An Bord Pleanála

Inspector's Report

ABP-314275-22

Development	Proposed development of a 110kV substation with 2 no. control buildings and associated site works
Location	In the townlands of Cummeennabuddoge (Co. Kerry) and Caherdowney (Co. Cork)
Planning Authority	Cork County Council
Applicant(s)	Knocnamork Ltd.
Type of Application	Application under the provisions of Section 182A of the Planning and Development Act 200, as amended
Prescribed Bodies	1. Department of Housing, Local Government and Heritage 2. Transport Infrastructure Ireland 3. Inland Fisheries Ireland 4. Kerry County Council 5. Cork County Council
Observer(s)	Grainne Cremins.

Date of Site Inspection	16th of June 2023
Inspector	Karen Hamilton

Contents

1.0 Introduction

1.1.1. An application has been made by Knocknamork Limited under the provisions of section 182A of the Planning and Development Act 2000, as amended ('the Act'), for the development of a 110 kV electrical substation associated electrical and other infrastructure, underground cable and all associated site works and drainage in the townlands of Cummeennabuddoge (Co. Kerry) and Caherdowney (Co. Cork).

1.1.2. The purpose of the proposed development is for a 110 kV electricity grid connection for a permitted wind/solar farm (Reg Ref 19/4972) previously granted by Cork County Council. A different grid connection was permitted with this application and the proposal now before the Board includes alterations to Reg Ref 19/4972 so as to align with this grid connection. An extension of this grid connection, for a 33 kV cable (3.6km) is currently before the Board on appeal (ABP 317406-23, Reg Ref 22816) against the refusal of permission for the 33 kV cable connection by Kerry County Council.

1.1.3. The proposed development was the subject of pre-application consultation on foot of which the Board determined on 14th of June 2022 that the proposed development would constitute Strategic Infrastructure Development.

2.0 Site Location and Description

2.1.1. The site is a linear route located within an area of forestry in the townlands of Cummeennabuddoge (Co. Kerry) and Caherdowney (Co. Cork). The subject site runs in length from east at the Ballyvouskil 220 kV Substation to the west (at Caherdowney in Co. Cork), through the upland area and commercial forestry at Cathair Dhúnaigh towards Cummeennabuddoge Co. Kerry. The subject site connects into a separate proposed 33 kV grid connection route (currently before the Board on appeal). The total length of both grid connections is 11.9km where this application is 3.6km and the 33 kV line is 8.3km in length.

2.1.2. The majority of this application is within the boundaries of Cork County Council with the substation and connection to the non-SID 33 kV at the boundary and into Kerry County Council.

2.1.3. The site is accessed to the east from the Ballyvouskil substation, at a local road which radiates west from the R582. This is a large substation with existing overhead line connections to the substation from the east and underground gable connections. The route, after connecting into the 33 kV proposed route, ends at the west at the N22. The subject site (110kV grid connection and substation) ends along the Cork/ Kerry boundary and within the townland of Cummeenndabuddoge.

2.1.4. The grid connection relates to an already permitted wind farm (Reg Ref 19/4972). There are currently wind farms located in the vicinity of the proposed grid connection, at elevated locations (Coomacheo/Curragh Windfarm).

3.0 **Proposed Development**

3.1. The proposed development would comprise of the following works associated with the grid connection.

3.1.1. Substations

- 110kV substation with 2 no. control buildings (No. 1 & No. 2),
- Associated welfare facilities, security fencing, underground cabling, wastewater holding (sealed compartment with waste removed from site) and all other works.
- It is intended this substation will remove the necessity for a 38kv substation for the permitted wind farm Reg Ref 19/4972 which is not within the subject site.

3.1.2. Underground cabling

- Underground electrical cabling for 110Kv (3.6km),
- Located predominantly along existing forest tracks with some of the site along agricultural lands.
- The cable circuit will include power ducts, communication fibre ducts and earth wire laid in an excavation depth of c.1.3m. The exact configuration of cabling is set by electrical engineers at the design stage.

3.1.3. Access and new road

- New access roads (c. 5.6km) will include c.5.2km of the underground cabling between the proposed substation and the existing Ballyvouskil substation.

3.1.4. Borrow Pit

- Borrow pit will be located c. 50m to the southeast of the new substation and an extension of the borrow pit permitted under Reg Ref 19/4972.
- The borrow pit is c. 13,094m^2 in area.
- The borrow pit will supply the majority of the rock and hardcore material required for the proposal.

3.1.5. Forestry Felling and replanting.

- c. 21.7 ha of commercial forestry will be permanently felled at the substation location.
- The works will be subject to a tree felling licence on application to the Forest Service.
- Replanting of the c. 21.7 ha will occur throughout any lands under the control of the Forest Service.

3.1.6. All associated site development works, drainage and apparatus.

3.1.7. The proposal includes amendments to a wind farm development (Ref No. 19/4972) permitted by Cork County Council to accommodate this grid connection.

3.1.8. The documentation associated with the application was placed on a dedicated project website: www.KnocknamorckSID.com .

4.0 Planning History

There is a substantial amount of planning history in the vicinity with regard wind farms, grid connections etc. The following proposal are considered the most relevant to this proposed development.

4.1. Current Applications

ABP 317406-23 (Reg Ref 22/816 Kerry County Council)

The file is currently on appeal with the Board.

Permission **refused** for underground electrical cabling of 33kV and associated upgrade of works which relate to the 110 kV network, windfarm and the planning application with Cork County Council. The reason for refusal relates to the impact of the proposal on the water quality downstream and the potential impact on the Killarney National Park, McGillycuddy Reeks and Caragh River Catchment SAC.

Reg Ref 22/5791 (Cork County Council)

Permission granted for the upgrade of electrical cabling 33kV and associated amendments to Reg Ref 19/4972 and all other associated works. This site are overlaps with the area currently on appeal (ABP 317406-23 (Reg Ref 22/816).

ABP 314602-22

Strategic Infrastructure Development application currently before the Board for a wind farm development of 14 turbines with 110 kV electrical substation and all related site works and ancillary development. The proposed cabling and/or connection associated with the wind farm overlaps with the proposed development.

4.2. Previous Applications

Reg Ref 19/4972 (Cork County Council)

Permission granted for a wind farm with 7 no turbines with a blade height of up to 150m, up to 70,000m^2 solar photovoltaic array, 38kv substation and all other associated works.

Reg Ref 18/4182 (Cork County Council)

Permission granted for a battery energy storage facility which will comprise of rechargeable battery units contained in up to 39 No. 40 foot containers on site and the associated development of unit substations, a 110 kV substation and associated site works.

Reg Ref 18/6438 (Cork County Council)

Permission granted for the construction of one no ± 100 Mvar STATCOM transformer one (1) no. auxiliary transformer, three (3) no. reactors, one (1) no. outdoor cooling bank, control and valve building (268m^2), underground connection to existing ESB substation and additional associated works.

Reg Ref 20/5281 (Cork County Council)

Permission granted for EirGrid plc at the existing ESB Ballyvouskill 200/110 kV substation for an additional (1) harmonic filter, one (1) HV circuit breaker (including CT and VT), one (1) MV disconnector and earth switch, two (2) cable sealing ends, three (3) additional lightning masts (approximately 25m high) and other associated works.

4.3. Section 5 Referrals

ABP 306431-20

Whether or not the construction of 220 kV Shunt Reactors and associated equipment within the existing Ballyvouskill 220/110 kV Electricity Substation constitutes exempted development.

ABP decision: Is Development and is Exempt Development

5.0 Policy Context

5.1. National Policy

5.1.1. National Planning Framework (NPF)

The National Policy Position establishes the fundamental national objective of achieving a transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050. This will be achieved by harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar.

- National Strategic Outcome NSO8 which seeks a Transition to a low carbon and climate resilient economy. It is stated that “the National Climate Policy Position establishes the national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. This objective will shape investment choices over the coming decades in line with the National Mitigation Plan and the National Adaptation Framework. New energy systems and transmission grids will be necessary for a more distributed, renewablesfocused 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 to the major sources of demand".

- National Policy Objective (NPO) 55 seeks to "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".

5.1.2. **Climate Action Plan 2023**

The Climate Action Plan (CAP) 2023 was adopted in December 2022 and follows a number of predecessors which arose following the declaration of a climate and biodiversity emergency by the Irish Government.

The Plan seeks to identify how Ireland will achieve its 2030 targets for carbon emissions by sector and through a series of actions.

The overarching requirement in the Climate Action Plan as they relate to electricity require transformational policies, measures and actions, and societal change to increase the deployment of renewable energy generation, strengthen the grid, and meet the demand for flexibility in response to the challenge.

The Plan seeks to reduce the State's greenhouse gas emissions by 51% by 2030. One of the most important measures increasing the proportion of renewable electricity to up to 80% by 2030, including a target of 9 GW from onshore wind, 8 GW from solar and at least 5 Gigawatts of offshore wind energy by 2030.

5.1.3. **The Climate Action and Low Carbon Development (Amendment) Act 2021**

The Climate Action and Low Carbon Development (Amendment) Act 2021 (Climate Act, 2021), commits Ireland to a legally binding 51% reduction in overall greenhouse gas emissions by 2030 and to achieving net zero emissions by 2050. As part of its functions the Board must, in so far as practicable, perform its functions in a manner that is consistent with the most recent approved climate action plan, most recent approved national long term climate action strategy, national adaptation framework, sectoral plans, furtherance of the national climate objective and the objective of

mitigating greenhouse gas emissions and adapting to the effects of climate change in the State[1] .

5.1.4. Wind Energy Development Guidelines for Planning Authorities (2006)

Chapter 6 relates to the aesthetic considerations in siting and design. Regard should be had to profile, numbers, spacing and visual impact and the landscape character. Account should be taken of inter-visibility of sites and the cumulative impact of developments.

5.1.5. Draft Revised Wind Energy Development Guidelines 2019

The department issued guidelines for wind energy development in 1996, superseded by guidelines in 2006. The 2019 where intended to supersede the 2006 guidelines but a full version of guidelines has yet to be formally published. These draft guidelines provide reference to a lot of best practice and updated guidance for assessing wind energy development.

- Chapter 5 – considering an application for wind energy development. A planning authority may consider some if not all of certain matters, inter alia, community engagement, grid connection, geology and ground conditions, site drainage and hydrological effects, land scape and visual, ancillary, natural heritage etc.

5.2. Regional Policy

5.2.1. Southern Regional Spatial and Economic Strategy (RSES)

- The Regional Spatial and Economic Strategy sets out a strategy to implement the NPF in the Southern Region.
- RPO 99 Renewable Wind Energy: Support for renewable energy sources
- Section 8.2: Support for renewable energy sources and requirements for transmission and distribution infrastructure.

[1] Section 15 (1) of the Climate Action and Low Carbon Development Act 2015 (as amended)

5.3. **Local Policy**

5.3.1. **Kerry County Development Plan (KCDP) 2022-2028**

5.3.2. Landscape Designation

The site is located in an area designated as visually sensitive area (Map 0)

Section 11.6.3.1 of the development plan provides guidance on the appropriate development within these areas whereas they must be satisfactorily integrated into the landscape.

Views and Prospects on either side of the N22 after the Cork/ Kerry border.

5.3.3. Energy

Chapter 12 includes the council's policy in relation to Energy.

Policy KCDP 12-1: supports the facilitation of energy provision form relivable and renewable energy sources whilst also seeking to maintain biodiversity, archaeology and built heritage, landscape and residential amenity etc.

5.3.4. Transmission Grid

KCDP 12-9: Facilitate electricity infrastructure.

KCDP 12-7: Facilitate enhanced generation capacity and associated networks.

KCDP 12-8: Ensure the siting of power lines is managed in line with the natural and built environment.

KCDP 12-9: Supports EirGrids roadmap plan subject to other considerations.

KCDP 12-10: Grid connection routing options should safeguard the strategic function of the national road network.

KCDP 12-11: Power lines should be sited to avoid any adverse impact on sensitive landscaped and Natura 2000 sites.

5.3.5. Wind Maps

Volume 4: No. 5 Wind Zoning

5.3.6. **Cork County Development Plan (CCDP) 2022-2028**

5.3.7. Landscape Designation

The site is located is landscape character type: Ridged and Peaked Upland.

Designated scenic route to the south (S22) Road from Ballyvourbey to Mullaghanish to Caherdowney

GI 14-9 Landscape

a) Protect the visual and scenic amenities of County Cork's built and natural environment.

b) Landscape issues will be an important factor in all land-use proposals, ensuring that a pro-active view of development is undertaken while protecting the environment and heritage generally in line with the principle of sustainability.

c) Ensure that new development meets high standards of siting and design.

d) Protect skylines and ridgelines from development.

e) Discourage proposals necessitating the removal of extensive amounts of trees, hedgerows and historic walls or other distinctive boundary treatments.

5.3.8. Renewable Energy

ET 13-4: Wind Energy

- Facilitate renewable energy production in line with national targets.

ET 13-5: Wind Energy Projects

a) Support a plan led approach to wind energy development in County Cork through the identification of areas for wind energy development. The aim in identifying these areas is to ensure that there are minimal environmental constraints, which could be foreseen to arise in advance of the planning process.

b) On-shore wind energy projects should focus on areas considered 'Acceptable in Principle' and 'Areas Open to Consideration' and generally avoid "Normally Discouraged" areas as well as sites and locations of ecological sensitivity.

ET 13-7: Open to Consideration

Commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on:

- Residential amenity particularly in respect of noise, shadow flicker and visual impact;
- Urban areas and Metropolitan/Town Green Belts;
- Natura 2000 Sites (SPA's and SAC's), Natural Heritage Areas (NHA's), proposed Natural Heritage Areas and other sites and locations of significant ecological value.
- Architectural and archaeological heritage;
- Visual quality of the landscape and the degree to which impacts are highly visible over wider areas.

In planning such development, consideration should also be given to the cumulative impacts of such proposals.

