
Proposed - Ballinla WF
Existing - Moanvane WF
Existing - Cushaling WF
Existing - Yellow River WF
Proposed - Ballydermot WF
Proposed - Derrynadarragh WF
230°
240°
250°
260°
270°
280°
290°
300°
310°


Proposed Photomontage with Cumulative at 90°


Matching Wireline
Proposed - Relay Mast
Proposed - Derrynadarragh WF
Existing - Cushaling WF
Proposed - Met Mast
Proposed - Ballydermot WF
110°
120°
130°
140°
150°
160°
170°
180°
190°

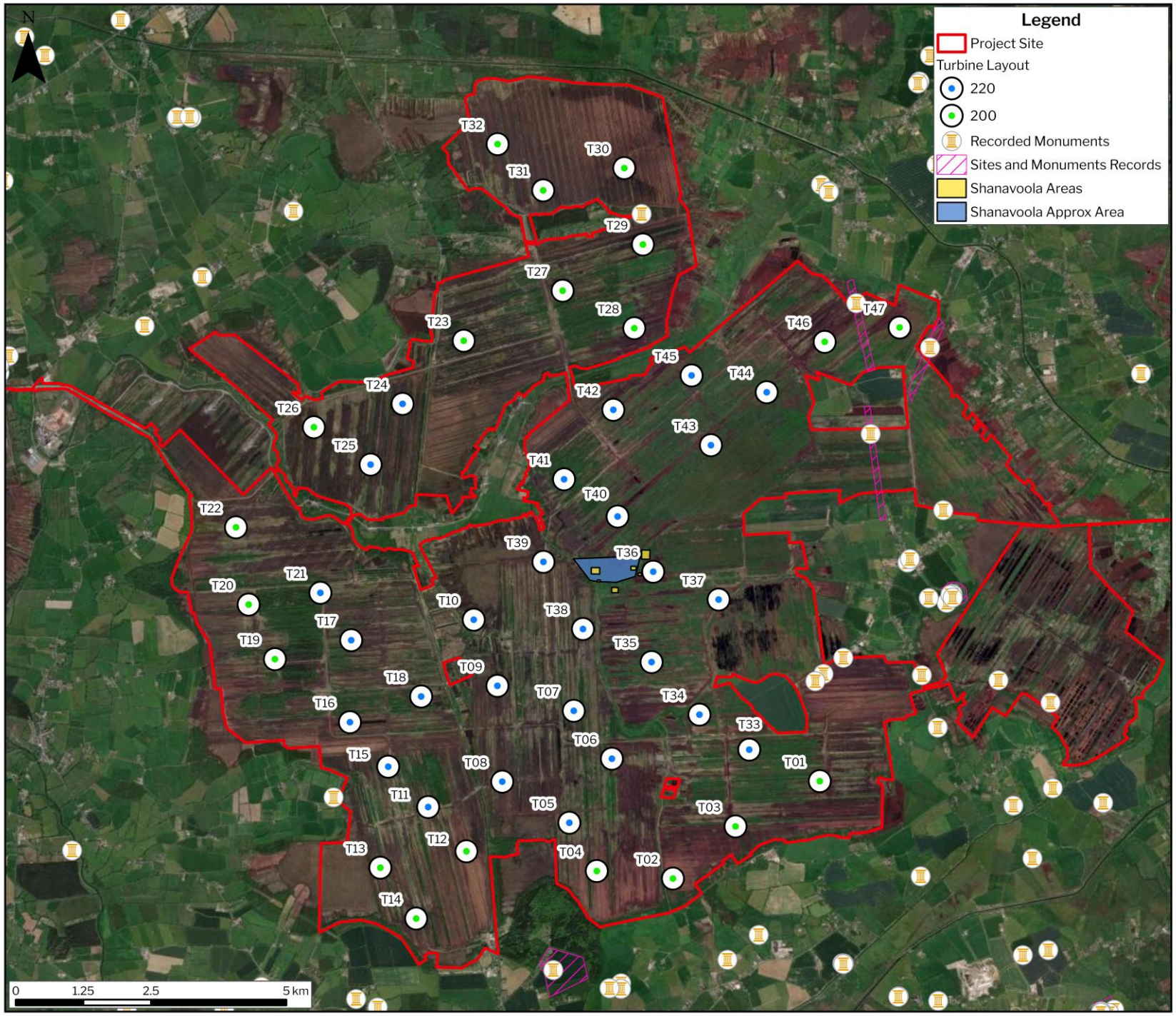

Proposed Photomontage with Cumulative at 90°


Matching Wireline
Permitted - Clonarrow WF
Proposed - Ballinla WF
Existing - Yellow River WF
Proposed - Relay Mast
Existing - Mountlucas WF
Existing - Cloncreen WF
Existing - Cushaling WF
Proposed - Met Mast
Proposed - Ballydermot WF


Proposed Photomontage with Cumulative at 53.5°
300°
310°
320°
330°
340°

Cultural Heritage

- Archaeological desktop surveys undertaken at an early stage to inform project design
- All recorded monuments still within the Project Site have a 50m buffer applied
- Archaeological monitoring was carried out during detailed site investigative work for 2021
- Detailed Archaeological assessment will be completed in Ch 13 of the EIAR
  - Landscape assessment on visual receptors, including cultural heritage included in Ch 14 of the EIAR



