An Bord Pleanála

Inspector's Report

ABP-310090-21

Development	Proposed development will comprise of onshore grid infrastructure including 220kV export cable circuits and fibre optic cables, new 220kV GIS substation at Shelton Abbey and overhead line connection and all associated ancillary works.
Location	In the townlands of Johnstown North, Johnstown South, Seabank, Ballymoney, Killiniskyduff, Templerainy, Coolboy, Kilbride, Shelton Abbey, Ballyraine Lower and Ballyraine Middle in County Wicklow
Planning Authority	Wicklow County Council
Applicant	Sure Partners Ltd
Date of Site Inspection	15/02/22.
Inspector	Sarah Lynch

Contents

1.0 Introduction

1.1. Pre-application Consultation

1.2. The Board received a request on 17th February, 2020 from Sure Partners Limited to enter pre-application consultations under Section 182E of the Planning and Development Act 2000, as amended, in relation to the proposed development in the environs of Arklow, Co. Wicklow.

1.3. The Board's representatives met with the prospective applicant on 17th June 2020 and 2nd September 2020 whereby the details of the proposed development were presented. The applicant sought the opinion of the Board as to whether the proposed development comprised Strategic Infrastructure Development, pre application reference ABP 306662-20.

1.4. The Board determined that in accordance with Section 182 (A) of the Planning Development Act 2000, as amended, the proposed development comprised of Strategic Infrastructure Development.

2.0 Background

2.1. The development site comprises the onshore grid connection element of the Arklow Bank Wind Park Project, located off the coast of County Wicklow. The current proposal relates to Phase 2 of the overall development, and the total windfarm site was the subject of a foreshore lease that was granted awarded in 2002 by the Department of the Environment. The area of this foreshore lease is extensive, covering a site c.27km in length (north-south) and c.2.5km wide and located c.8-12km offshore. The foreshore lease permits a total of up to 200 turbines with a total installed capacity of at least 520MW.

2.2. Phase 1 of the overall wind park development was constructed in 2003 and comprises a total of 7 no. turbines with a total installed capacity of 25.2 MW. This part of the project is owned and operated by General Electric under a sublease from SSE. SSE now propose to complete the remainder of the project under the existing foreshore lease. It is envisaged that Phase 2 of the overall development would have between 57 and 100 turbines of 5.5 to 10MW capacity each.

3.0 Development Description

3.1. The onshore elements of the Arklow Wind park development, the subject of this application, relate to the connection of the offshore windfarm to the existing grid network as follows:

- Landfall for two offshore export cable circuits from the High Water Mark to two Transition Joint Bays at Johnstown North located c. 4.5km to the northeast of Arklow Harbour.
- Connection by two underground 220kV high voltage alternating current cable circuits, and fibre optic cables over a distance of c.6km, from the landfall to the new onshore 220kV substation.
- A new onshore 220kV substation to be located at Shelton Abbey, north of the Avoca River, approximately 2.1km northwest of Arklow consisting of two connected compounds:
    - The transmission compound with the infrastructure to physically connect to the NETN and,
    - The connection compound with the infrastructure to allow the connection of the windfarm in accordance with EirGrid grid code requirements
- Flood defence improvement works to the existing Avoca River Business Park flood defences located c. 500m west of substation site,

3.2. A 220kV overhead line connection from the new 220kV substation at Shelton Abbey to the existing 220kV transmission network located c. 200m from the substation site.

4.0 Development site description

4.1. The site is extensive and comprises three principal elements as follows.

<u>Landing point</u>

- A coastal landing point, which is located in the townland of Johnstown North, Co. Wicklow approximately 4.5km northeast of Arklow Harbour adjacent to the regional road R750. This element of the site consists of undulating pasture fields located behind sea cliffs. The surrounding area is farmland pasture with

little development in the vicinity. The M11 motorway is c. 1km to the west from this location. The location of the landfall is indicated on Figure 5.3 of the EIAR.

- Jointing bays will be located c. 100-180m from the High Water Mark.