ET 13-9: National Wind Energy Guidelines

- Development of on-shore wind should be designed and developed in line with the 'Planning Guidelines for Wind Farm Development 2006' and 'Draft Wind Energy Development Guidelines 2019" and any relevant update of these guidelines

ET 13-10: Development in line with Best Practice

ET 13-11: Public Consultation and Community Support

Section 13.7: Development Proposals (Guidance for assessment to accompany applications)

5.3.9. Transmission Grid (reference to grid connections)

Section 13.7: Development Proposals

- Grid connection with the potential to impact the strategic function of a national road should be discussed and agreed with TII for alternative routes.
- Visual impact of ancillary development (e.g., grid connection)

5.4. Natural Heritage Designations

The site is located:

- Adjacent to the Mullaghanish to Musheramore Mountains SPA (site code 004162)
- c. 1.4km to the northeast of the Mullaghanish Bog SAC (001890)
- c. 3km to the east of Killarney National Park Macgillycuddy's Reeks and Caragh River Catchment SAC (site code 000365)
- c. 4.5km to the south of the Blackwater River (Cork/Waterford) SAC (site code 002170)
- c. 6.4km to the northeast of St Gobnet's Wood SAC (site code 000106)
- c. 14.2km to the northwest of The Gearagh SAC (site code 000108) and SPA (site code 004109)
- c.10km to the northeast of Old Domestic Building, Curraglass Wood SAC (002041)
- c. 13 km Kilgarvan Icehouse SAC (site code 000364)

6.0 Submissions and Observations

Planning Authority

The proposal bounds both Cork County Council and Kerry County Council, therefore submissions have been received from both Planning Authority (PA) as summarised below.

6.1. Kerry County Council (KCC)

6.1.1. Background

- The development location and site description are provided.
- A summary of the policy from the Kerry County Development Plan 2022-2028 is provided (i.e., landscape designations/ energy/ Transmission Grid).
- The relevant planning history surrounding the area is summarised.

6.1.2. European Designations and National Heritage Area

- The site is hydrologically connected to several European sites.

- A report from the KCC ecologist accompanied the report.
- The ecologist recommends:
  - dedicated surveys should be undertaken for the Kerry Slug and Badger,
  - evaluation for the potential impact of the proposal on the peat stability and water quality downstream.
  - If permitted, an “Annual Environmental Report’ on the Habitat Enhancement Area should be submitted to the PA.

6.1.3. Protected Structures, Architectural Conservation Areas & Archaeology

- Pre- development testing or a mix of geophysical testing should be undertaken in areas where there is to be ground disturbance.
- A specific assessment of the archaeological potential of the watercourses and the potential impact of crossing these watercourses.
- The impact of the proposal and the likely wind farm development should be outlined and assessed considering the importance on the archaeological landscape.

6.1.4. Public Surface Water Drainage Facilities & History of Flooding

- There is a history of flooding (2018/2020) in the Clydagh Valley
- The flood risk assessment in Section 8.3.6 of the EIAR could have clearly described the flood regime of the Clydagh and Flesk rivers.
- The site itself is within Flood Zone C and not at risk.
- Attenuation and stilling ponds should be maintained and de-silted to ensure attenuation capacity is maintained.
- It is noted that the environment section has not reviewed or commented on any of the geotechnical issues covering (soils & geology) including peat stability.

6.1.5. Landscape Status & Visual Impact Assessment

- The area is identified as a visually sensitive area.

- The 110kv substation, as the only above ground element of the proposal will be the most visually prominent feature.
- Cumulative impact is not deemed significant.

6.1.6. Carrying Capacity and Safety of the Road.

- No significant impact envisaged.

6.1.7. Environmental carrying capacity of the subject site.

- Dedicated surveys for the Kerry Slug and Badger should be undertaken.
- Geotechnical elements of the application (soil & geology) including peat stability should be evaluated for potential impact on water quality downstream.

6.1.8. Archaeology department

- There is potential for the site to contain unrecorded sub-surface sites and artifacts. The mitigation measures proposed are noted.
- The site area is bounded to the north by “The Paps” archaeological landscape area although no areas in included within.
- Predevelopment testing should be carried out.
- The impact of the archaeological potential of the watercourse needs to be addressed.
- The impact of the turbines has not been included in the visual impact assessment (i.e., The Paps).

6.1.9. Environment Department

- The site is within the Clydagh Valley. There was a significant landslide in 2003.
- Much of the project is within the Flesk (Kerry)_010 and the Flesk (Kerry)_020 waterbodies, the latter is considered at risk of achieving good status with hydro morphological issues identified as pressure.
- There are concerns about the risk to the water quality and the profile of the Lough Leane Catchment.

- Alternatives to the current project should be considered outside the Clydagh Valley.

6.1.10. Environmental Assessment Unit

- No surveys of the Kerry Slug or badger have been undertaken.
- A Habitat enhancement area “Annual Environmental report” should be submitted.
- An Invasive Species Management Plan should be continued for the lifetime of the project.
- The access road proposals could have been more clearly outlined (upgraded tracks etc) Appendix 4.4 indicates a lot of these are to be new roads.
- Alternatives to the current proposal should have been explored considering those alternatives given in the permitted development Reg Ref 19/4972.
- Geotechnical issues covered (soils & geology) including peat stability should be evaluated for potential impact on water quality downstream.

6.1.11. Fire & Building

- A fire safety cert is required and should engage with a competent individual/company and all building control measures to be carry out.

6.2. Cork County Council (CCC)

The submission from Cork County Council is summarised below:

6.2.1. Summary & Background

- A background of the report, pre-planning consultation, justification for the project, description of the site location and the planning history are outlined.

6.2.2. Technical Report

- Reports received from the Ecology Section states the proposal is located on highly degraded peatland habitats and based on the implementation of mitigation measures the proposal should not give rise to any significant negative impacts on the habitats or the general ecology of the area.

- No bird surveys informed the EIAR. 11 bird species have been classified as typical of the site and of local importance.
- No survey of the Kerry Slug was undertaken. It is noted from other applications (RE: Knocknamork Renewable Energy Development study area Reg Ref 19/4972) that adult and juvenile Kerry Slugs where recorded. There is a potential to impact this species.
- The Board should consider requested additional information on the presence of the Kerry Slug and draw up (in agreement with the NPWS) A Kerry Slug Management Plan.
- The identified deficiencies in the EIAR should be resolved before any grant of permission and not done by way for conditions.

6.2.3. Planning Policy and Context

- EU policy places emphasis on a robust renewable energy strategy
- National Policy: climate action plans and national development policy support renewable energy.
- The southern Regional Spatial and Economic Strategy (RSES) supports renewable energy development.
- The county plan supports the infrastructure related to the renewable energy sector.

6.2.4. EIAR

- The application is requesting an extended planning permission duration to align with the permitted Knocknamork Renewable Energy Development (Reg Ref 19/4972)
- A summary of each chapter is included and the EIAR assessed.
- In relation to Biodiversity the Heritage Officer has advised deficiencies in the EIAR should be resolved prior to any grant of permission.
- In relation to Lands, Soils & Geology and the Board should ensure that the assessment of geotechnical information is carried out be a suitably qualified person.

- No other issues of significance have been highlighted to the Board.

6.2.5. Background of proposed development

- The site is in an area open for consideration and the need for the proposed development is accepted.
- Mitigation measures indicated should ensure the significant cumulative effects do not arise during the continued operation of decommissioning phases.

6.2.6. Consideration of Alternatives

- Alternatives have been including in the design and layout.

6.2.7. Description of proposed development

- Underground cabling has two elements: 110kV connecting the existing substation and 33kV cabling to the permitted development and proposed 110kV substation.
- Peat and spoil excavation c. 98,500m^3.

6.2.8. Conclusion

- Having regard to the development plan and importance of renewable energy, it is considered the proposal complies with the policies and objectives.

6.2.9. Suggested conditions.

- Five surveys for breeding sites and resting places of protected terrestrial species. Conditions have been recommended.
- Submission of an Ecological Protection Plan (including proposal to deal with the Hen Harrier, Kerry Slug and Bats and Badgers.
- Submission of a Conservation and Habitat Management plan for the site.
- A survey for breeding birds (prior to commencement).

6.3. **Prescribed bodies**

6.3.1. Department of Housing, Local Government and Heritage

The submission from the Development Application Unit (DAU) is summarised below:

- There is a potential for unknown archaeological features/deposits to be disturbed.
- An archaeological mitigation strategy outlined in Section 11.4 of the EIAR should be included as a condition on any grant of permission (sample conditions attached).

6.3.2. Transport Infrastructure Ireland (TII)

The submission from the TII is summarised below:

- The concurrent planning applications are noted with Cork County Council (Reg Ref 19/4972) and Kerry County Council (Reg Ref 22/816).
- There is no record of TII observations for Reg Ref 19/4972.
- This application seems to rely on access proposal which are the subject of construction access from N22 national road. This access arrangement is mentioned in Section 4.4.1 of the EIAR (this application).
- As outlined to the PA (letter attached) the new direct access to the N22 (national primary route) conflicts with official policy adopted by Kerry County Council.
- Any planning permission granted should have to provide for the permanent enclosure of the temporary access on the completion of the turbine delivery and then for full reinstatement.
- The council are requested to ensure the proposed temporary access is constructed, maintained etc and sure the strategic function of the N22, levels of road user etc are maintained.
- There are several additional road safety and operational matters which should be considered:
    i. Haul route: it is unclear if the proposal proposed abnormal weight loads for any associated substation components. If so, a permit is required for all Local authorities it travels through. And/or any PPP contractors etc.

ii. TII publications: Any damage caused to the pavement on the existing national road arising from any temporary works shall be rectified in accordance with the TI pavement standards.

6.3.3. Inland Fisheries Ireland (IFI)

The submission from IFI is summarised below:

- There should be no drainage or other physical interference with the bed or bank of any watercourse without prior consultation with the IFI.
- Suspended solids or hydrocarbon contaminated site run-off waters must be controlled adequately so that no pollution of surface waters can occur.
- The following should be addressed:
  i. Identify and zone the project for environmental impact should a peat slip occur.
  ii. Set out contingency plan should a peat movement occur.
  iii. Set out a plan for the control of silt in such a scenario, including measures in place at the initial stage of construction.
- Works should be carried out in accordance with the IFI guidelines.
- If a water course is being bridged/ culverted a fish pass must not be obstructed, the original slope of the riverbed maintained, use of bridges preferred instead of culverts and all instream works to be caried out in July-September period.

6.4. **Third Party Observations**

One third party submission was received from a resident of Knocknagoshel North Co. Kerry (> 60km north of the site). The issues raised are summarised below:

- Concerns relating to planning application Reg Ref 19/4972.
- There is concern in relation to the number of consents and easements that Knocknamork Ltd have given supporting Reg Ref 19/4972.
- The site notices have not been erected on each landowner's folio site and to grant permission for this large infrastructure development would be illegal.

- There is practice of wind farm developers applying for a grid cable and not received the consents form the landowners.
- The EIAR and NIS are not acceptable if the landowners have not given consent prior to assessment of both reports.
- The impact on landowner properties would have to be individually assessed.
- The application Reg Ref 19/4972 is not fit for purpose and should be refused.

7.0 Further Information

7.1. Request for Further Information

7.1.1. On the 07th of June 2023 the Board requested the applicant to submit addition information, in accordance with section 182A (5) (a) of the Planning and Developmetn Act, 2000 (as amended) as detailed below:

- The Board has received submissions from both Cork and Kerry County Council noting the absence of any detailed survey of the protected species Kerry Slug (*Geomalacus maculosus*) and the potential use of the site by this species. These submissions highlighted, inter alia, the presence of both adult and juvenile slugs in the permitted wind farm site (Reg Ref 19/4972). It is noted that the desk study in the Environmental Impact Assessment Report (EIAR), which accompanied the proposed development, identified the Kerry Slug as a species known to occur in the study area.
- Having regard to the submissions from the planning authority and the information in the EIAR it is considered that the Kerry Slug may be present on the site. In this regard, the applicant is requested to either submit a site survey analysis detailing the presence/absence of the Kerry Slug and/or provide justification as to the absence of any detailed survey in the EIAR.

7.2. Applicants Response to Further Information

7.2.1. The applicant responded to the further information request on the 29th of June 2023 to state that as part of concurrent planning applications in County Kerry (Reg Ref

22/816) and County Cork (Reg Ref 22/5791) dedicated Kerry Slug surveys where undertaken. The further information response includes the following:

- The Kerry Slug Survey Report and Management Plan
- Appendix 1: NPWS Kerry Slug Derogation Licence
- Appendix 2: DAU Consultation on the survey and management plan

7.3. Submissions on Further Information

7.3.1. One submission was received from Kerry County Council to state that if the proposal is to be permitted then the following should be submitted to the planning authority:

- Habitat Enhancement area “Annual Environmental Report”.
- Habitat Enhancement area monitoring and where necessary management to be undertaken to ensure no invasive species.
- A site survey for the invasive non-native plant species in accordance with a detailed Invasive Species Management Programme.
- Attenuation/settlement ponds to be adequately designed, located, and maintained for the duration of the project to ensure sediment build up is removed and surface water run-off rates are kept below pre-development levels.

8.0 Planning Assessment

Having regard to the requirements of the Planning and Development Act 2000, as amended, there are three parts to my assessment: this planning and environmental assessment and an appropriate assessment all detailed below separately in Section 8.0, 9.0 and 10.0. In the interests of brevity, I have sought to avoid undue repetition where possible, instead indicating where overlaps occur.

I consider that the key planning and environmental issues arising are as follows:

- Principle of Development and Planning Policy.
- Landowner Consent and Site Notice
- Traffic and Transport

8.1. Principle of Development and Planning Policy

8.1.1. The proposed development forms part of a currently permitted development (Reg Ref 19/4972) of a renewable energy development with consisting of 7 no turbines, solar panels and associated works. The proposal constitutes the provision of a grid connection, new 110kV substation connection to Ballyvouskil substation and for a 33kV line (currently on appeal before the Board ABP 317406-23 Reg Ref 22/816).

8.1.2. National policy (including the NPF and Climate Action Plan 2021), and regional policy (Southern RSES) include objectives to support proposals which aim to achieve a climate neutral economy. The grid connection and associated works are ancillary to the windfarm proposal.

8.1.3. The grid connection is located mainly within Cork County Council although straddles the Kerry County Council (CC) boundaries and the substation and connection for the 33kV line are within Kerry CC area.

8.1.4. The Wind Energy Strategy in Cork County Development Plan (CCDP) 2022-2028 notes the lands as being open to consideration, where consideration should be given to normal planning consideration. A small section of the site bounds lands which are designated as normally discouraged. Policy ET 13-8 indicates that commercial wind energy developments should normally be avoided in these areas which are sensitive to adverse effects unless, in exceptional circumstances adverse impacts do not arise from the proposal. I have had regard to the location of the site and undertaken an assessment in both the EIAR and NIS below on consider the location of the site and nature of the works would have no adverse impact on the area. Therefore, I consider the inclusion of a small portion of the grid connection would not have any adverse impacts and would be in compliance with Policy ET 13-8.

