MEATH COUNTY COUNCIL
CHIEF EXECUTIVE'S REPORT

ON

STRATEGIC INFRASTRUCTURE DEVELOPMENT
AN BORD PLEANÁLA REF: ABP-316212-23

for the

PROPOSED BALLIVOR WIND FARM
(26 Wind Turbines & Associated Works)

in

Co. Meath and Co. Westmeath

Date: 30/05/2023

Table of Contents

SECTION ONE: INTRODUCTION

1.1 Introduction

An Bord Pleanála has requested a submission from the Planning Authority (Meath County Council) on an application from Bord Na Móna Powergen Ltd. who seek permission under **Section 37E** of the Planning & Development Act (PDA) 2000-2022. The application was received by An Bord Pleanála on 05/04/2023 and is accompanied by an Environmental Impact Assessment and a Natural Impact Statement.

Bord Na Móna Powergen Ltd. are proposing to construct 26 no. wind turbines and associated works in Co. Meath and Co. Westmeath.

Submissions to An Bord Pleanála must be made by **14th June 2023** and application details are available on ABP's website and the applicant's website[1].

This Report is prepared in accordance with Section 37E (4-7) of the PDA 2000-2022. This requires the Chief Executive to prepare and submit to the Board a Report setting out the views of the authority on the effects of the proposed development on the environment and the proper planning and sustainable development of the area of the authority, having regard in particular to the matters specified in section 34(2).

The Chief Executive shall, before submitting any Report in relation to a proposed development, submit the Report to the Members of the Authority and seek the views of the members on the proposed development.

The Members may, by resolution, decide to attach recommendations (specified in the resolution to the Report of the authority). Where the members so decide those recommendations (and the meetings administrator's record) shall be attached to the Report submitted to the Board.

This Chief Executive's Report is presented at the meeting of Meath County Council on 12th June 2023 with the following **agenda item:**

> *"To receive the Chief Executive's Report in accordance with Section 37E(4) of the Planning and Development Acts, in relation to a Strategic Infrastructure Development application made to An Bord Pleanála, reference ABP-316212-23, for proposed development of 26 wind turbines and associated works at the Ballivor Bog Group, County Meath and County Westmeath."*

The area within the red-line boundary of the wind farm encompasses 1,770 hectares and is proposed as the permanent area of the wind farm while the permanent footprint of the proposed development is 32.4ha (1.83% of the site area). It includes 26 no. wind turbines with a tip height of 200m and a total Megawatt Export Capacity (MEC) in the range of 117MW – 169MW.

Development in County Meath pertains to the installation of 10. no turbines fall within Co. Meath and 16 no. turbines fall within Co. Westmeath (refer to Figure 6 below).

[1] https://www.pleanala.ie/en-ie/case/316212 and www.ballivorwindfarmplanning.ie

The **Meath element** of the scheme, as proposed, will primarily involve the 10 no. turbines in Lisclogher and Ballivor Bogs and new internal roads to access these turbines, a small section of the proposed 3.3km amenity paths in Ballivor Bog and amenity carparking and bike rack facilities between Lisclogher Bog and Bracklyn Bog, underground electrical and communications cabling connecting turbines and to the proposed electrical substation in Co. Westmeath, accommodating works – widening/ reopening entrances, site works, drainage, signage, temporary security cabins, temporary accommodating works to existing public road at Doolystown and Moyfeagher.

The majority of works will take place within the administrative boundary of **Westmeath County Council** and includes 16 no. turbines, 2 no. met anemometry masts, the proposed permanent 110kV substation compound including associated 2 no. control buildings, 36 metre high telecom tower, groundwater well, wastewater holding tank, internal roads to access the turbine, proposed Grid Connection, construction compounds and security cabins, 2 no. borrow pits, the majority of the proposed 3.3km amenity pathway and amenity car parks in Ballivor Bog and Bracklin Bog, underground electrical and communications cabling connecting turbines and to the proposed electrical substation in Co. Westmeath, accommodating works – widening/ reopening entrances, road crossing and permanent vertical realignment of the R156, permanent site entrances, site works, drainage, signage, temporary security cabins, temporary construction compounds, temporary accommodating works to existing public road; and decommissioning of the existing meteorological mast and borrow pits.

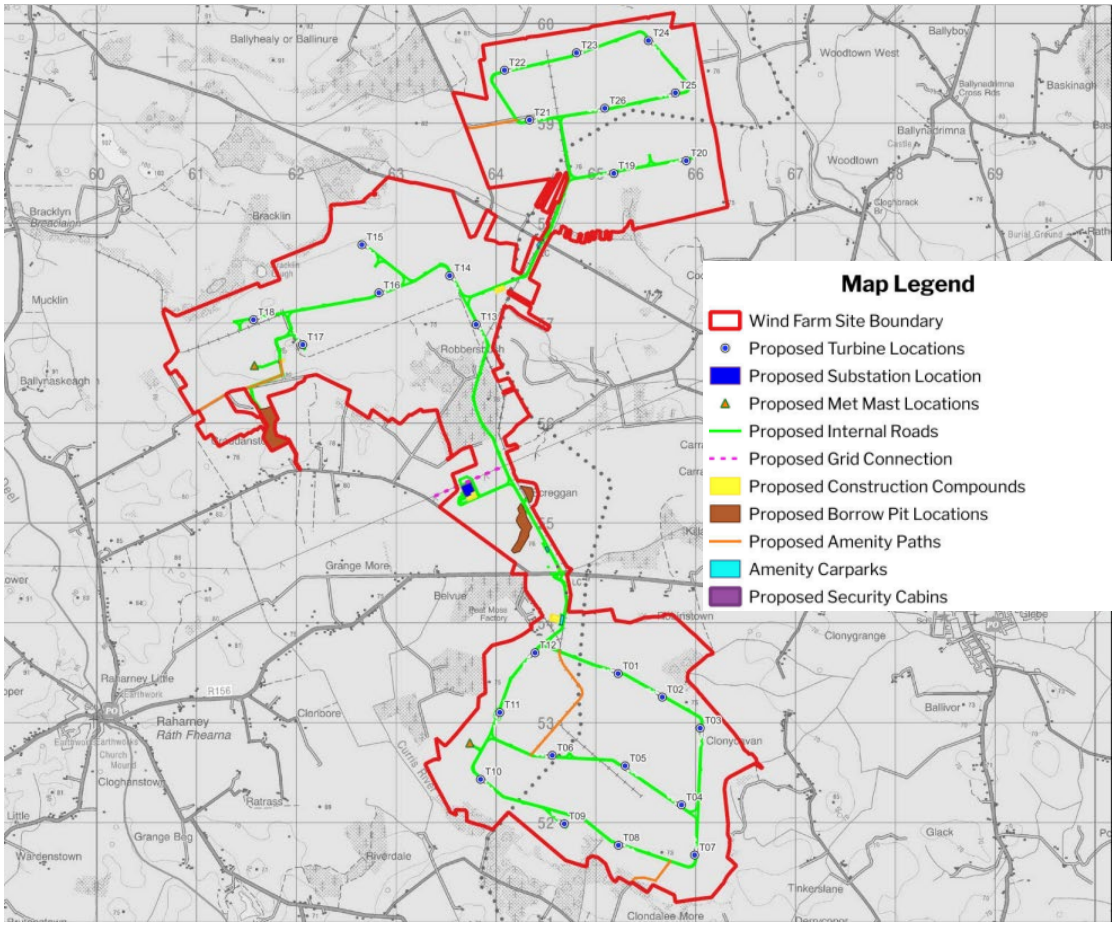

Fig. 1: Proposed Turbine Layout and other site infrastructure proposals

This Report is required to comment on a broad range of topics and is required to suggest appropriate conditions to be attached in the event of planning permission being granted. ABP

expect that a Report from the Planning Authority will focus on a range of issues, where relevant[2], including:

- The provisions of the Development Plan relating to the subject site and surrounding area including relevant Core Strategy provisions, the status of such plans and any relevant issues arising;
- Details of other relevant Plan provisions (e.g. Local Area Plans) and statement regarding status of these Plans (adopted or in draft form);
- Relevant national, regional and local policies;
- Guidelines issued by the Minister under Section 28;
- Relevant planning history (site and surrounding area);
- Relevant enforcement information relating to the subject site;
- Any Special Area Amenity Order (SAAO) which may be affected by the proposed development (whether in or proximate to same);
- European Site designations or Natural Heritage Areas which may be affected by the proposed development (whether in or proximate to same);
- Protected Structures, Architectural Conservation Areas (ACAs), etc.;
- Waste policy, which may be relevant to the proposed development. This will arise particularly in the case of applications for waste facilities where policies, objectives and other provisions of Regional Waste Management Plans should be referred to in addition to the Development Plan;
- Adequacy of the public water supply. (Note Irish Water may also comment as a prescribed body);
- Public sewerage facilities and capacity to facilitate the proposed development. (Note Irish Water may also comment as a prescribed body);
- Availability and capacity of public surface water drainage facilities;
- Flood risk assessment in accordance with The Planning System and Flood Risk Management – Guidelines for Planning Authorities (November 2009);
- Assessment under the Water Framework Directive and associated regulations;
- Hydrological and hydrogeological assessments as relevant to the case;
- Appropriate assessment under the Habitats Directive;
- Comments on the adequacy, methodology adopted, conclusions etc. of the EIAR submitted with the application;
- Assessment of landscape status and visual impact, as appropriate;
- Carrying capacity and safety of road network serving the proposed development;
- Environmental carrying capacity of the subject site and surrounding area, the likely significant impact arising from the proposed development, if carried out;
- Control of emissions arising where an IPPC or Waste Licence is required;
- Description of any public use of adjoining, abutting or adjacent lands in the applicant's ownership, and the planning authority's view on any condition which may be appropriate for the purpose of conserving a public amenity on those lands;
- Planning Authority view in relation to the decision to be made by the Board;
- Planning authority view on conditions which should be attached in the event of the Board deciding to grant permission. (Where an IPPC or Waste licence is required, the Board cannot impose conditions relating to the control of emissions from the activity for which a license is required);
- Planning Authority view of community gain conditions which may be appropriate;
- Details of relevant section 48/49 Development Contributions Scheme conditions which should be attached in the event of a grant;
- Details of any special contribution conditions which should be attached in the event of a grant along with detailed calculations and justification for the conditions;
- Previous developments by the applicant which have not be satisfactorily completed;
- Previous convictions against the applicant for non-compliance with the Planning Act, the Building Control Act 2007 or the Fire Services Act 1981;
- Any other relevant provision or requirement of the Planning Act, and any regulations made under the Act;

[2] https://www.pleanala.ie/en-IE/7th-Schedule-SID-Planning-Authority-Guidelines/7th-Schedule-SID-(Planning-Authority)-Issues-to-b (An Bord Pleanála - Issues to be addressed in the Planning Authority Report) and Planning and Development Act 2000, as amended.

- Views/ recommendations of all relevant departments in the local authority and the planning authority's overall considered view on the proposal; and
- Any other matters relating to the effects on the environment, the proper planning and sustainable development of the area or the effects on European site(s) that the planning authority may consider to be relevant to the case.

The Chief Executive's Report from Meath County Council seeks to address the above issues. It also outlines the location of the site and describes the proposed development. Relevant European, National, Regional and local energy and planning policies are considered. The Environmental Impact Assessment Report and Natura Impact Statement are reviewed. Internal referrals outlined and a planning assessment of the proposal is provided. Conclusions, recommendations and conditions, without prejudice, are addressed at the latter end of the report. A site inspection was carried out on 20th April 2023.

SECTION TWO: PROPOSED DEVELOPMENT & SITE LOCATION

2.1 Proposed Development

The 'application site' comprises the proposed wind farm site and two areas of temporary accommodating works along the haul route. The wind farm site encompasses an area of approx. 1,770 hectares and is described as the permanent area of the wind farm. It is 9km in length from north to south and 6km from east to west at its widest point. The permanent footprint of the proposed development is 32.4ha or 1.83% of the site to accommodate 26 No. wind turbines with a tip height of 200m and a total Megawatt Export Capacity (MEC) in the range of 117MW – 169MW. 10. no turbines fall within Co. Meath.

The proposed development consists of:

i. The construction of 26 No. wind turbines and all associated hard-standing areas with the following parameters:
   a. A total blade tip height of 200m,
   b. Hub height of 115 metres, and
   c. Rotor diameter of 170 metres.
ii. 2 No. permanent Meteorological Anemometry Masts with a height of 115 metres and associated hardstanding area and removal of existing meteorological mast.
iii. 4 No. temporary construction compounds with temporary site offices and staff facilities, in the townlands of Bracklin and Grange More.
iv. 5 No. temporary security cabins at the main construction site entrances and access points around the site, in the townlands of Killagh, Grange More and Coolronan.
v. 2 No. borrow pits located in the townland of Grange More and Craddanstown and all works associated with the opening, gravel and spoil extraction, and decommissioning of the borrow pits.
vi. 1 No. permanent 110 kV electrical substation, which will be constructed in the townland of Grange More. The electrical substation will have 2 No. single storey control buildings, a 36-metre-high telecom tower, associated electrical plant and equipment, a groundwater well and a wastewater holding tank. [22]
vii. All associated underground electrical and co²munications cabling connecting the turbines and masts to the proposed electrical substation, including road crossings at R156 and a local road between Lisclogher and Bracklin Bogs, and all works associated with the connection of the proposed wind farm to the national electricity grid, which will comprise connecting into the existing Mullingar – Corduff 110 kV overhead line that traverses the site.
viii. Provision of new internal site access tracks with passing bays measuring a total length of c.28km and provision/upgrade of existing/new pathways for amenity uses measuring a total length of c. 3.3km and associated drainage.
ix. Temporary accommodating works to existing public road infrastructure to facilitate delivery of abnormal loads at locations on the R156 and R161 in the townlands of Doolystown and Moyfeagher.
x. Accommodating works to widen existing site entrances off the R156 into Ballivor and Carranstown Bogs and reopen entrances at Lisclogher and Bracklin Bogs for use as construction site entrances and to facilitate delivery and movement of turbine components and construction materials; Entrances will be used for maintenance and amenity access during the operational period.
xi. Permanent vertical realignment of the R156 in the vicinity of the site entrance to achieve required sight lines.

xii. Construction of permanent site entrances off a local road into Lisclogher and Bracklin Bogs to facilitate a crossing point for turbine components, construction materials and operation/amenity access.

xiii. Provision of amenity access and amenity pathways using existing entrances off the R156 and local roads in the townlands of Bracklin, Coolronan, Clondalee More and Craddanstown.

xiv. 3 No. permanent amenity carparks in Ballivor Bog (50 no. car parking spaces), Carranstown (15 no. car parking spaces) and Bracklin Bog (15 no. car parking spaces) and the provision of bicycle rack facilities at each location.

xv. All associated site works and ancillary development including access roads, drainage and signage.

xvi. A 10-year planning permission and 30-year operational life of the wind farm from the date of commissioning of the entire wind farm.

2.2 Site Location and Description

The closest settlements to the application site are Ballivor which is 3.5km east of the site, Delvin located 5km to the north and Raharney which is 4km to the west. It adjoins a permitted development - Bracklyn Wind Farm (ABP-311565-21) for a development of 9 no. turbines.

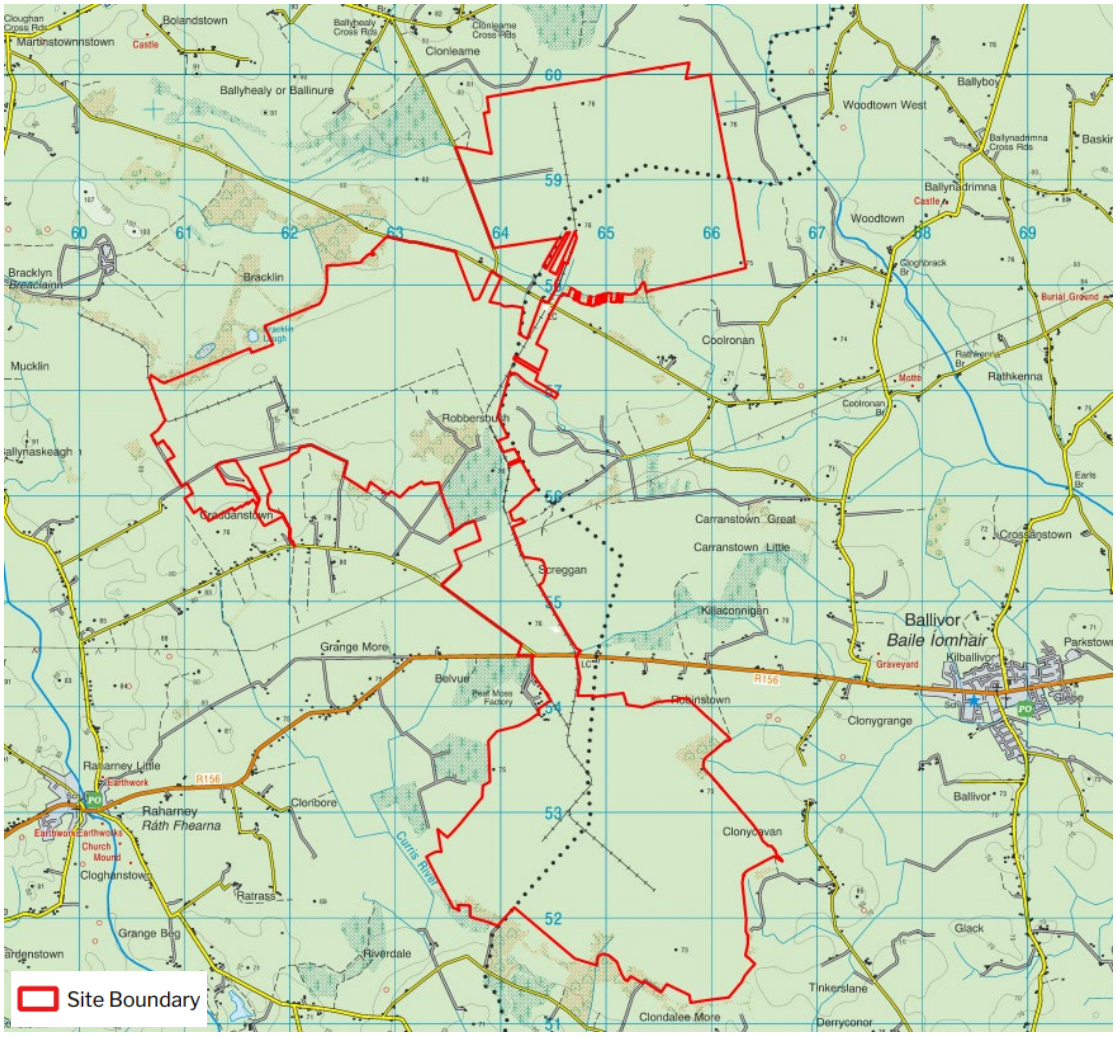

Fig. 2: Site Location (area within the red line) (c. OS*i* Discovery mapping & MKO)

The site extends into the following townlands:

Table 1: Townlands associated with the Proposed Development

Co. Meath		Co. Westmeath	
Site of Wind Farm			
Clondalee More	Derryconor	Lisclogher Great	Cockstown
Clonycavan	Robinstown	Clonmorrill	Clonleame
Coolronan	Doolystown	Bracklin	Craddanstown
Moyfeagher		Killagh	Grange More
		Riverdale	
Haul Route with Temporary Accommodating Works Areas			
Moyfeagher	Doolystown		

Table 1 and Figure 4 also identifies the location of proposed temporary accommodating works along the haul route in the townlands of Moyfeagher and Doolystown in Co. Meath.

Part of Ballivor, Carranstown, Bracklin and Lisclogher Bogs and agricultural land adjacent to Bracklin Bog underlie the site. This is an area within the larger Derrygreenagh Bog Group between Kinnegad and Delvin. The bogs are illustrated at Figure 3 below:

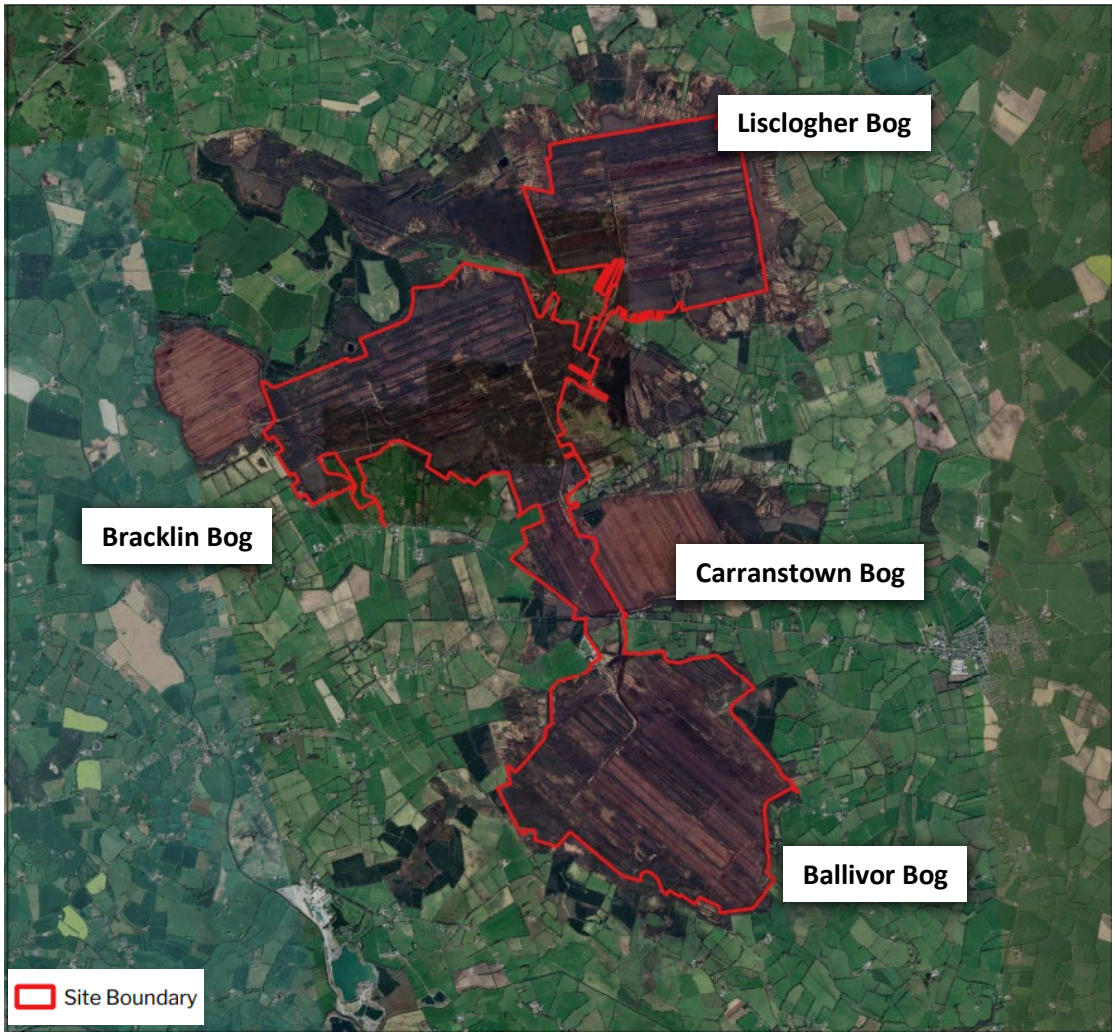

Fig. 3: Site Location Aerial View (c. OSi Aerial Mapping & MKO)

The Peat Moss Factory located in Belvue to the west of the Meath County border is not included in the site boundary.

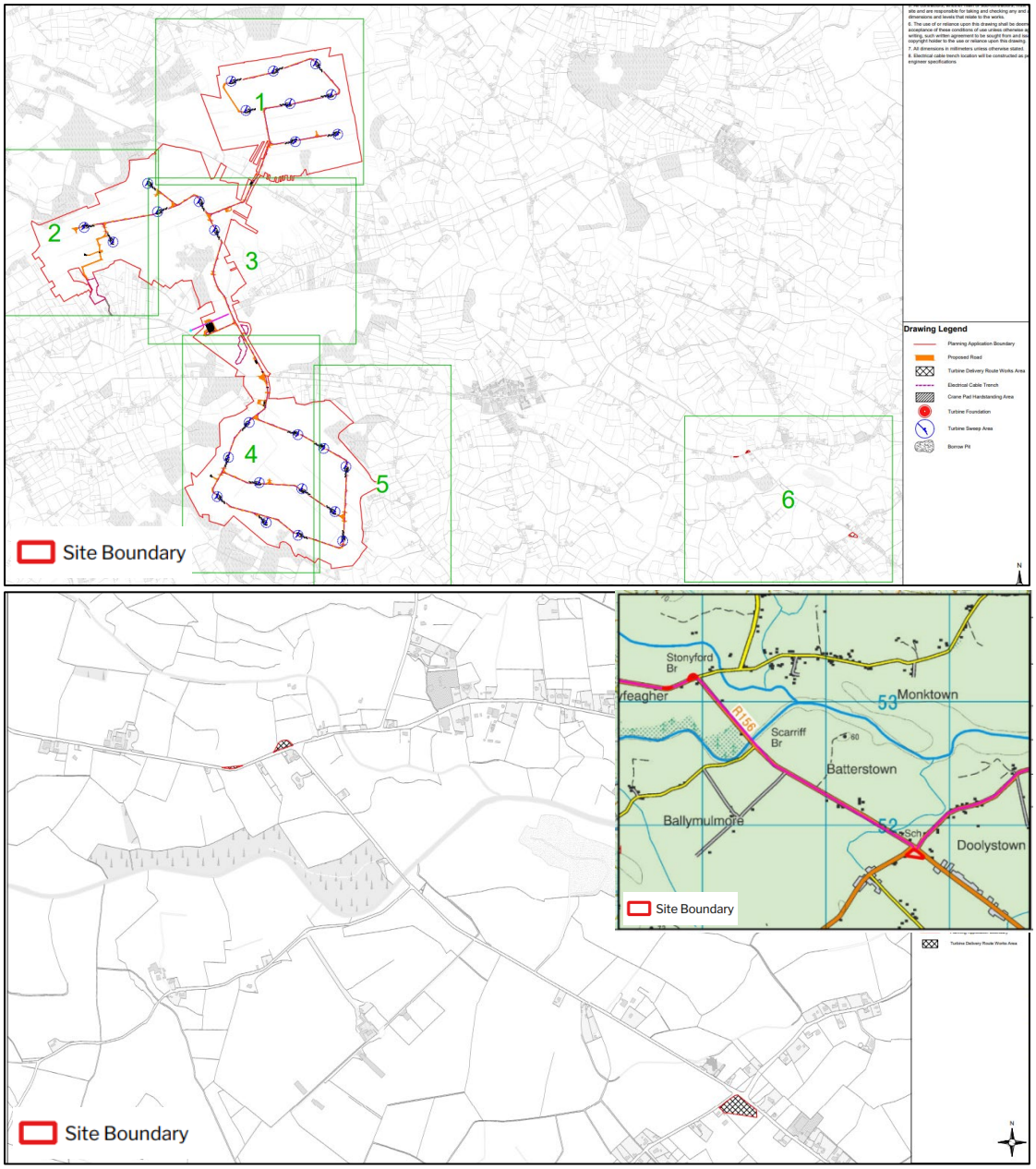

Fig. 4: Temporary accommodating works along the haul route in Moyfeagher & Doolystown (c. OSi & MKO)

The land within the boundaries of Meath County Council is identified as 'Rural Area' and '*low development pressure area*' in the Meath County Development Plan (CDP) 2021-2027 and lands within the boundaries of Westmeath County Council are classified as 'unzoned' lands as per the Westmeath CDP.

Land use within the site is synonymous with long-term intensive, industrial peat extraction however this is now in the decommissioning phase. The landscape is that of large open peatlands/ cutover bog though the site is surrounded by agricultural lands with native hedgerow and trees. The EIAR describes the landcover as a mixture of bare cutaway peat, re-vegetated bare peat, degraded blanket bog, scrub, low woodland and remnants of high bog. 18.9km of Bord Na Móna permanent fixed gauge rail lines can be found running through Ballivor, Bracklin and Carranstown Bogs. There are rural dwellings in the vicinity on adjoining roads.

There are small pockets of trees/ wooded areas recorded on OS*i* Discovery mapping within the site area. Two 'lakes' are identified close to the north-west boundary of the site – one of which is called Bracklin Lough.

Corine data (2018) identifies much of the site as inland wetlands, with some areas of forest and semi-natural areas (scrub and/or herbaceous vegetation associations).

Based on the Teagasc Subsoils Map, the area of the site generally corresponds with a large extent of cut-over peat and some smaller areas on the edges of the peat comprising Chert till (TCh), Limestone till (Carboniferous) (TLs), Limestone sands and gravels (Carboniferous) (GLs).

According to the Environmental Impact Assessment Report (EIAR) which accompanies the application, there is ongoing site management and environmental management (as per EPA Integrated Pollution Control (IPC) Licence P0-501) and temporary wind measurement (via 100m meteorological mast on Lisclogher Bog). Active peat extraction under the IPC Licence ceased within the area of the wind farm site in June 2020, but the stockpiled peat continues to be removed off the bogs and this is expected to be completed by 2024. Draft *Cutaway Bog Decommissioning and Rehabilitation Plans* have been prepared for Ballivor, Bracklin, Carranstown and Lisclogher Bogs (as per Condition 10 of the IPC Licence following the cessation of peat extraction).

Fig. 5: View to the north from R-156, Co. Westmeath, immediately west of the border with Co. Meath (c. Google 2023)

Topography is generally flat in the area but ranges between 69 metres above ordnance datum (m AOD) at its lowest point to approximately 84m AOD at its highest point.

Access to the site is via several local roads in Co. Meath and Westmeath and the area is dissected by the R-156, which is a straight regional road over an area of topography. The road is crossed by the peat rail line (see Figure 4) with areas which were subject to commercial peat production visible in the background of Figure 4. Residential dwellings and farmsteads are located along the L-80124-0 (local road), L-80122-10 (local road) and R-156-0 in the townland of Robinstown, L-40161-21 (local road), L-80181-7 (local road) and L-80182-0 (local road) in the vicinity of the site (Co. Meath).

A 110kV overhead line from Mullingar to Corduff traverses the proposed development site at Carranstown Bog.