Traffic and Transport

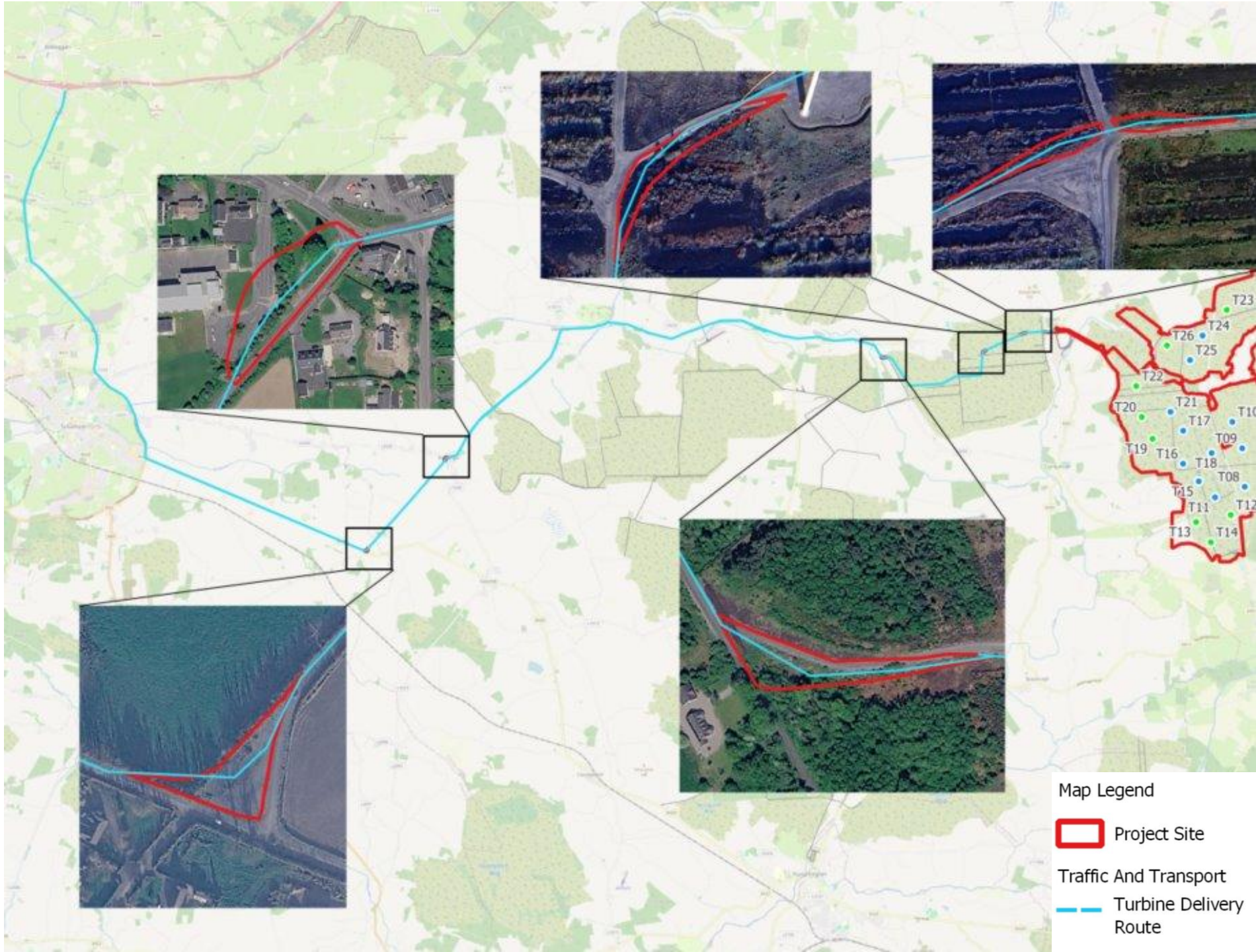
- Traffic assessment based on observed traffic counts to identify optimum delivery routes and access junction strategy
- Junction designs in accordance with TII Guidelines - Stage 1 Road Safety Audit completed
- Detailed link and junction capacity assessments undertaken for busiest construction days
- Assessment of traffic impacts undertaken during construction of the Proposed Grid Connection underground electrical cabling route
- Assessment of Proposed Construction Haul Routes and Proposed Turbine Delivery Route
- Swept Path analysis based on blade transport vehicles – carried out by Colletts & Sons Ltd and Alan Lipscombe .
- Traffic Management Plan

Traffic Counts

- Traffic counts - Traffinomics Ltd (Irish traffic survey company with a comprehensive knowledge of traffic data collection methods).
- Base year (2025) two-way daily traffic flows from automatic traffic counts (ATCs) and classified turning counts at 32 no. locations on the candidate delivery routes in November 2025.
- Background traffic volumes and future forecasted traffic volumes (during the construction of the development) were compared to the road capacity, in order to inform the potential suppliers and access routes that should be considered during the construction of the Proposed Project.
- The base flows were factored to a potential construction year of 2032 using TII growth factors