8.1.5. The policy of the CCDP (ET 13-4 & ET 13-5) supports a plan-led approach to the delivery of renewable energy projects with an overall aim of achieving the national targets where 80% of electricity consumption is by renewable sources by 2030.

8.1.6. The site is not located on any area designed in the Wind Energy Maps in the Kerry County Development Plan 2022-2028 although links up with the existing grid lines. Those policies in the KCDP, like the CDDP, support the delivery of renewable energy in line with national targets, subject to development management criteria.

The KCDP includes specific polices for the development of transmission grid. Electricity infrastructure will be facilitated (KCDP 12-9) where the power lines are managed in line with the natural and built environment (KCDP 12-8) and sited to avoid any adverse impact on sensitive landscape and Natura 2000 sites (KCDP 12-11).

8.1.7. The site is on an upland location comprises of mostly commercial forestry, some wind development, cut over bog and agricultural pastures. Access into the site is restricted due to its nature and location and mainly though the forestry tracks and via the Ballyvouskil substation site. The lands are not covered by any specific land use zoning objectives in either development plan. Compliance with all other relevant development plan polices and management criteria are addressed below.

8.1.8. Therefore, having regard to the nature and scale of the works as part of a permitted wind farm development, the location of the site and the national, regional, and local planning policy which supports the development of renewable energy, I consider the principle of the development acceptable.

8.2. Landowner Consent and Site Notice

Introduction

8.2.1. As stated above, the site is in an upland area where the majority of the site is Coillte commercial forestry. The proposed includes a gid connection for a permitted wind farm (Reg Ref 19/4972) to the south of the site in Cork County Council. In addition to the connection to the Ballyvuskil 220kv substation, the proposal includes a new 110kV substation to the west of the site in Kerry County Council and alterations to the permitted wind farm to accommodate this new connection.

8.2.2. One third party submission has been received which raised the impact of the wind/solar farm (Reg Ref 19/4972) which should be refused. The Board will note this wind/solar farm was granted permission by Cork County Council on the 18th of November 2019 and was not appealed to the Board. I note the cumulative impact of the proposal has been addressed in the submitted documentation and I have referred to those impacts where relevant below. Other issues raised in the third-party submission are addressed below.

Landowner Consent

8.2.3. Question 7 of the application form notes that consent from all the relevant landowners (4 detailed) has been obtained (information sheet appended to the application form). The application was accompanied by a drawing (Dwg 210732-02) illustrating all landowners in blue. The third-party appeal references the absence of any agreement from landowners for the EIAR and NIS. The landowner consent allows an applicant to submit a planning application. I note no submission has been received from any landowners raising concern regarding the consent and I consider the applicant has submitted sufficient information to allow the application to be assessed.

Site Notices

8.2.4. Four site notices were placed throughout the site at all possible access locations into the site. The third-party submission questioned the location of the site notices and considered that these should be located on individual land ownership sites.

8.2.5. The Planning and Development Regulations, 2001 (as amended) require the fixing of a site notice in accordance with article 19 to be on or near all such entrance into he site and easily visible and legible by persons using the road. I note the characteristics of the site, on an upland location, and the limited entrance roads into the site. I consider the location of the site notices appropriate to alert the public of the proposed development. The Board will note no requirement for site notices on individual landowners' plots.

8.3. Traffic and Transportation

8.3.1. The main access into the site to the east is via the Ballyvouskil 220kV substation and to the west is via forestry accessed from the N22 (national primary road). The access from the west, beside the N22 is from a portion of the old N22 which was closed following the upgrade and new route for the N22. The 110kV substation (the most western point of this application), the end of the subject site, allows a connection for the permitted development (Reg Ref 19/4972) and the 33kV line currently on appeal (ABP 317406-23 Reg Ref 22/916). The EIAR study area includes both the current SID proposal and the remaining non-SID electricity connection, which start at the N22 to the west of the study area.

8.3.2. The main access works proposed include:

Development Component	Proposed works
Turbine Delivery Route (TDR) plus site entrance works	• Widening of existing access road to 5m running surface. • Construction of new 5m access road. • Widening of existing entrance and construction of temporary track from N22.
Access road for 33kV cabling	Assumed 3m (33kV) and 2.5m (110kV) running surface with 4-5m wide development footprint.
Access road for 110kV cabling	

8.3.3. Transport Infrastructure Ireland (TII) made a submission raising concern in relation to the impact of the proposal and permitted development on the strategic functioning of the N22. The concurrent applications are noted (Cork County Council (Reg Ref 19/4972) and Kerry County Council (Reg Ref 22/816)) and the TII involvement with the permitted development questioned. It is requested that the proposed works should ensure that the strategic function of the N22 is retained and that any permitted development provides for the permanent enclosure of the temporary access on the completion of the turbine delivery and then for full reinstatement and any damage caused to the national road should be rectified to TII standards. A similar submission was made by TII on the concurrent application for the 33kV cable line (ABP 317406-23, Reg Ref 22/816).

8.3.4. The proposed development as submitted is accessed from the existing Ballyvouskil substation and via the existing commercial forestry tracks to the west. The main access to the entire site (i.e., 33kV cable route, 110kV substation and 110kV line) will radiate from the N22. Neither the Transport Section of both Cork and Kerry raised any issues with this application.

8.3.5. The Board will note the concurrent application for the 33kV line, which I have assessed in tandem with this application, includes a response to an FI request by Kerry County Council. The applicant responded to additional information relating to:

- Clarification on the frequency and time of turning movements at the access junctions of the N22.

- A Stage 1 Road Safety Audit.
- Detailed drawings of the access junctions off the N22 and clarification in relation to surface water.
- Clarification in relation to abnormal weight loads.

8.3.6. No further transport report is on file from Kerry County Council (KCC) and TII made no further observations on the file. The KCC submission to the grounds of appeal for (ABP 317406-23, Reg Ref 22/816) notes a different access (Option A and B) to the permitted development under Reg Ref 19/4972. I note the site layout for the permitted development does not include the grid connection although the EIAR assessed two options (current proposal Option B). The area engineers report notes the delivery of construction materials by two entrances, one on the N22 at Cumeenavarick at the Cork/Kerry Couty boundary and the second at Caherdowney off the R-582, both similar to this proposal. From an engineering perspective, there was no objection to the proposed development.

8.3.7. I note the overall proposal includes the upgrade of an existing access mostly to accommodate the construction of the permitted development and the grid connection. Kerry County Council response to the proposed development noted adequate carrying capacity of the road network to accommodate the proposal.

8.3.8. I note those concerns raised by TII in the submission and having regard to the location of the existing access, which is set off a layby from the N22, and the character of the existing road network (where the EIAR demonstrates adequate capacity to accommodate the additional traffic volumes). The national guidance for development on national roads[2] notes that development plan policy should restrict intensification which gives rise to additional turning movements unless in exceptional circumstances. Policy KCDP 14-29 of the Kerry County Development Plan implements this national guidance and KCDP 14-20 states that the generation of increased traffic from existing accesses to national roads will be avoided. As stated above that access onto the N22 currently exists. The works at the N22 are proposed under Reg Ref 22/816 (ABP 317406-23) and include a temporary access road for TDR through the greenfield section beside the current access (old N22). A Stage 1

[2] Spatial Planning and National Roads: Guidelines for Planning Authorities (Department of Environment, Community and Local Government), 2012.

Road Safety Audit was submitted to the application Reg Ref 22/816 as part of a further information request. This temporary access will only be used during the delivery of large turbine plant and will be fenced off at all other times. The impact of these works has been accessed in the EIAR with the proposed improvements detailed in Appendix 13.1.

8.3.9. Whilst there will be an element of intensification at this access it relates mostly to the construction traffic. The information submitted in the EIAR (further detailed in Section 9.12 below) demonstrates that the road network has adequate capacity to accommodate this construction traffic. The proposal includes, *inter alia*, the upgrade of the current access onto the N222 and the construction, then removal and reinstatement of the temporary access onto the N22 post construction. The Board will note additional details on the access are also included in the concurrent application submitted under Reg Ref 22/816 (ABP 317406-23) which I have also accessed and is currently before the Board. I consider the proposal can be adequately served from the N22 I do not consider the proposal would have a significant negative impact on the strategic functioning of the N22.

8.3.10. Having regard to the foregoing, I am satisfied that the proposed development, taken in combination with the permitted renewable energy development and other existing and permitted developments in the surrounding area, would not give rise to a traffic hazard, or endanger the safety of other road users during the construction and operational phases. This would be subject to the implementation of the EIAR mitigation measures and compliance with relevant planning conditions attached to the permitted development (Reg Ref 19/4972).

9.0 Environmental Impact Assessment

9.1. Legislation and Introduction

9.1.1. This application was submitted to the Board after 1st September 2018 and therefore after the commencement of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 which transpose the requirements of Directive 2014/52/EU into Irish planning law.

9.1.2. Schedule 5, Part 1 and Part 2 of the Planning and Development Regulations 2001, as amended set out the classes of development for the purposes of EIA.

- Section 20 of Part 1 provides that a mandatory EIAR is required for the 'Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 km'.
- Section 3(b) of Part 2 provides that a mandatory EIAR is required for 'Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more'.

9.1.3. The proposed development of a 110kV substation and connection to the existing 110kV line would not come within the projects outlined within either Annex I or Annex II to Directive 2011/92/EU as amended by 2014/52/EU nor is it a class as set out in either Part 1 or Part 2 of Schedule 5 (Planning and Development Regulations 2001, as amended) and therefore a mandatory EIAR is not required.

9.1.4. The proposal is linked to the delivery of permitted development Reg Ref 19/4972 which comprises of 7 no turbines, solar panels and associated works. Amendments to this permitted development Reg Ref 19/4972 are included to align with this electricity connection. Accordingly, the proposed development which constitutes the provision of an electrical substation and grid connection forms part of a larger renewable energy development (windfarm) at this location and falls within a class of development in Schedule 5, Part 2 (3) (1) wind farms with more than 5 turbines or having a total output of greater than 5 megawatts and accordingly an EIA is required for the proposed development.

9.1.5. The applicant has submitted an EIAR with the application. The EIAR includes the 33kV connection within the study area. This proposed connection is currently on appeal before the Board (ABP 317406-23 Reg Ref 22/816) and was accompanied by an EIAR and NIS. The EIAR "study area' extends beyond the application site, boundary depending on the requirements of individual assessments, and is larger the combined proposed development and 33kV cabling and substation. I have had regard to the impact of the cumulative impact of those works in the overall study

area, where necessary, and the permitted development by Cork County Council (Reg Ref 19/4972), further detailed below.

9.1.6. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with all relevant requirements. I have carried out an examination of the information presented by the applicant, including the EIAR, and the written submissions.

9.2. Consideration of Reasonable Alternatives

9.2.1. Chapter 3 deals with the site selection and consideration of alternatives. In line with the EPA Guidance (EPA, 2022) the applicant provided 5 alternatives to the proposal:

- Do Noting Option
- Alternative locations;
- Alternative layout Arrangement Options;
- Alternative Road Layout Options;
- Alternative Mitigation Measures.

Do Nothing Option

9.2.2. Without the grid connection the proposed wind farm could not proceed. The long-term effect would be a reduction in renewable energy supply to the national grid. The do nothing alternative has been assessed against environmental criteria. It is considered the do something and development of the permitted development and proposed development would have greater long-term positive impacts on the environment.

Alternative Locations

9.2.3. The proposed development will facilitate the permitted development. The permitted wind farm needs to connect into the Ballyvouskil 220kV substation and any alternative locations will require the redesign, land acquisition etc. Environmental

assessments also demonstrate the location will have no demonstrable harm to the environment.

Alternative Road Layout Options

9.2.4. The route follows the forestry road, avoiding the most sensitive parts of the site. Site investigations and the EIAR have informed the layout as proposed.

Alternative Grid Connection Options

9.2.5. Two underground grid connection options where assessed. The permitted development application was accompanied by an EIAR and included a connection, to the national grid, via an on-site 38kV substation to the existing Garrow 110kv substation. The grid connection offer permits a connection to the Ballyvouskil 220kV substation. The applicant notes this option is required by the electricity board.

9.2.6. There was insufficient space to accommodate the 110kV substation within the permitted development. This substation will be screened by forestry.

9.2.7. Two 110kV cable route options where assessed. Option 1 was along the forestry and public roads (c. 5.7km) and Option 2 was along the forest roads/land and agricultural lands (c. 3.6km). No dwellings where impacted by Option 2 and there was less dust emissions and noise impacts form construction, this was considered the most optimal route.

9.2.8. Two potential 33kV route options where assessed. Option A is along existing farm tracks/ permitted roads in the area of permitted road, then off road to the 100kV substation. Option B leaves the permitted development and goes in an easterly direction along a combination of existing road within the adjacent wind farm site and existing forestry tracks. Option B requires widening and upgrade if roads, 9 no extra watercourse crossings and landowner consents. Option A was considered the most optimal options.

Alternative Mitigation Measures

9.2.9. Additional options for road layouts, alternative locations for the borrow pits and mitigation measures have been considered. The choice and location of infrastructure and mitigation are such to avoid any environmentally sensitive areas to impacts.

Conclusion

9.2.10. The EIAR concluded that the proposed development represents the optimum solution taking into account access to land, cost and environmental effects. Having examined the alternatives and the options proposed I am satisfied the applicant has considered sufficient alternative and concur with the proposal as the optimum route.