There are no Protected Structures situated within the application site (as per www.archaeology.ie mapping viewer and internal GIS mapping). There are some National Monuments in the vicinity of the site: ME01591 SMRS: **ME035-001**--- Burial in the Townland of Coolronan and associated Zone of Archaeological Notification (R171864). There are two national monuments (ME01601/ SMRS: **ME035-011**--- Rath) and ME01602/ SMRS: **ME035-012**---- Earthwork in the townland of Robinstown which are c. 390m east of the site boundary in Co. Meath.

A listing on the National Inventory of Architectural Heritage is Reg. No. 15402102: Section of Rails in Grange More, Co. Westmeath, which is described as '*Permanent narrow gauge Bord na Móna railway line, erected c.1952, for transporting turf to the Ballivor Processing Plant, Co Meath. Now only used to transport carriages brought in for servicing. Constructed of steel I beams. Railway line is three foot wide and is laid in ten-yard sections. Level crossing to main road comprises concrete piers with steel cross bars. Much of the earlier permanent narrow gauge is overgrown by vegetation'*. It is located to the east of Raharney, close to the border with County Meath. It has a 'Regional' rating and is of 'Social and Technical Interest'.

IPC Industry Licence P0506-01 and P0507-01 for Bord na Móna Energy Ltd. (Kilberry) are identified to the west of the Meath County boundary.

The nearest NHA is 001584 Mount Hevey Bog (which is also a SAC: 002342) located c. 3.2km south of the boundary of the site. The River Boyne and River Blackwater Special Area of Conservation (SAC: 002299) and Special Protection Area (SPA: 004232) are located c.445m north of the site boundary (Stonyford River).

The River Deel is located 1.4km south of the site and this is also a tributary of the River Boyne. Tributaries to same (or part of the Curris River) extend into the site. The watercourses on/ adjoining the site are hydrologically linked tributaries to the River Boyne; and the Water Framework Directive (WFD) catchment and sub-catchments over which the site extends are that of the Boyne. WFD Water quality status with the Stonyford River tributaries within the site are 'moderate'; and 'good' for the River Deel/ River Boyne tributaries. Groundwater body status is 'good'.

Flood Zones are associated with the rivers and streams (tributaries to the Stonyford River which flows west to east c. 2km north of Ballivor) in the area which drain to the River Boyne SAC 002299 and SPA 004232. A Flood Zone A is associated with the tributary to the Stonyford River in the townland of Coolronan.

According to the Landscape Character Assessment for County Meath (part of the Meath County Development Plan 2021-2027), the site is within the Lowland Landscape (South-West Lowlands) character area which has a *high* value and *high* sensitivity.

The areas affected by the proposed haul route in Moyfeagher – on the R-156-44 and Doolystown – on the R-156-66 are rural areas (low development pressure areas for the purposes of rural housing) of Co. Meath. There is a Flood Zone B located near the site of one of the proposed areas in Moyfeagher.

SECTION 3: PLANNING HISTORY & PRE-PLANNING CONSULTATION

3.1 Relevant Planning Applications on the site/ in the area

An Bord Pleanála application for Strategic Infrastructure Development adjoins the site.

- **ABP-311565-21** – Permission granted by An Bord Pleanála for Bracklyn Wind Farm which adjoins the current application site in July 2022 for a development of 9 no. turbines https://www.pleanala.ie/en-ie/case/311565.

There are no previous planning applications recorded on Meath County Council's GIS system on the application site. However, several planning applications are identified in the EIAR within Co. Westmeath, as follows:

- **21620 (Westmeath Co. Co.)** - Retention permission granted for continued use of an existing Guyed Wind Monitoring Mast with instruments, 100m in height on its lands at Lisclogher Bog, Lisclogher Great, Co. Westmeath for a further period of three years. The purpose of the mast is to assess the suitability of the company's adjacent lands for wind farm development.
- **166259 (Westmeath Co. Co.)** - Permission granted to erect a guyed wind monitoring mast with instruments up to 100m in height. The purpose of the proposed mast is to assess the suitability of the company's adjacent lands for wind farm development.
- **156135 (Westmeath Co. Co.)** – Permission granted to erect a guyed wind monitoring mast, with instruments, up to 100m in height, at Lisclogher Bog, Lisclogher Great, Co Westmeath. The purpose of the proposed mast is to assess the suitability of the company's adjacent lands for wind farm development.
- **ABP-311646-21 (An Bord Pleanála)** – Decision awaited for an application for *Leave to Apply for Substitute Consent* for peat extraction and all peat extraction related activities. Should this be granted, the NIS states that it will be accompanied by an EIAR, AASR and NIS will assess the impacts of historical peat extraction activities on biodiversity and Designated Sites.

There is no planning history in the areas affected by the proposed haulage of turbines in Moyfeagher and Doolystown, Co. Meath.

3.2 Pre-planning Consultation

Chapter 2 of the EIAR refers to pre-planning consultation which took place on 28th July, 2020 with representatives from MKO, Bord na Móna (BnM) and Meath County Council for 29-35 no. turbines, etc. with details provided with regard to site location, site selection, wind farm design process, turbine delivery, grid connection, policy context, strategic infrastructural development and on-going planning consultations, public engagement and consultation, Environmental Impact Assessment: Scoping and consultation, assessments, modelling, surveys, site investigations, EIAR, etc. Issues raised include Appropriate Assessment and Environmental Impact Assessment (with particular reference to Traffic and Transportation, Cultural Heritage, Ecology and Landscape and Visual Impacts) and should incorporate a Construction and Environmental Management Plan (CEMP).

Representatives from MKO, BnM and Meath County Council were present at the second meeting on the 13th October 2020 with details provided in relation to Initial Draft Wind Turbine Layout for 26 no. turbines with 200m blade tip height, Haul Route Assessment, wind Farm Design Process, Turbine Delivery, Grid Connection, Strategic Infrastructural Development and On-going Planning Consultations, Public Engagement and Consultation including Meath Scoping Response and Environmental Impact Assessment, etc.

Chapter 13 of the EIAR notes that MCC requested a no. of receptors to be included in the LVIA including:

- Views from Scarriff Bridge

- Heritage Towns – Trim Castle
- Hill of Tara and intervisibility between this landscape and Frewin Hill located in Co. Westmeath
- Royal Canal
- Dublin to Sligo Railway
- Receptors identified in the Boyne Valley Tourism Strategy 2016-2020
- Discussion around intrusive works/ proposals regarding Scarriff Bridge as part of the haul route.

SECTION 4: EU, NATIONAL, REGIONAL & LOCAL PLANNING POLICY

The following policy documents are applicable in the assessment of this planning application, though the list is not exhaustive:

4.1 EU Directive 2009/28/EC and Directive 2018/2001/EU[3] (Renewable Energy)

This Directive establishes a common framework for the production and promotion of energy from renewable sources. The EU Directive 2009/28/EC, in the promotion of the use of energy from renewable resources, sets targets for each EU member state, to be achieved by 2020. Ireland is legally obliged to meet 16% energy consumption by 2020 from renewable sources, with a sub-target of 10% in the transport sector. A non-legally binding target requires that at least 40% of electricity is to come from renewable energy by 2020. The Directive also outlines methods by which member states can coordinate their activities/policies on achieving targets.

In December 2018, the recast Renewable Energy Directive 2018/2001/EU entered into force, aimed at keeping the EU a global leader in renewables and, more broadly, helping the EU to meet its emissions reduction commitments under the Paris Agreement.

Building on the 20% target for 2020, it established a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023 and comprises measures for the different sectors to make it happen. This included new provisions to enable citizens to play an active role in the development of renewables - enabling renewable energy communities and self-consumption of renewable energy, an increased 14% target for the share of renewable fuels in transport by 2030 and strengthened criteria for ensuring bioenergy sustainability.

The Commission proposed a revision of the Directive in July 2021. The proposed revision aims to ensure that renewable energy fully contributes to achieving a higher EU climate ambition for 2030, in line with the 2030 Climate Target Plan. It seeks to convert into EU law some of the concepts outlined in the energy system integration and hydrogen strategies, published in 2020. The two strategies outlined ways of creating an integrated energy system, based on renewable energy and fit for climate neutrality, and turning hydrogen into a viable solution to help reach the objectives of the European Green Deal.

In line with the EU Climate Law, the targets and measures set in the revised directive should be ambitious enough to reduce greenhouse gas emissions by at least 55% in 2030. This includes raising the overall renewables target (proposed to be increased to 40%), but also strengthened measures for transport or heating and cooling. The Commission is also aiming at a more energy efficient and circular energy system that facilitates renewables-based electrification and promotes the use of renewable and low-carbon fuels, including hydrogen, in sectors where electrification is not yet a feasible option, such as transport.

4.2 Ireland 2040 National Planning Framework

Ireland 2040 is a framework to guide public and private investment, to create and promote opportunities for our people, and to protect and enhance our environment - from our villages to our cities, and everything around and in between.

In accordance with Section 3.2 'Eastern and Midlands Region' one of the key future planning and development and place-making policy priorities for the Eastern and Midland Region includes:

> *Harnessing the potential of the region in renewable energy terms 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*

[3] https://ec.europa.eu/energy/topics/renewable-energy/directive-targets-and-rules/renewable-energy-directive_en#directive-2018-2001-eu.

managed transition of the local economies of such areas in gaining the economic benefits of greener energy.

Section 5.4 'Planning and Investment to Support Rural Job Creation' refers to solar energy and states:

'Rural areas have significantly contributed to the energy needs of the country and will continue to do so, having a strong role to play in securing a sustainable renewable energy supply. In planning Ireland's future energy landscape and in transitioning to a low carbon economy, the ability to diversify and adapt to new energy technologies is essential. Innovative and novel renewable solutions have been delivered in rural areas over the last number of years, particularly from solar, wind and biomass energy sources.'

National Strategic Outcome 8 'Transition to a Low Carbon and Climate Resilient Society' states:

'*New energy systems and transmission grids will be necessary for a more distributed, more renewables focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy. State-owned commercial enterprises are significant players in the energy market, which is subject to an EU regulatory framework. Promotion of renewable energy is supported by policy in the form of a public service obligation levy. The diversification of our energy production systems away from fossil fuels and towards green energy such as wind, wave, solar and biomass, together with smart energy systems and the conversion of the built environment into both generator/consumer of energy and the electrification of transport fleets will require the progressive and strategic development of a different form of energy grid.'*

National Policy Objective 55:

'Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050'.

4.3 Action Plan for Jobs and Future Jobs Ireland 2019

The Action Plan for Jobs series sought to transform Ireland into one of the most energy efficient economies in Europe by 2020. The reports identified the vital role that energy efficiency can play in reducing the cost of energy for businesses and domestic consumers.

Future Jobs Ireland 2019 has a target to increase total energy use from renewable resources to 20% by 2025 and aims to set ambitious targets, including for CO_2 reductions, in the All of Government Climate Plan, which will seek to make Ireland a leader in responding to climate disruption.

4.4 Strategy for Renewable Energy: 2012-2020

(Department of Communications, Energy & Natural Resources**)**

Section 2.1 states that the Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum we achieve our legally binding 2020 target in the most cost-efficient manner for consumers. Of critical importance is the role which the renewable energy sector plays in job creation and economic activity as part of the Government's action plan for jobs**.**

Section 2.2 states that underpinning the Government's energy and economic policy objectives are the following five Strategic Goals reflecting the key dimensions of the renewable energy challenge to 2020. This high-level strategy is underpinned by the more detailed National Renewable Energy Action Plan.

- *Strategic Goal 1: Progressively more renewable electricity from onshore and offshore wind power for the domestic and export markets.*
- *Strategic Goal 2: A sustainable bioenergy sector supporting renewable heat, transport and power generation.*
- *Strategic Goal: Green growth through research and development of renewable technologies including the preparation for market of ocean technologies.*
- *Strategic Goal 4: Increase sustainable energy use in the Transport sector through biofuels and electrification.*
- *Strategic Goal 5: An intelligent, robust and cost-efficient energy networks system.*

4.5 National Climate Change Adaptation Framework (NCCAF) (2012)

The Framework provides the policy context for a strategic national adaptation response to climate change in Ireland. It highlights the role of planning and development in implementing adaptation measures and recognises the benefits of wider stakeholder engagement in achieving climate change objectives at a local level. The NCCAF provides an overview of challenges for sectors that are impacted from climate change, including water, coasts, marine, agriculture, forestry, biodiversity, energy, transport, communications, insurance, heritage and health.

4.6 Climate Action and Low Carbon Development Act (2015)

The Climate Action and Low Carbon Development Act 2015 is the key policy instrument to address the issue of climate change in Ireland. The Act sets out a roadmap for Ireland's transition towards a low carbon economy and details mechanisms for the implementation of the 'National Low Carbon Transition and Mitigation Plan' (National Mitigation Plan) published in 2017, to lower Ireland's level of greenhouse emissions and a 'National Climate Change Adaptation Framework' (National Adaptation Framework). They will be renewed every five years and are required to include tailored sectoral plans.

The Act requires public bodies to actively consider mitigation and adaptation efforts, drawing on the objectives set out in the National Low-Carbon Roadmap, national adaptation framework and sectoral adaptation plans.

4.7 National Mitigation Plan 2017

The National Mitigation Plan represents an initial step in transitioning Ireland to a low carbon, climate resilient and environmentally sustainable economy by 2050. This whole-of-government Plan drew on the perspectives and responsibilities of a range of government departments and reflected the central roles of key ministers responsible for electricity generation, the built environment, transport and agriculture. The Plan includes over 100 individual actions for ministers and public bodies to implement and begin the process of developing medium to long term mitigation choices for the next and future decades.

4.8 National Adaptation Framework 2018

The NAF sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The NAF was developed under the Climate Action and Low Carbon Development Act 2015.

The NAF builds on the work already carried out under the National Climate Change Adaptation Framework (NCCAF, 2012). The NAF outlines a whole of government and society approach to climate adaptation in Ireland. It also aims to improve the enabling environment for adaptation through ongoing engagement with civil society, the private sector, and the research community.

4.9 National Renewable Energy Action Plan Ireland 2020

This is the framework within which Ireland has set out the detailed schemes, policies and measures underway and planned to deliver the trajectory of growth from renewable sources. It was submitted under Article 4 of Renewable Energy Directive 2009/28/EC.

4.10 National Climate Action Plan 2023

Prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, the first of the Climate Action Plans (since 2019) to be prepared following the introduction of economy-wide carbon budgets and sectoral emissions ceilings. The plan implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. It sets out how Ireland can accelerate the actions that are required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

Among the most important measures in the plan is to increase the proportion of renewable electricity to up to 80% by 2030 and a target of 9 GW from onshore wind, 8 GW from solar, and at least 5 GW of offshore wind energy by 2030. Section 5.2 'Key Measures and Shifts Required' identifies 'renewable generation' as one of the five most important decarbonisation measures for Ireland. '*Large scale deployment of renewables, both onshore and offshore, will be critical to decarbonising the power sector as well as enabling the electrification of other technologies. Shifting to an emissions pathway consistent with the sectoral emissions ceilings will require in the region of 22 GW in renewable generation capacity overall by 2030*'.

It identifies the socio-economic impacts within the Midland Region (which includes Co. Westmeath) which must be addressed following the closure of peat-fired power stations and the cessation of commercial peat extraction as a feedstock for power generation. Section 8.2.3 refers to 'peatlands restoration measures' and the largest programme of bog rehabilitation in the State's history, involving a wide array of engineering and ecology works design to encourage and accelerate natural processes. Section 8.2.7 refers to the major investment plans of Bord Na Móna and the ESB with regard to renewable energy infrastructure' in the Midlands Region.

4.11 Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy (RSES), 2019 to 2031

Renewable Energy is one of the five primary areas of transition/ key challenges which are at the core of the Strategy. The RSES recognises the need to facilitate the provision of sufficient electricity to meet increasing demand in the region. One of the key goals of the Climate Action Strategy is to Support the Transition to Low Carbon and Clean Energy:

> '*Pursue climate mitigation in line with global and national targets and harness the potential for a more distributed renewables-focussed energy system to support the transition to a low carbon economy by 2050'. (NSO 8, 9).*

Regional Policy Objective (RPO) 10.20 states the following:

> *"Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. Including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process."*

The strategy goes on to state the following:

> *"The Dublin Region is the major load centre on the Irish electricity transmission system. Approximately one third of total demand is located here, similarly the Eastern Region is a major load centre on the Irish transmission system. The main urban demand centres are composed of a mix of residential, commercial and industrial demand, which is expected to grow up to 2025 and beyond. Developing the grid in the Region will enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand. These developments will strengthen the grid for all electricity users, and in doing so will improve the security and quality of supply. This is particularly important if the Region is to attract high technology industries that depend on a reliable, high quality, electricity supply."*

In relation to renewable energy including solar energy the following is stated:

> *'Energy production, including renewable energy in the form of wind, solar and biomass have to date largely been provided in rural areas and the location of future renewable energy production is likely to be met in rural areas.'*

Regarding the decarbonisation of the Energy Sector, the following is stated:

> '*The Region will need to shift from its reliance on using fossil fuels and natural gas as its main energy source to a more diverse range of low and zero-carbon sources, including renewable energy and secondary heat sources. Decentralised energy will be critical to the Region's energy supply and will ensure that the Region can become more self-sufficient in relation to its energy needs.*'

Solar energy is recognised as one of our indigenous renewable energy sources. It is states that the strategy:

> *'Supports an increase in the amount of new renewable energy sources in the Region. This includes the use of wind energy – both onshore and offshore, biomass, and solar photovoltaics and solar thermal, both on buildings and at a larger scale on appropriate sites in accordance with National policy and the Regional Policy Objectives outlined in this 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.'*
>
> '*The provision of infrastructure should be supported in order to facilitate a more distributed, renewables-focused energy generation system, harnessing both on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting sites of optimal energy production to the major sources of demand.'*

Finally, regarding renewable energy in general, the following is stated in the Strategy:

> *'The diversification of our energy production systems away from fossil fuels and towards green energy such as wind, wave, solar and biomass, together with smart energy systems and the conversion of the built environment into both generator/consumer of energy and the electrification of transport fleets will require the progressive and strategic development of a different form of energy grid.'*

4.12 Wind Energy Guidelines (DoEHLG, 2006) & Revised Draft Guidelines (2019)

The Wind Energy Development Guidelines 2006 constitute Section 28 statutory guidance for wind energy development and offers advice to planning authorities on planning for wind energy through the development plan process and in determining applications for planning permission. Guidance is given on matters such as noise, shadow flicker, natural heritage, archaeology, architectural heritage, ground conditions, aircraft safety and wind take. Chapter

6 provides guidance on siting and design of wind energy development in the landscape. This includes advice on siting, spatial extent and scale, cumulative effect, and spacing, layout and height of turbines. Advice is also given regarding landscape character types as a basis for the application of the guidance on siting and design.

Draft *Revised Wind Energy Development Guidelines* were published in 2019. These provide for an update and review of the 2006 Guidelines focusing on key aspects including:

- Sound/ noise – proposing, consistent with who standards, a relative rated noise limit of 5db(a) above existing background noise within the range of 35 to 43db(a), a 43db(a) maximum noise limit permitted, day or night, applicable to outdoor locations at any residential or noise sensitive properties, and taking account of tonal noise, lfn and amplitude modulation; and introduction of noise monitoring regime;
- Visual amenity setback – 4 x tip-height setback from nearest point of curtilage to any residential property (500m minimum mandatory setback)
- Shadow flicker – mitigated by technology;
- Consultation obligations and community report;
- Community dividend – measure to ensure enduring benefit for community;
- And grid connections – underground to be the standard approach.

4.13 Meath County Development Plan 2021-2027

Several sections of the Meath County Development Plan 2021-2027 are relevant to this application. The Meath County Development Plan (MCDP) 2021-2027 aligns with the Eastern and Midlands Regional Spatial and Economic Strategy (RSES) and it has a stated objective 10.24 to support '*the sustainable development of Ireland's offshore renewable energy resources in accordance with the Department of Communications, Energy and Natural Resources 'Offshore Renewable Energy Development Plan' and any successor thereof including any associated domestic and international grid connection enhancements*'. This is set within the context of a range of renewable energy options of bioenergy, biomass, geothermal, hydro energy, solar, waste and wave.

Section **6.15.3 Renewable Energy** identifies a range of renewable energy types and of relevance in the context of the capacity of the electricity transmission network and wind energy development. The National Planning Framework refers to sustainability, security of supply and competitiveness. **Section 6.15.3.2 Wind Energy** of the MCDP 2021-2027 relates to Wind Energy and support for its generation including the modernisation and expansion of electricity infrastructure. It states the Planning Authority '*will continue to support and encourage the principle of development of wind energy, in accordance with Government policy and having regard to the provisions of the Landscape Characterisation Assessment of the County and the Wind Energy Development Guidelines (2006) or any revisions thereof*'.

In this regard, An Bord Pleanála are invited to consider Appendix A.05 '**Landscape Character Assessment**', A.10 '**Protected Views and Prospects**' and the policies and objectives of the **Infrastructure Strategy** (Section 6.15.3.6), particularly the following:

- **INF POL 34:** To promote sustainable energy sources, locally based renewable energy alternatives, where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity, natural and built heritage, residential or local amenities.

- **INF POL 35:** To seek a reduction in greenhouse gases through energy efficiency and the development of renewable energy sources utilising the natural resources of the County in an environmentally acceptable manner consistent with best practice and planning principles.

- **INF POL 36:** To support the implementation of the National Climate Change Strategy and to facilitate measures which seek to reduce emissions of greenhouse gases.

- **INF POL 41:** To encourage the development of wind energy, in accordance with Government policy and having regard to the Landscape Character Assessment of the County and the Wind Energy Development Guidelines (2006) or any revisions thereof.

- **INF POL 42:** To support the identification, in conjunction with EMRA, of Strategic Energy Zones, areas suitable to accommodate large energy generating projects within the Eastern and Midlands Regional area.

- **INF OBJ 39:** To support Ireland's renewable energy commitments outlined in national policy by facilitating the development and exploitation of renewable energy sources such as solar, wind, geothermal, hydro and bio-energy at suitable locations within the County where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity or local amenities so as to provide for further residential and enterprise development within the county.

- **INF POL 48:** To ensure that energy transmission infrastructure follows best practice with regard to siting, design and least environmental impact in the interest of landscape protection.

- **INF OBJ 50:** To seek the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner.

Section 6.15.4 includes an objective in the Section on 'Electricity Networks Infrastructure', as follows:

- **INF OBJ 50:** To seek the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner.

Chapter 8 '**Cultural and Natural Heritage Strategy**' and Sections 8.8 on '**Natural Heritage**' and Sections 8.17 – 8.19 on '**Landscape**', '**Landscape Character Assessment**' '**Views and Prospects**' and '**Green Infrastructure**' of the Meath County Development Plan 2021-2027 are also relevant in the context of the proposed development. Chapter 10 relates to **'Climate Change Strategy'.**

Chapter 11 contains the Council's '**Development Management Guidelines & Standards**', with Section 11.8.1 Energy Development and Section 11.8.3 of particular note in this regard.

Section 11.8.1 Energy Development

The Council encourages and facilitates early pre-application discussions on these projects. Refer to Chapter, 6 Infrastructure which contains the grounding policies and objectives relevant to energy related development.

DM POL 27: To encourage renewable development proposals which contribute positively to reducing energy consumption and carbon footprint.

DM OBJ 76: In the assessment of individual energy development proposals, the Council will take the following criteria into account:

- The proper planning and sustainable development of the area;
- The environmental and social impacts of the proposed development;
- Traffic impacts including details of haul routes;
- Impact of the development on the landscape, (please refer to Appendix 5 Landscape Character Assessment);
- Impact on protected Views and Prospects, (please refer to Appendix 10 Protected Views and Prospects);
- Impact on public rights of way and walking routes, (please refer to Appendix 12 Public Rights of Way);
- Connection to the National Grid (where applicable);
- Mitigation features, where impacts are inevitable;
- Protection of designated areas - NHAs, SPAs and SACs, areas of archaeological potential and scenic importance;
- proximity to structures that are listed for protection, national monuments, etc. (Please refer to Chapter 8 Cultural Heritage, Natural Heritage, Landscape and Green Infrastructure and Appendices 6-9 inclusive for further details);
- Cumulative Impact of proposal.
  In the assessment of individual proposals, the Council will take the criteria outlined above into account.

Section 11.8.3 Wind Energy exclusively addresses Wind Energy Developments. It states that the Council require that any pre-application discussion and/or planning application proposal for wind farm development sets out how the project complies with DM POL 27 and DM OBJ 76. The Council will support appropriate innovative designs for wind farms. Topographical enclosures and extensive areas of degraded or previously developed lands should be identified for wind farm development to help minimise visual impacts and to harmonise wind turbines with the landscape. In general, matt finishes and neutral colours for turbines and structures are required. All planning applications shall be accompanied by detailed proposals for the restoration of the site after removal of the turbines and associated infrastructure including access roads. Adequate financial security will be required to ensure site restoration and removal of the wind farm.

- **DM POL 28:** To require compliance with the Wind Energy Development Guidelines, (2006) and Circular PL20-13, and any updates thereof. Any proposal shall be supported by both a technical and an environmental statement prepared to an acceptable standard which sets out how the proposal complies with the Guidelines.

- **DM OBJ 78:** To require that any pre-application discussion and/or planning application proposal for wind farm development sets out how the project complies with DM POL 28.

- **DM OBJ 79:** Topographical enclosures and extensive areas of degraded or previously developed lands should be identified for wind farm development to help minimise visual impacts and to harmonise wind turbines with the landscape.

- **DM OBJ 80:** In general, matt finishes and neutral colours for turbines and structures are required.

- **DM OBJ 81:** The Council will support appropriate innovative designs for wind farms.

- **DM OBJ 82:** All planning applications shall be accompanied by detailed proposals for the restoration of the site after removal of the turbines and associated infrastructure including access roads. Adequate financial security will be required to ensure site restoration and removal of the wind farm.

The **Landscape Character Assessment** (Appendix 5 of the Meath County Development Plan 2021-2027) for the County provides the following guidance:

Physical Landscape Character

1. *To recognise, protect and enhance the unique sense of place provided by every landscape character area and to promote appreciation of landscape character through local design initiatives such as advertising and publication of information in the public (e.g. this Landscape Character Assessment).*
2. *To commission further supplementary guidance to assist the achievement of objective 1. For example; enhancement strategies where landscape character areas are not in optimum condition, Village Design Statements for villages and graigs that are inextricably linked to their landscape setting, design guides for new development such as tourism, housing, infrastructure corridors and one-off houses, and management plans for sensitive and popular sites.*
3. *Every objective and policy should have regard to the need to maintain distinctiveness and variety as the primary asset of all LCA's.*
4. *To respect historic patterns of land use to ensure that development and change is appropriate to its setting. Design guidelines should define the character of individual settlements and make recommendations regarding suitable building materials, styles, layouts, scales, etc. The objective of design guidelines may be to encourage local involvement and comment, ensure consistency in development control decisions and allow designs to be developed in response to local context.*
5. *To ensure that development, particularly in sensitive landscapes, adheres to tailored design guidelines. Sensitive landscapes include demesne villages and LCA's identified as being sensitive (see section 9).*
6. *To establish methods for improving existing landscape character and condition and incentives for landowners and managers to do this, e.g. through the availability of grants, guidelines and promotion of the economic benefits of high value landscapes.*
7. *To ensure maximum use of landscape character guidelines they must be fully coordinated with other statutory documents and statutory bodies should be consulted.*
8. *To conserve landscapes of significant scenic, geological, ecological, cultural and historic value that contribute to Meath's uniqueness.*
9. *Recognise, enhance and maintain the rich mosaic of wildlife habitats including those which are not statutorily protected but which are still highly valuable, including roadside verges, hedgerows and mature trees, canal and minor river corridors, lowland heath areas etc.*

Visual Character

10. *To review existing designations for areas of visual quality and to ensure adequate protection of views and vistas that contribute to the appreciation of landscape character.*
11. *To maintain scenic vistas and panoramic views from key vantage points and towards key landmarks and features within the landscape.*
12. *To maintain the visual integrity of sensitive and exceptional – high value areas.*
13. *To increase the visual integrity of sensitive and moderate - low value areas.*

History and Archaeology

14. *To accurately assess and define objectives and policies for conservation and preservation of all important historic landscapes and landscape settings in Co Meath to ensure their adequate protection alongside the need to allow public enjoyment of them.*
15. *To preserve the integrity of the landscape setting of key historic landscape features for the purposes of maintaining unique and unspoilt areas of landscape character, visual amenity and attractiveness to visitors.*

Landscape Character Types: Type 2: Lowland Areas (South-West Lowlands)

General recommendations (relevant to application)

1. *Promote good agricultural practices to create a sustainable rural economy e.g. stud farms.*
2. *Provide incentives for smaller rural/family farms to manage their land to avoid loss of hedgerows and field patterns.*

4.14 Meath Climate Action Strategy

The Meath Climate Action Strategy covers the period from 2019-2025 and aims to support businesses, social enterprises, public bodies and communities to change their energy systems to produce a climate resilient economy. The Strategy focuses on changes to key areas such as mobility, the built environment, clean energy, resource management, water and natural resources identifying methods by which Meath County Council can support change in these areas.

4.15 Meath County Council Economic Strategy

The Economic Development Strategy for Co. Meath 2014-2022 sets out a clear, concise, innovative and evidence-based measures aimed at accelerating the economic transformation, revitalisation and sustainable development of the County. The measures recommended within the Economic Development Strategy seek to promote County Meath to fulfil its economic potential and to prosper as a successful, diverse and vibrant social, civic, commercial, and residential centre that will be recognised locally, nationally and internationally as a highly attractive and distinctive location in which to conduct business.

Due regard was given to the aforementioned policy documents and guidance strategies in the assessment of this development proposal.

4.16 Other Relevant Guidelines/ Guidance

Section 28 Ministerial Guidelines on Environmental Impact Assessment, Flood Risk Management and other guidance documents on Appropriate Assessment are relevant in the context of this application. There is also a County Meath Biodiversity Action Plan 2015 – 2020.