Onshore route

- Two no. 220kV HVAC cable circuits with associated fibre optic communication and earthing cables will be laid underground from the landfall at Johnstown North to the proposed onshore 220kV substation at Shelton Abbey.
- The proposed route will commence from the jointing bay locations and continue south-west crossing a minor road, the L-95115 before running adjacent to R750 in agricultural lands for c. 2000m until it reaches Ballymoney. From this point the route continues in a north-westerly direction through agricultural lands, close to field boundaries for 600m.
- The route then passes the R772 and passes north of the existing Arklow substation. The route then runs parallel to the M11 for c. 400m and then in a south westerly direction for c.500m, close to field boundaries in agricultural fields. The route then crosses the L2180 Beech Road northwest of Kilbride Industrial Estate.
- The route changes to a north westerly direction for c. 250 metres before continuing in a south westerly direction alongside the M11 for c. 300m and then crosses the M11.
- It is at this point that the route has two options (both of which are assessed within the EIAR) as follows:
    - One option will utilise an existing underpass to cross the M11 and join and continue along the L6179 Kilbride Road.
    - The other option involves crossing the M11 by HDD. Both options meet the L6179 Kilbride Road near the entrance to the Avoca Business Park before arriving at the proposed new substation at Shelton Abbey.

The total corridor length is 6km and will require 5 road crossings and 8 watercourse crossings.

The location of the Substation is within the previously developed lands at the Avoca River Business Park. Permission has been granted for the development of a data centre in close proximity to the proposed substation. The lands were previously the site of a former fertiliser manufacturer and are bound to the south by the Avoca River whereby works will be carried out to bolster existing flood defences.

A construction corridor of 30m will be required and a permanent wayleave of 15m will be required to access the cable element of the development, in the vicinity of HDD crossings the construction corridor will be required to increase to 50m and the permanent wayleave to 20m.

4.2. Prescribed Bodies

4.3. Department of Housing, Local Government and Heritage, DAU

- Archaeology – mitigation to be implemented as proposed.
- No observations to make in relation to the NIS
- Location of the biodiversity enhancement area at coastal area should be reconsidered, the planting of trees in proximity to established existing broadleaved woodland would provide more biodiversity value as it would provide ecological connectivity to existing woodlands and could improve the coherence of ecological networks including the Natura 2000 network.
- The management of the land as traditional hay meadow, hedgerows and scrub may be of more benefit to local biodiversity, including yellowhammer and meadow pit.
- NPWS does not have a direct role in ensuring compliance and cannot agree or approve changes or alterations to the project or associated conditions or mitigation measures.
- Further details of restoration and stabilisation of stream banks should have been provided in the EIAR. Importation of large stones should not be used for stabilisation. The use of low impact soft engineering techniques such as willow spilling should be used in preference to the above.

- Access track to proposed tower 6B lies adjacent to southern bank of the Avoca River. This habitat has been disturbed and is recolonising, it is suggested that an alternative access track is identified.
- The river riparian area should be restored in order to allow this habitat and associated biodiversity to recover to protect water quality in the Avoca River and to provide a corridor for wildlife, including otter.
- Board should ensure that the attenuation pond is fit for purpose and the water quality within the Avoca River is maintained.
- Fish life has been found within the attenuation pond, maintenance of this pond is therefore required and protection of species within it such as the common frog is also required.
- Clearing of vegetation from the site should only be carried out outside of bird breeding season. Where it is required outside of this season, vegetation shall be inspected by a suitably qualified ecologist immediately prior to removal and suitable mitigation measures put in place.

4.4. Health and Safety Authority

- The authority does not advise against the granting of this permission.
- Attention is drawn to Regulation 24(3) of S.I 209 of 2015
- The operator of an establishment covered by S.I 209 of 2015 is also required to take all necessary measures to prevent major accidents and to limit the consequences of any such major accidents.

4.5. Inland Fisheries

- Works should be carried out in accordance with measures outlined within the CEMP.
- Works should prevent extensive tracts of exposed soils being exposed at any one time and adequate filter strips should be left undisturbed. Such strips are a secondary measure and should not be used as a sole method to prevent or treat soiled water.
- Excavation of trenches should be in short sections to prevent the trenches acting as conduits for surface water flows.

- No tracking of machinery in live channel.
- No concrete wash on site.
- Daily walkovers of surface water drainage locations should be carried out.
- Dust suppression water requirements should be identified in advance and extraction of more that 25m^3per day are required to register with EPA.
- Clarification on the source and operation of water required for HDD.
- Detailed method statement in relation to HDD should be supplied in relation to each crossing.
- Where instream works are required, they should be completed prior to the 30th ^{of} September in any year.
- It is preferable that all water crossings are trenchless.
- Trenchless techniques can occur at any time of the year.
- Programme of works to be provided in respect of substation which should demonstrate the immobilisation of contaminants to ground and surface water during the remediation process and during construction of footings, cable duct basements and drainage pipes.
- No build over of assets is permitted and diversion routes are to be approved prior to development.
- Separation distances as per Irish Water standards etc.