9.3. Description of Project

9.3.1. The proposed development has been detailed in Section 3.0 above and is summarised as follows:

I. 110 kV electrical substation with 2 no. control buildings with welfare facilities, all associated electrical plant and apparatus, security fencing, underground cabling, waste water holding tank and all ancillary works;

II. Underground electrical cabling (110kV);

III. New access roads;

IV. Borrow pit;

V. Site Drainage;

VI. Forestry Felling; and

VII. All associated site development works and apparatus

9.3.2. Cork County Council – Planning Notice Project Description

I. Underground electrical cabling (33kV);

II. Access roads (new and upgrade of existing);

III. Amendments to the Permitted Development (Ref. No. 19/4972), including extension to the borrow pit and the omission of the 38kV Electrical Substation, 38KV underground cabling and Battery Storage compound;

IV. Site Drainage;

V. All associated site development ancillary works and apparatus

9.3.3. Kerry County Council – Planning Notice Project Description

I. Underground electrical cabling (33kV);

II. Upgrade of access junctions;

III. Access roads (new and upgrade of existing);

IV. Temporary access road;

V. Borrow pit;

VI. Site Drainage;

VII. Forestry Felling; and

VIII. All associated site development works and apparatus.

9.3.4. The EIA details the different components of the project and identifies and summarises the likely significant effects of the proposed development on the environment with respect to several key receptors in the receiving environment. It identifies the main mitigation measures and any residual impacts following the implementation of these measures. I have assessed the EIAR under the same headings as presented for ease of reference.

9.4. Population & Human health

Chapter 5 deals with Population & Human Health. Population trends of the state and local area have been provided. The study area (14 persons per km^2) is in an area which has a significantly lower than national density (70 persons per km^2). The EIAR assesses five DEDs within the study area (c. 15,000ha) and notes 331 farms employing c. 646 persons. There are tourist attractions within a 20km area, although not within the study area. There are 3 no occupied dwellings within 500m from the proposed development. The closest dwelling is 157m to the north of the proposed road upgrade works at the nearest point and the closest dwelling to the 110kV substation is c.2.2km.	
Submissions	**Concerns raised**
None	None
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	

Health & Safety of works during construction. Increase in need of skilled employees and specialists. Increase in noise levels because of heavy machinery. Impact on nearby residential properties due to dust emissions from extraction and movement of materials.	Compliance with all health and safety legislation. Mitigation measures to restrict hours of deliveries, noise muffling equipment etc will prevent any significant impact. Minimal transportation of material to the site, and use of onsite aggregate materials. Use of best practice measures including, dust suppression will reduce any impacts. There is limited impact due to the absence of properties in the vicinity. The impact will be imperceptible due to those mitigation measures to prevent excessive dust emissions.
Operation Phase	
The electric and magnetic fields associated with the operation of the cable. Impact on residential amenity by way of noise, dust, visual and traffic impacts	Compliance with all international guidelines set by the international Commission on Non-Ionising Radiation Protection (ICNIRP). Monitoring of sites to ensure access is restricted and warning signs are maintained. Detailed assessments in Chapter 10 (noise) 12 (Visual) and 13 (Traffic) highlight mitigation during construction. The operation will have no negative impact.
Residual Effects	

There will be some increase in noise, dust & emissions during construction and mitigation but not significant due to the implementation of mitigation measures
Cumulative Effects
Cumulative effects of the proposed and permitted developments (wind farm) are detailed in Chapter 2 with minor impacts on population & human health relating to the noise, landscape & visual and traffic, none are predicated to be significant during operation.
Conclusion
No written submissions were made in relation to population & human health. I am satisfied that any impacts identified in this section of the report have been appropriately addressed in terms of the application and that no significant adverse effect on population & human health is likely to arise

9.5. Biodiversity

Chapter 6 deals with Biodiversity. An Ecological Impact Assessment informed the assessment. Detailed surveys on habitats, bats, and aquatic species where undertaken. A Kerry Slug Report and Management Plan was submitted as part of a further information request. The main habitats throughout the site relate to a mosaic of degraded heath/ upland blanket bog, existing forestry tracks and conifer plantation. Detailed habitat maps illustrate the existing habitats in conjunction with the proposed development and the lands included for the concurrent application, 33kV works. Seven watercourses are in the entire study area. The likely zone of impact includes the Kilarney National Park, Magillycuddys Reeks and Caragh River Catchment SAC (000365). The impact on designated sites is detailed and an NIS accompanied the application (further detailed in Section 11 below) and includes the potential impacts on this European site, *inter alia*, and Mullaghanish to Musheramore mountains SPA (004162).	
Submissions	**Concerns raised**

Inland Fisheries Ireland Kerry/ Cork CC	Impact on watercourse Absence of Kerry Slug Survey / Badger Absence of bird surveys
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Habitat loss or deterioration	Potential impact upland Blanket bog (PB2), wet heath (HH3) as areas of high biodiversity. These are located immediately beside the cabling route will avoid the removal of blanket bog and any identified high biodiversity value. Mitigation measures in place during construction will avoid disturbance of these areas. Peatland Enhancement proposal will fell and remove c. 0.59 ha of conifer plantation to allow reversion to Annex I wet heath.
Impact on watercourses and aquatic species	There are seven mapped watercourses. (Eroding/Upland Rivers (FW1). Indirect impact of watercourse from works may lead to degradation of water quality. Mitigation measures designed to control sedimentation and surface run-off (CEMP in Appendix 4.3) will prevent any long-term negative impacts. This issue is addressed in detail below under hydrology (Chp 8) and concludes that mitigation measures can adequately ensure surface water protection and prevent any negative impact.
Impact on Bats	No buildings will be impacted. The bat survey did not highlight any potential impact on roosting bats due to the lack of buildings and removal of conifer trees which do not offer support for roosting bats.

	Foreaging and commuting bats were recorded along the entire site, are of local importance mostly concentrated in the centre along the proposed 38kv line. These may be adversely affected by the clearance of trees and construction. The proposal is outside the range for the Lesser horseshoe and Natters bat.
Impact on Birds/ Hen Harrier	11 species which are typical of the conifer plantation upland habitats. Short term displacement possible during construction would not lead to any long-term negative impacts. No observations of the Hen Harrier were recorded during the bird surveys.
Impact on Kerry Slug	A Kerry Slug Survey Report and Management Plan accompanied the application for the 38kV line (Reg Ref 22/816) and was submitted following an FI request by the Board. Five Kerry Slugs were recorded in metric traps in conifer plantations adjoining the grid connection route and none within the proposed route. A Kerry Slug management plan has been drawn up, in consultation with the NPWS, to prevent any impact. These include a series of pre-construction measures (site surveys), prevention during construction and identification of habitat enhancement areas. The response from Kerry CC recommended a series of conditions on any grant of permission. I am satisfied with the results in the survey and consider the management plan would prevent any significant negative impact on the Kerry Slug.
	The desk study identified the potential for badger in the study area. Cork and Kerry CC submissions

Impact on badger	refer to the protection of the badger and require protection plans. The EIAR did not elaborate on further badger surveys. The habitat on site comprises of conifer forestry and upland mosaic. The ideal habitat for badger is a mixture of deciduous or mixed woodland and open country. The habitat is not ideal, and no impacts are proposed. This aside mitigation measures in the form of protection plans can ensure no potential impact.
Spread of Invasive Species	*Rhododendron ponticum* was recorded within the EIAR Study Area boundary. Invasive species encountered within the EIAR Study Area are shown below in Figures 4-1G and 4-1H. No works are proposed in the vicinity of these invasive species.
Operation Phase	
No impacts identified.	
Decommissioning phase	
It is not proposed to remove the cabling and following the lifespan of the permitted development it is envisaged the substation infrastructure will be an integral part of the electricity network. No impacts are identified.	
Residual Effects	
No significant residual effects	
Cumulative Effects	
An assessment of all plans and projects in the vicinity of the site indicates no cumulative impact. The cumulative impact of loss or deterioration of habitats and species is not considered significant due to the low biodiversity value. The overall connection (33kv line) is included in the study area and surveys and assessment relate to the entire network. An EIAR accompanied the application for the	

permitted development which concluded no significant impacts on the biodiversity of the site, *inter alia*, ecology and birds.
Conclusion
I have considered all the written submissions made in relation to biodiversity, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and the further information request and that no significant adverse effect is likely to arise.

9.6. **Land, Soils & Geology**

Chapter 7 deals with land, soils and geology. The site comprises mostly of forestry on blanket bog and is accessible via a network of farm tracks and forestry roads. The site is elevated and ranges from c. 255 to 530m OD. It is orientated east – west along the side of a mountain range and slopes north to south from the central ridgeline. The proposed 110kV line is mainly along forestry tracks while the 38kV route is along the south facing slopes of Derrynsaggart Mountain. The substation and borrow pits are on lands which has been subject to forestry feeling. Trial hole investigations indicate a range of peat depths between 0.5m and 3.25m with the average depth recorded at 0.85m. 92% of peat depths are recorded at less than 2.0m.

The cabling will require the removal of peat and subsoil and there will be c. 22.3ha of trees felled. 41,500m^3 of rock is available from the borrow pit and 20,000m^3 from the excavation of the substation. A further 18,000m^2 from the permitted development borrow pit indicates a total volume for fill at 79,500m^3. The total volume of material requiring placement/reinstatement is 98,500m^3. The remaining spoil will be used for landscaping.

Appendix 7.1 includes a Geotechnical and Peat Stability Assessment Report. The results from the assessment indicate a Factor of Safety (FoS) of the load capacity of the site in both the drained analysis and the undrained analysis is recorded as low risk to peat stability.

Submissions	**Concerns raised**
Kerry/ Cork County Council	Geotechnical elements of the application (soil & geology) including peat stability should be evaluated for potential impact on water quality downstream.
Inland Fisheries Ireland (IFI)	Impact on the watercourse and surface water run-off.
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Reduction in land take for the 110Kv cable.	There will be a negative impact on land take due to the reduction in agricultural land take. The actual impact will be slight as it is minimal (600m). The section of blanket bog for the 110kV cable will be reinstated with no road through any bog.
Reduction of peat due to road upgrade, additional access road and borrow pits.	The excavation of peat and subsoil during construction will involve the reuse of excess material on site. The granular peat and soil are of low value and the work will have no significant impact. The impact on peat will be slight, negative and permanent mitigated by the amount of habitat remaining and the reuse of soils within the proposal.
Contamination of soil by leakages	Hydrocarbon spillage during construction will be eliminated using mitigation measures during construction.
Erosion of subsoil during construction	The peat depth along the cable route and throughout the entire EIAR study area is relatively low. A small number of trial holes investigations

	recorded peat depth over 2.0m although these are mainly outside the proposed development works (Fig 7.3). Geotechnical investigation and stability assessments undertaken by experts conclude that there is a low FoS for an instability. There is a low risk of peat failure and control measures are not envisaged.
Operation Phase	
Erosion of subsoil due to the movement of vehicles to maintain the substations.	There is a potential for a slight negative impact from the movements of vehicles. The use of the CEMP will ensure there are no accidents spills, and the substation transformer will include a concrete bunded area and stored oil volume. Vehicles will use the tracks upgrades/ built during construction and will not cause any negative impact.
Decommissioning phase	
The electricity infrastructure will be left in place and roads associated with the permitted development will be left for forestry access	
Residual Effects	
Peat and soils can be eroded by vehicle movements, wind action etc. The use of a Peat and Spoil Management Plan will implement measures to remove residual effects.	
Cumulative Effects	
The cumulative impact of land works for both the 33kV and 110kV line and substation are detailed and assessed in the EIAR. Reference to the borrow pit and spoil volume form the permitted development is included in the EIAR and assessment. The PA carried out an EIA of the permitted development (Reg Ref 19/4972) and found no significant issues about the land, soils and water, I note the EIAR submitted with the permitted development included a Peat and Spoil Management Plan and the Peat Stability Assessment .	

Conclusion
I have considered all the written submissions made in relation to land, soil & water, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

9.7. Hydrology & Hydrogeology

Chapter 8 deals with Hydrology and hydrogeology. The study area is 631 ha and located between two regional surface water catchments in the Southwestern River Basin District (SWRBD). The 110kV substation and borrow pit are in the Laune River SWBD and the 110kV cable is in the River Lee SWBD. The remaining 33kV and 110kV route is between the two SWBD.

In terms of sub catchment, the Flesk River sub-catchment (Felsk(Kerry)_SC_020) flows along the north of the proposed development, from east to west. The 2019 WFD report on this catchment [3] notes some areas at risk due to abstractions and potential quarry and waste impacts along the south. In the River Lee sub catchment, the site is in the Foherish_SC_010 (c. 5.5km downstream) and Sullane_SC_010 sub catchment (c. 4.5km downstream) both to the south of the proposed development. The ecological status of the Foherish is under pressure from windfarm development [4]. There are several tributaries connecting the site to these rivers.

There are 9 no. open watercourses along the offroad section of the 33kV cable (5 no mapped and 4 no. are drains). There are 2 existing culvert crossings near the proposed 110kV substation (one mapped and one a drain). There are 22 no watercourses along the 110kV line, one is mapped the rest are drains.

The existing forestry drainage pattern is most significantly influenced by topography. Mound drains and ploughed ribbon drains are spaced every 15m and 2m respectively. Culverts are located at stream locations. Forestry drains are

[3] Subcatchment Assessment (catchments.ie)
[4] Subcatchment Assessment (catchments.ie)

primarily drained towards natural streams. Flows in higher elevated drains are noted to be slower.

Groundwater vulnerability ranges from High to Extreme along the full study area. There is low permeability of the Devinian bedrock aquifer and groundwater flow paths are likely to be short with recharge close to surface streams. There is low potential for groundwater dispersions and movement within the aquifer. The site is split between two groundwater bodies (GWB) Cahersiveen GWB (IE_SW_G_022) and Ballinhassig West GWB (IE_SW_G_005). The WFD study for the local groundwater body in terms of water quality is good.

Old Red Sandstones (ORS) are classified as a local important aquifer and having bedrock which is moderately productive. The coal bedrock comprises of sandstone and siltstone with low transmissivity and storeavity.

There are potential hydrological connections between the site and the Kilarney National Parks, Macgillycuddy Reeks and Caragh River Catchments SAC via the Flesk catchment (c. 1-2.5km upstream) and the Mullaghansih to Musheramore Mountains SPA. Groundwater flow seepage would flow north towards the Flesk River and there is also a potential groundwater path to the Mullaghansih to Musheramore Mountains SPA.

The proposed drainage will link with the existing forestry drainage network. There will be silt traps and settlement ponds during construction to control diffuse release into the drainage network and no direct discharge to the existing drains or watercourse. The works are in keeping with the best practice in wind energy infrastructure.

Sensitive receptors including dwellings, are mapped, and it is assumed that all dwellings have private wells. As stated above, the site has a potential hydrological connection to European Sites downstream.

Submissions	**Concerns raised**
Kerry/Cork CCC	• The flood risk assessment in Section 8.3.6 of the EIAR could have clearly described the flood regime of the Clydagh and Flesk rivers.