SECTION FIVE: MCC INTERNAL DEPARTMENT REPORTS/ IRISH WATER

5.1 Introduction

The application was referred to Uisce Éireann and the following departments within Meath County Council for comment:

MCC Dept./Organisation	Report Status	Comment
Uisce Éireann	Report Received	**No objection.**
Environment (Water Quality)	Report Received.	**Nothing further to add, refer to Environment (General) Report.** *Please see Section 5.2 below for further details.*
Environment (General)	Report Received.	**Requirements in relation to the CEMP, C&D WMP, Waste Management Act 1996, potential for generation of low frequency noise 20-200Hz risk on noise sensitive receptors and proposals for mitigation. Conditions recommended.** *Please see Section 5.2/ Appendices below for further details.*
Environment (Flooding)	Report Received.	**No objection, subject to conditions.** *Please see Section 5.2/ Appendices below for further details.*
Transportation	Report Received.	**No objection, subject to conditions.** *Please see Section 5.2/ Appendices below for further details.*
Water Services Department	Report Received.	**Broadly acceptable, subject to 4 no. points being addressed in relation to wells, permeable paving, Section 50 licences and Drainage Works Code of Practice.** *Please see Section 5.2/ Appendices below for further details.*
Architectural Conservation Officer	Report Received.	**Refusal recommended. Site is visible from Protected Structures in the vicinity and National Monuments, lack of visual impact assessment from Lough Crew Cairns, Tentative World Heritage Site of Tara, visible from the Protected View at Tara, negative impact on view and historic landscape,** *Please see Section 5.2/ Appendices below for further details.*
Archaeology	Report Received.	**Additional information required in EIAR with high potential for archaeological finds. Dating of residual peat, recording of railway structures, cultural heritage/ folklore and programme of palaeo-environmental work required. Limited mitigation proposed and programme of advance archaeological investigations required.** *Please see Section 5.2/ Appendices below for further details.*
Heritage Officer	Verbal Report.	**Cumulative visual impact of the proposed development on the Hill of Tara, the need for an independent assessment of the likely impact on the Tentative List for World Heritage Sites (outstanding universal value to mankind). The cumulative impact on Loughcrew and Slieve na Calliagh Hills which has an exceptional value and with a high sensitivity to change.**

		Consideration to be given to the Hill of Uisneach, one of the Royal Sites **Level of detail in relation to habitat and species surveys. Consideration of Whooper Swan and other overwintering bird populations which may use the site.**

5.2 Comments/ Reports Received

A summary of the comments received are set out below. Full reports are available in the appendices to this Chief Executive's Report. Please refer also to Section 5.1/ Appendices for reports which indicated 'no objection' or 'nothing further to add', etc.

5.2.1 Environment Department (General)

The Environment Department referred to the EIAR and NIS prepared to accompany the planning application. It noted that the applicant would be required to submit a site-specific Outline Construction Environmental Management Plan (CEMP) and this is in the appendices to the EIAR. A Construction and Demolition Waste Management Plan (WMP) is required in accordance with DEHLG Guidelines (2006). Any proposal to remove material from the site for reuse, recovery, recycling and/ or disposal should be carefully considered in the CEMP and WMP. The applicant is reminded of obligations under the Waste Management Act, 1996 as amended with regard to the control of waste, importation of soil, etc. The CEMP must address extremes of weather and possible impacts on receptors and mitigation. WMP and CEMP are to be treated as live documents.

The report notes that the potential for the generation of low frequency noise 20-200Hz is a risk and as such the applicant should be required to fully investigate the potential for low frequency noise on noise sensitive receptors within the area of development and proposals for the mitigation of same.

A series of recommended conditions ((a)-(o)) are proposed, in the event of a grant of permission, which relate to the CEMP, WMP, dust emissions, refuelling, bunding of hydrocarbons, chemicals, etc. away from watercourses, supply of spill kits and hydrocarbon absorbent pads, prohibition of burning of waste on site, details on the management of waste streams, standards for noise and vibration on construction sites, control of hours of construction work, use of low emission vehicles and plant, maintenance of a complaints register, requirements in relation to the importation of soil, stone or topsoil and the storage of such material on site, preconstruction invasive species survey and subsequent management plan as necessary; and pre-site clearance survey for protected species.

5.2.2 Environment Department (Flooding)

The Environment Department (Flooding) referred to the DoEHLG/ OPW Flood Risk Management Guidelines and noted that the proposed wind farm would be classified as a 'highly vulnerable development' due to essential infrastructure. The location of Flood Zone A in Coolronan and Martinstown indicates a high risk of flooding. The location of proposed internal road providing access to T19 and T26 also passes through a Flood Zone A. Proposed watercourse culverting required Section 50 OPW application. Proposed roads must not increase localised ponding. Subject to a number of conditions, the Environment Department (Flooding) has no objections, subject to a number of conditions in relation to the need for written consent for culverting works, etc. to be provided to the Planning Authority prior to

the commencement of development, the location of essential infrastructure outside FZA and FZB, a specified FFL for essential infrastructure, no development within 10 metres of watercourses, etc.; and ensuring that access tracks in FZA and FZB does not remove any flood plain storage.

5.2.3 Transportation Department

The application will involve a strategic roads corridor, namely the R-156. The Transportation Department considers the traffic impacts of the proposed development, referring to traffic flows, traffic volumes forecast, predicted traffic generated during Stage 1 Site preparation and groundworks, turbine foundation development; and Stage 2 Turbine component delivery. The report considers the applicant's proposals regarding turbine delivery and an outline traffic management plan, grid connection and amenity pathways and carparks.

The Transportation Department has stated that it has no objection to the proposed development, subject to conditions relating to details being agreed in relation to Road Safety Audits, works associated with abnormal loads, traffic management plan including details regarding haulage routes, vehicle types to be used for transportation of turbines, etc., roads and bridges condition surveys, addressing construction damage, protection of bridges, temporary traffic arrangements, protocols to keep residents informed, phasing programme, Road Opening Licences, etc.

5.2.4 Water Services (Surface Water) Department

The Water Services (Surface Water) Department referred to proposals regarding surface water treatment and disposal and considered that the development broadly meets the requirements of Meath County Council. It recommended that 4 no. points be addressed to the satisfaction of Meath County Council prior to the commencement of construction, in the event of a grant of permission. They relate to monitoring of wells within 500m of Borrow Pit no. 2 and the applicant being responsible for any remedial actions required in the event that quarrying impacts on existing wells in the vicinity, the installation of permeable paving at permanent car-parking spaces, the requirement for Section 50 OPW consent and the need to comply with Greater Dublin Code of Practice for Drainage Works.

5.2.5 Architectural Conservation Officer

This report refers to the site context including 10 no. Protected Structures within the immediate area of the site. It notes that the site is visible from Recorded and Registered National Monuments including *Lough Crew Cairns – Slieve na Callagh Collection* which includes 8 no. Megalithic tomb – passage tombs, 2 no. monuments of Rock Art and 2 no. Cairns in Corstown townland. The site is also visible from the Tentative World Heritage Site of Tara and this includes an extensive collection of National, Registered and Recorded Monuments, including the Castle Tower House, Church and Graveyards on the Hill of Tara. The Conservation Officer has noted Protected View no. 44 – Hill of Tara which has a panoramic view.

Relevant policies and objectives in the Meath County Development Plan 2021-2027 are listed including HER POL 1-5, HER POL 12, 14, 15-18, 52 HER OBJ 48, 49 and 56. The latter, objective 56, is highlighted which seeks to '*To preserve the views and prospects listed in Appendix 10, in Volume 2 and on Map 8.6 and to protect these views from inappropriate development which would interfere unduly with the character and visual amenity of the landscape*'.

The Conservation Officer has recommended refusal, stating that the applicant has failed to supply a visual impact assessment from the Lough Crew Cairns which are within the visibility context of the development; and the applicant has failed to supply a visual impact assessment from the immediate context from: Recorded Protected Structures which are within the visibility context of the development:

- 91078 Woodtown House
- 91193 Ballivor Health Centre
- 91194 St Columbas RC graveyard
- 91195 Saint Kineth's Church of Ireland Church
- 91196 Saint Columbanus' Roman Catholic Church
- 91197 Water Pump
- 91198 Parkstown
- 91292 Scarriff Bridge
- 91388 Foxbrook
- 91379 Killyon Manor.

The Conservation Officer has noted that the applicant has included incorrect RPS numbers for Scarrif Bridge and Ballivor Water Pump which is misleading. The effect of the development on the Hills of Tara Panorama are evident in the Visual Impact Assessment and will negatively alter the view, panorama, and experience of this historic landscape.

5.2.6 Archaeology

Meath County Council's Archaeologist provided comments in relation to details in Chapter 12 of the EIAR. It is submitted that the Map Regression section would benefit from additional information from 1650s Down Survey and 1815 Larkin Maps. There have been changes to the county boundaries, and boundaries prior to 1837 OS may survive (if not milled away) and should be recorded, if found.

Areas near the R-156 have *a very high archaeological potential for ancient routeways*. This is because pinch points and narrow hour-glass-shaped 'waists' between separate wetlands are typically targeted for archaeological trackways.

Dating the residual peat levels would determine the remaining archaeological potential of the bog. Archaeological finds and objects typically occur in two ways in a bog. They are either built on a contemporary ground surface or in open streams and become buried as the bog grows around them or the stream moves somewhere else; or they are deposited in holes that are deliberately dug into the peat or that occur naturally in the bog. Typically, the base of the peat bog is an area where remains of Giant Irish Deer are found.

All features associated with extant Bord na Mona Railway across the site require a full walkover and inventory to determine the extent of the 'Protected Structure'. Proper mapping and annotations to mark bridges, culverts, track types, points, associated mileposts, signals, sheds, junction boxes, turntables, etc. and any abandoned rolling stock, carriages, etc. is required.

There is no mention of cultural heritage-folklore. It would therefore be necessary to complete folklore surveys in both Meath and Westmeath.

A programme of palaeo-environmental work should form part of the proposed mitigation as bogs are a tremendous resource for trapping evidence for past landscapes and climates.

The archaeologist expressed concern regarding the *limited mitigation* proposed in the EIAR. It is recommended that a programme of advance archaeological investigations form part of the

mitigation works. This advance work will determine the location, date, nature and extent of any archaeological or environmental remains. This will inform an archaeological strategy for the project and will form a basis for programme, costs and archaeological significance. 8 no. recommendations have been made by the archaeologist.

SECTION SIX: PLANNING ASSESSMENT

6.1 Introduction

The following seeks to consider and where appropriate provide comments on items requested by ABP (listed in Section 1.1 of this Chief Executive's (CE's) Report) and as set out in the Planning and Development Act 2000-2022. It should also be read in conjunction with Sections 1-5 of this CE's Report.

The development description is set out in Section 2.1 of this CE's Report. Bord Na Móna Powergen Ltd. are seeking a **10-year planning permission and 30-year operational life** of the wind farm from when the entire farm is commissioned.

This application seeks to provide a windfarm, meteorological masts, excavate 2 borrow pits, install a 110kV substation infrastructure (including 2 no. buildings, telecoms tower and underground cabling) to connect to the Corduff 110kV line which traverses the site, and which is part of the national transmission grid. The proposal includes 28km of new internal site access roads, proposed 3.3km access tracks for amenity use, 3 no. car-parks (80 no. spaces), seeks to widen roads/ entrances to the site to facilitate access, etc. Bord Na Móna is seeking a 10-year permission and a 30-year operational life-span based on the current wind turbine generator technology.

It includes the following temporary structures, permanent structures, decommissioning, amenity facilities and haul route works, as follows:

Permanent Structures
26 No. wind turbines and all associated hard-standing areas (**10 no. in Co. Meath**)
2 no. Meteorological **Anemometry Masts - 115 metres** and associated hardstanding area (Co. W'meath)
1 No. permanent 110 kV electrical substation (Grange More). Includes **2** No. **single storey control buildings**, a **36-metre high telecom tower**, associated electrical plant and equipment, a **groundwater well** and a **wastewater holding tank**. (Co. Westmeath)
All **associated underground electrical and communications cabling connecting the turbines and masts to the proposed electrical substation**, including **road crossings** at R156 and a local road between Lisclogher and Bracklin Bogs, and **all works associated with the connection of the proposed wind farm to the national electricity grid** (connecting to existing **Mullingar – Corduff 110 kV overhead line** that traverses the site). (**Co. Meath** and Co. Westmeath)
New internal site access tracks with passing bays measuring **c.28km** and **provision/upgrade of existing/new pathways for amenity uses** measuring **c. 3.3km** and associated drainage. (**Co. Meath** & Co. Westmeath)
Accommodating works to **widen** existing **site entrances off the R156** into Ballivor and Carranstown Bogs and **reopen entrances at Lisclogher and Bracklin Bogs** for use as **construction site entrances** and **to facilitate delivery and movement of turbine** components and construction materials; Entrances will be used for **maintenance and amenity access** during the operational period. (**Co. Meath** & Co. Westmeath)
Permanent **vertical realignment of the R156** in the vicinity of the site entrance **to achieve required sight lines**. (Co. Westmeath)
Construction of **permanent site entrances** off a local road into Lisclogher and Bracklin Bogs to **facilitate a crossing point for turbine components, construction materials and operation/amenity access**. (**Co. Meath** & Co. Westmeath)
Provision of **amenity access and amenity pathways** using existing entrances off the R156 and local roads in (Bracklin, Coolronan, Clondalee More and Craddanstown). (**Co. Meath** & Co. Westmeath)
3 No. permanent **amenity carparks** in • **Ballivor Bog (50 no.** car parking spaces), (Co. Westmeath)

Permanent Structures
• **Carranstown (15 no.** car parking spaces) and (**Co. Meath**) • **Bracklin Bog (15 no.** car parking spaces) (Co. Westmeath) and the provision of **bicycle rack facilities** at each location.
All associated **site works and ancillary development** including access roads, drainage and signage. (**Co. Meath** & Co. Westmeath)

Temporary Structures	Structures to be removed/ Decommissioning of Use
4 No. **temporary construction compounds** incl. offices/ staff facilities (Bracklin, Grange More) (Co. Westmeath)	Existing **meteorological mast** (Co. Westmeath)
5 no. **temporary security cabins** at construction site entrances/ access points around the site (Killagh, Grange More (Co. Westmeath), Coolronan (**Co. Meath**))	
2 No. borrow pits and all works associated with the opening, gravel and spoil extraction (Grange More, Craddanstown) (Co. Westmeath)	All works associated with decommissioning of **2 no. borrow pits** (Grange More, Craddanstown) (Co. Westmeath)
Temporary accommodating **works to existing public road infrastructure** to facilitate delivery of abnormal loads at locations on the R156 and R161 (Doolystown and Moyfeagher) (**Co. Meath**)	

Land take within the application site comprises an area of 1,770 ha and the proposed works amount to 678m² (as per *Application Form for Permission*) incorporating a Substation Control Building A – 450 sq. m and Substation Control Building B – 228 sq. m.

The application relates to work within or close to a European Site (SAC/ SPA) or a Natural Heritage Area (NHA).

A groundwater well is proposed for the proposed electrical substation. Proposed Wastewater Management/ Treatment is via a sealed wastewater storage tank will be used for effluent from the staff welfare facilities in the substation control buildings. Effluent will be removed from site by a permitted waste collector to a licenced waste facility. Refer to Chapter 4 of the Environmental Impact Assessment Report (EIAR).

Proposed Surface Water Disposal is outlined in Chapter 4 of the EIAR and the drainage drawings (Drawing nos. D101-118, D501, D502).

6.2 Overview of Planning Application Details

6.2.1 General

Documentation submitted to ABP under Section 37E incorporates the statutory particulars, Drawings incorporated within the Planning Application are:

- Site Location Plan
- Site Layout
- Turbine Layouts (26 no.)
- Wind Turbine Elevations and Plans
- Driven Pile Foundations details
- Bored Pile Foundations Details
- Gravity Foundations Details
- Upgrade of Existing Excavated Access Road
- Upgrade of Existing Floated Access Road
- New Floating Access Road
- Temporary Construction Compounds (4 no.)
- Borrow Pits Layout & Sections
- Substation Layout & Sections
- TSO & IPP Control Building
- 110kV Overhead Line 12m/15m Tower Foundations

- Tower Foundation Elevation Section
- Palisade Fence & Gate Details
- Internal Collector Network Trench Arrangement Detail
- 36m High Telecom Tower & Elevation
- Met Mast
- Security Cabins (5 no.) & Standard Details
- Permanent Carparks (3 no.)
- Compound Cabin Details
- Security Gate Detail
- Borrow Pit Fence Detail, Elevation & Indicative Images
- Wheel Wash Detail
- Signage Detail
- Clear span Watercourse Crossing
- Proposed Access Junctions (A, B & C)
- Drainage Layouts & Details

An Environmental Impact Assessment Report (EIAR) incorporates the following:

- Background to the Proposed
- Consideration of Reasonable Alternatives
- Description of the Proposed Development
- Population and Human Health
- Biodiversity
- Ornithology
- Land Soils and Geology
- Hydrology and Hydrogeology
- Air and Climate
- Noise and Vibration
- Archaeology and Cultural Heritage
- Landscape and Visual
- Material Assets
- Vulnerability to Major Accidents and Natural Disasters
- Interaction of Effects
- Schedule of Mitigation and Monitoring
- 14 no. Appendices including:
    - Scoping Responses
    - Community Report
    - Development Management Standards
    - Planning Applications in the Surrounding Landscape
    - Site Layout
    - Drainage Design
    - Peat & Spoil Management Plan
    - Construction Environment Management Plan
    - Ballivor Amenity Layout
    - Decommissioning Plan
    - Wind Farms & Health Literature Review
    - House Prices Study
    - Botanical Study
    - Bat Survey Assessment Report
    - Aquatic Report
    - Badger Survey
    - Habitat Enhancement Management Plan
    - Bord na Móna Cutaway Peatland Rehabilitation Plans
    - Species List, Survey Effort, Summary Tables, Survey Data
    - Collision Risk Assessment
    - Bird Monitoring Programme
    - Peat Stability Assessment
    - Flood Risk Assessment
    - Laboratory Report
    - Water Framework Directive Assessment
    - Carbon Balance Calculations
    - Glossary of Acoustic Terminology
    - Calibration Certs
    - Noise Modelling Parameters
    - Predicted Omni-directional Noise Levels
    - Noise Contour Map
    - Cultural Heritage Photograph Log
    - Peatland Survey Report 2005
    - Human Remains Find Spot Report 2003
    - Westmeath & Meath Archaeology & Cultural Heritage Objectives
    - LVIA Methodology
    - LCA Assessment Tables
    - Assessment of Photomontages
    - Photomontage Booklet
    - LVIA Baseline
    - Collett Swept Path Analysis Assessment
    - Traffic Management Plan
    - Telecommunications Impact Study

A Natura Impact Statement has been submitted which identifies the following:

- Summary of Appropriate Assessment Screening Report and Assessment of Qualifying Features likely to be Significantly Affected
- Description of the Proposed Development
- Characteristics of the Receiving Environment
- Assessment of Potential Effects and Associated Mitigation
- Assessment of Potential Significant Effects
- In-Combination Effects
- Concluding Statement

The Application Site

The wind farm site can be described within 4 main areas - the north-east section where 8 no. turbines are proposed, internal roads and amenity paths, north-west section where 6 no. turbines are proposed, a borrow bit, amenity carparks, 2 construction compounds, a met mast, internal roads and amenity paths. A mid-section dissected by the regional road where the substation and grid connection are proposed, together with internal roads, a construction compound and 2 no. borrow pits. The fourth area is to the south of the regional road and contains 12 no. turbines, internal roads and amenity paths; and a construction compound.

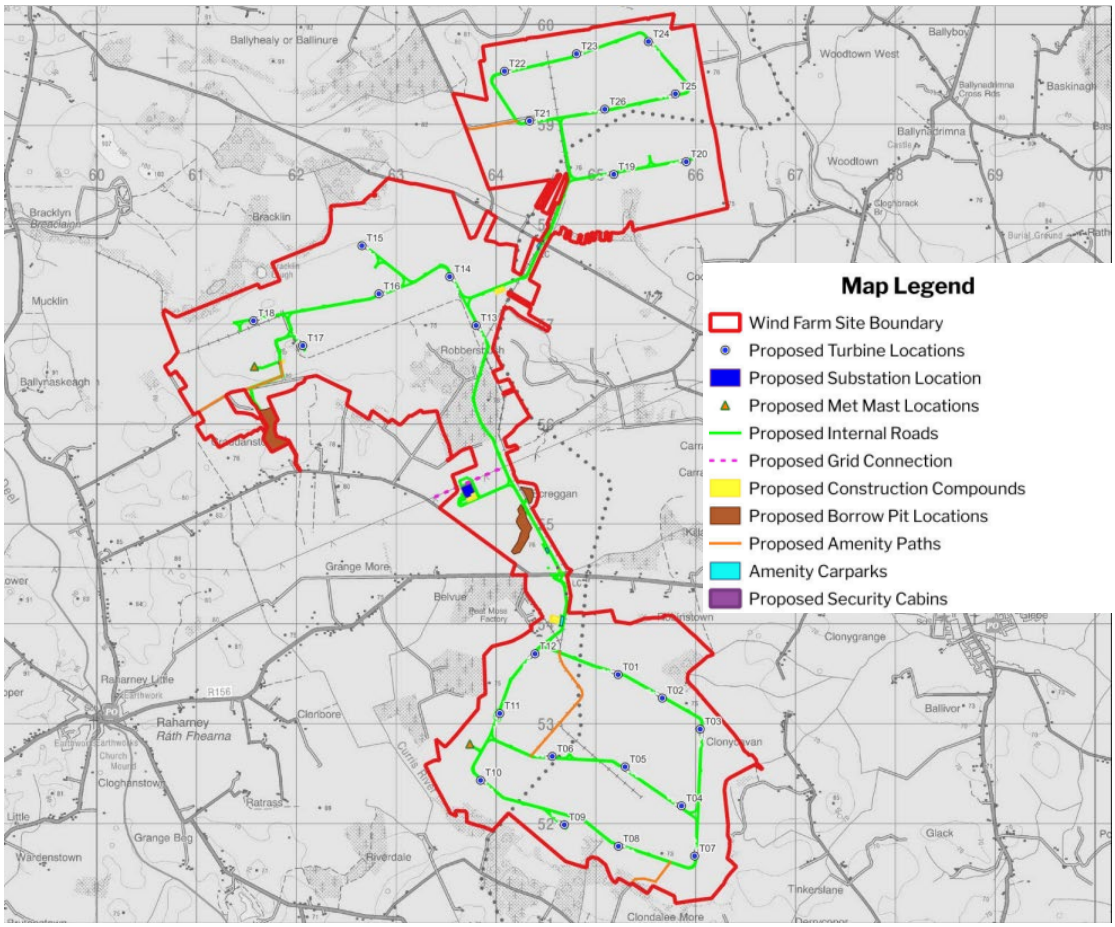

Fig. 6: Proposed Turbine Layout and other site infrastructure proposals. Note the County Boundary between Co. Meath and Co. Westmeath is represented by a dotted line.

The area within the red-line boundary of the wind farm encompasses 1,770 hectares and is proposed as the permanent area of the wind farm while the permanent footprint of the proposed development is 32.4ha (1.83% of the site area). It includes 26 no. wind turbines with

a tip height of 200m and a total Megawatt Export Capacity (MEC) in the range of 117MW – 169MW.

Development in County Meath pertains to the installation of 10. no turbines fall within Co. Meath and 16 no. turbines fall within Co. Westmeath (refer to Figure 6 below).

The **Meath element** of the scheme, as proposed, will primarily involve 10 no. turbines in Lisclogher and Ballivor Bogs and new internal roads to access these turbines, a small section of the proposed 3.3km amenity paths in Ballivor Bog and amenity carparking and bike rack facilities between Lisclogher Bog and Bracklyn Bog, underground electrical and communications cabling connecting turbines and to the proposed electrical substation in Co. Westmeath, accommodating works – widening/ reopening entrances, site works, drainage, signage, temporary security cabins, temporary accommodating works to existing public road at Doolystown and Moyfeagher.

The majority of works will take place within the administrative boundary of Westmeath County Council and includes 16 no. turbines, 2 no. met anemometry masts, the proposed permanent 110kV substation compound including associated 2 no. control buildings, 36 metre high telecom tower, groundwater well, wastewater holding tank, internal roads to access the turbine, proposed Grid Connection, construction compounds and security cabins, 2 no. borrow pits, the majority of the proposed 3.3km amenity pathway and amenity car parks in Ballivor Bog and Bracklin Bog, underground electrical and communications cabling connecting turbines and to the proposed electrical substation in Co. Westmeath, accommodating works – widening/ reopening entrances, road crossing and permanent vertical realignment of the R156, permanent site entrances, site works, drainage, signage, temporary security cabins, temporary construction compounds, temporary accommodating works to existing public road; and decommissioning of the existing meteorological mast and borrow pits.

Proposed Turbines
Wind farm design software has been used to position the proposed turbines on the site. The 26 no. turbines will have the following parameters:

a. A total **blade tip height** of **200m**,
b. **Hub height** of **115 metres**, and
c. **Rotor diameter** of **170 metres**.

They are described as conventional three-blade turbines which will all rotate in the same direction. The turbines will be multi-ply coated to protect against corrosion. It is proposed that the turbines would be of an off-white or light grey colour to blend into the sky background to minimise visual impact as recommended by DoEHLG (2006) Guidelines on Wind Energy and ETSU (1999) *The Influence of Colour on the Aesthetics of Wind Turbine Generators*'. It is submitted that wind turbines without a gearbox (i.e. direct drive) may also be considered for use in the Proposed Development but this will not affect the external design.

Peat and soil will be excavated to construct turbine foundations using imported structural fill and blinding is placed and compacted to formation level. A reinforced concrete base is cast in-situ and the turbine foundation transmits any load on the turbine into the ground. The base is 26m wide and 4m deep. Where ground conditions are unfavourable for excavation and importation of fill, piles will be installed to formation level and the diameter of these foundations will be c. 20m-25m. A turbine base anchor cage is reinforced and filled with concrete and the area is backfilled with granular fill to finished surface level where the finished

turbine base will be visible. The levelled and compacted granular fill around each turbine base comprise the hard standing areas necessary for the cranes to assemble the turbines and install them in position. Assembly areas are located on either side of the hard-standing areas and are used for offloading turbine blades or segments, etc. before they are lifted into position.

The blade length is expected to be up to 85m, with the longest section coming in a length of 76m so segmented blades will be required. Final size within this range will be based on market options at the time of construction.

MCC Comment: Finishes of the proposed turbines (part of the development in Co. Meath), telecoms towers, buildings (part of the development in Co. Westmeath) to be identified by way of Planning Condition by An Bord Pleanála, in the event of a grant, or agreed in writing with the Planning Authority, prior to the construction.

In the event of a grant of permission, An Bord Pleanála are also requested to require the applicant to submit drawings illustrating the final structure details to be installed on site, not exceeding the blade length in the development description.

Site Roads
To facilitate internal access to the site, 28km of 6m wide internal access roads are proposed, comprising new floating roads over peat, which represent the majority; and new excavated roads through peat.

Floating roads are typically 1.2mm deep with 2 no. layers of geogrid and geotextile separator and in deeper area of peat will include pressure berms (5m wide/ 1m height) to reduce the likelihood of bearing failures beneath the access road. Monitoring posts are installed where peat depth is greater than 2m. Stone fill will be tipp-ended onto the floating road, not onto the peat with lesser loads brought on site until heavier loads can be tipped out over a 10m length with material levelled and final surface layer placed over the floating road to accommodate wind turbine construction and delivery traffic.

Monitoring posts are installed where peat depth is greater than 2m in the case of the construction of newly excavated roads. They are carried out in lengths of 50m at a time which will be replaced with stone fill. Interceptor drains are installed upslope to divert surface water away from the construction area. They will be excavated below the peat and the peat will be spread alongside the excavations. Slope inclination along the construction will be monitored/ varied with battering of side slopes occurring as the excavation progresses. The surface of finished access road will be 1.2m above existing ground level. Geogrid/ geotextile may be required at the surface of the competent stratum (beneath the peat). Smooth transitions between permanent and floating roads is proposed with grading of surface material. Slope stability and gradients will be considered in the positioning of the construction location. Slopes greater than 5° are not envisaged on site. A final surface layer will be placed over the excavated road to accommodate wind turbine construction and delivery traffic.

Electricity Substation, Wind Farm Control Buildings, GRID Connection & Electricity Supply
A 110kV overhead line from Mullingar - Corduff traverses the proposed development site at Carranstown Bog and it is proposed to construct a 110kV substation in the northwest of the bog, in the townland of Grange More, 35m to the south of the existing overhead line, to connect the Ballivor Wind Farm to the national grid.

Approximately 35m of overhead line and two lattice loop in/loop out masts will be required to connect from the proposed substation to the existing overhead line. The proposed lattice masts will be located within the Application Site. Each mast will have a footprint of approximately 140m² and an overall height of 12--15m. They will be lattice steel structures with cross-arms which can extend over the base footprint and internal bracing.

The applicant submits that the construction and exact layout of electrical equipment in the onsite electricity substation will be to Eirgrid networks specifications and will be under the ownership of ESB Networks.

Access to the substation will be from the R-156 to facilitate Eirgrid and ESB Networks during the operational period of the Ballivor Wind Farm and beyond. Upon decommissioning of the wind farm, the 110kV substation within Carranstown Bog will remain in-situ and form part of the national grid infrastructure.

The stated *footprint* of the proposed onsite electricity substation compound is 11,600m² (as per digital documents lodged with Meath County Council though the *printed document states 14,600m²*. It will include two control buildings and the electrical components necessary to consolidate the electrical energy generated by each wind turbine and export that electricity from the wind farm to the national grid.

Two substation control buildings are proposed within the substation compound. The Transmission Asset Owner (TSO) Control Building will measure approximately 25 metres by 18 metres and approximately 9.7 metres in height. The Independent Power Provider (IPP) Control Building will measure approximately 19 metres by 12 metres and approximately 7 metres in height. These buildings have a A-pitch (see drawing no. 73 and 74).

An on-site well with an in-well pump is proposed as a source of water for staff welfare facilities (toilet flushing/ hand washing) with bottle water for drinking if required. It is stated that due to the specific nature of the proposed development there will be a very low water demand. It is planned to transport wastewater off the site for treatment by a permitted collector.

38kV electricity cables with connect each turbine to the substation and fibre-optic cables will connect each turbine to the wind farm control building in the onsite substation compound. Such cables will be in ducts 1.2m below ground level along the sides/ underneath the internal roads and follow the route of the access track to each turbine location.

Clay plugs will be installed at regular intervals of <50m along the length of the trenches to prevent them becoming conduits for water. Most cable trenches will be backfilled with native material or clay subsoils of low permeability used to prevent conduit flow in the backfilled trenches. This material will be imported onto the site if sufficient volumes are not uncovered during the excavation phase of roadway and turbine foundation construction.

A local electricity supply will provide back-up power to the proposed substation for light, heat and power. The supply pole, which will be designed by ESB Networks, will be located within Carranstown Bog will be 10m from the proposed substation location. It will have a transformer and will enter the substation by underground cable and terminate onto the control building AC distribution boards.