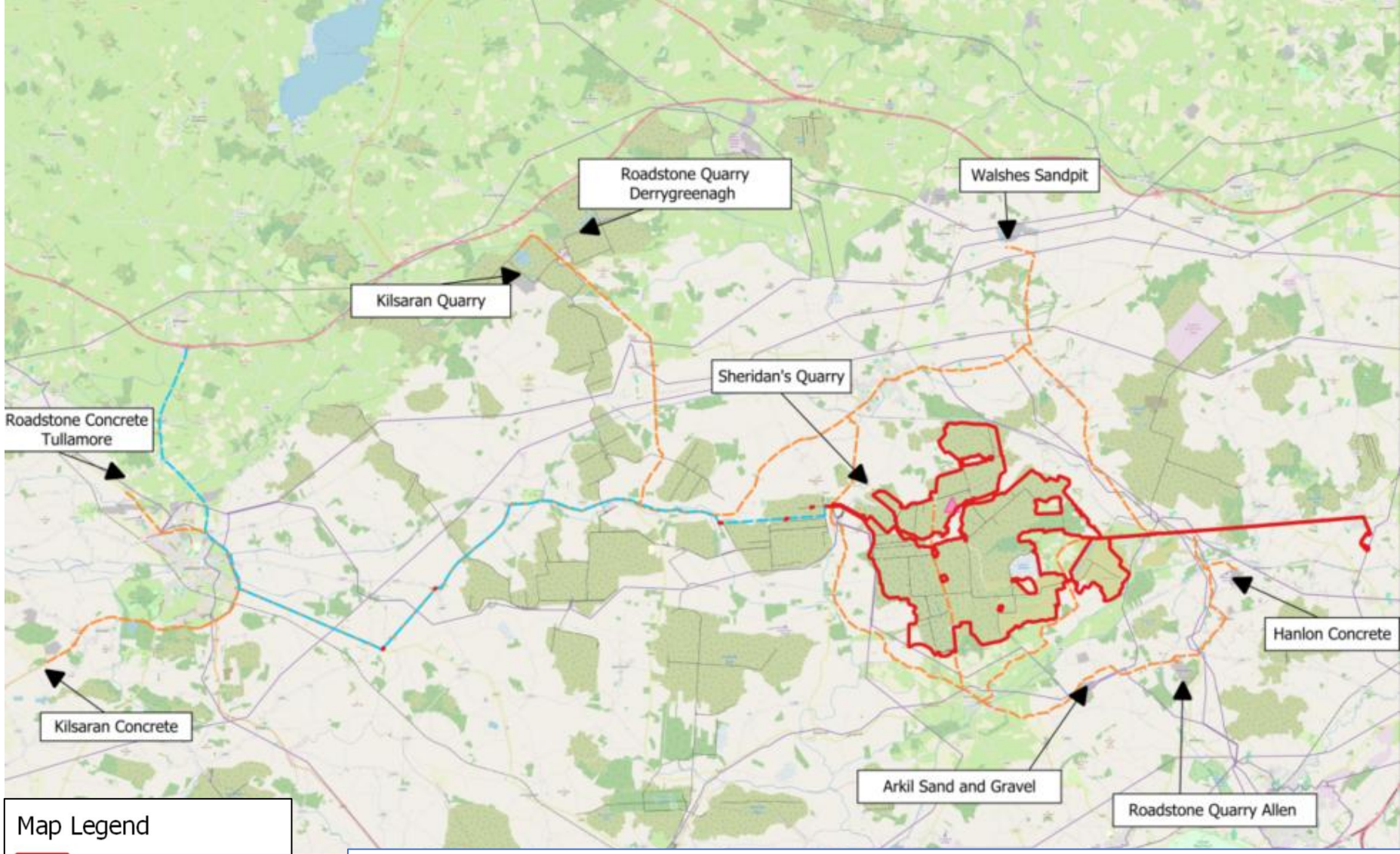
Transport Delivery Route

- Exits the M6 at Junction 5 (Tullamore/Kilbeggan)
- Travels south on the N52 towards Tullamore, further utilising the R420 and R402 regional roads to access the entrance of the existing Cloncreen Wind Farm
- Junction accommodation works will be required to facilitate the delivery of abnormal loads
- The route will exit the existing Cloncreen Wind Farm and cross the R401 to enter into the Project Site
- TDR Accommodation Areas
  - Cloncreen Wind Farm
  - Ballinagar, Co. Offaly
  - R402/R240 Junction, Co. Offaly



Proposed Construction Haul Routes

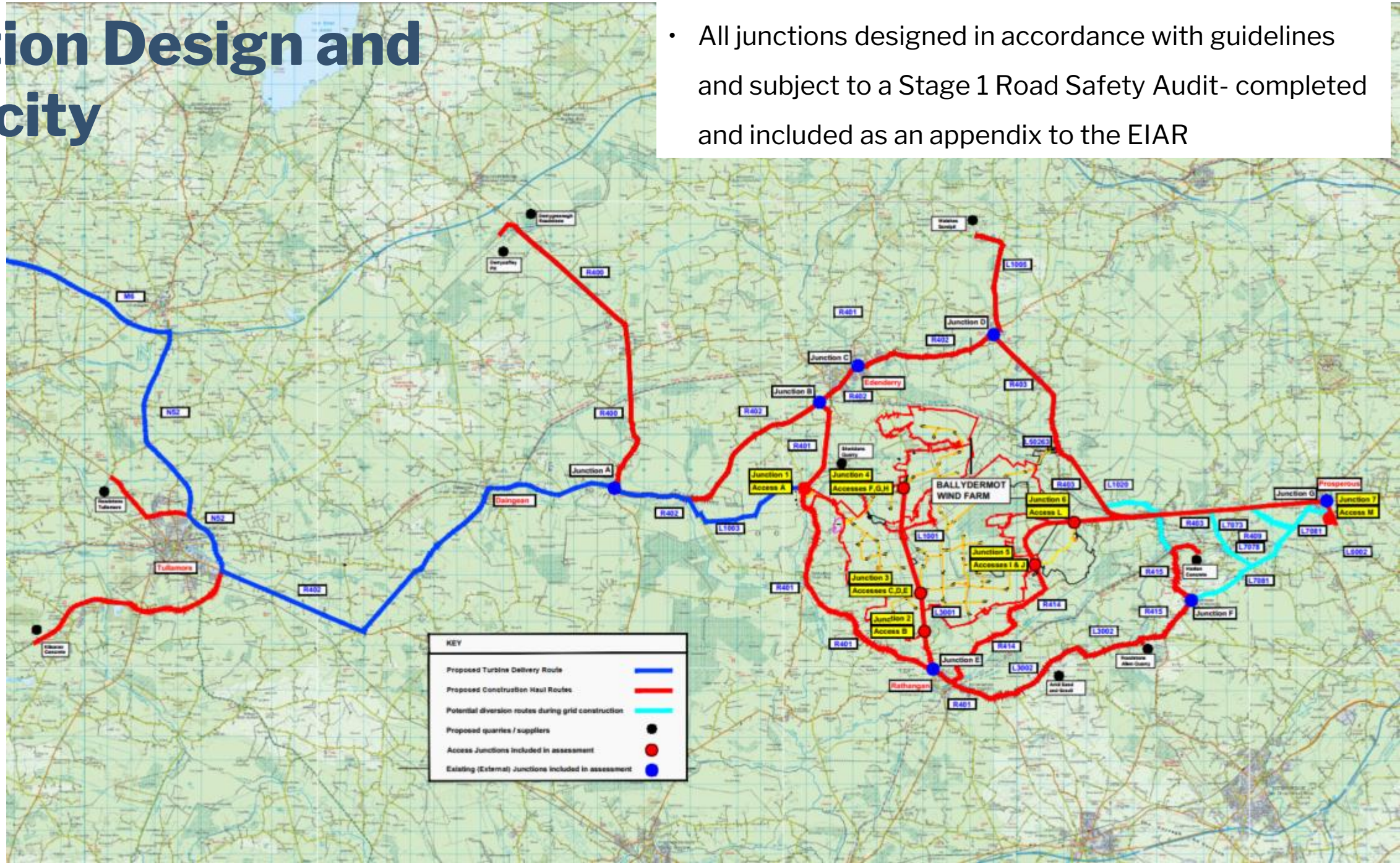
- No Borrow Pits on site
- All material to be sourced from local authorised quarries
  - 9 no. existing, authorised quarries, located within 20km of the Project Site have been selected for assessment
- Detailed consultation with OCC and KCC taking place- September 2025
- Detailed traffic counts and link capacity assessment has been carried out for all construction haul routes



- 30 to 36 month construction period; use of 36 month for construction phase traffic modelling.
- 1,113,088m^3 stone (160,335 truck loads excl. return)*.
- 51,700m^3 concrete (5,650 truck loads excl. return)*.
- It is estimated that a maximum 2-way all day flow of 1,864 pcus will be generated during the busiest constructions days
- A total of 7 access junctions are proposed

Junction Design and Capacity

- All junctions designed in accordance with guidelines and subject to a Stage 1 Road Safety Audit- completed and included as an appendix to the EIAR