Inland Fisheries Ireland (IFI)	• evaluation for the potential impact of the proposal on the peat stability and water quality downstream • Flesk (Kerry)_010 and the Flesk (Kerry)_020 waterbodies, the latter is considered at risk of achieving good status with hydro morphological issues identified as pressure. • There are concerns about the risk to the water quality and the profile of the Lough Leane Catchment. • Impact of the proposed development, drainage, contaminated run-off, siltation on the surface waters. • There is a need to identify the potential for contingency plan shuls a peat movement occur/ control of silt in such a scenario/ carry out works in line with IFI guidelines.
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Deterioration of **water quality** downstream	Local surface waters such as the Flesk River, Sullane River and Foherish River along with the downstream River Lee and Laune River can be considered very sensitive to potential contamination due to their fisheries potential and because all the above watercourses drain to downstream European Sites. Mitigation measures and controls included in the design include, *inter alia,* a 50m buffer area around all water course, upgrade of primary drainage measures and use of existing forestry drains, use of silt fences and settlement ponds. The water quality will be protected by ensuring the control of hydrocarbons.

impact on **surface waters** from forestry felling.	Potential for an increase in suspended solids and nutrient release from the forestry felling and movement of vehicles associated with same. Best practice methods associated with the forestry felling, buffer areas beside watercourse, drains and sediment traps will be installed during ground preparation, sediment traps will be sited in drains downstream of felling areas, on erodible soils silt traps will be located at the end of the drainage channels, brash mats on soft ground. Drains inspection and maintenance will be undertaken following the trees felling. Habitat Enhancement Area will allow regeneration of a previously felled area. Overall, I am satisfied the impact although negative, can be adequately mitigated to prevent any direct impact.
Impact on **aquatic species** and associated ecosystems	The release of suspended solids to surface water could result in the suspended sediment load, resulting in greater turbidity which could affect the water quality and fish stocks of downstream water bodies. This could have a negative, significant, indirect, temporary, effect on aquatic species and associated habitats. Mitigation measures detailed above, inter alia, drainage management, settlement ponds, sediment control, buffered outfalls etc during the construction will control the release of sedimentation. These mitigation measures will ensure any significant negative impacts are removed. The Inland Fisheries Ireland guidance on works undertaken adjacent to waters will be adhered to.
Operation Phase	
Potential for increase surface water run-off during the replacement of peat with tree planting although the potential for increase surface water run-off has been	

estimated at c. 0.03% average daily/monthly in comparison to pre-development run-off. This result also considers all surface to be impermeable which is not the case as many tracks are permeable stone aggregate. The Ecological Clerk of Works (EcoW) will inspect the site during operation to ensure all necessary mitigation measures are in place.
Decommissioning phase
The Decommissioning Plan (Appendix 4.7 of the EIAR) details the proposed works during decommissioning. The cabling will be pulled from the duct at each joint/ pull pit and fully reinstated. Access roads will be reused during decommissioning. Mitigation measures detailed above will be used during decommissioning and prevent any surface water, ground water degradation.
Residual Effects
The residual effect of tree felling will be negative, imperceptible, indirect, temporary, likely effect on downstream water quality and aquatic habitats. Mitigation measures will ensure the risk of release of sediments is reduced and break the pathway between potential sources and sensitive receptors.
Cumulative Effects
The cumulative impact of land works for both the 33kV and 110kV line and substation are detailed and assessed in the EIAR. Reference to the impact on the European sites is highlighted as a sensitive receptor and this has been further assessed in detail in the AA below. The PA carried out an EIA of the permitted development and found no significant issues about the hydrology or hydrogeology, I note the EIAR submitted with the permitted development included an assessment of the impact on the hydrology and hydrogeology.
Conclusion
I have considered all the written submissions made in relation to Hydrology and the Hydrogeology, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

9.8. **Air & Climate**

Chapter 9 deals with Air and Climate.

The site is located c. 6km southwest of Millstreet and c. 3km to the northwest of Ballyvourney. The land use in the surrounding townlands is predominantly commercial forestry, wind development, peat extraction and low intensity agriculture. The air quality of the area (Zone D) is good and there are no major sources of air pollution. EPA reports on the Ozone (O_3) and Carbon Monoxide (CO), Particle Matter (PM_{10}) for Zone D and at this site are low.

The EIAR refers to the Climate Action Plan 2021 (CAP 2021). The plan supports the increase in renewable energy to targets of 80% by 2030. The national and regional support for renewable energy and associated grid infrastructure is translated into both the Kerry and Cork County Council, where there is no adverse impact on landscape of sensitive sites (further discussed elsewhere in the report).

Section 15 of the Climate Action and Low Carbon Development Act 2015 states*. A relevant body shall, in so far as practicable, perform its functions in a manner consistent with. (a) the most recent approved climate action plan, (b) the most recent approved national long term climate action strategy, (c) the most recent approved national adaptation framework and approved sectoral adaptation plans, (d) the furtherance of the national climate objective, and (e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.* The EIAR refers to the CAP 2021 and other relevant national guidance on climate change. I note this has been updated since the submission of the application with the adoption of the Climate Action Plan 2023 (the amended version of CAP 2021). This Plan seeks to reduce the State's greenhouse gas emissions by 51% by 2030. The renewable energy section can reduce a proportion of CHG reliance, and the plan includes a target of 9GW by 2030. The proposal includes a grid connection for a permitted renewable energy development which can support those targets set out in CAP 2023.

The carbon losses and savings for the renewable energy development were assessed in the original application (Reg Ref 19/4972). It is estimated that 36,577 tonnes of carbon dioxide will be displaced per annum.

Submissions	Concerns raised
Cork County Council	National, regional, and local planning policy support the delivery of renewable energy projects.
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Impact on the air quality from the construction traffic	There is a potential negative, short-term impact on air quality from construction activity. The indicative construction schedule in the CEMP predicts the construction works over c. 2 years. The borrowing of cables and construction of sub-stations will require the operation of construction traffic. The movement of traffic during construction phase is not considered to emit a considerable amount of Green House Gases (CHG). Mitigation measures include the use of aggregate materials from the site, compliance with best practice construction measures and use of a Materials Recovery Facility (MRF) for recycling and recovery of waste. Dust emissions will be controlled through the best practice construction methods.
Operation Phase	
Impacts on climate change and carbon emissions	The proposed substation would serve to connect a permitted windfarm to the electricity grid which will contribute to the achievement of the achieve a climate neutral economy by no later than 2050. The proposal will have a long-term positive impact on carbon emissions by the reduction in CHG and meeting EU & National targets.
Decommissioning phase	

Short term negative impact on CHG emissions	The construction traffic associated with the decommissioning of the permitted development, the 33kV line and the 110kV line has been considered. The scale and nature of works will not have a significant impact and the main infrastructure will be retained for the national grid/ commercial forestry works.
Residual Effects	
No residual effects on air and climate are envisaged.	
Cumulative Effects	
The cumulative impacts of the proposal and the permitted renewable energy proposal will have a long-term, moderate, positive impact on air quality and climate. The national policy, in particular the Climate Action Plan 2023 promote the long-term delivery of renewable energy projects, and this objective is enshrined in regional and local policy.	
Conclusion	
I have considered all the written submissions made in relation to Air and Climate, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

9.9. **Noise & Vibration**

Chapter 10 deals with Noise & Vibration. A baseline noise survey was undertaken in line with best practice. Three noise survey locations were used with 19 noise sensitive locations (NSLs) assessed. The site is mainly rural, and those sensitive receptors are mostly one-off dwellings. Average baseline noise levels ranged from 50 dB L_{Aeq} (along the N22) to 36 dB $L_{Aeq.}$

The noise emission levels from typical machinery plant were used to assess the impact on the NSLs. The closest NSL to the 110kV substation is 820m. A worst-case scenario is used for all assessments and a level of 45 dB $L_{Aeq,}$ T (T:8 hrs over a 12-hr assessment period).

One NSL is located within 200m of the proposed temporary road (35m). The highest predicted noise level during construction at the edge of the works is 62 dB $L_{Aeq, T.}$ One NSL is located 160m from the access road. Noise levels from construction activity are predicted at 49 dB $L_{Aeq, T}$. Noise levels from Forestry Felling is predicted to cumulatively be 52 dB $L_{Aeq, T}$ at the nearest NSL (150m).

Two scenarios for the construction of the borrow pits have been assessed. Scenario A: blasting and Scenario B: rock breaking. Blasting will be undertaken over a 9–12-week period (10- 15 blasts in total). The noise levels at all NSL have been provided. The blasting proposal generates the lowest noise level, both are within the relevant construction guidance (65 dB $L_{Aeq, T}$).

Submissions	**Concerns raised**
None submitted	
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Impact residential amenities during construction phase.	The impact of noise and vibration on sensitive receptors has been considered as moderate and short term. Noise levels during construction phase are within the best practice guidance for day and night, which I consider reasonable to ensure no significant negative impact. The impacts on the NSL are short term during construction with no significant noise generated during operational phase. Any potential impact will be short term and moderation, mitigated by measures during construction works which include noise

	abatement measures, restriction of hours of blasting, selection of plant etc and adherence to an agreed CEMP.
Operation Phase	
The noise generated from the substation is predicted to be 93 dB (A) L_w (power level) with the level of noise at the closest NSL at 18 dB $L_{Aeq, T.}$ This level is well below the appropriate guidance[5].	
Decommissioning phase	
Mitigation measures in relation to decommissioning will be the same as those proposed or the construction phase.	
Residual Effects	
Impacts predicted to be minor subject to implementation of mitigation measures.	
Cumulative Effects	
The analysis presented in the EIAR includes consideration of the cumulative impact of noise in conjunction with the permitted wind farm. I consider this analysis is acceptable and agree that the potential cumulative impacts would not result in an exceedance of the noise limits prescribed under Ref. 19/ 4972	
Conclusion	
No written submissions were made in relation to noise & vibration. I am satisfied that any impacts identified in this section of the report have been appropriately addressed in terms of the application and that no significant adverse effect on the noise & vibration is likely to arise.	

9.10. Archaeology & Cultural Heritage

Chapter 11 deals with Archaeology and Cultural Heritage. An Archaeological Assessment was undertaken using a desktop analysis of the national and local inventory and a walkover survey/ field works associated with the

[5] BS 8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings

permitted wind farm (Reg Ref 19/4972). The assessment has regard to both the public database and newly recorded archaeological monuments (walkover survey). Excavations recorded under www.excavations.ie where also noted. The "Papa" archaeological landscape area is located to the north of the site. The nearest recorded monument to the 110kv cable route is a five stone circle (CO048-056) c. 455m to the north of the site. One recorded monument (KE076-086) is located c.77m to the east of the new access road. The nearest National Monument is located c. 3.9km to the east of the proposed 110kv cable routes. The nearest recorded "newly recorded archaeological monument" is a possible standing stone situated c. 2.1km to the west of the proposed 110kv substation. The nearest NIAH or Record of Protected Structures (RPS) is the Cloghboola National School (1802) located c. 2,4km to the north-east of the eastern end of the proposed route and Ballyvourney Bridge (RPS 00366) (NIAH Reg 20905805) located c. 3.4km to the south-east. A portion of the EIAR study area is in the Gaeltacht area (Múscraí Gaeltacht).	
Submissions	**Concerns raised**
Kerry County Council Department of Housing, Local	• Pre- development testing or a mix of geophysical testing should be undertaken in areas where there is to be ground disturbance. • A specific assessment of the archaeological potential of the watercourses and the potential impact of crossing these watercourses. • The impact of the proposal and the likely wind farm development should be outlined and assessed considering the importance on the archaeological landscape. • There is a potential for unknown archaeological features/deposits to be disturbed.

Government and Heritage	• An archaeological mitigation strategy outlined in Section 11.4 of the EIAR should be included as a condition on any grant of permission (sample conditions attached).
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Impact on the unrecorded standing stones Impact on unrecorded sub-surface areas of interest.	The newly recorded archaeological monument survey recorded several standing stones which may be impacted by moving machinery. Any potential for a negative impact will be mitigated by the inclusion of a 10m buffer zone is proposed around these stones. Archaeological monitoring works along the section of the 33kv line will be undertaken. Archaeological monitoring of all ground works associated with the underground cabling routes, borrow pits, substation and associated road works will be compiled and submitted to the relevant authorities on completion of the project. If detected the site will be protected. The potential for adverse impacts on yet undiscovered artifacts would be removed using EIAR mitigation measures & compliance with planning conditions (incl. testing, monitoring & recording).
Operation Phase	
No impacts identified.	
Decommissioning phase	
No impacts identified.	
Residual Effects	
Residual impacts are not predicted to be significant subject to the implementation of mitigation measures	
Cumulative Effects	

Although there are no recorded/ national monuments or buildings of cultural heritage, the EIAR notes the site and its location in area which has recorded a range of monument types ranging from re historic period. Appropriate pre-development testing, recoding and coordination with the PA and Department will ensure no cumulative impact.

Conclusion

I have considered all the written submissions made in relation to cultural heritage and note the EIAR and associated mitigation measures proposed pretesting and archaeological monitoring in line with the request from the County Council and Department. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

9.11. Landscape & Visual

Chapter 12 deals with Landscape and Visual.

A Landscape and Visual Impact Assessment (LVIA) is included in the EIA. The landscape assessment takes account of the permitted development and 7 existing wind farms, 1 proposed and 3 permitted within a 2 km radius of the site. The proposed 110kV substation will be the only structure above ground. The LVIA notes the location on an elevated and isolated plateau within an upland landscape. There will be limited visibility due to the topographical features and isolated location.

The site is in an area designated as visually sensitive area (Map 0) in the Kerry County development plan where Section 11.6.3.1 requires development to be satisfactory integrated. There are views and prospects protected along either side of the N22 just on either side after the Cork/Kerry Border.

The Cork County Development plan designates the area as landscape character type: Ridged and Peaked Upland. There is a Designated scenic route to the south (S22) Road from Ballyvourney to Mullaghanish to Caherdowney. There is a national waymarked trail “Sli Gaeltacht Mhúscraí” which runs from south to north.