MCC Comment: An Bord Pleanála are invited to clarify with the applicant, the size of onsite electricity substation compound, which is stated as 11,600m² (as per digital documents lodged with Meath County Council though the *printed document states 14,600m²*).

The sub-station buildings (part of the development in Co. Westmeath) should be integrated into the landscape. It is proposed to secure the substation compound with a 2.65m palisade fence and gate. It is recommended that matt dark green paint is applied on all exposed metal work, service buildings, cabins, gates and fences.

It is noted that there are no CCTV Pole/ other structure elevation details submitted for the substation area.

The NIS notes that there is no lighting associated with this development, however in the event of a grant of permission, ABP is requested to condition the applicant to direct all lighting inward to the development, avoiding spill/ glare into the surrounding environment. Further consideration to lighting may need to be given by An Bord Pleanála in its NIS/ EIAR. Section 6.1.2 of Appendix 6-2 Bat Survey Assessment refers to guidance in the relation to the use of lighting.

Anemometry Mast
2 no. permanent anemometry masts (met masts) which will be equipped with wind monitoring equipment at various heights are proposed. They are described as slender structures 115m in height, which are free-standing normally constructed with a reinforced concrete gravity foundation designed to cater for the mast loadings. A hard-standing area sufficiently large to accommodate the installation crane will be constructed adjacent to an existing track. They are proposed to be located closest to T17 and T18 in the west of the site in Bracklin Bog and between T10 and T11 in Ballivor Bog (see Drawing no. 82).

Temporary Construction Compounds & Security Cabins
4 no. temporary construction compounds are proposed with one main compound at Ballivor Bog, one sub-station compound, and 2 no. smaller compounds in the townlands of Grange More and Bracklyn. The construction compounds will consist of temporary site offices, staff welfare facilities, storage areas, and car-parking areas for staff and visitors. Temporary toilets will be used during the construction phase as part of the welfare facilities for site staff and visitors. Wastewater from toilets will be directed to a sealed storage tank, with all wastewater tankered off site by an appropriately consented waste collector to wastewater treatment plants.

Table 2: Temporary Construction Compound Areas

Compound No.	Bog	Scale	Total Area
1	Ballivor Bog (North)	130m x 70m	9,100 m²
2	Bracklin Bog (West)	40m x 25m	1,000 m²
3	Bracklin Bog (East)	100m x 50m	5,000 m²
4	Carranstown Bog (Substation)	100m x 50-60m	4,800 m²

Source: Natura Impact Statement, p. 24

Five temporary security cabins will be installed within the site for the duration of the construction phase of the Proposed Development. The security cabins will be located close to the proposed temporary and permanent site entrances and at crossing points on local roads from one bog to another. The security cabins will be prefabricated structures measuring

approximately 7.2 metres by 2.5 metres and 2.85 metres in height. The cabins will serve as the check in and check out point for staff and visitors during the construction phase. The temporary cabins will be removed as part of the post-construction reinstatement works of the wind farm development.

MCC Comment: In the event of a grant of permission, An Bord Pleanála is requested to include a condition pertaining to the implementation of a wastewater treatment maintenance contract by the applicant over the lifetime of the development (part of the development in Co. Westmeath).

Borrow Pits

It is intended to obtain significant volumes of crushed stone that will be required for the construction of the proposed development from two proposed onsite borrow pits.

- Borrow Pit No. 1a (52,700m²) - Carranstown Bog, west of a proposed access track and the Bord na Móna railway line, approximately 440m southeast of the proposed 110kV substation.
- Borrow pit 1b (*size not stated*) is a smaller pit located approximately 80m east of borrow pit 1a, approximately 440m from the proposed 110kV substation.
- Borrow Pit No. 2 (57,800m²) is located on third party land immediately south of the Bracklin Bog boundary, at Craddenstown, Raharney, Co. Westmeath. It is located approximately 700m southwest of Turbine No. 17 and 440m south of the proposed Bracklin Bog Met Mast.

Access to borrow pit 1a and 1b will be via internal roads constructed in the same manner as excavated turbine roads and measure 15m and 45m, respectively. Post-construction, both borrow pits in Carranstown will be reinstated with excavated peat or spoil, however, the access roads to both pits will be retained.

Initial access to the borrow pit (no. 2) field will be via the landowner's (third party) farm access track off the local road 800m south of Bracklin Bog. This existing farm access track will be upgraded. From the borrow pit area, an access road connecting it to Bracklin Bog will be constructed; approximately 50m will be constructed through pastureland via the excavated road method and approximately 120m will be floated (over an existing drain).

Once complete, machinery access to and from the borrow pit area during its construction, use and reinstatement will be via internal roads only, i.e. no local road use will be required by heavy goods vehicles for the purpose of transporting stone. Occasional employee access to the borrow pit and occasional movement of empty machinery to and from borrow pit may require use of the local road. Post-construction phase, the offsite borrow pit area and any construction access works will be permanently graded over and allowed to reseed.

Extraction of material from the borrow pits is at *construction stage*, will be a temporary operation run over a short period of time. Processing and crushing of cobbles and boulders will be required at all borrow pits (no rock breakers or blasters) to achieve the grading requirements for use in construction.

Volume to be extracted from the borrow pits for construction is up to 674,000m³ and the documentation sets out the planned approach. Excess peat with be sidecast and landscaped and other extracted materials deemed unsuitable for re-use will be reinstated within the borrow pits and processed material will be stockpiled in designated areas.

2m high concrete post and wire fence is proposed to secure the borrow pits areas.

MCC Comment: An Bord Pleanála is advised to clarify the area of Borrow Pit 1b where material will be extracted (part of the development in Co. Westmeath).

Sand and Stone Requirements

Construction grade granular fill and higher quality, final surfacing fill (including sand) will both be required for construction. The peat beneath the substation, all proposed hardstanding areas including temporary construction compounds will be excavated and replaced with construction grade granular fill up to the existing ground level.

- Roads will generally be constructed as floating roads except in areas with shallow peat and highly trafficked areas (e.g. site entrances and access roads in and out of borrow pits).
- The hardstanding areas and roads will be constructed to the 100-year flood level.
- Roads will generally comprise approximately 650mm of granular fill and approximately 150 mm of final surfacing layer (or capping). Geotextiles separators will be placed on the subgrade and geogrids will be installed within the road build-up.
- The proposed substation compound will be constructed to approximately 76 metres OD. Granular fill beneath the substation footprint will be in accordance with Eirgrid requirements. The final 250 mm shall comprise capping material.
- The internal site underground cable trenches will be approximately 1200mm in depth. The cable trench will be backfilled up to approximately 600mm with sand, within which the ducting will be placed. It is submitted that suitable materials from the excavations of the trenches will be reinstated to form the final layer of the trench.

Peat and Spoil Management

A Peat and Spoil Management Plan has been prepared (Appendix 4-2 of the EIAR). 732,000m³ of peat and spoil require management within the site, which is described as generally flat with predominantly bare, locally re-vegetated cutaway peat and shallow peat with an established drainage network.

The site has been harvested by Bord na Móna (BnM) using mechanical harvesting equipment. It is submitted that BnM has experience managing peat using safe and effective methods in similar terrain, both during peat production operations and during wind farm construction projects at Mountlucas, Bruckana, Cloncreen (under construction) and Oweninny wind farms.

Site Entrances

- **Turbine Component Entrances**

There are 2 no. main site entrances proposed for the delivery of turbine components to the site, located on R-156 which provide access and delivery of components into Ballivor Bog to the south, and into Carranstown Bog and on to the remaining bogs to the north.

BnM seek to widen the existing entrances in Grange More (townland) to facilitate the delivery to site of turbine components and encompass:

- Widening the existing site entrance off the R156 into Ballivor Bog
- Widening of existing site entrance off the R156 into Carranstown Bog

To deliver turbine components into Lisclogher Bog, an entrance is proposed at Bracklin Bog onto a local road with another entrance (opposite) into Lisclogher Bog. It is submitted that this will minimise road and traffic impacts as the components will travel through Carranstown and Bracklin bogs rather than the local road network and cross the narrow road into Lisclogher Bog. The local road network will not be used to facilitate access for components to these bogs.

- **General Construction Entrances**

It is proposed to use the northern entrance into Carranstown Bog for the delivery of construction materials (e.g. stone, steel, concrete) and construction staff to Carranstown, Bracklin and Lisclogher Bogs. Adjacent to the southern entrance, a new construction entrance is proposed for all non-component vehicles.

Following construction, the northern entrance will be narrowed to provide permanent access to accommodate light goods vehicles (LGVs) for maintenance work and private vehicles belonging to recreational visitors using the amenity carpark at Carranstown Bog.

The general construction entrance into Ballivor Bog at the south will be retained for the operational phase for amenity and maintenance use. The larger component entrance will be reinstated and revegetated for the operational phase.

Should replacement components be required during the lifetime of the development, BnM propose that the component entrances will be reopened to facilitate HGV and oversize component access to the site.

New entrances into Bracklin and Lisclogher Bogs are proposed to facilitate the direct travel of construction vehicles from Bracklin Bog to Lisclogher Bog across the local road. This local road network will not be used for general construction traffic to these bogs. For the *operational period*, these entrances will be upgraded to permanent site entrances for public amenity use and a permanent carpark will be provided off the Bracklin entrance.

As described above, access to borrow pit no. 2 in Craddanstown is proposed via an initial use of an existing third-party entrance and track off a local road through a farmyard, 800m south of Bracklin Bog which will be upgraded. At the beginning of the construction phase, machinery will enter the farmyard to the borrow pit area to commence construction of a temporary road from the pit area into Bracklin Bog. Access from the local road will cease (except for occasional employee access to the borrow pit and occasional movement of machinery from and to the borrow pit). The track and pit will be reinstated and reseeded during the construction phase.

MCC Comment: In the event of a grant of permission, the design of any temporary changes to entrances to accommodate replacement components, should be agreed in writing with the relevant Planning Authority.

In the event of a grant of planning, An Bord Pleanála is requested to ensure that there is an agreed programme of road cleaning in place with Meath County Council (by way of planning condition), prior to the commencement of development, to maintain the road clear of debris and dirt.

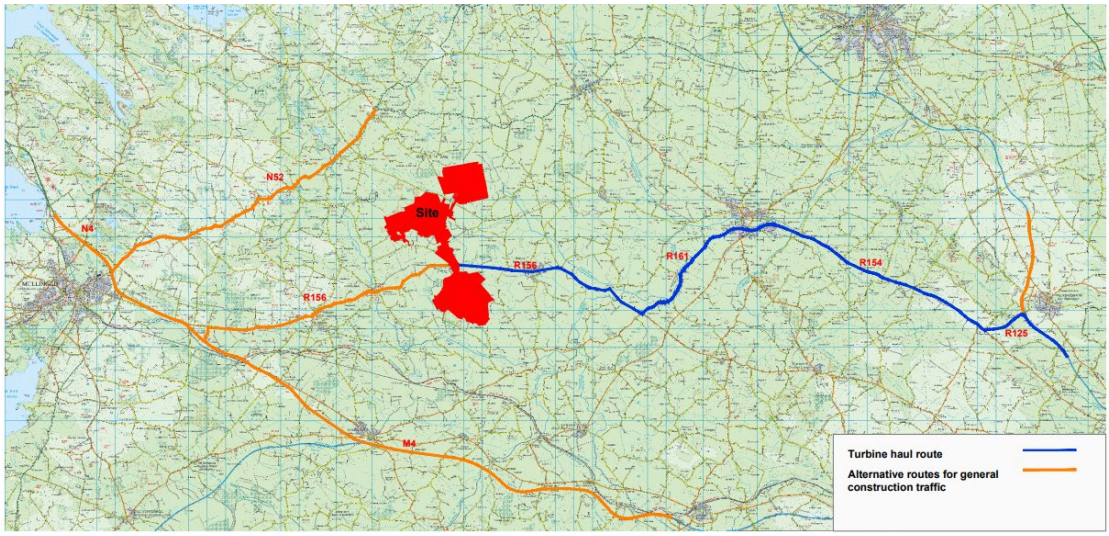

Fig. 7: Proposed Turbine Haul Route (c. OS*i* & MKO)

Turbine Component Transport Route

No material changes to existing ports (Cork, Foynes, Galway and Dublin) and national motorway network are anticipated as they can accommodate the turbine components.

It is proposed that the large wind turbine components will be delivered via the M3, exiting at Junction 6 onto the R-125 before turning northwest onto the R-154 Trim Road. The delivery route enters Trim town before turning south onto the R-161 for approximately 7.5km where it meets the R-156. Then it continues west for 11.1km along the R-156 through Ballivor Village the proposed site entrances off the R-156.

Turbine Delivery Accommodation Works

Temporary road widening works will be undertaken along the haul route at two locations to facilitate turbine component delivery and parking/storage:

- *Junction between the R-156 and the R-161 approximately 6.5km southwest of Trim:* 3,751m² comprising road widening to facilitate turning movements (on third-party land) and provision of off-road parking and storage facilities on an area of 5,375m².
    - At Doolistown, Trim - to accommodate site access, temporary parking, material storage, facilities and ancillary works; and an area of land requiring temporary ground improvement to facilitate trafficking of delivery vehicle.
- *East of Ballivor Village on the R-156*: Accommodating works within an area of 1,809m² will be required on the R-156 approximately 3.6km east of Ballivor Village. Road-widening within third party land is required for turning movements proposed parking and storage facilities will measure 6,770m².
    - At Moyfeigher, Ballivor - proposed temporary ground improvement to facilitate trafficking of delivery vehicle; and an area of land required to accommodate site access, temporary parking, material storage, facilities and ancillary works.

Temporary fencing will be installed at temporary road widening and parking/storage locations, removed to facilitate delivery and replaced following each delivery. Following the completed construction phase, the temporary road widening locations and parking/storage areas will be covered with a layer of topsoil and reseeded. Such locations would be used again should an oversized delivery was required for wind turbine maintenance purposes. Additional temporary works in the form of signage and bollard removal, lowering of traffic islands, roundabout lowering at locations along the R-125, R-154, R-156 and R-160 are required and to allow for oversailing of turbine components. It is submitted that these works will be

reinstated once turbine components have been delivered to site and have been agreed with Meath County Council.

Other Road Accommodating Works

Proposed Permanent Road Improvement Works at R156

It is proposed to permanently lower a section of road in the R-156 in between the proposed component entrances to Ballivor and Carranstown Bogs as existing visibility/ sight lines are compromised, and it is submitted that this will enhance the road safety for both construction and operational phase users as well as local road users of the R-156.

MCC Comment: An Bord Pleanála is requested to consider the referral report of the Transportation Department of Meath County Council, which provides a list of requested conditions to be considered, in the event of a grant of planning permission.

Amenity Pathways and Carparks

The applicant proposes that the 28km of internal road network to be used during construction will be re-purposed for use as amenity walkways and cycleways (surfaced with a granular material) when the wind farm becomes operational and will also be used for wind-farm maintenance purposes.

An additional 3m wide 3.3km of a dedicated amenity link is proposed, including new and upgraded tracks in Ballivor Bog and at existing entrances into Lisclogher and Bracklin Bogs to provide a greater variety of walking loops.

3 no. new public car parks are proposed for recreational use during the operational stage, along the proposed existing southern access off the R-156 into Ballivor Bog, the northern access off the R156 into Carranstown Bog and off the local road which runs northwest—southeast between Lisclogher and Bracklin Bogs. The main carpark in Ballivor Bog will accommodate 50 vehicles; the Carranstown and Bracklin carparks will accommodate 15 vehicles each and bicycle rack facilities. It is noted that bus parking spaces have been indicated on layout drawings.

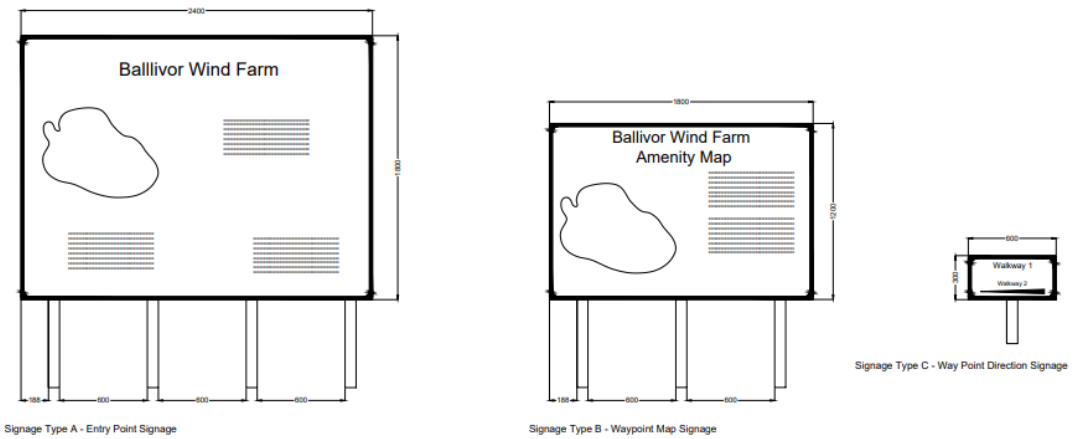

Fig. 8: Proposed Amenity Signage

MCC Comment: The location of any permanent signage proposed (see Drawing no. 97) related to the wind energy development/ amenity area should be agreed with the relevant Planning Authority prior to the commencement of development.

In the event of a grant of permission, An Bord Pleanála is requested to ensure the design of amenity paths and associated carparks/ bicycle racks are sufficiently robust to serve the local community beyond the 30-year operational lifespan of the proposed wind farm.

Site Drainage
It is submitted that the drainage design for the proposed development has considered the protection of watercourses within and surrounding the site, and downstream catchments to establish the most appropriate drainage proposals for the site. There is an existing drainage system and surface water discharges from the site which are regulated by the Environmental Protection Agency (Licence Ref. P0501-01). It is stated that the drainage design has been planned with the intention of having no negative impact on the water quality of the site and its associated rivers and lakes, and consequently no impact on downstream catchments and ecological ecosystems. The assessment of potential impacts on hydrology and hydrogeology due to the construction, operation and decommissioning of the proposed development is included in Chapter 9: Hydrology and Hydrogeology of the EIAR accompanying the proposed planning application.

Drainage Design
According to the details submitted, no routes of any natural drainage features will be altered as part of the proposed development. Turbine locations and associated new roadways were designed to avoid natural watercourses with existing roads to be used wherever possible.

No direct discharges to any natural watercourses are proposed, with all drainage waters being dispersed as overland flows. All discharges from the proposed works areas will be made over vegetation filters at an appropriate distance from natural watercourses.

Buffer zones around the existing natural drainage features have been used to inform the layout of the proposed development.

The applicant has provided details in relation to interceptor drains, collector drains, check dams, stilling ponds/ settlement ponds, silt bags, silt fences and proposed culverts.

MCC Comment: An Bord Pleanála are directed to the comments in relation to Section 50 applications (Arterial Drainage Act, 1945) for culverts, the referral reports of the Environment (General) and (Flooding) Departments of Meath County Council. Bord na Móna state that it will adhere to IFI (2016) Guidelines on protection of fisheries during construction works in and adjacent to waters; and all works will be supervised by an Environmental Clerk of Works and the Project Hydrologist.

Waste Disposal
The Construction and Environmental Management Plan (CEMP) includes a Waste Management Plan (WMP) which details the best practice procedures to be used during the construction, operation, and decommissioning phases of the proposed development. It is submitted that the WMP details the methods of waste prevention and minimisation by recycling, recovery and reuse at each stage.

MCC Comment: An Bord Pleanála are directed to the comments in the referral report of the Environment (General) Department of Meath County Council.

Operation

The proposed development is expected to have a lifespan of 30 years and thus planning permission is being sought for a 30-year operation period commencing from the date of full operational commissioning of the wind farm. While operational and on a day-to-day basis the wind turbines will operate automatically, responding to inputs from meteorological equipment and control systems to changes in factors such as wind speed and wind direction.

The wind turbines will be interconnected, and data relayed from the wind turbines to an off-site control centre. The meteorological mast will be similarly interconnected. Each turbine will also be monitored offsite by the wind turbine supplier. The monitoring of turbine output, performance, wind speeds, and responses to any key alarms will be monitored at an off-site control centre 24-hours per day. Each turbine will be subject to a routine maintenance programme involving several checks and changing of consumables, including oil changes. Each meteorological mast will be subject to a routine maintenance programme involving several checks and changing of instrumentation when required.

Unscheduled maintenance could vary between resetting alarms to major component changes requiring a crane. Typically, maintenance traffic will consist of four-wheel drive vehicles or vans. The electricity substation and site tracks will also require periodic maintenance. Maintenance of the site roads will involve filling potholes and maintaining road edge markers. Drainage maintenance will typically involve cleaning of drainage ditches when required to prevent water backing up.

The substation will also be operational 24 hours per day. Supervisory operational and monitoring activities will be carried out remotely using a SCADA system, with the aid of computers connected via a telephone modem link.

Periodic service and maintenance works include some vehicle movement. During such service visits, some waste (lubricating and cooling oils, packaging from spare parts or equipment, unused paint, etc.) will arise which will be recorded and removed from the site and reused, recycled or disposed of in accordance with the relevant legislation in an authorised facility. This means that day-to-day access to the infrastructure by persons and vehicles will be infrequent, only required to undertake minor routine maintenance and inspection.

Decommissioning

Following the 30-year lifespan of the turbines, it is planned to replace them with a new set of turbines or components, subject to planning permission being obtained, or full decommissioning of the site. The on-site substation will remain in place (in the ownership of the ESB/EirGrid).

During decommissioning, the wind turbines and meteorological masts would be disassembled. All above ground turbine and mast components would be separated and removed off-site for recycling. Turbine and mast foundations would remain underground and would be covered with earth and allowed to revegetate. Site roadways will be in use as amenity and recreational pathways, and therefore will not be removed during decommissioning. If it were to be confirmed that the roads were not required in the future for any other useful purpose, they could be removed where required. Underground cables, including grid connection, will be removed and the ducting left in place.

It is submitted that a *Decommissioning Plan* (Appendix 4-5 of the EIAR) will be agreed with Meath and Westmeath County Council prior to decommissioning the proposed development.

The Plan contains a decommissioning methodology, environmental management, emergency response plan, programme of works, mitigation and compliance proposals).

MCC Comments: In the event of a grant of permission, An Bord Pleanála is requested to ensure the proposed amenity paths and associated carparks/ bicycle racks are retained as permanent infrastructure (i.e. beyond the 30-year lifetime of the proposed wind farm).

6.2.2 Appropriate Assessment (AA) – Natura Impact Statement (NIS)

The 'application site' comprises the proposed wind farm site and two areas of temporary accommodating works along the haul route (i.e. the '*entire project*').

An AA Screening Report identified the European Sites, their Qualifying Interests/ Special Conservation Interests (QI/SCI), which could be significantly affected by the proposed development and explores the pathways by which those effects may occur. They are the:

- River Boyne and River Blackwater Special Area of Conservation (SAC)
- River Boyne and River Blackwater Special Protection Area (SPA)

Thus, the applicant prepared a NIS as part of the application.

Located 412m from the application site (at its closest point), the **SAC** could potentially be impacted due to:

- A pathway for direct effect on QI Otter exists as a result of ex-situ habitat loss within the site;
- Indirect effects on otter due to disturbance during construction works;
- A hydrological connection to the SAC via watercourses within/ adjacent to the site which discharge to the Stonyford River to the east and Deel (Raharney) River to the south-west (designated as part of the SAC); and
- Indirect effects on aquatic QIs, due to deterioration in water quality due to run-off of and infiltration of pollutants, including silt, hydrocarbons and cement-based products, during construction (activities including construction of turbine hardstands, access roads, substations, borrow pits, amenity paths, car parks, etc.); and run-off of pollutants from turbine hardstand areas, access tracks and any other hard surfaces during the operational phase of the development and during decommissioning; and along the proposed haul route, the potential release of silt laden waters during road widening works.

  The SAC QIs are:
  - Alkaline fens [7230]
  - Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0]
  - *Lampetra fluviatilis* (River Lamprey) [1099]
  - *Salmo salar* (Salmon) [1106]
  - *Lutra lutra* (Otter) [1355]

Located 486m from the application site (at its closest point), the **SPA** could potentially be impacted as:

- A pathway for direct effects on the SQI *Kingfisher* exists as a result of ex-situ habitat loss within the proposed site;
- A pathway for indirect effect on Kingfisher because of disturbance during construction phase and collision risk during the operational phase of the development;
- A hydrological connection to the SPA via watercourses within/ adjacent to the site which discharge to the Stonyford River to the east and Deel (Raharney) River to the south-west (designated as part of the SAC);
- Potential to cause deterioration in water quality due to run-off of and infiltration of pollutants, including silt, hydrocarbons and cement-based products, during construction (activities including construction of turbine hardstands, access roads, substations, borrow pits, amenity paths, car

parks, etc.); and run-off of pollutants from turbine hardstand areas, access tracks and any other hard surfaces during the operational phase of the development and during decommissioning;
- Deterioration of water quality could potentially affect availability of food resources for the Kingfisher as a result of the construction activities on the site and along the haul route;
- potential pathway for indirect effects on kingfisher because of disturbance during the construction phase of the development; and
- Indirect effects due to the potential release of silt laden waters during road widening works.

MCC Comment: An Bord Pleanála must satisfy itself that the list of experts involved in the preparation of the AA and EIA have the appropriate competence and experience, including relevant qualifications for the part which they have contributed to ensure the completeness and quality of each report. The level of qualifications of the team who prepared the NIS is stated on p.4, though individual specialisation is not.

It is noted that the NIS examined various datasets including the Bord Na Móna Cutaway Bog and Decommissioning and Rehabilitation Plans for Bracklin, Lisclogher-West, Lisclogher and Carranstown Bogs; and the Draft Plan for Ballivor.

Scoping Consultation Feedback

The NIS includes a summary of feedback received during Scoping consultation. The Dept. of Agriculture, Food and the Marine (DAFM) referenced the need for the EIAR and NIS to consider the effects of felling or replanting of trees, deforestation, etc. in their submission.

The Development Applications Unit noted that cumulative effects of the proposed development should include the consideration of a range of other projects (not windfarms alone), migratory species (particularly birds including nocturnal migrants) and a range of other species, indirect effects of the demand for resources to supply and build the development and the impacts elsewhere, interactions with the proposed development and on-going peat extraction activities. It stated that detailed rehabilitation plans for the peatlands should be prepared and the impacts of the proposed development on the rehabilitation of the peatlands should be considered and assessed in the EIAR. For e.g. hydrological changes may prevent future rehabilitation of suitable areas of the site to peat forming habitat. In the context of the layout of the development - adequate buffers should be placed around important habitats and species in the locations identified in flora and fauna studies. Passive bat surveying at height should be undertaken to document highflying species such as Leisler bat and the risk to bats (collision and barotrauma) should be addressed.

Inland Fisheries Ireland (IFI) made comments in relation to watercourse crossings, instream works, pollution control measures and biosecurity.

Surveys

Ecological Surveys were conducted on various dates between October 2019 and February 2023 and reference is made to detailed ecological surveys of the Ballivor Bog Group by Bord Na Móna (BnM) in 2011, 2012 and 2018. The NIS states that ecologists visited the site to ground-truth the BnM surveys and this habitat map of the site produced by BnM formed the baseline for surveys undertaken for the NIS. The surveys included ecological multidisciplinary walkover surveys, stated as falling within the optimum period for vegetation surveys/ habitat mapping (April to September). Further detailed surveys of features of ecological significance and invasive species were searched for during such surveys. Other targeted surveys included otter, aquatic, Kingfisher, other bird surveys (vantage point surveys including viewshed analysis, breeding walkover surveys, winter walkover surveys, waterbird distribution and abundance surveys, connectivity vantage point surveys).

An area of Alkaline Fens (identified under Article 17) is located adjacent to and within the north-west boundary of the site (Bracklin Bog), which is a Qualifying Interest, but not located with the SAC boundary (River Boyne and River Blackwater SAC). Otter is found throughout the SAC and is likely to occur in the proximity to the proposed development site. The nearest recorded area of Alluvial forests is 67km downstream of the site, but un-surveyed areas may occur elsewhere. River Lamprey and Salmon species in the SAC river are also an important consideration. A report by the NPWS/BWI recorded sightings of Kingfisher along the Stonyford and Deel (Raharney) Rivers and a section of the Stonyford River to the east of Lisclogher Bog is a possible Kingfisher territory.

No Annex I Habitats associated with any European Sites *were identified within or adjacent to the application site* during site surveys carried out as part of this application. The site comprises 4 no. large cutover raised bogs classified as *Cutover Bog (PB4)*, classified as per (Fossitt, 2000) which were in commercial peat production by Bord na Móna until 2020 and are characterised by bare peat. Areas that have been out of commercial production for a significant period of time have begun to revegetate with dry heath type vegetation dominated by ling heather (*Calluna vulgaris*), birch (*Betula pubescens*) dominated scrub and woodland, pioneer poor fen communities characterised by common cottongrass (*Eriophorum angustifolium*) and small areas of grassland which occur mostly along the existing railway tracks traversing the site. In some areas, particularly lower lying areas where drainage is impeded, embryonic bog communities dominated by common cottongrass and with a rich *Sphagnum* component have begun to form.
There are also small areas of remnant uncut raised bog at various locations throughout the site, predominantly but not exclusively at the edges of the site. These are of varying condition, from very poor (with no *Sphagnum*) to relatively good condition with a greater abundance and cover of *Sphagnum* species. It is submitted that the design layout of the proposed development has sought to avoid the areas of uncut raised bog which is not degraded. The condition of the existing remnants are such that they do not conform to the Annex I habitat Active Raised Bog [7110] and can only be characterised as Degraded Raised Bog. Some small conifer plantation exists within the northern extent of Ballivor Bog. Spoil and bare ground and recolonising bare ground correspond with existing unpaved access tracks and around existing buildings. There are existing buildings and artificial surfaces and treeline and hedgerow make up a very small proportion of the habitats within the site with A hedgerow with scattered ash trees is also located at the location of Borrow Pit No. 2.

MCC Comment: It is noted that the 'Overview Habitat Map' (Figure 4-2 in the NIS) has a boundary which does not match the application site, therefore there may be some mapping information missing. An area identified as 'bog woodland (WN7)' under Fossitt Classification corresponds with an area of 'Alkaline Fen (7230)' (as identified under Figure 4-1 and Article 17 Mapping).