Site Entrances

- Road Safety Audit has been completed – all identified safety problems were minor and proposed solutions have been confirmed to the satisfaction of the RSA Team.
- RSA will be provided as an appendix to Chapter 15 of the EIAR

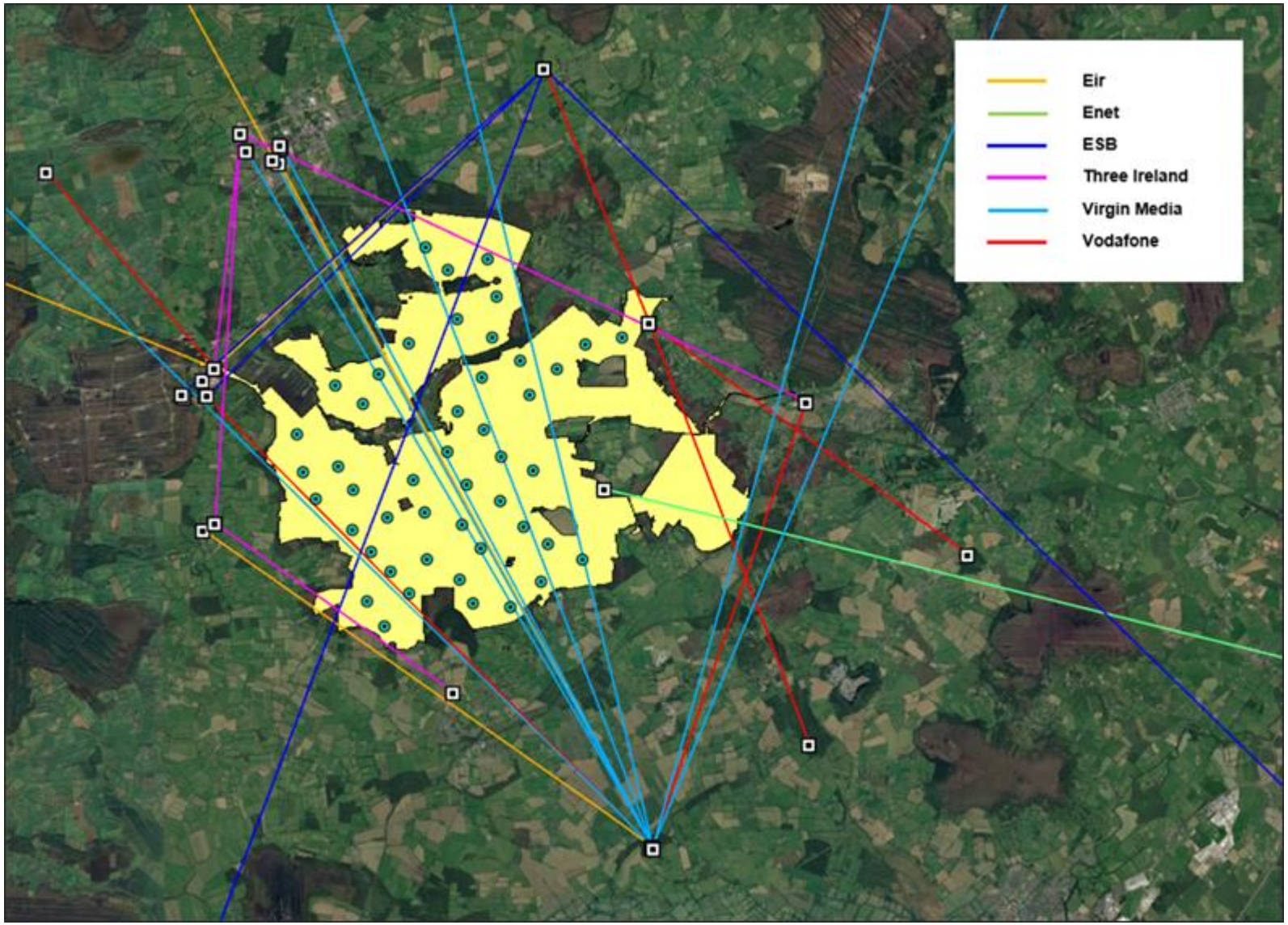
Access Junction	Site Entrance	Description	Used for Turbine Delivery	Used during Construction Phase	Used During Operational Phase (maintenance and monitoring)	Used During Operational Phase (amenity)	Existing Entrance	New Entrance	Security Compound and Gate
1	A	Access on the east side on R401 *(currently used for the existing Cushaling Wind Farm)*	✓	✓	✓		✓		✓
2	B	Access junction off the west side of L3001 (at existing Ballydermot works)		✓	✓	✓	✓		✓
3	C	Access off the L3001 between T08 & T11 – North		✓	✓			✓	✓
	D	Access off the L3001 between T08 & T11 – Southwest	✓					✓	
	E	Access off the L3001 between T08 & T11 – Southeast	✓	✓	✓			✓	✓
4	F	Access off the L1001 Between T23 & T24 – West	✓	✓	✓			✓	✓
	G	Access off the L1001 Between T23 & T24 – South		✓	✓	✓		✓	✓
	H	Access off the L1001 Between T23 & T24 – East	✓					✓	
5	I	Access off the R414 - West		✓	✓	✓	✓		✓
	J	Access off the R414 – East		✓	✓		✓		✓
6	L	Access off the R414 to access the Proposed Onsite Substation		✓	✓			✓	✓
7	M	Access to the Proposed Offsite Substation-L6002 Road		✓	✓			✓	✓

Other Material Assets

- **Other Materials Assets**
  - Telecommunications and Aviation Assessment
  - Telecoms Impact Assessment
  - Built Services