The EIAR provides an assessment of the 110kV cabling, substation and the 33 kV cabling, borrow pits, and all associated roads and works and the impact on the Landscape Value and Sensitivity of the area in both Cork County and Kerry County, having regard to the characteristics of the environment and the sensitivities. Landscape sensitivity is generally considered medium to low due to the presence of other windfarms in the area and the impact from the works.	
Submissions	**Concerns raised**
Kerry County Council	• The impact of the turbines has not been included in the visual impact assessment (i.e., The Paps). • The area is identified as a visually sensitive area. • The 110kv substation, as the only above ground element of the proposal will be the most visually prominent feature. • Cumulative impact is not deemed significant.
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Impact on the landscape from the construction of new access road.	The construction works are envisaged to last c. 12 months. There will be a short-term change to the character of parts of the landscape due to the creation of temporary structures e.g., Berms and borrow pits. These impacts are localised and will not impact the wider landscape.
Operation Phase	
Visual impact of the substation on a sensitive landscape area	The substation will be the only structure above ground. This substation is located along the site of the existing local road on a site which is not elevated. The elevated masts associated with the substation may be visible from the S22 scenic route although will not be significant or dominant. The closest sensitive receptor to the substation is a dwelling, c.2.4km from the site. Due to the presence of

	trees and the topography of the site it will not be visible and will not be significant.
Decommissioning phase	
No impacts identified.	
Residual Effects	
Residual impacts are not predicted to be significant subject to the implementation of mitigation measures	
Cumulative Effects	
The EIAR includes an assessment of the impact of the proposed development and the 33 kV line on the existing receiving environment and those permitted, proposed and existing windfarms. I note the impact of the permitted development (Reg Ref 19/4872) was considered by the Planning Authority. The impact was considered acceptable in terms of direct, indirect, and cumulative landscape and visual impacts. The proposed connection and associated works will not cause any significant additional impact to the permitted development.	
Conclusion	
I have considered all the written submissions made in relation to landscape and visual, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

9.12. **Material Assets**

Chapter 13 deals with Material Assets. The preliminary traffic management plan is included this chapter and the CEMP proposes to develop and implement a Traffic Management Plan. There are two options for the TDR, from the west on the N22 (Option 1) and from the east in the direction of Macroom (Option 2). The site will be accessed from an existing access track off the N22 and will require permanent upgrade. This is also the access for the permitted renewable energy development.

During turbine delivery there will be 5 transporter loads per working day for a total of 11 days. It is estimated that 2,412 truckloads of materials will be required for the permitted development. It is estimated that the proposed development of 110 kV cable, substation and 33 kV cabling will require a total of 1,617 HGV 2-ways trips during the construction period (c. 12 months).

A link capacity assessment was undertaken on the N22 and R582. Capacity is based on road types and width and has been assessed in line with the TII standards [6]. During construction the link capacity on the background level of the N22 and R582 will increase by 1%. No significant impact on junctions on the N22/Old N22 is envisaged.

In terms of other material assets there will be no overhead cables. A Waste Management Pan (WMP) informed the CEMP.

Submissions	**Concerns raised**
Kerry County Council	• No significant impact on the carrying capacity of the roads is envisaged.
Transport Infrastructure Ireland (TII)	• This application seems to rely on access proposal which are the subject of construction access from N22 national road. This access arrangement is mentioned in Section 4.4.1 of the EIAR (this application). This new direct access conflicts with the policies adopted by the Kerry County Council • There is no record of TII observations for Reg 19/4972 CCC file. • Any planning permission granted should have to provide for the permanent enclosure of the temporary access on the completion of the turbine delivery and then for full reinstatement.

[6] TII Standards Document DN-GEO-03031 Road Link Design.

	• The council are requested to ensure the proposed temporary access is constructed, maintained etc and sure the strategic function of the N22, levels of road user etc are maintained. • Haul route: it is unclear if the proposal proposed abnormal weight loads for any associated substation components. If so, a permit is required for all Local authorities it travels through. And/or any PPP contractors etc. • TII publications: Any damage caused to the pavement on the existing national road arising from any temporary works shall be rectified in accordance with the TI pavement standards
Potential Impacts	**Assessment and Mitigation measures**
Construction Phase	
Increase volumes of construction traffic along the N22 and/or R582	The TDR and construction traffic associated with the permitted development (Reg Ref 19/4972) included an assessment of the route options and impact on traffic and transport. No significant impact was identified. The submission from TII notes no record of any observations on this report. This aside, the principle of the proposal has been addressed above in Section 8.3. I have concluded that having regard to the use of an existing access, albeit intensification, the use of a temporary access for the turbine delivery and the nature and scale of the works, the proposal does not conflict with the policies of the national or local policy for national roads. There would be no significant negative impact on the flow of traffic along the N22. In relation to the environmental impact, an increase of construction traffic, the Link Capacity Assessment indicates

	that the road network has sufficient capacity to assimilate the traffic volumes.
Residual Effects	
Residual impacts are not predicted to be significant subject to the implementation of mitigation measures.	
Cumulative Effects	
Minor impacts would occur in-combination with the construction of the permitted windfarm, but none predicted during the operational phase.	
Conclusion	
I have considered all the written submissions made in relation to material assets, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

9.13. **Interaction of Effects**

I have also considered the interrelationships between the key receptors and whether this might as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. In particular, the potential arises for the following interactions and interrelationships:

Population & Human Health	• Air & Climate • Noise & Vibration • Land, Soils & Geology • Material Assets
Biodiversity	• Land, Soils & Geology • Hydrology & Hydrogeology • Landscape & Visual • Air & Climate

Land, Soils & Geology	• Hydrology & Hydrogeology • Archaeology & Cultural Heritage • Landscape & Visual
Hydrology & Hydrogeology	• Population & Human Health • Biodiversity • Land, Soils & Geology
Air & Climate	• Population & Human Health • Biodiversity • Land, Soils & Geology
Noise & Vibration	• Population & Human Health
Archaeology & Cultural Heritage	• Population & Human Health • Landscape & Visual
Landscape & Visual	• Archaeology & Cultural Heritage • Population & Human Health
Material Assets	• Population & Human Health

9.13.1. In conclusion, I am satisfied that any such impacts can be avoided, managed and mitigated by the measures which form part of the proposed development.

9.14. **Risks associated with major accidents and/or disasters.**

9.14.1. No outstanding risks associated with major accidents or disasters identified and the potential impacts associated with climate change have been factored into most sections of the EIAR.

9.15. **Reasoned Conclusion**

9.15.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and the submissions from the planning authorities and

prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment have been identified in section 8.0 and section 9.0 of this report. It is considered that the proposed development would not give rise to any significant direct or indirect impacts of the environment, and the minor direct and indirect impacts are as follows:

- The risk of pollution of ground and surface waters during the construction phase through a lack of control of surface water during excavation and construction, the mobilisation of sediments and other materials during excavation and construction and the necessity to undertake construction activities in the vicinity of existing watercourses. The construction of the proposed project could also potentially impact negatively on ground and surface waters by way of contamination through accidents and spillages. These impacts would be mitigated by the agreement of measures within a Construction and Environment Management Plan, and the implementation of mitigation measures related to control and management of sediments, accidental spills and contamination, and drainage management.
- The proposed development would give rise to a short-term increase in vehicle movements and resulting traffic impacts during the construction phases. These impacts would be mitigated by the agreement of measures within a Construction and Environment Management Plan.
- The overall proposed project, including the permitted development (Reg Ref 19/4972), the concurrent application before the Board for part of the grid connection (ABP 317406-23, Reg Ref 22/816) and the proposed development for this 110kV cable and substation would have a direct long term positive impact on the climate by supplying electricity to the national grid from renewable energy sources.

10.0 Appropriate Assessment (AA)

10.1. AA Screening

Compliance with Article 6(3) of the Habitats Directive

10.1.1. The requirements of Article 6(3) as related to Appropriate Assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered fully in this section.

Background on the Application

10.1.2. The proposed development relates to a grid connection (110kV line, substation, and connection to the 220kV Ballyouskil substation) for a permitted windfarm/solar panel development permitted by Cork County Council (Reg Ref 19/4972). The grid connection includes a separate 33kV grid cabling and substation (non-SID) which was refused by Kerry County Council as the PA was not satisfied the proposed development would not result in adverse impacts on the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] having regard to the impact on water quality downstream. The Board will note that I have assessed this concurrent application in tandem with this proposed development and have all the information on both proposals before me. I have referred to that application throughout this AA where I consider relevant.

10.1.3. The applicant has submitted a Natura Impact Statement (NIS) and an Appropriate Assessment (AA) Screening (Appendix 1 of the NIS). The screening report has regard to the proposed development, the 33 kV cabling route, extension of permitted borrow pit and the proposed TDR. The permitted development is considered in the NIS as an in-combination/ cumulative assessment.

10.1.4. The AA screening and NIS have been undertaken on the entire study area (i.e., the proposed development and the concurrent application for the 33kV line also before the Board). I consider this approach is acceptable and allows a co-ordinated approach to the assessment.

10.1.5. The total length of the underground electrical cabling routes will be c. 11.9km and located on existing forest/ agricultural roads, forestry land, peatland and agricultural land. An ecological survey has been undertaken to inform the NIS and the EIAR. During the survey, the site was also searched for species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations (S.I. 477 of 2011).

10.1.6. The cabling will require the removal of peat and subsoil and there will be c. 22.3ha of trees felled. The study area is 631 ha and located between two regional surface

water catchments in the Southwestern River Basin District (SWRBD). The 110kV substation and borrow pit are in the Laune River SWBD and the 110kV cable is in the river Lee SWBD. The remaining 38kV and 110kV route is between the two SWBD. In terms of sub catchment, the Flesk River sub-catchment (Felsk (Kerry)_SC_020) and flows downstream along the north of the proposed development, from east to west. In the River Lee sub catchment, the site is in the Foherish_SC_010 (c. 5.5km downstream) and Sullane_SC_010 sub catchment (c. 4.5km downstream) both to the south of the proposed development.

Submission and Observations

10.1.7. Kerry County Council has raised the following issues of concern with regard the impact on European Sites:

- The site is hydrologically connected to several European sites.
- Dedicated surveys should be undertaken for the Kerry Slug and Badger,
- Evaluation for the potential impact of the proposal on the peat stability and water quality downstream.

10.1.8. Cork County Council raised concern in relation to the potential impact on the Kerry Slug and recommended the Board request additional information and a Kerry Slug Management Plan. The Environmental Section raise concern in relation to the impact on the eater quality and hydrology.

10.1.9. As stated above, the Board requested that the applicant submit further information and a Kerry Slug survey. A Kerry Slug Report and Management Plan was submitted as part of the applicant's response to this further information request.

European Sites

Table 3.1 of the AA screening report details all the European site within the likely Zone of Impact.

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening. Y/N
Special Area of Conservation (SAC)			
Mullaghanish Bog SAC [001890] Mullaghanish Bog SAC | National Parks & Wildlife Service (npws.ie) 0.3km	[7130] Blanket bogs (* if active bog)	No – there is no complete source-pathway-receptor chain between the site and the blanket bog	N.
Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC | National Parks & Wildlife Service (npws.ie) 0.7km	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the Violetalia calaminariae [6130] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Blanket bogs (* if active bog) [7130]	Y-the site is located downstream with a hydrological connection via the Clydagh River	Y- Based on a hydrological pathway

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening. Y/N
Special Area of Conservation (SAC)			
	Depressions on peat substrates of the Rhynchosporion [7150] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Taxus baccata woods of the British Isles [91J0] Geomalacus maculosus (Kerry Slug) [1024] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Euphydryas aurinia (Marsh Fritillary) [1065] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Trichomanes speciosum (Killarney Fern) [1421] Najas flexilis (Slender Naiad) [1833] Alosa fallax killarnensis (Killarney Shad) [5046]		

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening. Y/N
Special Area of Conservation (SAC)			
St. Gobnet's Wood SAC [000106] St. Gobnet's Wood SAC | National Parks & Wildlife Service (npws.ie) 2.9km	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	N- The site is downstream although the QI for the SAC is entirely terrestrial	N
Blackwater River (Cork/Waterford) SAC [002170] Blackwater River (Cork/Waterford) SAC | National Parks & Wildlife Service (npws.ie) 4.km	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	N- There is no hydrological connection between the proposed developmetn and the SAC.	N

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening. Y/N
Special Area of Conservation (SAC)			
	Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Alosa fallax fallax (Twaite Shad) [1103] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Trichomanes speciosum (Killarney Fern) [1421]		
Old Domestic Building, Curraglass Wood SAC [002041] Old Domestic Building, Curraglass Wood SAC | National Parks & Wildlife Service (npws.ie) 9.7km	Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]	N- The proposed development is located outside the foraging range of the Lesse Horseshoes Bat, therefore there is no source -pathway-receptor.	N
Kilgarvan Ice House SAC [000364] Kilgarvan Ice House SAC | National Parks & Wildlife Service (npws.ie)	Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]	N- The proposed development is located outside the foraging range of the Lesse Horseshoes Bat, therefore there is no source -pathway-receptor.	N

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening. Y/N
Special Area of Conservation (SAC)			
12.6km			
The Gearagh SAC [000108] The Gearagh SAC | National Parks & Wildlife Service (npws.ie) 13.2km	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation [3270] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Lutra lutra (Otter) [1355]	N- The proposed development is outside the designated area and there is no hydrological connection between the SAC and the subject site	N
Special Protection Area (SPA)			
Mullaghanish to Musheramore Mountains SPA [004162] Mullaghanish to Musheramore Mountains SPA | National Parks & Wildlife Service (npws.ie)	Hen Harrier (Circus cyaneus) [A082]	Y- This European site overlaps slightly with the EIAR study area and there is a potential for direct effects on the supporting habitats of the SPA and suitable roosting or hunting for the hen harrier	Y
The Gearagh SPA [004109] The Gearagh SPA | National Parks & Wildlife Service (npws.ie) 13.4km	Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Coot (Fulica atra) [A125]	N- The proposed development is located outside the designated site and there is no hydrological connection. The site is location over 13km from the subject site and it is not likely that any of the listed	N

European Site (Code) and distance to site	List of Qualifying Interest/Special Conservation Interest	Connections (Source, pathway, receptor)	Considered further in screening. Y/N
Special Area of Conservation (SAC)			
	Wetland and Waterbirds [A999]	species would use the habitat for foraging.	