Waterbodies within the site include a network of drainage ditches, small streams/watercourses classified as lowland depositing rivers, small areas of standing open water and artificial silt ponds. The watercourses including streams and drainage ditches provide hydrological connectivity with downstream EU and Nationally designated sites.
Following the cessation of commercial peat extraction/ milling, secondary habitat which has begun to form on the cutover bog are Bog Woodland, Scrub, Dry Health type communities (which do not conform to the Annex I health habitats – either wet heath or raised bog), poor fen, open water, other artificial lakes and ponds, drainage channels and lowland depositing streams. Grassland habitats include dry calcareous and neutral grassland and dry meadows and grassy verges. Small areas of dry grassland are present within the site, along the sides of

the railway lines and existing track verges as well as in areas where underlying glacial till has been exposed. Other areas of grassland habitats comprised of a mix of species typical of both *calcareous* and *peatland habitats*, resulting in species diversity associated with imported stone for the construction of railway tracks throughout the peatland. Improved agricultural grassland, wet grassland and amenity grassland surround the Ballivor Bog Group. Small areas of oak-ash-hazel woodland exist within the site.

No invasive species (as per S.I. No. 477/2011 Regulations) were identified within/ near the construction footprint of the proposed development.

Habitats along the Haul Route
At the junction between the R156 and the R161 and to the east of Ballivor Village on the R156, there are hedgerow and improved agricultural grassland habitats.

Faunal Surveys
Otter - No otter resting or breeding sites were recorded within the site during the dedicated otter surveys or during the dedicated fisheries assessment or kick sampling of the watercourses surrounding the site. *Otter spraints* were recorded within the site in proximity to a drainage ditch in Lisclogher Bog during the multi-disciplinary walkover surveys undertaken in May 2020. *Otter prints* were recorded in Lisclogher Bog during the otter surveys in May 2021 in proximity to a wide drainage ditch. No signs of otter were recorded within the site during the aquatic surveys in July 2021. However, signs of otter (spraints and/or prints) were recorded outside of and downstream of the site in the Craddanstown stream to the west of Ballivor Bog and in the Ballivor river to the east of Ballivor Bog during these surveys.

The River Stoneyford and River Deel (Raharney), both located outside of the site also provide suitable habitat for otter. Most of the drainage ditches within the site are small and provide poor quality habitat for otter given their small size and highly modified channels of low fisheries value, however it is likely that otter utilise the streams and some of the larger drains for *foraging and commuting* on occasion. The main watercourses/ larger artificial drainage channels were assessed as providing *suitable commuting and foraging habitat* for the species.

Kingfisher - No kingfisher nesting sites were recorded within the site and the artificial drains and small watercourses within the site do not provide significant suitable nesting habitat for this species. *Kingfisher was observed flying through the site* across cutover bog and silt ponds during bird surveys. Kingfisher was also observed travelling along the River Deel (Raharney) to the west of and outside the site during the bird surveys undertaken in 2021.

Vantage Point Surveys - Kingfisher were observed on only two occasions during vantage point surveys between April 2020 and September 2022. Both observations were of individuals travelling along silt ponds. There were no flights observed at the potential collision height. Both observations were outside the site and >1.5km from the nearest proposed turbine.

Breeding Walkover Surveys – 4 no. observations of kingfisher were made during the breeding walkover surveys in July 2020 and consisted of individuals flying, fishing or being flushed by the observer. There were two observations at the site in cutover bog habitat and all observations were greater than *690m from the nearest proposed turbine.*

Waterbird Distribution Surveys - Kingfisher were observed on 15 occasions during the waterbird distribution surveys, up to 5km from the site. All observations were of birds travelling, hunting, perched or heard calling by the observer. Observations ranged from an individual to two birds and were between 1.8km and 6.6km from the nearest proposed turbine.

Connectivity Vantage Point Surveys - Kingfisher were observed on one occasion and it was of an individual approximately 6.8km to the southwest of the nearest proposed turbine. This observation was not mapped.

Incidental Observations - There were *3 no. incidental observations of kingfisher* during surveys between April 2020 and September 2022. All observations were of individuals commuting or being flushed by the surveyor. There were *two observations within the site* and one observation approximately 9.7km from the nearest proposed turbine.

MCC Comments: The sighted locations of Kingfisher are within and surrounding the site. Turbine no. 21 is in the flightline of one incidental sighting (according to Figure 4-4d). An Bord Pleanála is requested to consider this matter in the context of potential impact on the Kingfisher.

Water Quality

The most recent surface water quality data is provided for a no. of locations in the rivers in the vicinity of the site (EPA, 2020). This is shown as a good and moderate (Q-value) for the River Deel (Raharney); and Boyne as good and moderate (Q-value) and the Stonyford as having poor and moderate status. WFD Surface Water Body Status and risk result in the vicinity and downstream of the Ballivor Bog Group are provided. The western section of Bracklin Bog is drained by the Deel (Raharney). The Boyne drains the eastern section of Ballivor Bog and Carranstown Bog. The majority of these bodies have been deemed as 'at risk' of not meeting WFD objectives with hydromorphological changes (i.e. changes to the physical habitat or natural functioning caused by, for e.g. channelisation and straightening of rivers or land drainage) deemed to be significant stressors on several of these sites. The Athboy Groundwater Body underlies the Ballivor Bog Group and is also deemed 'at risk' of not meeting WFD objectives though no significant pressures were identified by the EPA.

The application site is drained by watercourses within and surrounding the site including the following:

- Cartenstown Stream,
- Stonestown River,
- Ballinn Stream,
- Bolandstown River,
- Woodtown West Stream,
- Stonyford River,
- Carranstown Little River,
- Killaconnigan Stream,
- Kilballivor Stream,
- Ballivor River
- Two unnamed tributaries,
- Graffanstown stream,
- Ballynaskeagh Stream,
- Mucklin Stream,
- River Deel,
- Craddanstown stream; and
- Clondalee More stream

The Deel (Raharney) river is located approximately 2km to the west of the site and the Stonyford River is located approximately 430m to the east of the site. Both rivers are designated as the River Boyne and River Blackwater SAC. A number of the streams within and adjacent to the site discharge to these rivers which in turn discharge to the River Boyne downstream of the site.

Assessment of Potential Effects & Associated Mitigation

This refers to the potential **direct effects** on European Sites, due to the potential for direct effects on these species (Kingfisher and Otter) due to ex-situ habitat loss where they occur outside of the SAC and SPA with the proposed site. Direct habitat loss could potentially occur if any otter resting or breeding sites or kingfisher nesting sites are present within small watercourses within the construction footprint at the time of construction works. However

suitable habitat for this site (site walkover) was not found to support significant suitable habitat for this species.

Otter may use the *streams towards the peripheries* of the site and some of the larger drains *for foraging and commuting*, *no resting or breeding sites were recorded within or adjacent to the site*.

No Kingfisher nesting sites were recorded within or adjacent to the site, however the drains and small watercourses within the site were not found to provide significant suitable nesting habitat for Kingfisher. No instream works are proposed within any streams or natural watercourses and works to artificial drains are not a good quality habitat for Kingfisher. *No breeding sites* were recorded within the site during survey work.

While no adverse effects on Otter or Kingfisher are anticipated, prior to any works being carried out, *a pre-construction otter and kingfisher survey is proposed* by a qualified ecologist to ensure that these species have not taken up residence within/ close to the proposed development; and should an Otter holt be found, it will be subject to relevant TII exclusion procedures in consultation with the NPWS. Similarly, should a Kingfisher nesting site be located during a pre-commencement survey, any construction works in the footprint/ adjacent to the nest will be undertaken outside the breeding season.

Potential **indirect effects** on European Sites due the **hydrological connectivity** between the site and the River Boyne/ River Blackwater SAC and SPA, due to deterioration in water quality arising from run-off and infiltration of pollutants during the construction, operational and decommissioning phases of the development. A potential pathway for indirect effects on the below European Sites and their aquatic QIs/SCIs due to construction, operational and decommissioning activities was identified.

The construction phase has the potential to generate suspended solids, result in the release of cement-based products, the potential for spillage of fuels (hydrocarbons) associated with the refuelling of excavation machinery and there is also a risk of surface water runoff from bare soil and soil storage areas during construction works.

During the operational phase, an increase in the area of non-permeable hard-surfaces may result in increased surface water run-off from the site, which in turn has potential to cause erosion of watercourses and impact on water quality. There is also potential for run-off of pollutants due to accidental spillage or release of hydrocarbons from site vehicles during any routine maintenance works.

It is stated that the impacts on water quality associated with decommissioning of the development are like those associated with construction phase but of a reduced magnitude, due to the reduced scale of the proposed decommissioning works.

To ameliorate the potential impacts, the applicant has submitted that an *environmental management framework* must be adhered to including comprehensive detail regarding site set up, pollution prevention and hydrocarbon management and mitigation measures. Details are provided regarding construction and operational phase drainage (including interceptor drains, swales/ roadside drains, check dams, stilling ponds/ settlement ponds, culverts, IFI (2016) *Guidelines on protection on fisheries during construction works in and adjacent to waters*, silt fences, further Section 50 applications (Arterial Drainage Act, 1945) and supervision of works by an Environmental Clerk of Works and project hydrologist. Mitigation

measures include - not refuelling on site, fuel and hazardous materials storage, cement-based products control measures and dust control.
Disturbance/ Collision Risk

Indirect effects, in the form of disturbance, due to increased noise during construction activities, of Otter population associated with the SAC. Construction activity will be confined to daytime hours, thus minimizing potential disturbance related impacts to the species who prefer dim light during dawn/ dusk. It is not expected that recreational activity will pose a significant disturbance pressure. No significant effects on the otter population associated with the River Boyne and River Blackwater SAC during the construction phase of the Proposed Development are anticipated. There will not be any lighting associated with the proposed development. Any effects during the decommissioning phase will be like the construction phase, but to a much-reduced extent. It is submitted that *the potential for adverse effects on the integrity of the Otter population associated with the European Site (SAC) because of the construction, operational and decommissioning phases of the proposed development can be excluded.*

A 50m buffer is proposed between the main infrastructure of the proposed development and any watercourses within the site, therefore construction activity is unlikely to deter flight activity within the site. Kingfisher were not observed regularly using the site during the bird surveys undertaken and given the sub-optimal nature of the habitats present, no potential for disturbance or displacement of the species during the operational phase of the Proposed Development are anticipated. It is submitted that there is *no potential for adverse effects on this species during the construction, operational or decommissioning phases of the Proposed Development was identified.*

Kingfisher was not recorded flying at potential collision height during the extensive vantage point survey work undertaken at the site, thus it is submitted that collision related mortality is not likely to significantly impact this species.

Section 6 of the NIS is an **Assessment of Potential Significant Effects** and considers site-specific residual impact assessment of the Qis of the SAC and SCI of the SPA. It has determined that in view of best scientific knowledge and based on objective information that there is no potential for adverse effects on the Qualifying Interests (Qis) Alkaline Fen, Alluvial forests, River lamprey, Atlantic Salmon and Otter associated with the Boyne and River Blackwater SAC, in any phase of development.

Taking into consideration the preventative measures to avoid impact, and the sub-optimal nature of the habitats within the proposed site for Kingfisher, it can be concluded that there is no potential for adverse effects on kingfisher in respect of deterioration of water quality due to the proposed development.

Therefore, it concludes that the proposed development will not have an adverse effect on the integrity of the River Boyne and River Blackwater SAC and SPA considering its conservation objectives and will not adversely affect the Qualifying Interests/ Special Conservation Interests associated with any European Sites.

In Combination Effects
Section 7 of the NIS deals with this section and considers 'other plans and projects' that have potential in-combination effects with the proposed development. It refers to the end of industrial scale peat extraction in 2020 and the on-going decommissioning and maintenance

activities associated with the removal of existing peat stockpiles from the Bog Group and duties under IPC licence and post-peat rehabilitation of the Bog Group. Reference is made to Draft Cutaway Bog Rehabilitation and Decommissioning Plans which must be agreed by the EPA prior to implementation.

Planning applications in Co. Meath for 2 no. telecommunications towers have been considered. It has also considered wind energy developments within 25km of the site.

Having considered other projects in the area, no potential for the proposed development to contribute to any adverse cumulative effects on any European Sites was identified when considered in combination with other plans and projects. The NIS concludes that the proposed development will not have an adverse impact on any European Sites, either alone or in combination with other plans or projects

MCC Comments: No solar farms were considered by the applicant in the context of in-combination effects and ABP are invited to consider such projects within ABP's cumulative assessment such as MCC Planning Ref: KA161206, KA161319, 22958, 21396 (not identified in Appendix 5 – NIS). Bracklyn Wind Farm which adjoins the site was granted planning permission in 2022 and other wind farms permitted in the wider region include Colon/ Dunmore in Co. Meath. MCC was consulted regarding the scope of the EIAR for a proposed renewable energy development (Knockanarragh Wind Farm) comprising a proposed 8 no. wind turbines within the townlands of Cavestown and Rosmead, Kilrush Lower, Newtown, Carnybrogan, Ballinlig, Kilrush Upper, Galboystown and Clonmellon in Co. Westmeath and Co. Meath which is described as a medium-scale wind farm in an upland area of Counties Westmeath and Meath. The proposed wind turbines will have a tip height of 170m and a rotor diameter of 155m, capable of generating 52.8 MW of power and includes a 110 kV electricity substation, c.15 kilometres of site access tracks, etc.

ABP is advised to consider the Draft Cutaway Bog Rehabilitation and Decommissioning Plans 2022 (EIAR Appendix 6-6) and the impact of the proposed development on the restorative/ permanent rehabilitation plans which were prepared in accordance with Condition 10.2 of IPC Licence Ref. P0501-01. The Executive Summary of the Ballivor Draft Plan notes that peatland rehabilitation for Ballivor Bog will be carried out alongside or after the proposed windfarm construction. An indicative location of 'constraints' associated with the wind farm have been identified.

6.2.3 Environmental Impact Assessment Report

An Bord Pleanála are the 'competent authority' for the purposes of EIA, however the Planning Authority has reviewed the details submitted, summarised and/ or reviewed same, where relevant. For the purposes of EIA, the competent authority must consider the likely impacts of the 'entire project', in this case the wind energy development and its proposed connection to the electricity transmission network, substation, together with associated works, borrow pits, proposed access tracks, carparking, works along the haul route, etc.

MCC Comment: The Planning Authority is aware of other renewable energy applications in the west of Co. Meath, including solar farms (MCC Planning Ref: KA161206, KA161319, 22958, 21396) to be considered within ABP's cumulative assessment. The cumulative impact of the proposed development, operating windfarms, permitted windfarms (not yet constructed or operational) and other large infrastructure projects in the area should also be addressed in the landscape assessment and within the EIAR.

Bracklyn Wind Farm which adjoins the site was granted planning permission in 2022. Other wind farms permitted in the wider region include Colon/ Dunmore in Co. Meath and MCC were consulted regarding the scope of the EIAR for a proposed renewable energy development comprising 8 no. wind turbines within the townlands of Cavestown and Rosmead, Kilrush Lower, Newtown, Carnybrogan, Ballinlig, Kilrush Upper, Galboystown and Clonmellon in Co. Westmeath and Co. Meath as a medium-scale wind farm in an upland area of Counties Westmeath and Meath. The proposed wind turbines will have a tip height of 170m and a rotor diameter of 155m, capable of generating 52.8 MW of power and includes a 110 kV electricity substation, c.15 kilometres of site access tracks, etc.

Public Participation is a key component of EIA. ABP should satisfy itself that the applicant has offered the public the opportunity to express opinions and concerns, etc. Appendix 2-2 of the EIAR contains a Community Report outlining Bord Na Móna's engagement activities.

Description of the project and background to the proposal

The applicant has provided a description of the proposed project and refers to EU renewable energy targets, Ireland 80% renewable energy target, Kyoto Protocol commitments, national energy security, the Climate Action Plan 2023 and its onshore wind target of *6GW by 2025* and *9GW by 2030*, Climate Act and Low Carbon Development Act 2021 as amended, etc. It is submitted that increasing electricity generation from wind power represents the most economical renewable option to reduce emissions within the power generation sector and is the most mature technology available to achieve national targets.

Economic benefits and recreational benefits are proposed. €100 million will be invested in renewable energy infrastructure. It is estimated that the proposed installed capacity of 117MW-169MW will result in net displacement of c.6,035,010TN - 8,717,237TN of CO_2 per annum (against EU FFC). It is submitted that 100-210 jobs will be created across the construction, operational and maintenance phases of the development, will contribute to commercial rates and a Community Benefit Scheme. There are specific local benefits/ community gain associated with such a development as set out in the Dept. of Communications, Climate Action and Environment (2021) Renewable Energy Support Scheme. The Community Gain Fund for the proposal is c.€14 million over the lifetime of the project and will support a range of initiatives. The proposal also includes 28km of walkway and cycling; and 3.3km of dedicated amenity track and 3 no. carparks with bicycle parking. Such pathways are linked to the wider area and existing walkways.

The applicant states that the design of the proposed project has taken account of the "preferred draft approach" as per the current Draft Wind Energy Guidelines (2019). Scoping was undertaken by the applicant with competent authorities for the purposes of EIA and environmental NGOs and it is submitted that such responses have informed the EIAR.

Consideration of Reasonable Alternatives

The consideration of alternatives typically refers to alternative design, technology, location, size and scale. The applicant has considered the *'do-nothing' alternative* whereby no changes to existing land-use would occur, but the site would be managed as per IPC Licence, ongoing site management and environmental monitoring, peat stockpile removal (until 2024) and wind measurement. In addition, peatland rehabilitation plans would be implemented.

The consideration of *alternative locations* was confined to the lands within the ownership of Bord na Móna (some 80,000ha) the majority of which are in the Midlands, such peatlands

which are referenced in the NPF. Following a technical review of all lands (cut away or will be cut away before 2030), a site-specific assessment determined the Ballivor Bog Group as a suitable site for wind energy development, with low potential for environmental effects and proximity to the national grid. The applicant submits that this alternative would result in a missed opportunity to capture renewable energy, meet Government targets, create local employment, development contributions and rates, amenity access and resources.

An *alternative technology* considered for the site is solar energy, however, to achieve the energy output, a solar development would require a significantly larger footprint with higher potential effects on hydrology, hydrogeology, traffic and transport (construction phase), biodiversity (habitat loss) and is ruled out.

Proposed wind turbines will have a potential power output in the 4.5 – 6.5-megawatt (MW) range. 26 turbines at the site could achieve approximately 117 MW to 169 MW output and although smaller turbines (an *alternative size and scale*) could be used, 30-44 would be required resulting in a larger footprint including supporting infrastructure (i.e. roads) with increasing potential for negative environmental impacts. Such turbines would not optimise the wind resource.

Layout alternatives were considered by the applicant, but it is submitted that the final design takes account of all site constraints (e.g. ecology, ornithology, hydrology, peat depths etc.), design constraints (e.g. setback distances from houses and third-party lands/infrastructure and distances between turbines on-site etc.), all site investigations and baseline assessments and feedback from the relevant statutory and non-statutory organisations, local authorities and ongoing discussions with the local community.

Alternative transport routes for the delivery of wind turbine components were assessed as part of the design of the Proposed Development. The proposed route was considered to be the preferred route given the limited temporary accommodating works and fewer third-party requirements. The 110kV Mullingar to Corduff overhead line that traverses the Proposed Development site at Carranstown Bog.

Alternative locations for a proposed 110kV substation were investigated. The selected location requires the least amount of grid connecting infrastructure in the form mast requirements thereby reducing the potential for bird collision risk, is screened by adjacent vegetation and reduces the potential for impacts to unknown subsurface archaeology.

The applicant submits that the final design is considered the optimal layout given it has the least potential for environmental effects. Where loss of habitat occurs in the site, this has been mitigated with the proposal of enhancement lands.

Description of the Proposed Development

The 26 no. proposed wind turbines proposed are conventional three-blade turbines, geared so the rotors of all turbines will rotate in the same direction at the same time. The turbines will be multi-ply coated to protect against corrosion. It is proposed that the turbines would be of an off-white or light grey colour to blend into the sky. Each wind turbine is secured to a reinforced concrete foundation that is installed below the finished ground level on a granular sub-base after the excavation of soil and peat. The turbine foundation transfers any load on the wind turbine into the ground. Hard standing areas consisting of levelled and compacted hardcore are required around each turbine base to facilitate access, turbine assembly and turbine erection. The hard-standing areas are typically used to accommodate cranes used in

the assembly and erection of the turbine, offloading and storage of turbine components, and generally provide a safe, level working area around each turbine position.

Approx. 28km of internal access roads is proposed to provide access to all turbines and ancillary infrastructure. Most will be floated, thus reducing the level of peat disturbance. These roads will form part of amenity loops and trials for public use during the operational phase. A further 3.3km of dedicated amenity rails will be construction/upgraded including the upgrade 450m of existing access road.

A connection between the proposed development and the national electricity grid will be necessary to export electricity from the proposed wind farm. It is proposed to construct a 110kV electricity substation in the northwest of Carranstown Bog to connect to the Mullingar to Corduff 110kV overhead line which traverses the site. Two substation control buildings will be located within the substation compound. The wind farm control buildings will include staff welfare facilities for the staff that will work during the operational phase of the project. Toilet facilities will be installed with a low-flush cistern and low-flow wash basin. It is proposed to manage wastewater from the staff welfare facilities in the control buildings by means of a sealed storage tank, with all wastewater being tankered off site by an appropriately consented waste collector to wastewater treatment plants.

Each turbine will be connected to the on-site electricity substation via an underground 33kV electricity cable. Fibre-optic cables will also connect each wind turbine to the wind farm control building in the onsite substation compound. The electricity and fibre-optic cables running from the turbines to the onsite substation compound will be run in cable ducts approximately 1.2m below the ground surface, along the sides of or underneath the internal roadways.

Two permanent anemometry masts are proposed as part of the development. The anemometry masts will be equipped with wind monitoring equipment at various heights. The masts will be slender free-standing structures up to 115m in height.

Four temporary construction compounds are proposed within the development, which will consist of temporary site offices, staff facilities and car-parking areas for staff and visitors.

It is estimated that approximately 732,000m³ of peat and spoil will be managed during the construction of the proposed development. This peat and spoil will be managed by means of placement/ spreading alongside the proposed infrastructure elements, where suitable. Excavated peat and spoil will also be used for reinstatement and landscaping works as close to the extraction point as possible or stored within the proposed onsite borrow pits. Approximately 717,291m³ of stone is required for the construction of the development. It is proposed to source stone from local, authorised quarries and/or from onsite borrow pits.

Two main entrances are proposed for the construction stage of the proposed development in order to transport turbine components, materials and equipment to the site. The entrance can be described as follows:

- Widening existing site entrance off the R156 into Ballivor Bog in Grange More (Td);
- Widening existing site entrance off the R156 into Carranstown Bog in Grange More (Td).

To deliver turbine components into Lisclogher Bog via the main site entrance described above, an entrance will be constructed at Bracklin Bog onto a local road and an opposing entrance will be inserted into Lisclogher Bog. This will facilitate the direct travel of components from

Bracklin Bog to Lisclogher Bog across the local road, thus minimising road and traffic impacts as the components will travel through Carranstown and Bracklin bogs rather than the local road network and cross the narrow road into Lisclogher Bog. This local road network will not be used to facilitate access for components to these bogs.

It is proposed that the large wind turbine components will be delivered to site via the M3, exiting at Junction 6 onto the R125 before turning northwest onto the R154 Trim Road. The delivery route enters Trim town before turning south onto the R161 for approximately 7.5km where it meets the R156. The delivery route continues west for approximately 11.1km along the R156 through Ballivor Village before reaching the proposed site entrances off the R156. All deliveries of turbine components to the site will only be by way of the proposed transport route.

On the R156 in between the proposed component entrances to Ballivor and Carranstown Bogs, existing visibility is currently impacted by a trough and rise in the road. As part of the wind farm construction works, it is proposed to permanently lower a section of the R156 to remove the current visual impediment and enhance the safety of this road. This proposed work will be undertaken prior to any construction phase works and will be retained for the operational phase and beyond.

The drainage design for the proposed development has been proposed specifically with the intention of having no negative impact on the water quality of the site and its associated rivers and lakes, and consequently no impact on downstream catchments and ecological ecosystems. No routes of any natural drainage features will be altered as part of the Proposed Development and turbine locations and associated new roadways were originally selected to avoid natural watercourses, and existing roads are to be used wherever possible. There will be no direct discharges to any natural watercourses, with all drainage waters being dispersed as overland flows. All discharges from the proposed works areas will be made over vegetation filters at an appropriate distance from natural watercourses. Buffer zones around the existing natural drainage features have been used to inform the layout of the Proposed Development.

It is estimated that the construction phase will take approximately 24 months from starting onsite to the full commissioning of the wind farm. The construction phase can be broken down into three main overlapping phases, 1) civil engineering works: 18 months, 2) electrical works: 18 months, and 3) turbine erection and commissioning: 9 months.

During the operational phase, each turbine will be subject to a routine maintenance programme involving checks as outlined in the 6.2.1 in this report. Again, as noted previously, the turbines are expected to have a lifespan of approximately 30 years, with a new permission required to replace same or the site will be decommissioned with the substations being under ESB/ EirGRID ownership.

Population and Human Health

This chapter examines population, human health, employment and economic activity, land-use, residential amenity, community facilities and services, tourism, property values, shadow flicker, noise and health and safety.

There are no tourist attractions relating to the site although it is proposed to develop a recreational and amenity facility as part of the development. 8 no. District Electoral Divisions in the vicinity of the site have been examined which has a population of 4,841 persons as of 2016 (CSO, 2016) and comprises a total land area of 16,074km².

The closest dwelling to the proposed Ballivor Wind Farm is located approximately 815m from the nearest proposed turbine (T17), i.e., greater than the recommended setback distance (i.e., 800m, 4 times the tip height of 200m), as per the Draft Revised Wind Energy Development Guidelines (2019). The applicant submits that there is no direct link between wind turbines and health and do not negatively impact on the property values.

It is estimated that 100-120 jobs could be created during the phases of the development with most construction workers and materials sourced locally, resulting in a *short-term significant positive direct impact* and the impact of commercial rates on public services within Co. Meath and Westmeath will have a *long-term slight positive direct impact*.

Shadow flicker is an effect that occurs when rotating wind turbine blades cast shadows over a window in a nearby property. An indoor phenomenon, it may be experienced by an occupant sitting in an enclosed room when sunlight reaching the window is momentarily interrupted by a shadow of a wind turbine's blade. Shadow flicker effect lasts only for a short period of time and happens only in certain specific combined circumstances. Current guidelines recommend that shadow flicker at neighbouring dwellings within 500 metres of a proposed turbine location should not exceed a total of 30 hours per year or 30 minutes per day.

The closest dwelling (currently unoccupied) is 815m from the nearest proposed turbine, with 217 dwellings located within 1.7km of the turbine locations. Flicker was calculated using the WindFarm software package and a regional sun factor of 30% was applied. Of the 217 No. residential properties modelled, the daily threshold of over 30 minutes shadow flicker may potentially be exceeded at *80 properties*. The annual threshold of over 30 hours for shadow flicker is predicted to be exceeded at *12 properties* once the regional sunshine average factor has been considered. The prediction does not consider wind direction, screening provided by intervening vegetation and topography and therefore shadow flicker events *may be lower than predicted*. Where daily shadow flicker exceedances are predicted for dwellings within 1.7km of the turbines, a site visit will be undertaken to determine the level of occurrence, existing screening and window orientation and should threshold exceedances be exceeded, mitigation measures will be employed, consistent with 2006/ 2019 Wind Energy Guidelines.

The applicant submits that where a negative impact was identified, appropriate mitigation measures will ensure that there will be *no significant residual negative effects* on Population and Human Health within the study area. There will be a *long-term significant positive impact* on CO_2 emissions and energy targets with the implementation of the proposed development.

MCC Comment: An Bord Pleanála are requested to consider the impact of shadow flicker of the proposed development on the residences referred to above; and where it considers appropriate, seek further information in this regard from the applicant.

Biodiversity

A detailed habitat survey of the site was undertaken by Bord na Móna ecologists in 2011 and 2012, with follow up visits in subsequent years. Multidisciplinary walkover surveys of the entire site and dedicated botanical and faunal surveys of the proposed development site were undertaken in April, May, June, July and Sept. 2020, in May, July and September 2021, April and Sept. 2022 and in Feb. 2023 by MKO ecologists. During the surveys undertaken for the EIAR, a ground-truth exercise was undertaken of the habitats recorded and mapped by Bord na Móna. Habitats are classified in accordance with Fossitt (2000).

The lands within the Wind Farm site boundary comprise 4 large cutover raised bogs, Lisclogher East and Bracklin Bog to the north and, Carranstown Bog and Ballivor Bog to the south. Large areas of the site, i.e. Lisclogher Bog and large parts of Bracklin and Ballivor Bogs, have not be subject to commercial cutting for a significant period of time and thus vegetation, dominated primarily by birch scrub and woodland, common cottongrass and ling heather, has regenerated over much of these areas. Other areas, i.e. Carranstown Bog and sections of Ballivor, which underwent peat extraction until relatively recently and are characterised by large areas of bare peat. Peat production ceased entirely in June 2020. *Small areas of uncut remnant raised bog (6 no. separate fragments)* are also present in the site, mostly at the peripheries and outside the footprint of the proposed development.

Construction of the proposed windfarm will result in the *small-scale loss of some habitats of local importance (higher value), including 32.8ha of cutover bog habitats* (due to temporary and permanent elements of the proposed development) which is characterised by bare peat, revegetating dry heath and pioneer poor fen communities, as well as smaller areas of revegetating birch scrub and dry bog woodland. This represents *1.9% of the total area of this habitat* within the site. While the proposed development has been designed to avoid most of the uncut remnant raised bog, *1.03ha* (0.3% of the total area of this habitat within the site) of highly degraded *uncut remnant raised bog* within the site *will be lost. 0.28ha of oak-ash-hazel woodland and 375m of hedgerow habitat with scattered trees will be lost.*

A *Habitat Management and Enhancement Plan* (HMEP) has been prepared for the site which allows for the *re-wetting and enhancement* of approximately *12ha* of drained, remnant uncut raised bog at the northern extent of Bracklin Bog through drain blocking. The plan also allows for the *planting* of approximately *6.5ha of native woodland* within the site which will replace woodland lost due to the proposed development. Section 6.7.3-5 of the EIAR examines the '*likely significant effects*' during each phase of the development.

MCC Comment: Section 7.1.3 of the EIAR states that 8ha of native woodland will be planted. The proposed Habitat Management and Enhancement Plan should be implemented in full, in the event of a grant of permission.