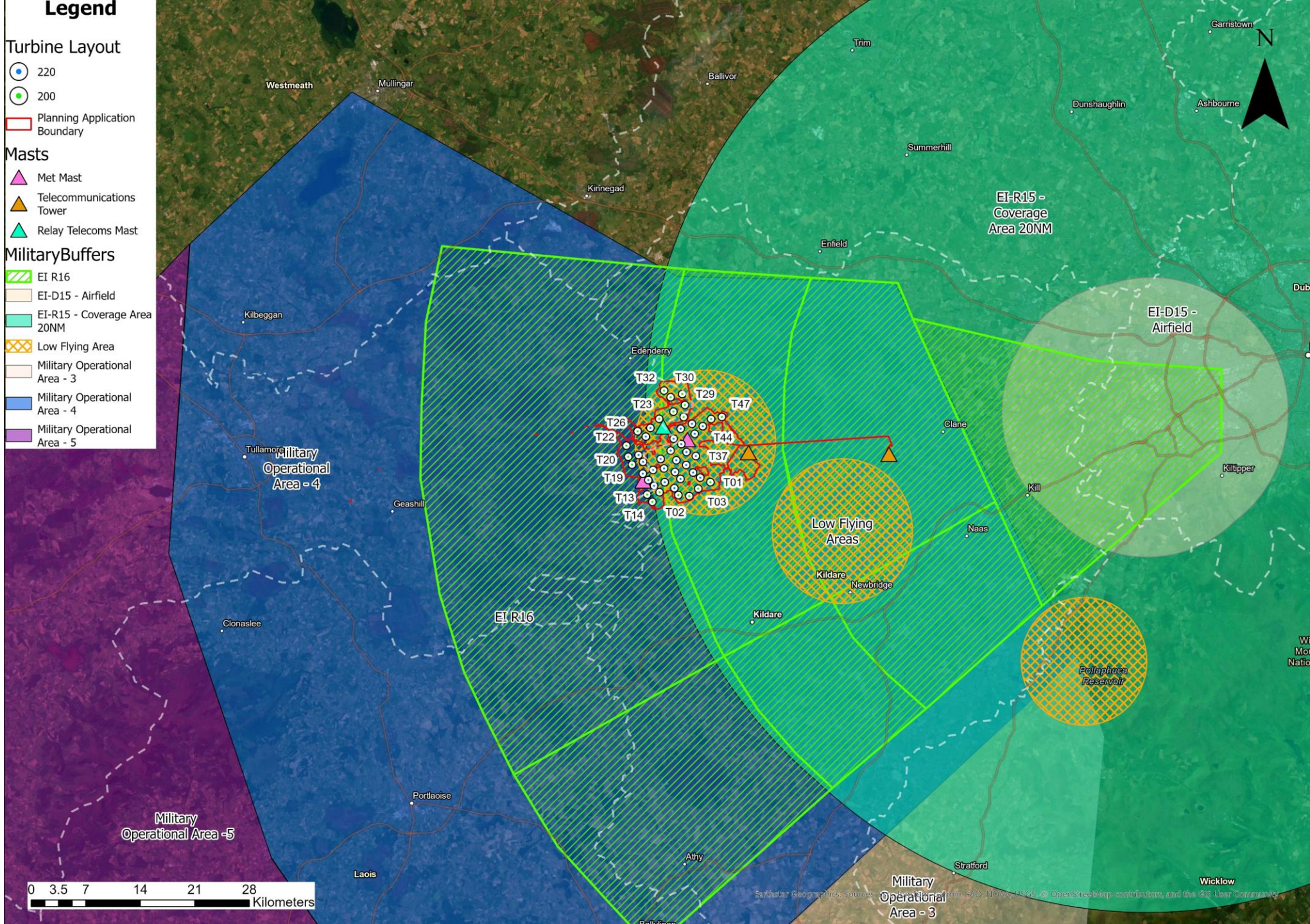
Other Material Assets - Telecommunications Networks

- Telecoms Impact Assessment
  - Ai Bridges was commissioned to carry out a telecommunications impact assessment for all telecoms links and potential impacts
- The final site layout ensures that all telecoms operator networks are not impacted with exception of Virgin Media. A Mitigation Measures Strategy has been proposed and a technically viable solution is available to mitigate the potential impact to the Virgin Media Network



Aviation Designations

- EI-R16
- EI –D15
- EI – R15
- *Restricted* - '...within which the flight of aircraft is restricted in accordance with certain specified conditions'
- *Danger* - '... within which activities dangerous to the flight of aircraft may exist at specified times.
- Edenderry Low Flying Area -not formally identified as a Restricted or Danger Area, but has been 'designated' as a LFA as a result of an Air Corps requirement (Helicopter Training)
- Military Operation Areas - used by military aircraft but may also be used by civilian aircraft up to 4500ft without Military Air Traffic Service clearance.
- The Project Site is located within MOA 4 and EI-R16



Aviation Assessment – Airspace and Technical Safeguarding

- **Methodology**: Desktop exercise referencing the Aeronautical Information Publication (AIP) and online source material regarding the Corps fleet and flight training. Referencing personal experience as both a Military and Civil Air Traffic Controller and significant flying experience as a commercial pilot.
- **Key impacts** from the proposed establishment of Ballydermot Wind Farm:
  - EI-R16 'C': Legal, but limited, ability to transition directly overhead the wind farm whilst not infringing the overlying restricted airspace above with a base of 1500ft AMSL.
  - EI-R16 'H': Overlying restricted airspace has a base of 2500ft AMSL which will enable such overflight more readily.
    - Avoiding the Proposed Turbines will increase flight time by approximately 60 seconds compared to flying directly over it.
  - The Proposed Project lies well outside of any Technical Safeguarded Areas associated with airports equipped with navigational aids. Radar Sterile Areas (Beam forming) and Building Restricted Areas (Instrument Landing Systems) are associated with Airport Air Navigation Equipment (AANE) and the elements of Communication, Navigation and Surveillance (CNS).
  - The Proposed Wind Farm is at a distance so as not to have any impact on such areas at Casement Aerodrome, which is the nearest airport to have such aids.

Conclusion

- There is **no physical penetration of the restricted airspace** above the Project Site by the Proposed Turbines in any Prohibited, Restricted or Danger Area.
- An aircraft could pass overhead the Proposed Turbines whilst complying with Minimum Heights regulation and not infringing Restricted Airspace.
- There is no impact from the Proposed Wind Farm on Technical Safeguarded Areas of AANE at Casement Aerodrome.

Low Flying Training Areas and Aerodrome Safeguarding

Low Flying Training Areas

- The Project Site is located within a large portion of an area identified as the Edenderry/Allenwood/Rathangan Low Flying Area (LFA).
- Whilst LFA's are also used to transit between various parts of the MOA they are predominantly used for off-airfield helicopter flight training and landing practice.
- Flight training;
  - During a meeting with the DoD on 19th May 2026 the Air Corps noted that the Edenderry LFA was used by helicopters to practise off-airfield landings. The Project Site is located within a large portion of the Edenderry LFA and as such would impact on such training. The Applicant is committed to engaging with the DoD and Irish Air Corp prior to construction of the Proposed Wind Farm

Aerodrome Safeguarding

- The Project Site is approximately 16NM (30KM) from Casement Aerodrome.
- Technical Safeguarded Areas such as Sterile Areas necessary for radar beam forming and Building Restricted Areas associated with other navigation and approach aids such as Instrument Landing systems are not infringed by the Project Site.
- Instrument Flight Procedures (IFPs) would be required to be assessed as a normal requirement of the introduction of new obstacles in the vicinity of an airfield.
  - Assessment ongoing by Sagentia for the Proposed Project
- There is no impact from the Proposed Wind Farm on Technical Safeguarded Areas of AANE at Casement Aerodrome.