Potential Impact on European Sites

10.1.10. The proposal includes the upgrade of existing forestry roads for underground cabling and construction traffic and a new 110kV substation. There will be short section of new road (209m) and works to peatland habitat for 110kV cabling (685m). Theses works include the removal of commercial forestry trees and the cut and fill of lands along the site of the roads, cutover bog for the new borrow pit and substation. These works have the potential to have direct and/or indirect impact on the European Sites due to:

- Increase suspended solids in the watercourses from construction traffic over exposed soils,
- Nutrient release and suspended solids from the clear feeling of coniferous plantation.
- Drainage and seepage of water from excavations for the road upgrades, new roads,
- Reduction in groundwater levels from the dewatering of lands for borrow pits.
- The release of hydrocarbons into the groundwater and surface water from the accidental spillage of construction plant,
- Release of effluent from on-site temporary wastewater treatment systems.

10.1.11. In general, the proposal has the potential to cause deterioration of water quality in ground or surface water flowing downstream into the European sites via on-site

tributaries, through the release of suspended solids and hydrocarbons. Any impact on water quality can impact the supporting habitat for the Hen Harrier.

10.1.12. Two sites have been screened in, having regard to presence of a hydrological connection, and a source-pathway -receptor to the European Sites as follows:

- Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365]
- Mullaghanish to Musheramore Mountains SPA [004162]

10.1.13. The remaining sites within the identified Zone of Influence for the proposed development have been screening out as listed below. I have had regard to the qualifying interest for each of these European Sites and associated conservation objectives.

- Mullaghanish Bog SAC [001890]
- St. Gobnet's Wood SAC [000106]
- Blackwater River (Cork/Waterford) SAC [002170]
- Old Domestic Building, Curraglass Wood SAC [002041]
- Kilgarvan Icehouse SAC [000364]
- The Gearagh SAC [000108]
- The Gearagh SPA [004109]

AA Screening Conclusion

10.1.14. The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment, it has been concluded that the proposed development individually or in combination with other plans or projects would not be likely to have a significant effect on Mullaghanish Bog SAC [001890], St. Gobnet's Wood SAC [000106], Blackwater River (Cork/Waterford) SAC [002170], Old Domestic Building, Curraglass Wood SAC [002041], Kilgarvan Icehouse SAC [000364], The Gearagh SAC [000108], The Gearagh SPA [004109], or any other European site (other than those two listed below), in view of the site's Conservation Objectives, and

Appropriate Assessment (and submission of a NIS) is not therefore required. This determination is based on the following:

- The qualifying criteria of each of the European Sites,
- The distance from the application site and study area,
- The absence and lack of meaningful ecological connections to those site…

This screening determination is not reliant on any measures intended to avoid or reduce potentially harmful effects of the project on a European Site.

10.2. Appropriate Assessment Stage II

10.2.1. The site is located upstream from Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and adjacent to Mullaghanish to Musheramore Mountains SPA [004162]. The site is hydrological linked to the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] is a range of tributaries which flow into the Clydagh River and the Lough Leanne Catchment Area. The location of the site, adjacent to the Mullaghanish to Musheramore Mountains SPA [004162], which lists the Hen Harrier as a qualifying species, as the potential to be used as foraging by this species.

10.2.2. The AA Screening assessment, above in Section 10.1, could not rule out any potential impacts on either of these European Sites, having regard to the nature and scale of the proposed development, the proximity of the project to the European sites, to the nature of the qualifying interest habitats and species, and the special conservation interest species, and the conservation objectives of the European sites, and the potential impact ground and surface water pathways between the project and the European sites.

10.2.3. The AA Screening Assessment submitted with the application had the same determination and considered that mitigation measures must be implemented to ensure no significant impact on either European Site. The application was accompanied by a Stage II assessment, Natura Impact Statement (NIS).

Natura Impact Statement (NIS).

10.2.4. The NIS which accompanied the application examines and assesses the potential adverse effects of the proposed development on:

- Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365]
- Mullaghanish to Musheramore Mountains SPA [004162]

10.2.5. The NIS provides a summary of the AA Screening Report, provides a description of the proposed development, the characteristics of the receiving environment and details the potential effects on both European Sites, the associated mitigation measures which are intended to avoid and/or reduce any negative impact and provides an overview of any residual effects.

10.2.6. The NIS is informed by the best available data on the above European Sites (NPWS), European and national information on the habitats and species within the European Sites, habitat surveys, otter surveys, bird surveys and other relevant desk top surveys.

10.2.7. The cumulative impact of other plans and projects include the permitted development (Reg Ref 19/4972) and all other applications included in the EIAR study area (as defined above). The impact of the works requires for the TDR, construction access and 33Kv cabling line are also included throughout the NIS and the assessment of potential impacts.

10.3. Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365]

10.3.1. The AA notes that there is an identified hydrological pathway between the subject site and the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC. This link is via tributaries which link the subject site with the Clydagh River which is located within the Lough Leane Catchment. It is noted that there is a potential for the proposal to impact the water quality which would result in a negative impact on those qualifying interest which are water dependant as the following

- [1095] Sea Lamprey (Petromyzon marinus)
- [1096] Brook Lamprey (Lampetra planeri)
- [1099] River Lamprey (Lampetra fluviatilis)

- [1106] Salmon (Salmo salar)
- [1355] Otter (Lutra lutra)
- [1833] Slender Naiad (Najas flexilis)
- [3110] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
- [3130] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea
- [3260] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation
- [5046] Killarney Shad Alosa fallax killarnensis
- [91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

10.3.2. The proposal includes the feeling of coniferous forestry and excavation of lands for the 110kV cable route, substation, borrow pit and 33kV cable route. The proposed works include instream works to seven EPA/OSI mapped watercourses.

10.3.3. The AA includes an assessment of the impact on the above species and habitats having regard to the nature and scale of the proposed development, the location of the site and the site-specific pressures and threats to each of the qualifying interests. Four habitats are Annex I habitats (Oligotrophic waters, Oligotrophic to mesotrophic waters, Water course of plain to montane levels and Alluvial Forests (priority).

Potential impacts

10.3.4. The proposed development includes instream works along a number of watercourses and the extraction of peat associated with the cable routes and the associated temporary and permeant road construction and c. 22.3ha of forestry felling.

10.3.5. The main hydrological link between the site and this European Site is the watercourse, into the Clydagh River Catchment which has down water surface water connectivity. I consider the habitats and species which have the potential to be affected are restricted to sensitive watercourses. As summarised below, I do not consider there is a source-pathway-receptor to any terrestrial qualifying interests.

10.3.6. A summary of the potential impacts is listed below:

- Entrainment of suspended sediment in watercourse due to the vehicle tracking through watercourses, extraction close to watercourses.
- Damage to roads and increase if suspended sediment into the surface water,
- Release of sediment attached to the timber in stacking areas,
- Nutrient release from the tree feeling,
- Stockpiled excavated material providing point source of exposed sediment,
- Erosion of sediment from emplaced site drainage channels.
- Dewatering of borrow pits and 110kV substation platform has the potential to impact local groundwater flows and levels.
- Potential for groundwater/surface water seepage from excavations.
- Release of hydrocarbons during construction and the impact on groundwater and surface water quality which can ultimately deplete dissolved oxygen in the waters.
- Diversion, culverting and bridge crossing can result in morphological changes to the drainage patterns of watercourses, interfere with water flows and quality.

10.3.7. In general, the impact of an increase in suspended sediment load will result in increased turbidity which could affect the water quality and fish stocks downstream water bodies.

10.3.8. In the interest clarity and considering a precautionary approach, I have assessed the impact of the proposal all those habitat and species listed in this SAC, as summarised in the table below.

Mitigation Measures

10.3.9. Mitigation measures are required to prevent any impact on the identified qualifying features of interest in the European Sites. Details of all mitigation measures are included in Section 5.0 of the NIS. These have also been detailed throughout the EIAR and included in the CEMP. Specific mitigation measures are proposed during construction and operation.

10.3.10. During construction mitigation is proposed by avoidance and design as summarised:

- 50m buffer zones around all watercourses to ensure adequate space is maintained to prevent the entry of suspended sediment from earthworks/construction into the watercourse.
- Use of source controls (inceptor drains, vee-drains, diversions drain, sandbags, filter fabrics etc) to restrict sediment movement.
- Use of small working area, covering stockpiles, weathering stockpiles to prevent sediment run-off.
- In-line controls proposed include those source controls and silt bags/ fences. Collection sumps, temporary sumps, sediment traps settlement ponds.
- Settlement systems will be used to ensure the treatment of sediment before any surface water can flow downstream.
- No direct discharge (without treatment for sediment reduction, and attenuation for flow management) before runoff to the drainage network.
- Drains running parallel to existing roads will be widened and upgraded with velocity and silt control measures.

10.3.11. Details of all prevention control measures are specified along with pre-emptive site drainage management measures. Monitoring will be undertaken as per the CEMP.

10.3.12. I note those mitigation measures proposed which I consider are appropriate to prevent an increase in sedimentation in the surface waters. The proposed mitigation measures in relation to construction and protection of water quality are well established and in line with best practice development and the protection of water courses. I also consider that the proposed construction methodologies and details supplied are sufficiently comprehensive to remove any lack of clarity regarding the potential for adverse effects to arise.

10.3.13. I note no reference to an Ecological Clerk of Works (EcOW) during mitigation and monitoring although included in the CEMP. I consider the inclusion of a EcOW can ensure that the location of the preventative measures is at the optimum location to prevent any sedimentation of surface waters and ensure those construction methods

are in keeping with the NIS. It is reasonable to include this as a condition on any grant of permission.

Submissions

10.3.14. Inland Fisheries Ireland have raised concern, not specifically with the AA, in relation to the impact of the proposed development on the aquatic species and watercourses. I have addressed this submission above in Section 9.7 although it is of note that information in the EIAR reiterates those mitigation measures in the NIS, *inter alia*,

- Appendix 4.3: Construction and Environmental Management Plan (CEMP)
- Appendix 8.3: Settlement Pond Design Calculations,
- Appendix 8.4: Drainage Management Design and Pollution Prevention Measures,

10.3.15. I am satisfied that the NIS includes sufficient information and mitigation measures to ensure no release of suspended solids or hydrocarbon contamination of run-off waters so that no pollution of surface waters can occur.

10.3.16. As stated above, the Environment Section of Cork County Council have also raised concern with regards the impact on the water quality and the potential for adverse impacts on the Qualifying Interests of this SAC. They have not included any assessment on geotechnical issues with regard peat stability. In the first instance, the Board will note that the accompanying and geotechnical and stability assessments conclude a low Factor of Safety (FoS) Indicating a low risk of instability. I am satisfied that sufficient information to demonstrate that the excavation on the site, in combination with the mitigation measures to control the release of suspended solids outside the site, will not have an adverse effect on the qualifying criteria.

Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] Source content: (accessed 11th of August 2023) Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC | National Parks & Wildlife Service (npws.ie)					
Qualifying Interest Feature	Conservation Objectives Targets and Attributes	Potential Adverse effects	Mitigation measures	In combination effects	Can Adverse effects on integrity be excluded?
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	To **restore** the favourable conservation condition of……:	Y- Pathway between the site and habitat via surface water. Lough Guitane is the closest mapped lake. Pressures such as eutrophication, overgrazing, forestry and peat-cutting may have reduced vegetation depth in some lakes. Dissolved and organic carbon (OC) can increase the DOC.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality. A summary of the mitigation measures is listed above	None arising post mitigation	Yes
Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130]	To **restore** the favourable conservation condition of……:	Y- Pathway between the site and habitat via surface water. Muckross Lake is the closest mapped lake. Pressures such as eutrophication, overgrazing, forestry and peat-cutting may have reduced vegetation depth in some lakes. Dissolved and organic carbon (OC) can increase the DOC.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality. A summary of the mitigation measures is listed above	None arising post mitigation	Yes

Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	To **maintain** the favourable conservation condition of……:	Y- Pathway between the site and habitat via surface water. These habitats support those aquatic species of qualifying interest listed in the SPA. The rivers require good hydrochemistry.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality and reduce water pollution. A summary of the mitigation measures is listed above	None arising post mitigation	Yes
Northern Atlantic wet heaths with Erica tetralix [4010]	To **restore** the favourable conservation condition of……:	No pathway between the subject site and no potential for adverse effects to this habitat due to the location on hills sides of the SAC combined with the nature of the QI and character of the proposed development.	N/A	None arising – no likely significant in-combination effects	Yes
European dry heaths [4030]	To **restore** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Alpine and Boreal heaths [4060]	To **restore** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Juniperus communis formations on heaths or calcareous grasslands [5130]	To **maintain** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Calaminarian grasslands of the Violetalia calaminariae [6130]	To **maintain** the favourable conservation	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes

	condition of……:				
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	To **restore** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Blanket bogs (* if active bog) [7130]	To **restore** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Depressions on peat substrates of the Rhynchosporion [7150]	To **restore** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	To **restore** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To **restore** the favourable conservation condition of……:	No direct pathway. Potential indirect impact on the water quality.	Mitigation measures will ensure no decline in the woodland structure or the hydrological regime necessary for the maintenance of the forest.	None arising – no likely significant in-combination effects	Yes
Taxus baccata woods of the British Isles [91J0]	To **restore** the favourable conservation condition of……:	No direct habitat removal from the site or likely indirect impact on the habitat.	N/A	None arising – no likely significant in-combination effects	Yes

Geomalacus maculosus (Kerry Slug) [1024]	To **maintain** the favourable conservation condition of……:	A Kerry Slug Survey Report and Management Plan was submitted as part of a further information request. No species was detected and the proposed development will not have an indirect impact on this species.	N/A	None arising – no likely significant in-combination effects	Yes
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	To **restore** the favourable conservation condition of……:	(As per Map 8 of the SSCOs (NPWS 2017), the Conservation Objective population is located in a separate catchment (Caragh River catchment) and no source-pathway-receptor chain was identified).	N/A	None arising – no likely significant in-combination effects	Yes
Euphydryas aurinia (Marsh Fritillary) [1065]	To **restore** the favourable conservation condition of……:	Map 9 of the SSCOs (NPWS 2017)).	N/A	None arising – no likely significant in-combination effects	Yes
Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106]	To **maintain** the favourable conservation condition of……:	Yes - Potential for effects on juveniles, spawning habitat and water quality arising from excessive sedimentation and discharges during construction activities in relation to Sea Lamprey, Brook Lamprey, River Lamprey and Salmon.	Y- The prevention of sedimentation of the watercourse will prevent a negative impact on the water quality. A summary of the mitigation measures is listed above	None arising post mitigation	Yes
Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]	To **maintain** the favourable conservation condition of……:	No- (As per Map 10 of the SSCOs (NPWS 2017) the EIAR Study Area is located outside the core foraging range (2.5km)	N/A	None arising – no likely significant in-combination effects	Yes

		of Lesser Horseshoe Bat (NPWS, 2013)).			
Lutra lutra (Otter) [1355]	To **maintain** the favourable conservation condition of……:	N- No instream works are proposed and there will be no impact on any connectivity along the watercourse. There was no recorded sighting of the otter during the site survey. Construction will be restricted to daytime hours.	N- only those relating to the protection of water quality.	None arising – no likely significant in-combination effects	Yes
Trichomanes speciosum (Killarney Fern) [1421]	To **maintain** the favourable conservation condition of……:	No pathway for effect was identified.	N/A	None arising – no likely significant in-combination effects	Yes
Najas flexilis (Slender Naiad) [1833]	To **maintain** the favourable conservation condition of……:	No pathway for effect was identified.	N- only those relating to the protection of watercourses.	None arising – no likely significant in-combination effects	Yes
Alosa fallax killarnensis (Killarney Shad) [5046]	To **restore** the favourable conservation condition of……:	No pathway for effect was identified.	N/A	None arising – no likely significant in-combination effects	Yes
Overall conclusion: Integrity test Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, either alone or in combination is European site and no reasonable doubt remains as to the absence of such effects.					