- **Construction Phase**

Potential impacts on habitats include direct loss of habitat within the proposed development footprint and indirect deterioration of aquatic habitats due to deterioration of water quality. It will result in the loss of several habitats of Local importance (higher value) which were identified as Key Ecological Receptors (KERs).

The KERs are:

- **Bats** Local importance (Higher Value)
- **Badger** Local importance (Higher Value)
- **Otter** International importance
- **Heath type Communities** Local importance (Higher Value)
- **Poor fen** Local importance (Higher Value)
- **Bog Woodland, Oak-ash-hazel woodland and pioneering scrub** Local importance (Higher Value). Note: The bog woodland does not correspond to the Annex I Habitat Bog Woodland 91D0
- **Uncut Raised Bog** Local importance (Higher Value)
- **Aquatic and Fisheries Species** International importance and smaller rivers and streams have Local importance (Higher Value)
- **Rivers and Streams** International importance – part of River Boyne and

	River Blackwater SAC and SPA; smaller rivers and streams have Local importance (Higher Value)
• **European Designated Sites**	National importance
• **Nationally Designated Sites**	International importance

The main habitat loss will be to cutover peatland habitats including bare peat, and mosaics of establishing dry heath, pioneer poor fen and scrub. In addition to this there will be some small-scale loss of birch dominated dry bog woodland, a small area of oak-ash-hazel woodland on a mineral island at Carranstown Bog, small areas of highly degraded, dry remnant uncut raised bog and sections of hedgerow with scattered trees. There is also *potential for deterioration of stream and river habitats due to run-off* of pollutants during the construction and operational phases.

Habitat loss and disturbance impacts on faunal species that were recorded on the site but were not included as KERs could occur (i.e. drainage ditches, bare peat habitats, open water, grassland habitats, spoil and bare ground (ED2), recolonising bare ground (ED3) and buildings and artificial surfaces (BL3), marsh fritillary, reptiles and amphibians, additional protected fauna not found during surveying). *Due to the extent of cutover habitats that will remain undisturbed* on the site and the avoidance in so much as possible of the most significant areas of faunal habitat (woodland, watercourses), *no significant effects on non-KER faunal biodiversity are anticipated* so were excluded from further assessment.

No significant habitat for salmonids, lamprey, coarse fish, white-clawed crayfish, European eel, aquatic invertebrates or other aquatic species was recorded within the footprint of the proposed development and, with the exception of the crossing of the Bolandstown stream (as assessed, all major infrastructure is located over 50 metres from the main watercourses within the site. The potential for significant effects on aquatic species is restricted predominantly to *indirect effects on their habitat resulting from water pollution* in addition to the potential for *direct loss of small areas of supporting habitat as a result of the culvert within the Bolandstown stream*. No invasive species were recorded, however best practice biosecurity measures are proposed during the construction phase.

- **Operational Phase**

It is submitted that the operation of the development *will not result in any additional land take or loss of uncut raised bog or revegetated peatland habitats*, therefore *no potential for any significant effects* are expected. Peatland habitat enhancement is likely to occur through rehabilitation measures during the operational phase as per the *Habitat Management and Enhancement Plan (HMEP)*. Measures included are in addition to those contained in the Draft Cutaway Bog Decommissioning and Rehabilitation Plans for Ballivor Bog (post peat harvesting). *Significant negative effects on the remnant raised bog or cutover bog habitats* within the site will *not occur* and there will be *no significant effect on* the implementation of or outcome of the Cutaway Bog Decommissioning and *Rehabilitation Plans*.

No additional habitat loss or deterioration for faunal species will occur and there will be a decrease in anthropogenic activity (peat harvesting to wind generation. There is *no potential for significant negative effects* during the operational phase on non-volant terrestrial fauna including *badger*. *No effects on marsh fritillary or habitat* for the species are anticipated. *No significant habitat for otter, salmonids, lamprey, coarse fish, white-clawed crayfish, European eel, aquatic invertebrates or other aquatic species* was recorded within the footprint of the proposed development and all major infrastructure such as turbine bases are located over 50

metres from the *watercourses and wetlands* within the site. There will be no *instream* activity during the operational phase and therefore *no potential for habitat loss or disturbance*.

- **Decommissioning Phase**

As outlined in Section 6.2.1 of this report. The applicant submits that there will be *no additional habitat loss associated with the decommissioning* of the proposed development and therefore there will be *no significant effects* in this regard. Turbine bases and roads etc. will be left in place so works would be of a smaller scale but would have similar impacts on ecology to those experienced during construction. No additional or ancillary impacts are associated with the decommissioning phase and the same mitigation (as per construction phase applies) with an additional measure in relation to noise.

In the context of *Biodiversity,* it is submitted that given the scale of habitat loss in comparison to the total area of habitat present in the site, following the implementation of the HMEP, *no significant effects on any habitats* at any geographical scale are anticipated. The implementation of the HMEP has the potential to result in a *positive impact* on the area of remnant peatland habitat due to re-wetting and the area of woodland within the site will increase.

No potential for significant negative effects on faunal species were identified. Watercourses within the site do not provide optimal fisheries habitat or optimal habitat for otter. No otter resting or breeding sites were identified within the Proposed Development Site and there will be no instream works within any natural watercourses within the site.

Detailed fisheries and bat assessments were undertaken. Bat species have been assessed as of *Local Importance (Higher Value)* as they represent a resident or regularly occurring populations assessed to be important at the Local level and are listed in Annex IV of the EU Habitats Directive. The habitats on site provide linear foraging and commuting habitat for a range of bat species.

Most watercourses within the site comprise artificial drains with a poor structure and silty substrate which are of low fisheries value. The Boldanstown Stream, Cartenstown Stream, Killaconnigan Stream and Clondalee More Stream are the only watercourses located within 100m of the proposed turbine and associated infrastructure. These watercourses provide poor quality or unsuitable habitat for salmonids, crayfish and European eel, given the above characteristics. While they provide some suitability for lamprey, only low densities of lamprey were recorded during the electrofishing surveys.

The site provides *suitable habitat for badger* and a badger sett was recorded close to proposed development infrastructure at Carranstown Bog. A range of best practice measures are proposed to ensure that there will be *no significant effects on badger*. *Evidence of fox, deer, pine marten, Irish hare and pygmy shrew were recorded* within the boundaries of the site. *No evidence of significant populations* of these species at more than a local level was recorded. No signs of any additional protected fauna were recorded within the study area during the field surveys.

No significant effects on surface water quality*, groundwater quality or the hydrological/ hydrogeological regime* were identified for the either construction or operational phases and *no significant effects on rivers and streams and sensitive aquatic faunal species*. Subject to the implementation of mitigation measures and best practice design, *significant impacts on biodiversity are not anticipated, either alone or cumulatively*.

MCC Comment: An Ecological Clerk of Works should be appointed during the pre-construction, construction stage and post construction phases to advise on, oversee and monitor mitigation measures. All mitigation measures outlined in the EIAR/NIS/CEMP should be fully implemented and post-construction monitoring as detailed in EIAR should be in place for a minimum of 7 years post construction. Mitigation measures should be in line with the NRA *Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes* and the *Guidelines for the Treatment of Bats during the Construction of National Road Schemes* and any works relating to bats may only be carried out under a licence issued by the NPWS.

Ornithology

This chapter assesses the likely significant effects that the application site may have on bird species. A description of the methodologies followed is provided including the identification of target species and Key Ornithological Receptors (KOR), field surveys and records, an analysis of the results and a discussion of the ecological significance of the birds recorded within the study area which include different distances for different receptors. A *Collision Risk Assessment* was conducted to predict the no. of individual birds, of a particular species, that may be killed by collision with the rotating blades. It is noted that there are some limitations in the vantage point surveys. These carried out for less hours each time than recommended, however additional surveying was conducted, and the survey period (2.5 years) was longer than recommended. Field surveys conducted were:

- vantage point survey
- breeding walkover survey
- breeding raptor survey
- breeding woodcock survey
- winter walkover survey
- waterbird distribution survey
- connectivity vantage point survey
- hen harrier roost survey
- wintering golden plover survey
- additional species recorded

The potential for effects on designated sites is contained in the Natura Impact Statement (NIS) which concluded that where the potential for any adverse effect on any European Site has been identified, the pathway by which any such effect may occur has been robustly blocked via avoidance, appropriate design and mitigation measures. It is submitted that the measures employed during construction, operation and decommissioning will not adversely affect the integrity of any European Sites.

A Bird Watch Ireland (BWI) Bird Sensitivity Mapping Tool was used and identifies a southern section of the site as a low bird sensitivity zone (overlapping 8 no. turbines) and the remainder is not within a sensitive area for birds. Target species (Golden Plover, Hen Harrier, Merlin, Peregrine, Whooper Swan, Kestrel, Lapwing, Snipe, Woodcock, Buzzard and Sparrowhawk) were recorded during site surveys in October 2019 and March 2020.

From April 2020 to September 2022, the following target species were recorded within the zone of influence of the wind farm site:

Bird Species	**Conservation Significance**	**Determination of Population Importance within the Zone of Influence (Proposed Development)**	**Pathway for Significant Effects/ Collision Risk Assessment (CRA) required**	**Significant of Effect**
Bewick's Swan	Annex I	No ecological importance	No pathway	No further consideration

Golden Plover	Annex I	County Importance for wintering population No ecological importance for breeding population	CRA (wintering) required	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Slight Negative Effect
Hen Harrier	Annex I	County Importance for wintering population No ecological importance for breeding population	Potential habitat loss and displacement (wintering) and CRA (wintering) required	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Imperceptible Negative Effect
Kingfisher	Annex I SCI species of the River Boyne & River Blackwater SPA	Local Importance (Higher Value)	Assessment of potential impact required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Imperceptible Negative Effect *Disturbance:* Short-term Imperceptible Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Imperceptible Negative Effect *Collision:* None
Little Egret	Annex I	No ecological importance	No pathway	No further consideration
Merlin	Annex I	County Importance	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Imperceptible Negative Effect
Peregrine	Annex I	County Importance	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Slight Negative Effect
Short-eared Owl	Annex I	No ecological importance	No pathway	No further consideration
Whooper Swan	Annex I	County Importance for wintering population No ecological importance for	Potential habitat loss and displacement (wintering) and CRA (wintering) required	**Construction** *Direct Habitat Loss:* Long-term Imperceptible Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation**

		breeding population		*Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Slight Negative Effect
Barn Owl	BoCCI Red Listed	County Importance	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* No effect
Curlew	BoCCI Red Listed	No ecological importance	No pathway	No further consideration
Kestrel	BoCCI Red Listed	No ecological importance	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Moderate Negative Effect on the availability of nesting habitat **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Slight Negative Effect
Lapwing	BoCCI Red Listed	County Importance for wintering population County Importance for breeding population	Potential habitat loss and displacement and CRA required (all seasons)	**Breeding** **Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Slight Negative Effect **Wintering** **Construction** *Direct Habitat Loss:* Long-term Imperceptible Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Slight Negative Effect
Red Grouse	BoCCI Red Listed	No ecological importance	No pathway	No further consideration
Redshank	BoCCI Red Listed	No ecological importance	No pathway	No further consideration
Snipe	BoCCI Red Listed	County Importance	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect

				Collision: Long-term Slight Imperceptible Negative Effect
Woodcock	BoCCI Red Listed	County Importance	Potential habitat loss and displacement (breeding) and CRA (breeding) required	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* No effect
Buzzard	Raptor	Local Importance (Higher Value)	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Slight Negative Effect
Long-eared Owl	Raptor	Local Importance (Higher Value)	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* No effect
Sparrowhawk	Raptor	Local Importance (Higher Value)	Potential habitat loss and displacement and CRA required (all seasons)	**Construction** *Direct Habitat Loss:* Long-term Slight Negative Effect *Disturbance:* Short-term Slight Negative Effect **Operation** *Direct Habitat Loss:* None *Displacement & Barrier Effect:* Long-term Slight Negative Effect *Collision:* Long-term Imperceptible Negative Effect
Grey Wagtail Meadow Pipit Redwing Swift Yellowhammer	BoCCI Red listed passerine species	Local Importance (Lower Value)	No pathway	No further consideration

* **Decommissioning Effects:** No direct habitat loss is anticipated for any species due to decommissioning; and Disturbance is the same as detailed identified during the construction phase.

Section 7.6.5 details the effects associated with the turbine delivery route. It is classified as *short-term, slight negative*. Section 7.7 sets out the proposed mitigation including specific measures for Kestrel and Barn Owl, etc. The EIAR states the potential effects of the proposed development upon birds will *not be significant*. A *long-term slight negative effect* and *low effect significance* is anticipated which is associated with *habitat loss, disturbance displacement, collision risk and cumulative effects*.

A *short-term moderate negative effect* and *low effect significance* is predicted for *Kestrel*. Section 7.7 (Chapter 7) contains a mitigation plan which seeks to reduce the magnitude of the

impact to a *long-term slight negative effect* and *low effect significance*. It is submitted that the implementation of the prescribed mitigation measures will render any potential effects on avian receptors to *low significance*. In conclusion, *no significant effects* are foreseen on key ornithological receptors of the study area of the application site due to the proposed development.

Section 7.9 identifies the proposed monitoring which will take place at each phase, including a detailed Bird Monitoring Programme for the operational phase, which will be reported to the Planning Authority annually (based on monthly flight activity surveys, collision surveys, etc.) and may inform additional mitigation, etc.

MCC Comment: It is important to note that many of the wildlife/geology sites identified through these surveys have no statutory nature conservation designation but nonetheless are of *county importance* and provide several ecosystem services[4]. Such sites can function as important stepping-stones and ecological corridors (Article 10 of the Habitats Directive) for improving the ecological coherence of sites protected for nature conservation.

The proposed bird monitoring may provide valuable data, and the applicant intends to share pre-planning survey data with the NBDC, in the event of a grant of permission. It is recommended that in the event of a grant of permission, aviation lights on wind turbines should be flashing to reduce the likelihood of collisions with bird species. An Ecological Clerk of Works should be appointed during the pre-construction, construction stage and post construction phases to advise on, oversee and monitor mitigation measures. All mitigation measures outlined in the EIAR/NIS/CEMP should be fully implemented and post-construction monitoring as detailed in EIAR should be in place for a minimum of 7 years post construction.

Land, Soils and Geology

Geological mapping, detailed walkover surveys, peat probing, trial pits and bore holes are part of the activities undertaken. Geotechnical ground investigations were carried out as part of the preparation of the *Geotechnical and Peat Stability Assessment Report* and a *Peat and Spoil Management Plan* for the proposed site.

The proposed development will result in the removal of peat and subsoils (spoil) for access roads, internal road network, internal cable network, hardstanding emplacement, turbine foundations, substation, crane hardstands, compounds and met mast foundations. The site comprises cutover bog - bare peat fields separated by field drains and the existing topography is relatively flat, ranging from approximately 69–84m OD. Due to commercial turbary activities and associated drainage, the land and topography of the proposed site has been significantly modified. Production began in 1953 on Ballivor Bog. Where peat extraction ceased some time ago, regeneration and succession has begun.

Peat depths vary on the site from *0.4 - 5.7m* with an average of 1.93m. The peat thickness at *proposed turbine locations ranges* from *0.7 to >5m* with an average of 2.4m. Site data indicates that 70% of the proposed turbine locations have a peat depth ≤3m, with only 2 no. proposed turbine locations having a peat depth more than 5m (at T1 in Ballivor Bog and T25 in Lisclogher Bog). It is submitted that the applicant has sought to avoid the deeper peat areas in design layout. Peat deposits at the proposed site are underlain by glacial tills comprising clay, silts, sands and occasional gravels. The glacial till deposits are underlain by limestone bedrock. The limestone, in the context of aggregate potential mapping is classified as 'medium' importance.

[4] http://www.npws.ie/media/Biodiversity%20Plan%20text%20English.pdf

The site of the proposed borrow pit (BP2) is identified by GSI as having 'high' granular aggregate potential. Depth to bedrock at the site is expected to be in excess of 11m.

Estimated volumes of peat and spoil to be excavated are c.732,000m³ (564,000m³ of peat and 168,000m³ of spoil (non-peat)). Excavated peat and spoil will be used for reinstatement and landscaping works close to the extraction point or stored within the proposed onsite borrow pits. The handling and storage of peat and spoil will be done in accordance with the *Peat and Spoil Management Plan* (Appendix 4-2). It is submitted that peat slide failures in other locations have informed the design at the application site.

It is submitted that storage and handling of hydrocarbons/ chemicals will follow best practice methods and measures are proposed to prevent peat and subsoil erosion during excavation and reinstatement and water quality impacts.

A *Geotechnical and Peat Stability Assessment* (Appendix 8-1) demonstrates an acceptable margin of safety and that the proposed site is suitable for the development representing a *low risk of peat failure*. A series of control measures are required to manage all risks associated with peat instability.

The assessment examines the construction phase effects on soils/ land, peat and subsoil excavation, excavation of borrow pits, contamination of soil by leakages and spillages and resulting alteration of peat/ soil geochemistry, erosion of exposed subsoils and peat during construction of infrastructure, peat instability and failure, piling works, proposed substation, proposed amenity links, the operational phase effects including site road maintenance, site vehicle/ plant use, use of oils in substation and turbine transformers; and the decommissioning phase.

Owing to the small development footprint within the site as compared to the wider Ballivor Bog Group, it is submitted that *no significant effects on land* will occur. With the implementation of proposed mitigation measures and the best practice measures as per Peat and Spoil Management Plan, *no significant effects on peat and soils* will occur. Similarly, *no significant effects on the underlying limestone bedrock geology will occur* during the construction, operation, or decommissioning phases.

No significant cumulative effects on land, soil and geology as a result of the proposed development are anticipated and the bogs rehabilitation plans will result in an *overall positive effect on the local land, soils and geological environment* due to the small footprint of the development. The Peat Stability Risk Assessment concludes that from a major accident/ disaster point of view, the risk is negligible/ none.

No significant fuel spills or wastewater discharges have occurred at the site prior to or since 2020 according to Annual Environmental Reports. There are no historic quarries or pits recorded by the GSI within the site. Some localised fly-tipping has occurred along the edge of access tracks. There are no Geological Heritage Sites at or near the proposed site.

MCC Comment: DCENR mapping does not identify any landslide events in the vicinity of the application site/ or the bog complex.
An Bord Pleanála is directed to the referral report from the Environment (General) of Meath County Council in relation to the importation of soil and stone, waste management, CEMP, etc.

Hydrology and Hydrogeology

The surface of the proposed site is drained by a network of drains that are typically spaced every 15 to 20m. Larger arterial drains connect the smaller field drains and gently slope towards perimeter silt ponds and surface water outfalls. Surface water outflows from the site discharge to small streams and drains located in the lands surrounding the Ballivor Bog Group. All outfalls are drained by gravity with no pumping locations situated within the proposed site.

Regionally, the proposed site is located in the River Boyne surface water catchment. The west of the site drains westward towards the Deel River and to the east towards the Stonyford River and to the south towards the River Boyne via the Ballivor River. All surface water drainage pathways from the proposed site eventually discharge to the River Boyne.

Due to the nature of wind farm developments, being near surface construction activities, it is submitted that the effects on groundwater are generally negligible and surface water is generally the main sensitive receptor assessed during impact assessments. The primary risk to groundwater would be from oil spillage and leakages at turbine foundations or during construction plant refuelling, which is common to all construction sites. These potential contamination sources are to be carefully managed at the proposed site during the construction and operational phases of the development and measures are proposed to address potential minor local impacts.

During each phase of the proposed development, certain activities (sediment input from runoff and other pollutants such as hydrocarbons and cement-based compounds) may have the potential to significantly affect the hydrological regime or water quality at the proposed site or downstream of the proposed site.

The applicant submits that surface water drainage measures, pollution control and other preventative measures have been incorporated into the project design to minimise significant impacts on water quality and downstream designated sites. A 50m stream and lake buffer was applied during the design of the proposed development to avoid sensitive hydrological features. The *Surface Water Drainage Plan* seeks to significantly reduce sediment runoff arising from construction activities and to control runoff rates. No direct discharge of wind farm runoff into local watercourses or into the existing bog drainage network will occur, via avoidance methods (i.e. stream buffers) and design methods (i.e. surface water drainage plan). Preventative measures also include fuel and concrete management and a *Waste Management Plan* (part of the *Construction and Environmental Management Plan*).

No significant impacts to surface water (quality and flows) *and groundwater* (quality and quantity, and any local groundwater wells) will occur once mitigation measures are implemented as these are proven and effective mitigation measures to mitigate the release of sediment which will reduce the concentration of suspended solids to acceptable levels. The storage and handling of hydrocarbons/chemicals will be carried out using best practice methods to protect surface and groundwater quality. The drainage system will be designed to slow surface water runoff via attenuation and avoids the alteration of downstream surface water flows. The applicant submits that this will *not contribute to downstream flooding*.

A hydrological assessment of potential impacts on local designated sites was undertaken. The River Boyne and River Blackwater SAC and SPA is hydrologically connected to the site, as the Deel, Stonyford and Boyne Rivers are in the vicinity/ downstream of the site. Following implementation of appropriate mitigation measures, no significant impacts on the European Sites will occur.

A *Water Framework Directive (WFD) Compliance Assessment* has been completed for all waterbodies (surface water and groundwater bodies) with the potential to be impacted by the proposed development. With the implementation of the mitigation measures detailed in Chapters 8 and 9 no change to WFD status of the underlying groundwater body or downstream surface waterbodies will occur. The proposed development complies with the WFD and will not affect the achievement of WFD objectives.

The *cumulative assessment* found that there will be *no significant effects on the hydrological and hydrogeological environments* and the bogs rehabilitation plans will result in an *overall positive effect* as *surface water quality and attenuation* will be improved.

MCC Comment: An Bord Pleanála is directed to the referral report from the Environment (General) and (Flooding) Department of Meath County Council in relation to flood risk management and the importation of soil and stone, water protection, waste management, CEMP, etc. The importation of soils and stones to the site can affect the hydrochemistry of an area so the imported material should be suitable to the peat soil/ subsoil and bedrock of the site.

Air and Climate

The EPA (2022) *Air Quality in Ireland 2021* provide SO_2, PM10, NO_2 and O_3 concentrations for areas in Zone D (where the site is located) and these are within acceptable limits. From 2000 to 2020 (prior to cessation of peat extraction) dust emissions were measured and submitted to the EPA. Dust emission limits of 350 mg/m²/day were not exceeded during this time and as this has ceased, dust emissions have reduced considerably and do not exceed daily thresholds.

Wind turbines do not produce direct emissions. Some *minor short term or temporary indirect emissions* associated with the *construction* of the wind farm include *vehicular and dust emissions*. CO_2 emission will result from peat disturbance and other emissions will occur due to the presence of machinery and increased traffic. The CEMP includes dust and CO_2 suppression measures. It is considered that there will be *no significant effects on air quality during the construction phase*. The development will have the potential to offset approximately 6,035,010TN and 8,717,237TN of CO_2 per annum (against EU FFC), due to the provision of renewable energy (electricity) to 70,036 - 101,163 Irish households per year, which will have a *long-term Moderate Positive indirect effect on air quality*.

The proposed development will have an export capacity of approximately **117MW - 169MW** and will help contribute towards Ireland's renewable energy generation target and will provide grid infrastructure and the capacity to offset 6,035,010 tonnes and 8,717,237 tonnes of CO_2 (against EU FFC), thereby reducing the GHG effect and improving air quality as we transition to cleaner energy industries.

Wind farm developments in peatland areas, will result in direct impacts and loss of peat within the development footprint. There may also be indirect impacts where it is necessary to install drainage in certain areas to facilitate construction. The works can either directly or indirectly allow the peat to dry out, which permits the full decomposition of the stored organic material with the associated release of the stored carbon as CO_2. It is submitted that any wind farm development in a peatland area save more CO_2 than is released.

It is submitted that Bord na Móna developed a methodology for generating a *Carbon Balance* based on their experience of calculating carbon losses and savings from proposed wind farm development. It is informed by the Scottish Government's Carbon Calculator and other

sources from Ireland/ UK, etc. and it was used to determine the effects of the proposed wind farm in terms of potential carbon losses and savings considering peat removal, drainage and operation of wind farm, including the specific nature of the cutaway peat lands.

The model calculates the total carbon emissions associated with the proposed wind farm development including manufacturing of the turbine technology, transport, construction of the development and carbon losses due to peatland disturbance. The model also calculates the carbon savings associated with the proposed wind farm development.

Based on the Bord na Móna model, ***384,030 tonnes of CO_2 will be lost to the atmosphere*** **due to changes in the peat environment**, changes in the cycling of mid-merit gas-fired generation units and due to the construction, operation and decommissioning of the proposed development. However, it is submitted that ***6,035,010 TN and 8,717,237 TN of CO_2*** **(against EU FFC)** ***will be offset*** **by the operational phase**. The volume of CO_2 that will be lost to the atmosphere during the construction phase will be offset within 1.17 - 2.37 years of operation, depending on the fuel source to which it is compared.

Therefore, the *construction of the development will have a short-term, imperceptible negative effect* due to the GHG emissions from construction plant and vehicles and operation will have a *direct long-term moderate positive impact on climate* due to reduced GHG emissions.

Noise and Vibration

Noise monitoring surveys taken at 8 no. noise sensitive locations (NSLs) surrounding the proposed development, have results for the level of background noise environment in the absence of existing operational wind farm developments. Typical background noise levels for day and night periods at various wind speeds have been measured in accordance with best practice guidance contained in the Institute of Acoustics document '*A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise*' (IoA GPG).

The results of the survey guided the appropriate noise criteria for the development in line with the guidance in the 2006 Wind Energy Guidelines and potential noise and vibration effects on the surroundings have been considered for the short-term construction and decommissioning phases and the long-term operational phase.

The assessment of construction and decommissioning noise and vibration has been conducted in accordance with best practice guidance contained in *BS 5228-1:2009 + A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise* and *BS 5228-2:2009 + A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Vibration.*

Subject to good working practice, *it is not expected that there will be any significant noise and vibration impacts* associated with the construction phase and the likely noise from construction activity at the nearest NSLs is expected to be within recommended threshold values. The associated construction noise and vibration impacts are *not expected to cause any significant effects*. A series of cumulative turbine noise prediction models were prepared which considered the site layout, the likely turbine noise emissions and turbine hub height for the proposed development and predicted turbine noise levels have been calculated in accordance with the IOA GPG recommendations. Residual turbine noise levels associated with the *proposed development and the permitted Bracklyn wind energy development will be within the best practice noise criteria curves* recommended in 2006 Wind Energy Guidelines.

No significant vibration effects are associated with the operation of the proposed development. *Noise and vibration impacts will not be significant* considering best practice guidance for wind turbine developments.

MCC Comment: An Bord Pleanála is directed to the referral report of the Environment (General) Department of Meath County Council in relation to noise, which states that '*the potential for the generation of low frequency noise 20-200Hz is a risk as such the applicant should be required to fully investigate the potential for low frequency noise on noise sensitive receptors within the area of the development and proposals for the mitigation of same'*.

Archaeological, Architectural and Cultural Heritage

Cultural heritage includes archaeology, architectural heritage and other detailed tangible assets. The assessment was based on GIS based mapping, Zone of Theoretical Visibility (ZTV) and Viewshed analysis to assist with the assessment of impacts, a desktop analysis of all baseline data and a field inspection programme.

Trim Castle (Co. Meath) is located c. 14km from the edge of the site and it is submitted that *no direct effects* to Trim Castle will occur and *no effects on setting from the grounds* of Trim Castle will occur. The potential effects on setting of Trim Castle when viewed from the upper floor are *Slight/Moderate*. *Cumulative effects* will occur and will be *moderate* when considering the Ballivor, Yellow River, Milltown Pass and Bracklyn wind farms together).

Frewin Hill (Co. Westmeath) has been considered. The theoretical viewshed analysis shows that all turbines have some potential degree of visibility from the monument (requiring clear weather conditions). The photomontage (Appendix 13-4) shows that all turbines will be visible at a distance at various turbine heights. The *potential impact* is *slight* due to the separation distance between the monument and the proposed turbines. It is submitted that *Cumulative effects* may occur (effects may increase from *slight* when considering Ballivor turbine alone to ***slight/ moderate*** when considering *Ballivor and Bracklyn wind farms together*).

National Monuments within 10km of the nearest proposed turbine were assessed. The *effects on setting* have been determined to be *slight* (from viewshed analysis and ZTV analysis).

No recorded monuments are located within the site boundary and therefore there will be *no direct impacts*. Indirect effects on sites and monuments and within 5km of the nearest proposed turbine were assessed. Effects are *slight-moderate* since the ZTV shows that *21-26 turbines may be visible from all SMR locations*. However, natural screening is not taken into consideration in the model and may reduce the effects on their setting considerably.

Cumulative effects may occur and the *effect on setting may increase from slight/ moderate* when considering Ballivor turbines alone to *moderate* when considering both Ballivor and Bracklyn turbines (adjacent to the proposed development). Bracklyn Wind Farm was granted permission by An Bord Pleanála (ABP-311565-23) in July 2022 for a development of 9 no. turbines.

One structure listed in the Record of Protected Structures (RPS) is located within the EIAR boundary (NIAH Reg. No. 15402102 and RPS 021-008 *Permanent narrow gauge Bord na Móna railway line*). The proposed roads will interact with the rails at 7 locations. Since the roads will be floated, there is no requirement to remove any of the tracks and it is submitted that *no direct effects will occur*. Furthermore, no level crossings will be negatively impacted. An extensive railway network will remain on the site. Mitigation measures to include the

provision of *information signage* will be required at various locations along the amenity trails which will result in a *positive impact*.

The haul route extends through Ballivor at the western end which will pass some NIAH/ RPS structures. Two structures listed in the RPS are located along the Haul Route including Scarriff Bridge NIAH Reg number 14403601 RPS 91254 and *Ballivor Water Pump* (NIAH Reg 14327002 and RPS ID 91156). The water pump at the roadside may be deemed to be more at risk from damage from the movement of large abnormal loads and a *potential direct negative effect to the structure* is possible, though considered *slight*. It is proposed to fence off the structure temporarily with high-visibility fencing during the movement of the abnormal loads through Ballivor.

The *sub-surface archaeological potential* of the bog is considered 'high' due to the RMPs in the surrounding landscape, the presence of a bog-body (Clonycavan Man) discovered in the peat sorting plant (excavated by machines on a peat-field) as well as the numerous stray finds detected within the Wind Farm site boundary (and housed in the National Museum of Ireland). The excavation of peat during *all elements of the proposed development has the potential to impact on any new sites*, if present. All elements of the proposed development include turbine and meteorological mast bases, hardstands, roads, cable trenches, amenity car park, amenity trails, construction compounds, substation site, grid connection loop-ins, angle towers, borrow pits, security cabins and gates, drainage, junction accommodation areas along the haul route and any other peat extraction activities. Mitigation measures will include construction stage monitoring. Should new sites, features or artefacts be present within the site (currently not visible on the surface) the impact is likely to be *significant negative and permanent* (i.e. the excavation by machinery would permanently remove the sites resulting in a significant negative impact).