Cumulative Aviation Effects

- Within 25km of the Proposed Turbines there are 11 no. of existing, permitted or proposed wind farm developments.
  - Nearest developments are the existing Cushaling Wind Farm and the existing Cloncreen Wind Farm (both located under MOA4 and EI-R16).
- Cushaling Wind Farm is enclosed by the Proposed Turbines and Cloncreen Wind Farm is located directly west of the Project Site.
  - Ballydermot Wind Farm, Cushaling Wind Farm, and Cloncreen Wind Farm are all sited within Class G uncontrolled airspace.
- With several wind farms already within the area surrounding the Proposed Project, flight planning at higher altitudes, or routings that avoid the particular area would likely already be in effect.

Radar Impact Assessment

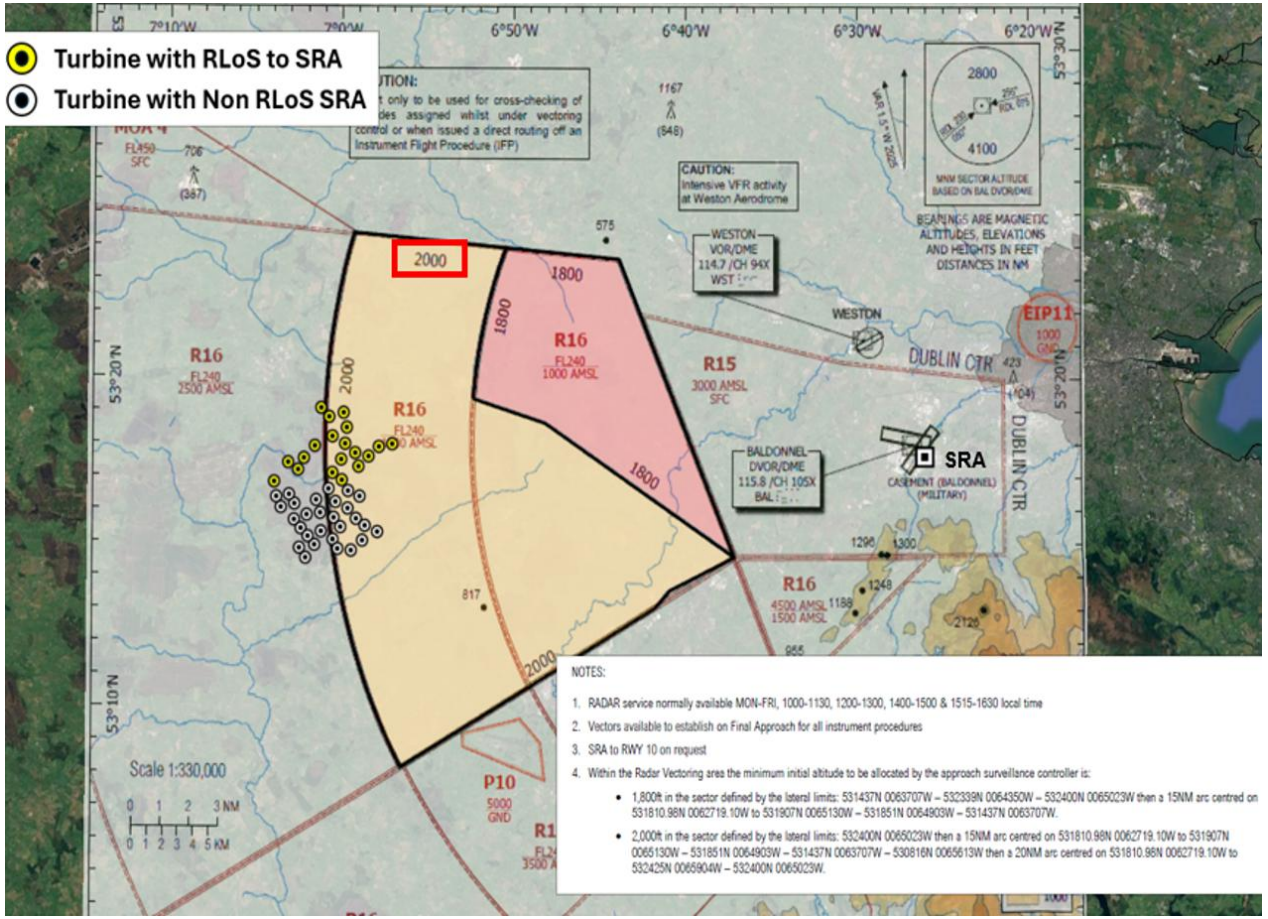
Radar Assessment Methodology

- Radar Line of Sight (RLoS) Modelling - radar propagation model using 3D digital terrain and clutter data (shielding of buildings, structures and vegetation)
- Casement ASR modelled as PSR (wind turbine impacts caused by blades), RLoS is calculated for maximum Turbine Tip Height
- RLoS plots from Casement ASR to all 47 turbines (according to ATC Radar Vectoring Chart - EIME AD 2.24-22)
- RLoS plots for PSR\SSR at Dublin Airport, Forrest Little and Tooman (according to Eurocontrol Guidelines Assessment Methodology)
- Batch Radar Propagation Path Profiling of the actual path loss between the Casement ASR and all 47 turbines