Assessment and Conclusion

10.3.17. I have had regard to the information contained in the submitted NIS, the NPWS Site Synopsis for each site and the threats and pressures to the habitats and species and I am satisfied that there would be no direct impacts on the SAC because of the proposed works. The potential for indirect effects because of construction- water pollution from the unmitigated release of fine sediments in runoff during construction work and hydrocarbons by way of accidental spillages from machinery; can be adequately mitigated using surface water and drainage management and the appointment of a Project Ecologist to oversee works.

10.3.18. Following the implementation of mitigation, the construction and operation of this proposed development I am satisfied the proposed development will not adversely affect the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, either alone or in combination is European site and no reasonable doubt remains as to the absence of such effects.

10.4. **Mullaghanish to Musheramore Mountains SPA [004162]**

10.4.1. The Mullaghanish to Musheramore SPA is located to the south of the site. This European Site lists the Hen Harrier as the only qualifying species of interest. A Stage II assessment was undertaken having regard to the location of the site beside the subject site. Bird Surveys undertaken in the EIAR study area did not record any presence of Hen Harrier and therefore a dedicated species survey was not required. A summary of the potential impact on the Hen Harrier is detailed below.

10.4.2. I note the conservation objectives for this European Site and the location, nature and scale of the works proposed and I do not consider there is a potential for any impact on the Hen Harrier. The NIS includes an assessment of the potential residual impacts and considers in-combination impacts. There was no pathway identified for adverse effects on the conservation condition of the hen harrier associated with the proposed development. I do not consider there is any potential for either direct or indirect impacts as a result of the proposed development.

10.4.3. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the Mullaghanish to Musheramore Mountains SPA

[004162], or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

10.4.4. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project in relation to the Conservation Objectives (Hen Harrier) of the Mullaghanish to Musheramore Mountains SPA [004162]
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals, and future plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Mullaghanish to Musheramore Mountains SPA [004162]

Mullaghanish to Musheramore Mountains SPA [004162] Source content: (accessed 11th of August 2023): Mullaghanish to Musheramore Mountains SPA | National Parks & Wildlife Service (npws.ie)					
Qualifying Interest Feature	Conservation Objectives Targets and Attributes	Potential Adverse effects	Mitigation measures	In combination effects	Can Adverse effects on integrity be excluded?
Hen Harrier (Circus cyaneus) [A082]	To **restore** the favourable conservation condition of the Hen Harrier in Mullaghnish to Musheranmore Mountains SPA	N- The site is located entirely outside the subject site. No potential adverse effects are envisaged as the works are mainly to commercial forestry plantation will be short term and no recorded sighting of the Hen Harrier during surveys.	None required	A range of plans and projects (including the permitted development Reg Ref 19/4972 and other wind developments) have been assessed had there is no potential for any in-combination effects.	Yes
Overall conclusion: Integrity test Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of the Mullaghanish to Musheramore Mountains SPA, either alone or in combination is European site and no reasonable doubt remains as to the absence of such effects.					

10.5. Appropriate Assessment Conclusion

10.5.1. The proposed 110kV grid connection, substation and associated works has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may potentially have a significant effect on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162]. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of that site in light of its conservation objectives.

10.5.2. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site Code No. 000365 or No. 004162, or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

10.5.3. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162].
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals, and future plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162].

11.0 **Recommendation**

11.1.1. I recommend that planning permission should be **GRANTED** for the proposed development for the reasons and considerations set down below, and subject to the attached conditions.

12.0 **Reasons and Considerations**

12.1. Having regard to:

- European, national, regional, and county level support for renewable energy development as follows:
  - (i) Climate Action Plan 2023,
  - (ii) Project Ireland 2040 National Planning Framework,
  - (iii) The Regional Spatial and Economic Strategy for the Southern Assembly
  - (iv) The policies and objectives of the Kerry County Development Plan 2022-2028 and the Cork County Development Plan 2022-2028
- the nature, scale, and extent of the proposed development,
- mitigation measures proposed for the construction, and operation of the site and subject works,
- the submissions and observations on file including those from prescribed bodies, the planning authority and other third parties.
- the planned renewable energy development (Reg Ref 19/4972), and
- the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the absence likely significant effects of the proposed development on European Sites.

Proper planning and sustainable development

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with European, national and regional renewable energy policies and with the provisions of the Kerry County Development

Plan 2022-2028 and the Cork County Development Plan 2022-2028 , would not seriously injure the visual or residential amenities of the area or otherwise of property in the vicinity or have an unacceptable impact on the character of the landscape or on cultural or archaeological heritage, would not have a significant adverse impact on ecology, would be acceptable in terms of traffic safety, public health and would make a positive contribution to Ireland's renewable energy and security of energy supply requirements. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

12.2. Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development taking account of:

a) the nature, scale, location and extent of the proposed development on a site,

b) the Environmental Impact Assessment Report (EIAR) and associated documentation submitted in support of the application,

c) the Further Information and associated documentation submitted by the applicant;

d) the submissions received from the prescribed bodies, the planning authority and third parties, and

e) the Inspector's report.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board agreed with the examination, set out in the Inspector's report, of the information contained in the environmental impact assessment report and associated documentation submitted by the applicant and submissions made during the application. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows.

- The risk of pollution of ground and surface waters during the construction phase through a lack of control of surface water during excavation and

construction, the mobilisation of sediments and other materials during excavation and construction and the necessity to undertake construction activities in the vicinity of existing watercourses. The construction of the proposed project could also potentially impact negatively on ground and surface waters by way of contamination through accidents and spillages. These impacts would be mitigated by the agreement of measures within a Construction and Environment Management Plan, and the implementation of mitigation measures related to control and management of sediments, accidental spills and contamination, and drainage management.

- The proposed development would give rise to a short-term increase in vehicle movements and resulting traffic impacts during the construction phases. These impacts would be mitigated by the agreement of measures within a Construction and Environment Management Plan.
- The overall proposed project, including the permitted development (Reg Ref 19/4972), the concurrent application before the Board for part of the grid connection (ABP 317406-23, Reg Ref 22/816) and the proposed development for this 110kV cable and substation would have a direct long term positive impact on the climate by supplying electricity to the national grid from renewable energy sources.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

12.3. Appropriate Assessment – Stage 1

The Board considered the Screening Report for Appropriate Assessment and all other relevant submissions and carried out an appropriate assessment screening exercise relation to the potential effects of the proposed development on designated European sites. The Board noted that the proposed development is not directly connected with or necessary for the management of a European Site and considered the nature, scale, and location of the proposed development, as well as the report of

the Inspector. The Board agreed generally with the screening report submitted with the application and with the screening exercise carried out by the Inspector. The Board concluded that, having regard to the qualifying interests for which the sites were designated and in the absence of connections to, and distance between, the application site and the European Sites; Mullaghanish Bog SAC [001890], St. Gobnet's Wood SAC [000106], Blackwater River (Cork/Waterford) SAC [002170], Old Domestic Building, Curraglass Wood SAC [002041], Kilgarvan Icehouse SAC [000364], The Gearagh SAC [000108], The Gearagh SPA [004109], could be screened out from the further consideration and that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effects on these European Sites or any other European Sites in view of the sites' conservation objectives and that a Stage 2 appropriate assessment is therefore not required in relation to these European Sites.

12.4. **Appropriate Assessment Stage 2**

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162] in view of the sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment as well as the report of the Inspector.

In completing the assessment, the Board considered the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects, the mitigation measures which are included as part of the current proposal and the Conservation Objectives for this European Site. In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Site, having regard to the sites' Conservation Objectives. In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365] and Mullaghanish to Musheramore Mountains SPA [004162] or any other European Site in view of the sites' Conservation Objectives.

13.0 **Conditions**

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars received by An Bord Pleanála, except as may otherwise be required in order 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 interests of clarity and of proper planning and sustainable development of the area.
2.	Apart from any departures specifically authorised by this permission, the development shall be carried out and completed in accordance with the terms and conditions of the permission(s), planning register reference number 19/4972, and any agreements entered into thereunder. Reason: In the interest of clarity and to ensure that the overall development is carried out in accordance with the previous permission(s).
3.	(a) All of the environmental, construction, ecological and heritage-related mitigation measures, as set out in the Environmental Impact Assessment Report, the Natura Impact Statement, and the Construction and Environmental Management Plan, and other particulars submitted with the application, shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order. (b) Prior to commencement of development a badger survey shall be undertaken, in the event of badger sett(s) being identified appropriate mitigation and avoidance will be agreed in writing with the Planning Authority.

	(c) There shall be no felling or scrub clearance within the bird nesting season (1st March to 31st August). (d) A finalised Invasive Species Management plan detailing the methodology of control of Invasives and monitoring to be agreed with the Planning Authority prior to commencement of development. (e) Submission of an "Annual Environmental Report' on the Habitat Enhancement Area should be submitted to the planning authority on an annual basis. (f) Submission of a Mitigation and Monitoring report prepared by a suitably qualified ecologist clearly indicating compliance with all ecological conditions listed in those reports from Section a). **Reason:** In the interests of clarity and of the protection of the environment during the construction and operational phases of the development.
4.	1. All mitigation measure in relation to Archaeology and cultural heritage as set out in Chapter 11 of the EIAR (Tobar Archaeological Services: 29th of July 2022) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this permission. 2. The Construction Environmental Management Plan (CEMP) shall clearly identify and highlight the location of all archaeological and cultural heritage constraints located in proximity to the proposed works(Chapter 11 of the EIAR) the CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity. 3. The applicant is required to employ a suitably qualified, archaeologist to monitor all ground disturbance required for this development. No groundworks of any type (including any enabling works or advance site investigations) are to take place in the absence of the archaeologist without his/her express consent. The

	use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. a) The archaeological monitoring programme must be carried out under license from NMS and in accordance with an approved method statement, note a period of 5-6 weeks should be allowed to facilitate processing and approval of the licence application and method statement. b) Should archaeological material be found during the course of the archaeological monitoring, the archaeologist shall have work on site stopped pending a decision regarding appropriate mitigation. The developer shall be prepared to be advised by the National Monuments Service with regard to any mitigating action (preservation *in situ* and/or excavation). The developer shall facilitate the archaeologist in recording any material found. 4. The planning authority and National Monuments Service shall be furnished with a final archaeological report describing the results of archaeological monitoring and of any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer. Reason: To ensure the continued preservation (either *in situ* or by record) of places, caves, sites, features and other objects of archaeological interest.
5.	The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall incorporate all mitigation

	measures set out in the application documentation and provide details of intended construction practice for the development, including: (a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse, site offices, construction parking and staff facilities, re-fuelling arrangements security fencing and hoardings; (b) a comprehensive construction phase traffic management plan including details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site; (c) a comprehensive decommissioning and operation phase traffic management plan similar to the requirements for the construction phase plan; (d) measures to prevent the spillage or deposit of clay, rubble, or other debris on the public road network; (e) details of appropriate mitigation measures for noise, dust, and vibration, and monitoring of such levels; (f) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater; (g) off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil; (h) means to ensure that surface water run-off is controlled such that no deleterious levels of silt or other pollutants enter local surface water drains or watercourses. (i) Surface water discharge from compounds will be via a class 1 oil interceptor. (j) An audit list of all construction and operational mitigation measures, their timelines for implementation and responsibility for reporting.

	A record of daily checks that the works are being undertaken in accordance with the Construction and Environmental Management Plan shall be kept for inspection by the planning authority. **Reason:** In the interest of environmental protection, amenities, public health, and safety
6.	(a) During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed: i. An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.] ii. An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component. At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site. (b) All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with respect of Community Response" as amended by ISO Recommendations R 1996 1, 2 or 3 "Description and Measurement of Environmental Noise" as applicable. **Reason:** To protect the amenities of property in the vicinity of the site
7.	The developer shall appoint a suitably qualified ecologist to monitor and ensure that all avoidance/mitigation measures relating to the protection of flora and fauna are carried out in accordance with best ecological practice and to liaise with consultants, the site contractor, the NPWS and Inland Fisheries Ireland. A report on the implementation of these measures shall be submitted to the planning authority and retained on file as a matter of public record. **Reason:** To protect the environmental and natural heritage of the area.
8.	No instream works shall be carried out from October 1st to June 30th, fish removal will take place within cofferdams prior to dewatering and Inland

	Fisheries Ireland to be notified in advance of any works. The Ecological Clerk of Works will ensure all mitigation detailed in application documentation relative to watercourse crossings are employed and watercourse crossings shall not lose material to the rivers. **Reason:** In the interests of environmental protection.
9.	Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority. **Reason:** In order to safeguard the amenities of property in the vicinity.
10.	Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services. Reason: In the interest of public health.
11.	All road surfaces, culverts, watercourses, verges, and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority at the developer's expense. Prior to commencement of development, a road condition survey shall be carried out to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. **Reason:** In order to ensure a satisfactory standard of development.
12.	Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, 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. Reason: To ensure satisfactory reinstatement of the site.
13.	The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme. **Reason:** It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Karen Hamilton

Senior Planning Inspector

31st of August 2023