The sites/ features, if detected, during monitoring will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the *potential impact after the mitigation* measures is likely to be *slight*. Cumulative effects - all potential negative effects are deemed to have been dealt with through the use of effective mitigation measures and planning conditions issued through the Planning Authorities, therefore *cumulative direct effects to unknown sub-surface archaeology will not occur*.

A review of the historic OS mapping and the walkover survey has shown that a *derelict ruined structure ('Tonduff') is located within an overgrown section to the east of Bracklin Bog*. This is a possible *famine settlement/ house* and is shown within Bracklin Bog on both the 1st Edition 6-inch map and the 25-inch 2nd Edition. The remains of the structure will be preserved in-situ (100m buffer) and the impacts are considered *imperceptible*. Licensed archaeological monitoring of the proposed road to the west will be undertaken during construction and in this regard preventing any accidental damage to the structure.

MCC Comment: The comments of the Architectural Conservation Officer, Meath County Council are relevant in this regard, who notes that the applicant has failed to supply a visual impact assessment from 10 no. Protected Structures within the immediate context of the site. It is also noted that incorrect Record no.'s attached to two no. entries. In particular, the effect of the proposed development on the Hill of Tara Panorama is negative and will alter the view and experience of the historic landscape. The Conservation Officer has recommended refusal based on the current information available and that accompanying the application. Such

issues could however be addressed through a request for further information (if considered appropriate by ABP).

The Tara Complex (as part of the Royal Sites of Ireland) is included in *Ireland's Tentative World Heritage List*. It is recommended that An Bord Pleanála seek the advice of an independent World Heritage Expert, with specific expertise and experience in assessing World Heritage Site nominations on behalf of UNESCO, to assess whether the development could impact (either alone or in-combination with other developments) on any future nomination by the State Party to UNESCO for World Heritage Status using established international best practice guidance.

An Bord Pleanála are requested to consider the cumulative impact of the proposed windfarms, solar farms and other projects in the vicinity of the proposed development on the Boyne Valley Sites, the Tara Complex, Loughcrew and Slieve na Calliagh Hills which are classified as having '*exceptional'* value, of '*national/international importance'* with a '*high sensitivity'* to change, Frewin Hill in Co. Westmeath and the Hill of Uisneach, which is part of the Royal Sites (excluded from the LVIA Study at 13.4.1.1 of the EIAR) and the entire LVIA should be amended accordingly to take account of the impact on all of the sites identified.

An Bord Pleanála are invited to consider the Heritage Council's (2013) *Windfarm Planning in Ireland, Planning in Harmony with Heritag*e and the *National Landscape Strategy for Ireland 2015-2025* in assessing this application.

Meath County Council's Archaeologist has made a series of recommendations, in the event of a grant of permission to identify and record any archaeological remains/ folklore, etc. ABP are invited to consider same in its assessment.

Landscape and Visual

The following figures illustrate the extent of Bracklyn Wind Farm which was granted permission by An Bord Pleanála in July 2022 for a development of 9 no. turbines. This site adjoins the current Ballivor Wind Farm application for 26 no. turbines.

It is submitted that this part of the EIAR considers the impact of the proposed turbines from a landscape and visual perspective. It describes the baseline landscape, assesses the direct effects on the landscape, effects on landscape character and the impact on sensitive landscape receptors and Landscape Character Areas (LCAs).

Visibility of the proposed turbines was assessed from receptors within a study area extending 25km (and 26.1km for the Hill of Tara) from the proposed turbines. Visual effects were determined from information gathered during multiple site visits and through use of Zone of Theoretical Visibility (ZTV) of 25km (or further where relevant) mapping and photomontages.

The application site comprises a flat lowland landscape with an expansive network of open peatlands located at the Westmeath-Meath County boundary. Industrial peat extraction practices at the site in the 20th Century have impacted on the character of the landscape within the site. The bogs are now degraded and can be described as a cutover peatland landscape. The LVIA study area for landscape character is 15km.

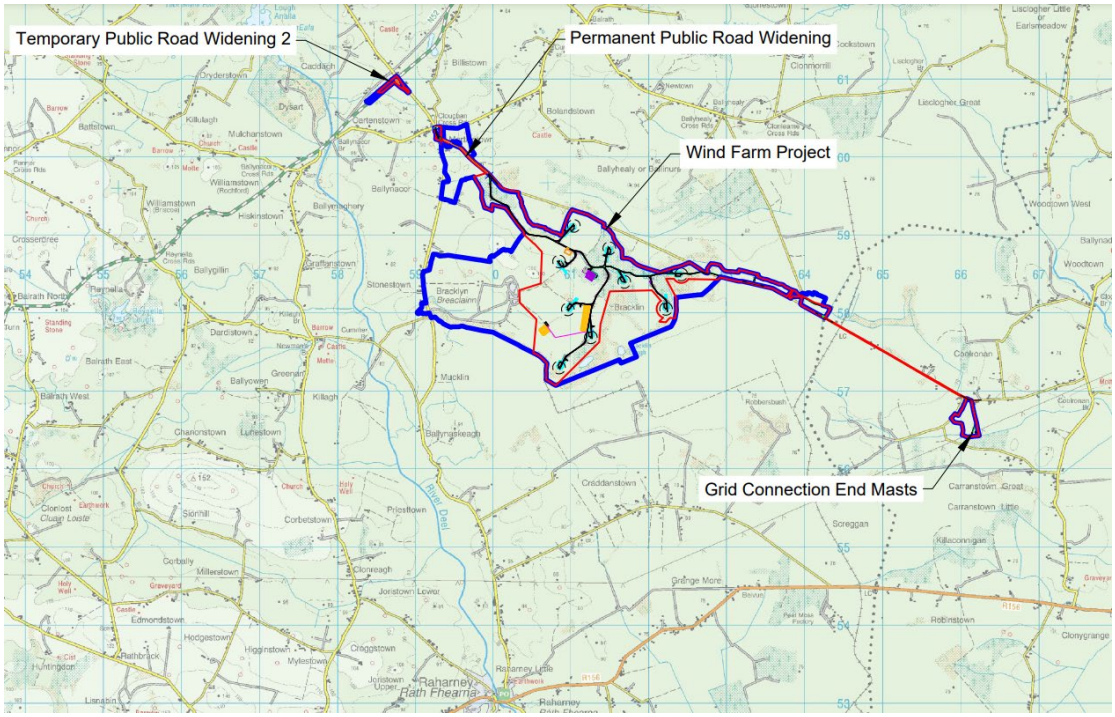

Fig. 10: Permitted Bracklyn Wind Farm development boundary (Source Bracklyn W.F. Ltd.)

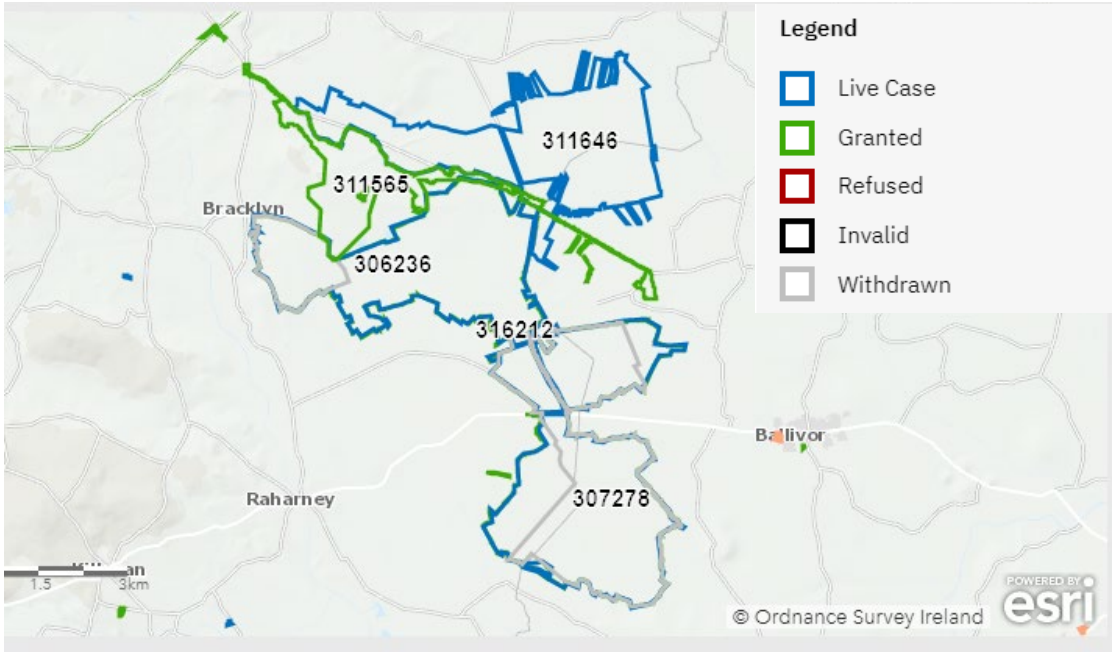

Fig. 11: Proposed Ballivor Wind Farm (blue boundary) and permitted Bracklyn W.F. (green boundary) (c. An Bord Pleanála Mapping, 2023)

10 proposed turbines (T01 - T05, T07 – T09, T19 & T20) are located in Co. **Meath** LCA 15 (South-West Lowlands) as per the Landscape Character Assessment (LCA) which has 'medium' potential for wind energy development. It is submitted by the applicant that the location, spatial extent, spacing, layout, the siting and design of the proposed development adheres to the guidance for such development in Flat Peatland Landscape Types, as set out in the 2006 Wind Energy Guidelines.

16 of the proposed turbines are sited in **Westmeath** Landscape Character Area 3 (River Deel Lowlands), which is deemed to be 'low' sensitivity as there are no High Amenity Areas located within this LCA and does not comprise any unique landscape features of county or national interest. The LCA was designated as an area with 'low' capacity for wind energy, as are all other LCAs in Co. Westmeath.

On-site visibility appraisals, ZTV mapping, a Route Screening Analysis and assessment viewpoint locations determined that visibility of the proposed turbines will be very limited from locations beyond 5km from the Wind Farm Site.

Visibility beyond the immediate landscape setting of the site is limited to localised areas of high elevation where there are open views across the flat and highly vegetated landscape from elevated vantage points, though uncommon in the Landscape and Visual Impact Assessment (LVIA) Study Area.

The landscape value of the Wind Farm Site is deemed to be of 'low' value and the sensitivity of the landscape to wind farm development is deemed to be '*medium*'.

The introduction of vertical man-made structures and ancillary infrastructure will substantially alter the landscape comprising the proposed infrastructure footprint at the site.

LCAs which will experience '*moderate*' landscape effects will be Westmeath LCA 3 and Meath *LCA 15* in which the proposed site is located. These LCAs *will experience direct effects on landscape character*. *Effects on other LCAs are indirect*, as the development will be visible from within these LCAs but located outside of them.

The site is *not located within or close to any designated High Amenity Areas* within County Westmeath, Kildare or Offaly or any areas of High Landscape Sensitivity (Co. Meath) and has will *not have any significant effect* on these areas.

19 No. viewpoint locations were selected for the photomontages and determines the visual effects. It is submitted that *no* '*profound*' or '*very significant*' effects occurred at any of the 19 viewpoints.

Residual effects of a 'significant' nature occurred at one viewpoint location (VP03) as the turbines are within <1km. The recommended 500m set back distance as per 2006 Guidelines has been incorporated into the proposal and the 4 times tip height set-back distance set out for residential visual amenity prescribed by the Draft 2019 Guidelines. No significant effects occurred from any other residencies or settlements within 5km of the site.

'*Moderate*' effects occurred at 3 of the 19 No. viewpoints. These include *VP11 View from Loughcrew Megalithic Tomb in the townland of Corstown (Sliagh Na Calliagh); VP15 View from the R156 in Robinstown; and View from R156 (Grange More) on the outskirts of Raharney*. All other viewpoints were assessed as resulting in '*slight*' residual effects (12) or '*not significant*' (3). Slieve na Calliagh and Loughcrew Megalithic Tomb, a Scenic viewpoint in the MCDP 2021-2027, is located approximately 18.9km northwest of the closest turbine.

Residual effects were deemed to be '*moderate*' as the proposed turbines read coherently in the expansive and long ranging landscape view. The *Hill of Tara* is located approximately 26.1km from the nearest proposed turbine and is a designated view within County Meath and was given '*very high' sensitivity*. Residual visual effect was deemed to be '***slight***' given the

distance and character of the view, the turbines appear as two coherent clusters in the background of the expansive view.

The assessments determined that *no significant cumulative landscape and visual effects will occur* with any other existing or permitted or proposed wind farm development. The proposed turbines with the permitted Bracklyn wind farm will appear/ be visible as a one coherent cluster, avoiding visual confusion and overlapping, thus mitigating visual impacts. The visual separation between permitted and proposed turbines and difference in scale is stated as resulting in '*low-medium*' visual effects. Overall, it is submitted that '*long-term, slight cumulative visual effects are to arise as a result of the proposed development*'. It is submitted that the removal of the turbines, in the event of decommissioning of the site, will have a '*short-term, slight, negative visual effect'.*

MCC Comment: The Landscape Character Assessment (part of the Meath County Development Plan 2021-2027) identifies this area as the South-West Lowlands which have a 'medium' capacity to absorb wind turbines.

The photomontages submitted by the applicant illustrate the dramatic change in landscape for those residences near the proposed turbines and at VP12. Existing trees obscure the view of the development from the Tower of Llyod. The mast and turbines are a dominant aspect at the viewpoint taken from the Hill of Downs and there is a clear view of the proposed turbines from Trim Castle. The proposed turbines will be clearly visible from the Hill of Tara and VP5 north of Enfield. Notable is the potential merging/ coalescence of wind farms across the skyline when considering the view presented from Loughcrew.

The applicant considered other windfarms, namely Bracklyn, Milltown Pass (Proposed), Knockanarragh (Proposed), Yellowriver, Ballydermot (Proposed), Cushaling/ Cloncant and Cloncreen (refer to Section 13.6 of the EIAR). As submitted by the applicant, it is considered that the permitted Bracklyn Wind Farm (Co. Westmeath) and the proposed development will appear as a single cluster within the landscape. However, from certain viewpoints, the cumulative effect of the spread of the proposed turbines, together with other permitted/ proposed development, will be quite visible and dominant in the background landscape.

The proposed site of the substation is located on a flat area of land in the north-west of Carranstown Bog in Co. Westmeath, stated as being dominated by scrub vegetation and mature trees. Visibility of the substation is limited by existing vegetation to the north/ east of the site, but it will be visible from the R-156 to the south.

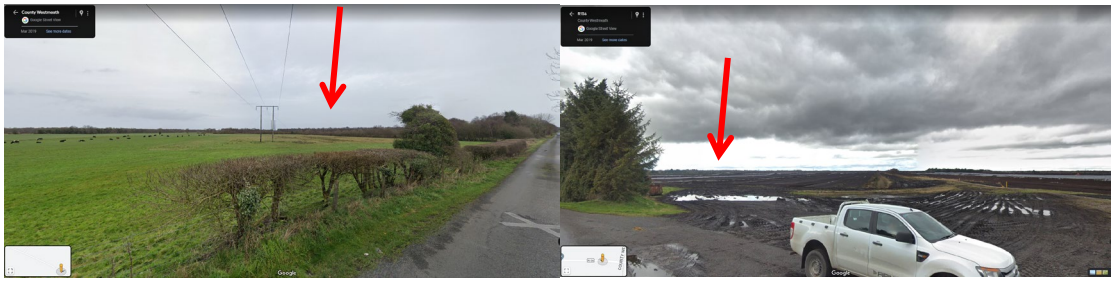

Fig. 12: Location of proposed Substation – eastern view from local road to the north of R-156; and view north-west of R-156 in Co. Westmeath (c. Google Images, 2023)

Meath County Council have identified concerns with the cumulative impact of the proposed development on the cultural heritage of local, regional, national and international importance.

While acknowledging the viewpoints/ photomontages presented by the applicant, it is submitted that a revised Visual Impact Assessment (including photomontages), taking account of the cumulative impact of the proposed development, other permitted and proposed developments including solar farms in the vicinity of the proposed development is required.

Other Protected Views (as per the Meath County Development Plan 2021-2027) (including those associated with the Brú na Bóinne World Heritage Sites) should be included, as follows:

a) 30 – Hill of Slane – Panorama (north of Slane village)
b) 59 – Panoramic views in all directions from top of Knowth tumulus. Extensive view across a working countryside (south-east of Slane village)
c) 87 a,b,c,d – Newgrange Passage Tomb – Panorama (south-east of Slane village)
d) 88 – Dowth Passage Tomb – Panorama (south-east of Slane village)

Other sites include:

e) 52 – Hill of Ward – Panorama (east of Athboy and within the study area of the LVIA)
f) 47 – Skryne Church – Panorama – of National Significance (east of the Hill of Tara)

Protected Views in the immediate vicinity of the site should also be addressed:

- 79 – View to the north-east and south-west – View of Boyne Valley from Scarrif Bridge
- 78 View north and south – View of Boyne Valley from Derrindaly Bridge).

Bracklyn Estate (Co. Westmeath) is a demesne landscape located close to the west of the northern turbine cluster; and the Royal Canal is located 3.7km to the south of the site.

To assist with the assessment of the LVIA, it is noted that colour-coding relating to theoretical visibility of turbines at different distances has not been presented at 13-1 as stated in Section 13.3.2. The applicant should be requested to provide this detail.

The EIA includes a *Habitat Management and Enhancement Plan* which seeks to improve the ecological and amenity value of the landscape at the site of the proposed development. In the event of ABP approving the current proposal, that applicant should be conditioned to retain all other existing hedgerows, trees, drainage, ditches and watercourses which are not affected by the development proposal.

As per DM obj 80 (MCC DM Standards) the applicant proposes neutral colours for the proposed turbines. In the event of a grant of planning permission, An Bord Pleanála are respectively requested to ensure that any service building for this development is integrated into the landscape, ensuring the use of matt dark green paint colour for all exposed metal work, service buildings, cabins, gates and fences; or where relevant all finishes of structures be agreed in writing with the relevant Planning Authority, prior to the commencement of development. In addition, it is recommended that a condition is applied to ensure that the wind farm site is always maintained in a 'neat and tidy' condition with no stockpiling of equipment, etc. permitted on site particularly during the operational phase.

Material Assets

- *Traffic and Transport*

This section examines the effects of traffic generated by the proposed development, including the effect of abnormal-size vehicles required to deliver the turbine plant equipment on the road network. Abnormal weight loads do not apply, only abnormal size. All construction and delivery vehicles must adhere to standard axle weight requirements set out under Road Traffic Regulations so loadings from construction traffic will not exceed the relevant standards.

The turbine (large components) delivery route proposed is via the M-3, exiting at Junction 6 onto the R-125 before turning northwest onto the R-154 Trim Road. The delivery route enters Trim town before turning south onto the R-161 for approximately 7.5km where it meets the R-156. The delivery route continues west for approximately 11.1km along the R-156 through Ballivor Village before reaching the proposed site entrances off the R-156.

2 no. main site entrances located on the R-156 in the townland of Grange More are proposed as access points for the components into Ballivor Bog to the south, and into Carranstown Bog and on to the remaining bogs to the north. It is proposed to widen these existing entrances.

To enable delivery of turbine components into Lisclogher Bog via the main site entrance referred to above, an entrance will be constructed at Bracklin Bog onto a local road and an opposing entrance will be inserted into Lisclogher Bog. They were former (now closed) peat extraction entrances. This will facilitate direct travel of components from Bracklin Bog to Lisclogher Bog across the local road, thus minimising road and traffic impacts as the components will travel through Carranstown and Bracklin Bogs rather than the local road network and cross the narrow road into Lisclogher Bog. This local road network will not be used to facilitate access for components to these bogs, construction materials or concrete deliveries.
The main entrances for the construction phase are the same entrance into Carranstown Bog and a new dedicated construction entrance to the west of the component entrance into Ballivor Bog. The crossing point between Bracklin and Lisclogher Bogs will also be used for construction materials and staff.

The widened entrances will be narrowed for the operational phase for amenity use and some will be reseeded and fenced. However, reopening during the lifetime of the development may be required should replacement blades/ abnormal size loads be required to access the site.

The delivery route for general HGV construction traffic may vary depending on the location of quarries and the suppliers used for stone and other materials required. It is intended to use quarries in the vicinity of the site as trucks delivering stone comprise most deliveries.

c.100-120 staff members will be employed on the site at any one time during the site preparation and groundworks stage of construction, reducing to a maximum of 80 staff at any one-time during turbine construction. In a worst-case scenario, whereby all staff travel to/ from the site via car, at an average of 2 persons per car, 120 PCU movements (two-way trips) will be added to the network during the groundworks stage of the development, reducing to 80 PCU trips during the turbine construction stage.

Once operational the site will also attract visitors for amenity purposes, with those travelling by car using the carparks provided via the access junctions off the R-156 and off a local road at Bracklin Bog. The locations of the proposed carparks (repurposed construction compounds) are Bracklin Car Park (15 spaces), Carranstown Car Park (15 spaces) and Ballivor Car Park (50 spaces). Based on existing Bord na Móna sites it is forecast that on a typical day to 30 to 40 car trips will be generated by this use.

It is submitted that comprehensive traffic management measures will be put in place before and during the construction stage to minimise the effects of the additional temporary traffic generated. A Traffic Management Plan forms part of the EIAR. The Construction and Environmental Management Plan (CEMP) will include necessary detailed measures – e.g. traffic management coordinator, agreement of a delivery programme with each County Council, use of temporary signage, management of site access and provision of information to local residents, pre- and post-construction road condition survey and re-instatement works, etc.

- *Telecommunications and Aviation*

A scoping exercise was undertaken to ascertain the presence of telecommunication links within the area of the proposed development. Requested setbacks for turbines from respective links were incorporated into the final design. A *Telecommunications Impact Study* concluded that the siting of the proposed Ballivor turbines *will not impact on telecommunication links* that traverse the site.

Following consultation with the Irish Aviation Authority and Department of Défense indicates *no impacts are anticipated on nearby aviation assets* and the site is not located within any of the Air Corps Assets as listed in the Tall Structures Position Paper.

- *Utilities and Waste Management*

There is no Gas Networks Ireland infrastructure or public water supply infrastructure located within or adjacent to the site. The 110kV Mullingar to Corduff overhead 110kV transmission line traverses the site in an east to west orientation at Carranstown Bog. There are no EPA-licensed or local authority-authorised waste facilities or activities located within the site. It is submitted that all waste materials will be disposed of at licenced facilities if they cannot be reused or recycled. During the operational phase, the wastewater tank at the substation will be emptied as required.

Mitigation measures regarding working near grid infrastructure will be adhered to during the construction and decommissioning phase and a CEMP will be in place during construction.

No significant effects (including cumulative effects) on telecommunications, aviation, utilities and waste management as a result of the proposal. There will be a *long-term slight positive residual effect on electricity supply during the operational phase* due to the addition of 117MW to 169MW of electricity to the national grid, offsetting the use of fossil fuels. The proposed development could supply 70,036 - 101,163 households with electricity per annum.

MCC Comment: A wide range of agencies/ companies were contacted in relation to 'Material Assets' and the proposed development and are considered appropriate with details incorporated into the final design layout where relevant.

It is noted that there is a small airstrip located in Lisclogher West to the west of the proposed development, used recreationally by model aeroplane enthusiasts (as per Section 13.4.2.2 of the EIAR). There is no reference to this under Material Assets.

ABP are directed to Section 14.2.7.2 Aviation and the conditions identified by the Irish Aviation Authority and the Department of Defence.

An Bord Pleanála is referred to the comments from the Transportation Department of Meath County Council in relation to the turbine haul route, proposed works, construction traffic and the CEMP, etc.

Vulnerability of the Project to Major Accidents and Natural Disasters
The scenario with the highest risk score in terms of the occurrence of major accident and/or disaster was identified as '*Contamination*' of the site and risk of '*Industrial Accident- Fire*' during the construction, operation and decommissioning phases. Consideration has been given to bog fires, peat stability and contamination, etc.

The design of the development is in accordance with best practice measures and mitigation against the risk of major accidents and/or disasters is embedded through the design. The *risk of a major accident and/or disaster during the construction of the development is considered 'low'* in accordance with the '*Guide to Risk Assessment in Major Emergency Management*' (DoEHLG, 2010). It is submitted that a 'Risk Management Plan' will be prepared an implemented. The Major Accidents and Natural Disaster Risk Assessment forms the basis of the Emergency Response Plan which is part of the CEMP. Similarly, the procedures in relation to fire safety risk assessment will be carried out as per Health and Safety and Welfare at Work Act 2005, as amended.

MCC Comment: A Fire Safety Certificate application is required under Part III of the Building Control Regulations for each individual building within the proposed development. Fire safety issues with regard to the design, layout and construction of the proposed buildings, as well as all proposed active and passive fire protection systems will be examined in more detail by the Fire Officer at the Fire Safety Certification application stage.

Interactions of Effects
A matrix is presented in Chapter 16 of the EIAR to identify interactions between the various aspects of the environment and identifies potential positive or negative impacts during both the construction and operational phases. Where any potential interactive impacts were identified, mitigation is proposed.

Cumulative Impact Assessment
Cumulative impacts are addressed within each chapter of the EIAR. It is submitted that the applicant considers the range and nature of existing and/ or approved projects relevant to the study area, identifies those with potential to create cumulative impacts and those that may have cumulative interaction. Such projects include permitted and existing wind farms in the area, drainage/ maintenance works/ programmes. Potential significant cumulative effects arising and, where appropriate, the relevant mitigation measures proposed are set out in each chapter of this EIAR.

Mitigation and Monitoring Measures
Chapter 17 sets out a schedule of mitigation and monitoring measures and this forms part of the CEMP.

MCC Comments: In the event of a grant of planning permission, ABP are requested to apply planning conditions to implement the mitigation and monitoring outlined in Chapter 17 of the EIAR, together with any other mitigation outlined in this Chief Executive's Report/ Referral Reports of Meath County Council internal departments.

SECTION SEVEN: CONCLUSION & RECOMMENDATION

7.1 Principle of Development

The Planning Authority considers the nature of the wider development is supported in National, Regional and Local Planning Policy. Bracklyn Wind Farm was permitted on adjoining lands in 2022. Such development must be appropriate from an environmental, technical and visual perspective, etc.

7.2 Design & Amenity

It is considered that the size, scale and position of the proposal will have an impact on the landscape and An Bord Pleanála is invited to consider the local impact on neighbouring residences (overshadowing, property values, etc.), archaeological and architectural heritage, together with the impact on the cultural heritage landscape of Co. Meath, Co. Westmeath and further afield. The proposed substation in proximity to existing 110kV transmission lines is considered acceptable, subject to mitigation.

The applicant has submitted proposals regarding decommissioning of the site; however, it is intended that a further permission for a new windfarm development will be sought, following the 30-year operational window of the current proposal. Extensive trackway is proposed on the site so it is unlikely that the site would be fully reinstated to its current use, albeit cutover peat and recolonising cutover peat habitats.

The Environment (General) Department of Meath County Council have noted that noise levels must be considered further. Of the 217 no. residential properties modelled, the daily threshold of over 30 minutes shadow flicker may potentially be exceeded at *80 properties*. The annual threshold of over 30 hours for shadow flicker is predicted to be exceeded at *12 properties* once the regional sunshine average factor has been considered. It is noted that this does not account for screening and window orientation and mitigation has been proposed as per Wind Energy Guidelines. The Planning Authority requests that An Bord Pleanála address these issues by way of a further information request.

7.3 Access/ Traffic and Movement

Having regard to comments from the Transportation Department of Meath County Council, including conditions recommended in the event of approval of the proposed development, it is considered that the proposed development will not have a negative impact on access, traffic and movement in the vicinity of the proposed development and along the haul route.

7.4 Cultural Heritage & Landscape

The Planning Authority requests that An Bord Pleanála considers the cumulative impacts of the proposed development on the landscape of the region, including architectural and archaeological heritage, in particular the impacts on sensitivity and protected sites of local, national and international importance. The Architectural Conservation Officer has recommended refusal based on the details in the application. The need for further assessment, in particular on Tentative World Heritage Sites and other sensitive locations has been set out in the body of the report.

7.5 Environmental Receptors & Environmental Assessment

A Natura Impact Statement (NIS), Environmental Impact Assessment Report (EIAR) and a Flood Risk Assessment were submitted by the applicant and ABP are the competent authority for the purposes of EIA and AA. Where identified in this Chief Executive's Report or in referral

reports from internal departments of Meath County Council, ABP are requested to seek further information in relation to key environmental receptors or aspects of the Environmental Assessments.

An Bord Pleanála is requested, in the event of a grant of planning permission, to apply a condition which seeks the implementation of all environmental mitigation proposed in the reports accompanying the application; and where relevant, additional mitigation proposed in this submission by Meath County Council.

7.6 Development Contributions

In accordance with Section 48 of the Planning and Development Act 2000-2022 and the *Meath County Council Development Contribution Scheme 2016-2022*[5], the proposed development involves the provision of new buildings, meteorological masts, new pylons, renewable energy structures, which will export to the national grid and as such, in the event of permission for approval being granted by ABP, development contributions are applicable.

An Bord Pleanála has sought the following information from Meath County Council:

- Community gain conditions which may be appropriate
- Details of relevant section 48/49 Development Contributions Scheme conditions which should be attached.
- Details of any special contribution conditions which should be attached along with detailed calculations and justification for the conditions.

In accordance with Section 48 of the Planning and Development Act 2000-2022 and the *Meath County Council Development Contribution Scheme 2016-2022*[1], the proposed development involves the provision of new buildings, meteorological masts, new pylons, renewable energy structures, which will export to the national grid and as such, in the event of permission for approval being granted by An Bord Pleanála, development contributions are applicable.

The DCS, development contributions on telecommunications masts, electricity pylons and renewable energy initiatives will be allocated 100% to Class 3 - Social Infrastructure.

The development **within Co. Meath** which is listed within the DCS 2016-2022 relates to 10 no. turbines and a portion of the 28km access track and 3.3km amenity paths and car-park.