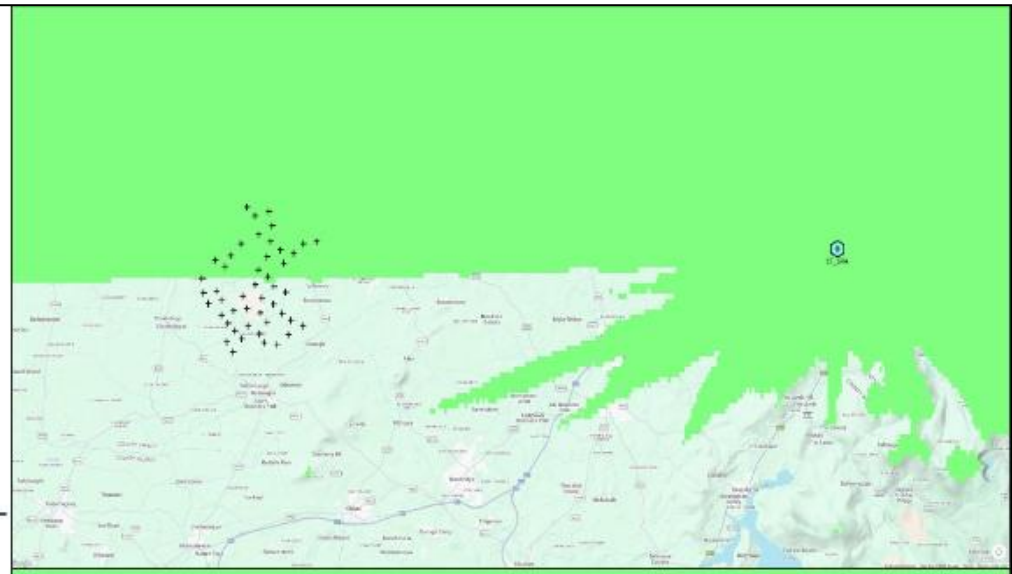
Assessment Results

- 13 of the 19 proposed turbines detectable by the radar station ***and*** within 20NM Radar Vectoring Range
- All 13 turbines are below the minimum initial altitude of 2000ft within the Radar vectoring chart bounded by the 15NM and 20NM arcs.
- The highest of the Proposed Turbines at Ballydermot is T44 (Tip-Height = 968ft AMSL) rounded to 1000ft AMSL.
- Assessed against the Casement - ATC Radar Vectoring Chart - EIME AD 2.24-22 , for [CAT A, B, C, D]
- RLoS plots showing predicted RLoS from Casement ASR receivable at heights of 200m and 220m AGL
- RLoS analysis shows 19 of the 47 are visible to the ASR
- No Impacts to Civil Primary Surveillance Radar (Dublin Airport, Forrest Little) based on EURO Control Assessment
- No Impacts on Secondary Surveillance Radar (Dublin Airport, Forrest Little, Tooman) based on EUROControl Assessment

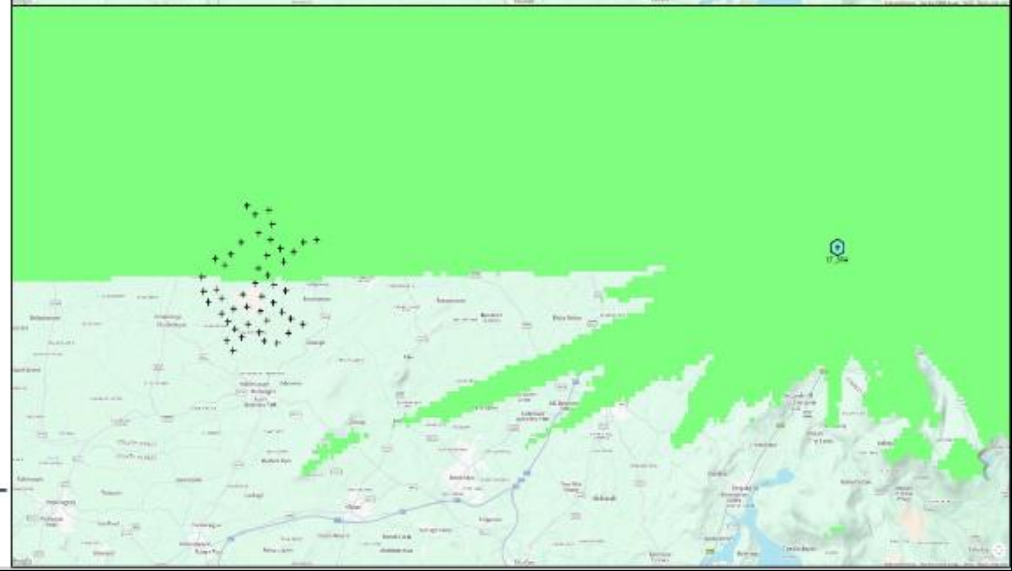
Radar Impact Assessment



RLoS Assessment – 200m AGL



RLoS Assessment – 220m AGL



Consultation with Statutory & Public Bodies



- **EIA scoping / Scoping with Statutory Bodies**
  - A scoping document, providing details of the Ballydermot Wind Farm, was circulated to prescribed statutory bodies in December 2025 and previously in February 2021.
  - Meeting held with NPWS, Eirgid and the Department of Defence
  - Public Information Event held for 18th and the 20th of May 2026

- **Pre-planning consultation**
  - ACP: meeting held in July 2021,March 2026 and June 2026
  - OCC: meeting held in April 2021, further meeting held on the 22nd July
  - KCC: meeting held in April 2021, further meeting to take place on the 19th September
  - Traffic specific meetings held with OCC and KCC in August and September 2025, further traffic meeting to take place with KCC on the 3rd September

Consultation with Statutory & Public Bodies EIA scoping

- EIA Scoping/ Scoping with Statutory Bodies - A Scoping document, providing details of the Proposed Project, was circulated in May 2021 and December 2025
- Separate Scoping exercise completed for Telecom providers
  - Completed in July 2020 and May 2025

Key Responses	Key topics/concerns raised	Where considered in EIAR
DAU	• Visibility analysis for vantage point surveys • Breeding Curlew surveys • Contextualization of any impacts on breeding curlew • Breeding nightjar surveys • Potential for biodiversity enhancement measures within the application site	• Chapter 6 Biodiversity • Chapter 7 Ornithology
Inland Fisheries Ireland	• IFI note that given the scale of this project there is a unique opportunity to showcase multiple river and terrestrial habitat restoration techniques focusing upon the watercourses within the study area and to make this restoration a central pillar of the project'	• Chapter 6 Biodiversity
Department of Defence	• Proposed Project's location within military airspace (EI-R16 and MOA 4) and within the protected 20 NM zone of Casement Aerodrome. • Low-level flight training, military • Instrument flight procedures, and operational safety. • Cumulative impact	• Chapter 16 Aviation
Uisce Éireann	• Uisce Éireann identified the Water Supply Project Eastern and Midlands Region which will run through the Proposed Site	• Chapter 15 Material Assets
Eirgrid	• Concerns relating to cumulative impacts between the Eirgrids proposed Kildare-Meath Grid Upgrade project and the Proposed Project	• Chapter 15 Material Assets