As the MW levy for the energy generated by the 10 no. turbines in Co. Meath cannot be established until a permitted development has an accepted Grid Connection agreement in place, prior to the commencement of development. An Bord Pleanála are requested to include a condition of planning which reflects the above and as recommended at planning condition 40 below.

An Bord Pleanála are also requested to include a condition for a cash deposit/ bank bond or other such security with the Planning Authority to secure the satisfactory reinstatement of the site on cessation of the project.

The following information is extracted from the DCS.

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[5] https://www.meath.ie/system/files/media/file-uploads/2021-12/Meath%20County%20Development%20Contribution%20Scheme%202016-2022.pdf

[1] https://www.meath.ie/system/files/media/file-uploads/2021-12/Meath%20County%20Development%20Contribution%20Scheme%202016-2022.pdf

Category of Development	Floor Area (rounded to the nearest m^2)	Contribution
Renewable Energy Initiatives (export to the Grid) [7]	Per mega watt	€1,000 / 0.1 mw

[7] Applies to renewable energy initiatives which produce electricity for export to the national or international grids. Renewable energy initiatives used for domestic or on-site consumption of power shall be exempt. Where permission is sought for primary use for on-site consumption with the excess exported to the national grid, the first 0.5 mw shall be exempt from development contributions and any additional output charged at the rate for 0.1 mw thereafter (i.e. €1,000).

7.7 Conclusion and Recommendation

Wind energy development is supported by national and regional policy in the context of climate change and reducing greenhouse gas emissions. The Executive of Meath County Council and local planning policy supports the principle of the construction of wind energy development and supporting infrastructure as per the Meath County Development Plan 2021-2027. There is different potential within landscape character areas to accommodate wind turbines, telecommunication structures, etc. subject to normal planning, environmental and landscape sensitivities considerations. Notwithstanding the policy approach, issues raised in relation to the potential visual impact of the proposed 26 no. turbines (10 no. in Co. Meath) on protected views and cultural heritage sites is of particular concern to the Planning Authority and necessitate further assessment and information. Other aspects of the development including accompanying documents require further consideration as set out in the report above.

Accordingly, based on the examination of the documents accompanying this SID application, carried out by the Executive of Meath County Council, in the context of National, Regional and Local planning policy, reports and comments from Irish Water and internal departments of Meath County Council, a review of the planning application, its plans, particulars and supporting reports, this report respectfully recommends without prejudice that the following **Further Information** be requested by the Bord to ensure a complete and comprehensive assessment of the proposed development.

1. **Cumulative Impacts on Archaeological, Architectural, Cultural Heritage, Landscape, EIAR & NIS:**

(a) The Planning Authority is making the applicant and ABP aware of other renewable energy applications in the west of Co. Meath, including solar farms (MCC Planning Ref: KA161206, KA161319, 22958, 21396) to be considered within An Bord Pleanála's cumulative assessment. The cumulative impact of the proposed development, operating windfarms, permitted windfarms (not yet constructed or operational) and other large infrastructure projects in the area should also be addressed in the landscape assessment and within the EIAR.

MCC were consulted regarding the scope of the EIAR for a proposed renewable energy development comprising 8 no. wind turbines within the townlands of Cavestown and Rosmead, Kilrush Lower, Newtown, Carnybrogan, Ballinlig, Kilrush Upper, Galboystown and Clonmellon in Co. Westmeath and Co. Meath as a medium-scale wind farm in an upland area of Counties Westmeath and Meath. The proposed wind turbines have a tip height of 170m and a rotor diameter of 155m, capable of generating 52.8 MW of power and includes a 110 kV electricity substation, c.15 kilometres of site access tracks, etc.

(b) It is the opinion of the Planning Authority that the proposed development could have a significant impact on the protected views from the Hill of Tara/ Tara Complex which is included in Ireland's Tentative World Heritage List (as part of the Royal Sites of Ireland). It is recommended that An Bord Pleanála seek the advice of an independent World Heritage Expert, with specific expertise and experience in assessing World Heritage Site nominations on behalf of UNESCO, to assess whether the development could impact (either alone or in-combination with other developments) on any future nomination by the State Party to UNESCO for World Heritage Status using established international best practice.

(c) The visual and cultural heritage impact of the proposed development on the existing UNESCO World Heritage Site at Brú na Bóinne and Tara Complex (as part of the Royal Sites of Ireland) requires further consideration. The Hill of Uisneach also part of the Royal Sites of Ireland (County Westmeath) and Dún Ailinne (County Kildare) require further assessment by An Bord Pleanála.

(d) Loughcrew and Slieve na Calliagh Hills are classified as having '*exceptional*' value, of '*national/international importance'* with a '*high sensitivity*' to change. Slieve na Calliagh may be compromised due to the cumulative effects of the proposed wind turbines, other wind farm projects and other developments. The proposed development may therefore have a negative visual impact on the setting of Loughcrew Megalithic Cemetery which is contrary to HER POL 54[6] of the Meath County Development Plan 2021-2027.

(e) It is recommended that An Bord Pleanála considers the need for a revised Landscape Visual Impact Assessment (LVIA) (including photomontages), taking account of the cumulative impact of the proposed development, other permitted and proposed developments including solar farms in the vicinity of the proposed development. The following Protected Views and Recorded Protected Structures (RPS) in the Meath County Development Plan 2021-2027, etc. in the immediate visibility context of the site and associated with the Boyne Valley and the World Heritage Sites should be included in the assessment. Additional prominent locations outside Co. Meath are also referenced:

Protected Views	• 30 – Hill of Slane – Panorama (north of Slane village) • 59 – Panoramic views in all directions from top of Knowth tumulus. Extensive view across a working countryside (south-east of Slane village) • 87 a, b, c, d – Newgrange Passage Tomb – Panorama (south-east of Slane village) • 88 – Dowth Passage Tomb – Panorama (south-east of Slane village) *Others include:* • 52 – Hill of Ward – Panorama (east of Athboy and within the study area of the LVIA) • 47 – Skryne Church – Panorama – of National Significance (east of the Hill of Tara) *Protected Views in the immediate vicinity of the site:* • 79 – View to the north-east and south-west – View of Boyne Valley from Scarrif Bridge • 78 View north and south – View of Boyne Valley from Derrindaly Bridge).
RPS	• 91078 Woodtown House • 91193 Ballivor Health Centre

[6] '*To protect the archaeological heritage, rural character, setting and amenity of the Tara landscape and Loughcrew and Slieve na Calliagh Hills'.*

	• 91194 St Columbas RC graveyard • 91195 Saint Kineth's Church of Ireland Church • 91196 Saint Columbanus' Roman Catholic Church • 91197 Water Pump • 91198 Parkstown • 91292 Scarriff Bridge • 91388 Foxbrook • 91379 Killyon Manor which are within the visibility context of the development.
Other prominent sites in the area	• Bracklyn Estate (Co. Westmeath) is a demesne landscape located close to the west of the northern turbine cluster; and • Royal Canal c. 3.7km to the south of the site.

(f) It is noted that colour-coding relating to theoretical visibility of turbines at different distances has not been presented at 13-1 as stated in Section 13.3.2. This should be requested from the applicant.

2. Noise, Vibration & Shadow Flicker

(a) Noise and Vibration: The Environment (General) Department of Meath County Council in relation to noise, states that '*the potential for the generation of low frequency noise 20-200Hz is a risk as such the applicant should be required to fully investigate the potential for low frequency noise on noise sensitive receptors within the area of the development and proposals for the mitigation of same'*. An Bord Pleanála are requested to consider this matter and where it considers appropriate, seek further information in this regard.

(b) 217 dwellings are within 1.7km of the turbine locations. Using a Windfarm software package, the applicant has submitted that the daily threshold of over 30 minutes shadow flicker may potentially be exceeded at *80 properties* and the annual threshold of over 30 hours for shadow flicker is predicted to be exceeded at *12 properties* once the regional sunshine average factor has been considered. An Bord Pleanála are requested to consider the impact of shadow flicker of the proposed development on the residences in the vicinity of the development; and where it considers appropriate, seek further information in this regard.

3. Biodiversity/ Ornithology:

(a) An Bord Pleanála is requested to invite the applicant to submit details regarding lighting at the proposed development and in particular, the address the impact of same on birds/ bats, etc. This should include aviation lights on wind turbines, sub-station compound lighting proposals, etc. All lighting should be directed inward to the development, avoiding spill/ glare into the surrounding environment. Further consideration to lighting may need to be given by An Bord Pleanála in its NIS/ EIAR. Section 6.1.2 of Appendix 6-2 Bat Survey Assessment refers to guidance in the relation to the use of lighting.

(b) The sighted locations of Kingfisher are within and surrounding the site. Turbine no. 21 is in the flightline of one incidental sighting (according to Figure 4-4d). An Bord Pleanála is requested to consider this matter in the context of potential impact on the Kingfisher.

(c) It is noted that the 'Overview Habitat Map' (Figure 4-2 in the NIS) has a boundary which does not match the application site, therefore there may be some mapping information missing. An area identified as 'bog woodland (WN7)' under Fossitt Classification corresponds with an area of 'Alkaline Fen (7230)' (as identified under Figure 4-1 and Article 17 Mapping).

(d) An Bord Pleanála is advised to consider the Draft Cutaway Bog Rehabilitation and Decommissioning Plans 2022 (EIAR Appendix 6-6) and the impact of the proposed development on the restorative/ permanent rehabilitation plans which were prepared in accordance with Condition 10.2 of IPC Licence Ref. P0501-01. The Executive Summary of the Ballivor Draft Plan notes that peatland rehabilitation for Ballivor Bog will be carried out alongside or after the proposed windfarm construction. An indicative location of 'constraints' associated with the wind farm have been identified.

4. **Borrow Pits:** An Bord Pleanála is advised to clarify the area associated with the proposed Borrow Pit 1b, where material will be extracted. This is currently stated in the application documentation.

5. **Amenity Pathways and Carparks & Signage:** An Bord Pleanála is requested to invite the applicant to identify those paths within the site that can be safely used for the purpose of recreation, noting the stability of proposed access routes, areas close to the proposed turbine installations and areas adjoining bog ponds, drains, etc.

   A location plan layout for proposed signage could be requested (see Drawing no. 97) from the applicant.

6. **Electricity Substation Compound:** An Bord Pleanála are invited to clarify with the applicant, the size of onsite electricity substation compound, which is stated as 11,600m² (as per digital documents lodged with Meath County Council though the *printed document states 14,600m²*).

   Details pertaining to CCTV Poles/ other structure in the substation area have not been submitted and it is advised that these are requested.

7. **Material Assets:** It is noted that there is a small airstrip located in Lisclogher West to the west of the proposed development, used recreationally by model aeroplane enthusiasts (as per Section 13.4.2.2 of the EIAR). There is no reference to this under Material Assets. ABP are directed to Section 14.2.7.2 Aviation and the conditions identified by the Irish Aviation Authority and the Department of Defence.

If planning permission is granted, please have regard to the recommended Schedule of Conditions as set out below.

7.7.1 Schedule of Conditions

The comments from the various internal sections/ departments have sought specific planning conditions, in the event of a grant of permission, and An Bord Pleanála is respectfully requested to attach the conditions listed below. While the conditions relate exclusively to the

element of the development proposed in Co. Meath, there is inevitably some overlap with the part of the site in Co. Westmeath.

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application to An Bord Pleanála on the 05/04/2023, except as may otherwise be required to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

   Reason: In the interest of clarity and proper planning and sustainable development.

2. The Applicant shall appoint a Community Liaison Officer for the all stages of the development and shall be the first point of contact for residents seeking information, making a complaint, etc. and shall be responsible for discharging information in relation to the project to residents.

   Reason: In the interests of amenity and orderly development of the site

3. The period during which the development hereby permitted may be carried out shall be ten years from the date of this permission.

   Reason: In the interest of clarity and having regard to the nature and extent of the proposed development, it is considered appropriate to specify a period of validity of this permission in excess of five years.

4. (a) The date of decommissioning of the wind turbines and ancillary wind farm infrastructure in Meath shall be notified to, and established in writing with, the Planning Authority. This permission shall be for a period of 30 years from the said date of commissioning of the wind farm. The wind turbines and ancillary infrastructure shall be removed at the end of this period of 30 years unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

   (b) Amenity tracks and associated amenity car-parking and bicycle racks shall be retained in situ, following the 30-year permission.

   Reason: In the interest of clarity and proper planning and sustainable development.

5. This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

   Reason: In the interest of clarity.

6. Prior to the commencement of any work on site, the Applicant shall submit proposal for the final locations, design and quantity of CCTV Cameras to the Planning Authority for agreement. The revised proposals shall include the applicant's detailed justification and demonstration of best practice for the installation of CCTV Cameras on site.

   Reason: In the interests of clarity.

7. All service buildings for this development shall be required to integrate into the landscape. A matt dark green paint shall be applied on all exposed metal work, service buildings, cabins, gates and fences. The developer shall agree finish details in writing with the Planning Authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

   Reason: In the interests of visual amenity and the proper planning and sustainable development of the area.

8. (a) All exposed metal work, service buildings, cabins, gates and fences shall be painted matt dark green colour, to the satisfaction of the Planning Authority. The colour and finish of the proposed turbines and associated developments shall be agreed in writing with the Planning Authority, prior to the commencement of development. The applicant shall submit drawings illustrating the final structure details (i.e. blade length) to be installed on site.

   (b) All lighting shall be directed inward to the development, avoiding spill/ glare into the surrounding environment.

   (c) A location plan layout for proposed signage (as per Drawing no. 97) shall be submitted to the Planning Authority, prior to the commencement of development, for its written agreement.

   Reason: In the interests of visual amenity and the proper planning and sustainable development of the area.

9. The applicant shall provide and arrange for the continuous and indefinite maintenance of the entire wastewater holding tank installed, which shall be maintained in accordance with the manufacturer's instructions with relevant EPA Code of Practice. The installation and maintenance of this holding tank shall be such as to not give rise to any polluting matter entering any waters, tidal waters or any part of any river, stream, lake, canal, reservoir, aquifer, pond, watercourse or other inland waters, whether natural or artificial, or any contiguous to those mentioned which for the time being is dry.

   Reason: In the interests of public health and to provide for the protection of the environment.

10. (a) The mitigation measures and monitoring identified in the Environmental Impact Assessment Report, Natura Impact Statement, Construction Environment Management Plan and other particulars submitted with the planning application, shall be implemented in full by the developer, except as may otherwise be required in order to comply with the following conditions. The developer shall appoint persons with appropriate ecological, hydrological and construction expertise such as Environmental Manager/ Ecological Clerk of Works and Hydrologist to ensure that the mitigation measures identified in the above documents are implemented in full during the pre-construction, construction stage and post construction phases to advise on, oversee and monitor mitigation measures. Monitoring shall be carried out for a minimum of 7 years post construction.

    (b) The proposed Habitat Management and Enhancement Plan should be implemented in full, in the event of a grant of permission.

Reason: In the interest of clarity and the protection of the environment during construction and operational phases of development.

11. Mitigation measures for the management of the impacts of Shadow Flicker as set out in the Environmental Impact Assessment Report and which are consistent with 2006 Wind Energy Guidelines shall be implemented by the developer within on year of the wind turbines becoming operational.

    Reason: In the interest of protection of residential amenity.

12. Trees and hedgerows shall not be removed during the nesting season (i.e. March 1st to August 31st) in accordance with the Wildlife Act (as amended). Replacement hedgerows shall be of native species.

    Reason: In the interest of avian ecology and visual amenity.

13. All landscaping shall take place in the 1st planting season upon commencement of development and shall be in accordance with the plans and particulars as submitted with this application. The landscaping and screening shall be maintained at regular intervals. Any trees or shrubs planted in accordance with this condition which is removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those originally required to be planted.

    Reason: To protect the rural character of the area.

14. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall:

    (a) Notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,

    (b) Employ a suitably-qualified archaeologist in advance of construction works to complete an archaeological assessment of the project site to determine the location, date, nature and extent of any archaeological sites or features. This work will feed into an Archaeological Mitigation Strategy Document that will determine how any archaeological remains are either preserved in situ or preserved by record.

    Machine-based trial trench investigations of any areas subject to development are required. Particular attention to be paid:
    - to potential surviving previous county boundary markers,
    - the areas north and south of the R156 (which may contain trackways),
    - proposed turbine bases and access roads.

    If the advance works show nothing of archaeological significance, construction works shall be monitored, as stray finds (including human remains) are always a possibility. All finds and reports shall be lodged with the National Monuments Service and the National Museum of Ireland.

(c) The suitably-qualified archaeologist shall monitor all site investigations and other excavation works and prepare a report on the results of such monitoring to be submitted to the Planning Authority and to the Department of Arts, Heritage and the Gaeltacht.

(d) Employ a suitably-qualified palaeo-environmental specialist to complete a programme of palaeo-environmental research on the whole area of the wind farm. The palaeo-environmental specialist shall guide research under the general supervision of the archaeologist.

Should archaeological remains be discovered on the site during advance or construction works, the palaeo-environmental specialist shall advise on appropriate sampling and methodologies for preservation in situ or by record.

(e) A full written and drawn survey of the Bord na Móna railway in its entire, current condition, including all associated structures and any abandoned rolling stock shall be completed by a suitably-qualified archaeologist.

(f) Two folklore surveys shall be completed by a qualified folklore specialist: one from the population on the Meath side and one from the population on the Westmeath side. A baseline for this survey will be the Schools Folklore collection on duchas.ie. Folklore is any oral histories up to the present day.

(g) Results of the works outlined above shall be published in digital and/ or hard copy.

(h) Provide arrangements, acceptable to the Planning Authority, for the recording and removal of any archaeological material which the authority considers appropriate to remove.

(i) A comprehensive report on any completed archaeological excavation shall be prepared and submitted to the Planning Authority and to the National Monuments Service within a period of six months or within such extended period as may be agreed with the Planning Authority.

Reason: To ensure the continued preservation in situ or by record of all archaeological and historical material, features or objects, to conserve the archaeological heritage of the site, it is considered reasonable that the developer should facilitate the preservation and protection or the preservation by record of any archaeological features or materials which may exist within it.

15. Prior to commencement of the development, the developer shall submit the following for agreement, to the satisfaction of the Planning Authority:

(a) Road safety audits in respect of works to be carried out on the local road network.

(b) Details of all signage, crash barriers, poles etc. to be removed on the local road network to facilitate the abnormal loads to be delivered on site.

Reason: In the interests of Road Safety and Traffic Management

16. Prior to the commencement of development, a Traffic Management Plan for the construction phase shall be submitted for the agreement of the Planning Authority. The traffic plan shall incorporate the following:

    (a) Details of the road network/haulage routes and the vehicle types to be used to transport materials and turbine parts to and from the site and a schedule of control measures for exceptionally wide and heavy delivery loads.

    (b) A condition survey of the roads and bridges along the haul route shall be carried out at the developer's expense by a suitably qualified person both before and after the construction of the proposed development. This survey shall include a schedule of required works to enable haul routes to cater for construction related traffic. The extent and scope of the survey and the schedule of works shall be agreed prior to the commencement of development.

    (c) Detailed arrangements whereby any construction damage which arises shall be made good and completed to the satisfaction of the planning authority.

    (d) Detailed arrangements for the protection of bridges to be crossed.

    (e) Detailed arrangements for temporary traffic arrangements/control on roads and protocols to keep residents informed of upcoming traffic related matters, temporary lanes/road closures and delivery of turbines.

    (f) A phasing programme indicating the timescale within which it is intended to use each public route to facilitate the construction of the proposed development. In the event that the proposed development is being developed concurrently with any other wind farm in the area the developer shall consult with and arrange suitable traffic phasing arrangements with the planning authority.

    Reason: In the interest of traffic safety and proper planning and sustainable development.

17. Within three months of the cessation of the use of each public road and haul route to transport material to and from the site, a road survey and scheme of works detailing works to repair any damage to these routes shall be submitted to and agreed in writing with the Planning Authority. All works arising from the aforementioned arrangements shall be completed at the developer's expense within 12 months of the cessation of each road's use as a haul route for the proposed development.

    Reason: In the interest of traffic safety and proper planning and sustainable development.

18. The public road shall be maintained clean and free of any dirt or debris created as a result of the proposed development.

    Reason: In the interest of traffic safety and proper planning and sustainable development.

19. (a) All essential infrastructure shall be located outside Flood Zone A and Flood Zone B.

    (c) The Finished Floor Level (FFL) of any essential infrastructure such as 38kV Compound, Battery storage and Inverter/Transformer to be a minimum 500mm above the 1 in 1000-year critical flood level.

    (d) The applicant shall ensure that there shall be no development within 10 metres of the watercourses on site to facilitate ongoing maintenance by the OPW or other parties unless otherwise agreed with the OPW and such agreement shall be submitted in writing to the Planning Authority, in advance of the commencement of development on the site.

    (e) All access tracks located in Flood Zones A & B shall not be raised above the local ground level so as not to remove any flood plain storage. Tracks within Flood Zones A & B shall be delineated with a marker pole which shows the depths of the 1 in 100-year and 1 in 1000-year events.

    (f) The Applicant shall carry out all works in accordance with recommendations in the Inland Fisheries Ireland *Guidance Document on Protection of Fisheries during Construction Works in and adjacent to Waters*, 2016. Compliance with this condition shall be to the satisfaction of the Planning Authority.

    Reason: In the interest of environmental protection and the protection of water quality.

20. The Applicant shall update accordingly and communicate to all site personnel the Construction Environmental Monitoring Plan (CEMP). The CEMP shall include but not be limited to operational controls for dust, noise and vibration, waste management (to include contaminated materials encountered), protection of soils and groundwaters and surface waters (to include a proposal for a surface water monitoring programme to be undertaken during the construction phase), protection of flora and fauna, site housekeeping, emergency response planning, site environmental policy, environmental regulatory requirements and project roles and responsibilities. The CEMP shall also address extreme of weather (drought, wind, precipitation, temperature extremes) and the possible impacts on receptors and mitigation of same. The CEMP shall be treated as a live document.

    Reason: In the interest of environmental protection and orderly development.

21. The Applicant shall prepare and implement a Waste Management Plan (WMP) for the proposed development. The WMP shall include but not be limited to project description, legislation requirements, demolition waste, construction phase waste, categories of construction waste, anticipated hazardous waste, non-construction waste, segregation of waste streams, estimated waste generated, waste hierarchy and adherence to same, roles and responsibilities and communication of WMP, details of recovery and disposal sites, details of waste hauliers, record keeping and documentation, waste audit procedures. The WMP shall be prepared in accordance with "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects" (2006) and "Guidelines for the Management of Waste from National Road Construction Road Projects" (Rev. 2014), the WMP shall also take cognisance of the current Regional Waste Management Plan in particular to the upper tiers of the Waste Hierarchy. All waste generated on site shall be recovered/ disposed of at an authorised facility and transported

by an authorised collector. The WMP shall be treated as a live document and communicated to all relevant personnel.

Reason: In the interest of environmental protection and orderly development.

22. Dust emissions at the site boundaries shall not exceed 350mg/m^2/day. All mitigation measures in respect of dust as referenced in an updated CEMP shall be fully implemented.

Reason: In the interest of environmental protection and orderly development.

23. The applicant shall investigate the potential for the generation of low frequency noise 20-200Hz and its impact on noise sensitive receptors within the area of the development. The applicant shall submit proposals for the mitigation of same, for the written agreement of the Planning Authority, prior to the commencement of development.

Reason: In the interest of public health and environmental protection.

24. All refuelling shall take place in a designated refuelling area at least 30m from watercourses, details of same to be included in the updated Construction Environmental Management Plan (CEMP).

Reason: In the interest of environmental protection and orderly development.

25. All hydrocarbons, chemicals, oils, etc. shall be stored in a dedicated bunded area at least 30m from watercourses and capable of storing 110% of the container/tank capacity.

Reason: In the interest of environmental protection and orderly development.

26. The applicant shall ensure adequate supply of spill kits and hydrocarbon absorbent pads are stocked on site.

Reason: In the interest of environmental protection and orderly development.

27. Burning of waste, including green waste, is prohibited on site.

Reason: In the interest of environmental protection and orderly development.

28. The Applicant shall provide to the Local Authority, on completion of the works, a comprehensive report detailing the management of all waste streams generated during the construction and commissioning stages of the project. This shall include but not be limited to type of waste streams, amount of each waste stream generated, destination of waste streams (including final destination if applicable), percentage of waste re-used, recycled, recovered and disposed, and prevention and minimisation initiatives undertaken.

Reason: In the interest of environmental protection and orderly development.

29. The construction works shall be carried out in accordance with the noise guidance set out by BS 5228-1:2009 Code of Practice for Noise and Vibration Control on Construction and

Open Sites and the NRA Guidelines for the treatment of Noise and Vibration in National Roads Schemes.

Reason: In the interest of residential amenity.

30. During the construction phase noise levels at noise sensitive locations shall not exceed 70dB(A) between 0700 to 1900 hours Monday to Friday and 0800 to 1400 hours Saturday and 45dB(A) at any other time. Noise exceedance activities must be agreed in writing with Meath County Council prior to the activity taking place. For the operational phase the applicant should be required to assess the potential impact of the special audible characteristics and noise limits associated with the development on NSR's as referenced in the DRAFT revised Wind energy Development Guidelines December 2019.

    Reason: In the interest of environmental protection and orderly development.

31. The Applicant shall, during the construction stage, maintain a Complaints Register to record any complaints regarding but not limited to noise, odour, dust, traffic or any other environmental nuisance. The Complaint Register shall include details of the complaint and measures taken to address the complaint and prevent repetition of the complaint.

    Reason: In the interest of environmental protection and orderly development.

32. All excavated material stored onsite shall be setback a minimum of 5 metres back from the drainage ditches/watercourses onsite. A silt fence shall also be installed at a minimum of 3 metres from the drainage ditches/watercourses onsite and shall be maintained until vegetation has been re-established.

    Reason: In the interest of environmental protection and orderly development.

33. A preconstruction invasive species survey shall be carried out to identify the presence of any invasive species and in the event that a full Invasive Species Management Plan shall be developed.

    Reason: In the interest of environmental protection and orderly development.

34. A pre-site clearance survey for protected species shall be carried out across the site a maximum of 3 months prior to site clearance. This shall include an assessment for bat roosts. The applicant shall liaise with the NPWS for appropriate guidance. Any works relating to bats may only be carried out under a licence issued by the NPWS.

    Reason: In the interest of environmental protection and orderly development.

35. The site shall be maintained in a neat and tidy condition during the operational phase, with stockpiling of damaged turbine component parts, etc. permitted on site, unless approved in writing with the Planning Authority.

    Reason: In the interest of environmental protection and orderly development.

36. Prior to commencing construction on site, the following issues shall be addressed to the satisfaction of Meath County Council Water Services Department.

(a) All work shall comply fully with the Greater Dublin Regional Code of Practice for Drainage Works Volume 6.

(b) The applicant shall monitor any existing wells within 500m of Borrow Pit No. 2. The applicant shall be responsible for any remedial actions required in the event that quarry activities impact existing wells in the vicinity.

(c) The applicant shall install permeable paving to all permanent car parking spaces.

(d) Prior to commencement the applicant shall submit consent for the proposed culvert upgrades from Office of Public works under Section 50 of the Arterial Drainage Act.

Reason: In the interest of environmental protection and orderly development.

37. If the proposed development causes interference with telecommunications signals in the area, effective measures shall be implemented to minimise such interference. Details of these measures, which shall be at the developer's expense, shall be submitted to, and agreed in writing with, the Planning Authority prior to commissioning of the turbines, and following consultation with the relevant authorities.

    Reason: In the interest of orderly planning and residential amenity.

38. The developer shall liaise with the Transportation Department of Meath County Council with respect to any telecommunications ducting required to be put in along the public road. Mapping details shall be provided to Meath County Council.

    Reason: In the interests of proper planning and sustainable development.

39. Any significant works to bridges over rivers or streams shall be carried out in accordance with the National Roads Authority guidelines for the treatment of otters.

    Reason: To comply with requirements for the protection of breeding otters.

40. Prior to commencement of development, the mega-watt output of the proposed Wind farm shall be submitted to and agreed with the Planning Authority.

    The developer shall pay a contribution to the Planning Authority towards expenditure that was and/or that is proposed to be incurred by the Planning Authority in the provision and extension of social infrastructure (open spaces, recreational and community facilities, amenities and landscaping works) by the Council benefiting development in the area of the Authority, as provided for in the Contribution Scheme of Meath County Council adopted in accordance with the provisions of Section 48 of the Planning & Development Acts 2000 - 2022. Payment of the contribution shall be made prior to commencement of development unless the phasing of payments and the giving of security to ensure payment in full is agreed in writing with the Planning Authority prior to the commencement of development. The amount to be agreed, shall apply until 31st December 2023 and shall be subject to review on that date and to annual review thereafter unless previously paid. The contribution rates shall be updated effective from January 1st each year during the lifetime of the Development Contribution Scheme in accordance with the Wholesale Price

Indices - Building and Construction (Capital Goods) published by the Central Statistics Office.

Reason: The provision of such social infrastructure in the area by the Council will facilitate the proposed development. It is considered reasonable that the developer should contribute towards the cost of providing these services.

41. Prior to the commencement of development, the developer shall lodge with the Planning Authority a cash deposit, to secure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the Planning Authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the Planning Authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination. If the amount of security required by this condition has not been lodged with the planning authority within 12 months of the date of this decision, the amount required shall be adjusted in accordance with an increase in the House Building Cost Index, which occurs between the date of this decision and the date on which the condition is satisfied.

    Reason: To ensure the site is restored to a satisfactory condition.

42. (a) The identification of environmental community projects and works shall be decided upon by a community liaison committee; the composition of the committee shall be based upon equal representation of personnel from the Planning Authorities, the developer, local residents and elected members of Meath and Westmeath County Councils; any variation in the composition of the committee shall be subject to the prior agreement of the Planning Authorities.

    (b) The developer shall pay a sum of money to the Planning Authority, either annually or in such manner as may be agreed, towards the cost of the provision of environmental improvement and recreational or community amenities in the locality. The identification of such projects shall be decided by the relevant Planning Authority having consulted with the community liaison committee as provided for under (a) above. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authorities or, in default of such agreement shall be referred to the Board for determination. The amount shall be index linked in the case of phased payment. The developer shall consult with the planning authorities in this regard prior to the commencement of the development.

    Reason: It is considered reasonable that the developer should contribute towards the cost of environmental, recreational or community amenities which would constitute a substantial gain to the local community.

_____
Teresa O'Reilly,
Executive Planner.

Approved,

_____
Wendy Bagnall,
Senior Executive Planner

_____
Padraig Maguire
Senior Planner