Application Contents - Planning Documents

- Completed SID Application Form, including
  - Consents (as required)
  - Drawing Schedule
  - EIA Portal ID
  - Prescribed body letters
  - Consultation Details
- Site Notice
- Newspaper Notices – Local (Offaly and Kildare) and National
- Detailed Cover Letter
  - SID Application Fee Confirmation
  - RED III Completeness Check Checklist
- Planning Report
  - Policy Compliance Statement
- Planning Drawing Pack
  - Draft schedule and drawings to be issued to ACP for agreement prior to submission

Application Contents - Planning Drawings and Scales

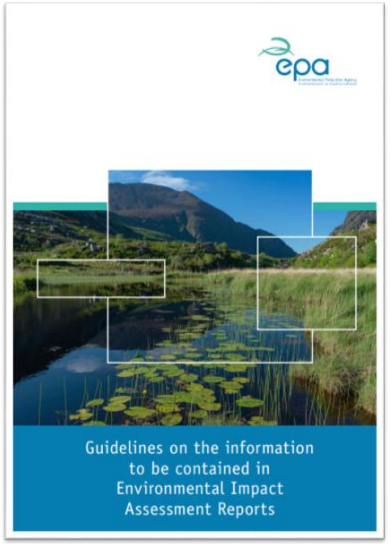
Layouts

- Location Context Map 1: 50,000 @ A0
- Site Location Key Map 1: 50,000 @ A0
- Site Notice Location Map Series 1: 2,500 @ A1
- Site Layout Series 1: 5,000 @ A1
- Site Layout Series 1: 2,500 @ A1
- Turbine Layout Key Plan 1: 20,000 @ A1
- Turbine Layout Sheets 1: 500 @ A2
- Drainage Layout Series 1: 2,000 @ A1

Detail/ Technical Drawings

- Turbine Elevation and Plan
- Turbine Foundation
- Temporary Construction Compounds
- Proposed Amenity Car Parks
- Met Masts
- Proposed Telecommunications Mast
- Temporary Accommodation Works
- Security Cabin
- Access/Amenity Road Detail
- Cable Trench Detail
- Access Junction Detail
- Biodiversity Enhancement and Mitigation Proposals
- Drainage Detail
- Peat and Spoil Management Areas Details
- Watercourse Crossings
- Substation layout, section and elevations
- Grid Connection Details
- Ancillary works details (signage, gates, wheel wash, site offices, etc.)

Environmental Impact Assessment Report



- Volume 1: Main EIAR, including all figures
  - Non-Technical Summary
  - Chapter 1: Introduction
  - Chapter 2: Background to the Proposed Project
  - Chapter 3: Consideration of Reasonable Alternatives
  - Chapter 4: Description of the Proposed Project
  - Chapter 5: Population and Human Health (including Shadow Flicker)
  - Chapter 6: Biodiversity: Flora and Fauna
  - Chapter 7: Ornithology
  - Chapter 8: Land, Soils and Geology
  - Chapter 9: Water
  - Chapter 10: Air Quality
  - Chapter 11: Climate
  - Chapter 12: Noise and Vibration
  - Chapter 13: Landscape and Visual
  - Chapter 14: Cultural Heritage
  - Chapter 15: Material Assets (including Traffic & Transport)
  - Chapter 16: Aviation
  - Chapter 17: Vulnerability of the Proposed Development to Major Accidents and Natural Disasters
  - Chapter 18: Interactions
  - Chapter 19: Schedule of Mitigation and Monitoring Measures
- Volume 2: Photomontages
- Volume 3: EIAR Appendices

Natura Impact Statement with Screening Report

- Supporting Documents
  - Statement of Authority
  - Aquatic Baseline Report
  - BnM Draft Cutaway Bog Decommissioning and Rehabilitation Plans
  - Ornithology Survey Effort
  - Project Description
  - Site Layout Drawings
  - Peat and Spoil Management Plan
  - Ornithology Survey Results
  - List of Plans and Projects
  - Construction and Environmental Management Plan
  - Decommissioning Plan

Application Contents - EIAR Supporting Documents

EIAR Topics	Supporting Documentation/ Appendices	EIAR Topics	Supporting Documentation/ Appendices
Non-Technical Summary		Water	Flood Risk Assessment for Proposed Wind Farm and Proposed Onsite Substation Flood Risk Assessment for Proposed Grid Connection and Proposed Offsite Substation Lab Reports Water Framework Directive Compliance Assessment
Introduction		Air Quality	
Background to the Proposed Project	Scoping Replies Community Engagement Report Cumulative List	Climate	Climate Legislation and Policy Carbon Calculations
Consideration of Reasonable Alternatives		Noise and Vibration	Glossary of Acoustic Terms Summary of Background Noise Survey Noise Modelling Assumptions and Inputs Predicted Noise Contours Tabulated Predicted Noise Draft Protocol for Managing Noise Complaints
Description of the Proposed Project	**Planning Drawings** **Cutaway Bog Decommissioning and Rehabilitation Plans** Ballydermot Wind Farm Amenity Plan **Peat and Spoil Management Plan** Proposed Turbine Separation Distances **Construction and Environmental Management Plan** Drainage Drawings Surface Water Management Plan Watercourse Crossing Detail **Decommissioning Plan**	Landscape and Visual	LVIA Methodology Landscape Character Area Assessments Viewpoint Assessments LVIA Baseline Map Landscape Plan
Population and Human Health	Wind Turbines and Horses BHS 2025 Wind Farms and Health Literature Review – Chapman 2025 EMF Booklet – EIrGrid 2017 House Prices Study – CXC Scotland 2016 Shadow Flicker Results	Cultural Heritage	Recorded Monuments within the Project Site Recorded Monuments within 5km outside of the Project Site Photographic Record
Biodiversity: Flora and Fauna	Botanical Assessment Report Bat Survey Report **Aquatic Baseline Report** Biodiversity Management Plan Confidential Appendix	Material Assets (including Traffic & Transport)	Traffinomics Traffic Count Data Traffic Management Plan Turbine Delivery Route autotrack Assessment Link Capacity Assessment Access Junction Drawings Stage 1 Road Safety Audit Telecoms impact assessment
Birds	Species List **Survey Effort** Summary Tables **Survey Data** Confidential Appendix Collision Risk Assessment Bird Monitoring Programme	Vulnerability to Major Accidents and Natural Disasters	Air Space Analysis for Ballydermot Wind Farm Impact to Proposed Wind Farm Planning Radar Impact Assessment Instrument Flight Procedure Assessment
Land Soils and Geology	Peat Stability Risk Assessment	Interaction of the Foregoing	

Thank you

Discussion & Feedback

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