4.6. **Irish Water**

- Irish water requires that the applicant engage with Irish Waters Diversions team to ensure no negative impacts to any IW assets, reservoir, drinking water source, treatment works, pipes, pumping stations, discharges and outfalls.

4.7. **Transport Infrastructure Ireland**

- Works in relation to crossing M11 via existing underpass will require arrangements for third party access which will need to be resolved prior to commencement of development.

- General requirements for directional drilling under motorway include:
    - The launch and reception pits for the Pipeline are located outside the Motorway boundary,
    - The Pipeline will be installed at such depth so as not to conflict with the drainage for the Motorway,
    - Neither the Works nor the Pipeline will damage or interfere with the Motorway,
    - There are no bolted joints in that part of the Pipeline within the motorway fence-line,
    - Specific requirements may also arise for these proposed works.
- Any third party seeking to gain access to the M11 PPP Scheme area to undertake works will need to consult with the M11 PPP Company.
- Other approvals in addition to works specific indemnities, Section 53 consent or arrangements for third party access may also be required for certain proposed works.
- Having regard to the foregoing, TII requests that any decision made on the Strategic Infrastructure Application would confirm that prior to any works being undertaken in the M11 PPP Scheme Area liaison with TII as national road authority, Wicklow County Council as road authority and N11 Arklow Rathnew PPP Limited, the M11 PPP Scheme Company, is required. Such liaison will ensure appropriate consents, approvals and third-party protocols are adhered to in the interests of safeguarding the strategic function and safety of the national road network in the area.
- In relation to substation component delivery haul routes or delivery of other components that may represent abnormal loads, any operator who wants to transport a vehicle or load whose weight falls outside the limits allowed by the Road Traffic (Construction Equipment & Use of Vehicles) Regulations 2003, SI 5 of 2003, must obtain a permit for its movement from each Local Authority through whose jurisdiction the vehicle shall travel. All structures on the proposed haul route through each Council administrative area should be

checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed.

- Maintenance and Renewal Contracts (MMaRC) as well as local road authorities in association with TII. The applicant/developer should consult with all PPP Companies, MMaRC Contractors and road authorities over which the haul route traverses to ascertain any operational requirements such as delivery timetabling, etc. and to ensure that the strategic function of the national road network is safeguarded.
- Any damage caused by the transportation of abnormal loads shall be rectified in accordance with TII pavement standards.

4.8. **Wicklow County Council**

- Planning history of site is outlined.
- A temporary traffic management plan or a construction traffic management plan to be submitted.
- Road opening licenses required for works and general conditions proposed.
- Road closures will not be considered on the R750, L21810, L6179, R772, M11.
- Road closure may be considered on the L95115.
- Seveso site lower tier – Sigma Aldrich Ireland Ltd.
- European sites and pNHAs listed.
- Relevant policy is outlined in Section 1.5 of the submission.
- The principle of development is considered to be acceptable and is supported within the County Development Plan (Objective CCE7).
- No concerns are raised in relation to biodiversity, and all works instream should be carried out in consultation with IFI.
- No concerns in relation to visual impacts.
- Works within 100 metres of a dwelling should only be carried out between 9.00-17.00 Monday to Friday and no Saturday working.

- No concerns in relation to dust emissions, flooding, surface water quality or wastewater.
- No issues in terms of human health and a community funds will be set up.
- Impacts can be ruled out on European sites.
- Conditions are recommended in relation to mitigation measures and traffic.

4.9. Third Party Observations

4.10. South East Coastal Protection Alliance

- Concerns raised in relation to development of windfarm along the Arklow Bank and the associated grid connection.
- Development of turbines on sandbanks is not sustainable and will result in long term damage to habitats etc.
- Substation is on contaminated land and there is insufficient information to assess the in-combination effects of the proposed development in this context.
- Groundwater assessment of substation site is deficient.
- Ground water monitoring holes in adjacent landfill site were inspected by EPA and found not to be present.
- Ground water pollution under landfill is significant, details of EPA testing outlined.
- No details on file as to how excavation on site will prevent polluted groundwater from entering other groundwater sources and the Avoca River.
- Proposed development may not be utilising groundwater but works may impact residential wells.
- Due to the contamination of the site and nearby landfill, the board has no choice but to refuse permission.
- No information is provided to enable the assessment of solid and liquid wastes that will arise from excavations.

- 23,000 tonnes of material are to be excavated and the destination for liquid and solid wastes and the nature of their treatment is not stated.
- Flood defence improvement works have not been designed by the OPW or authorised by the appropriate minister.
- Flood defence embankment is to be raised by 0.75, design basis for this is unclear.
- Potential for frac out to occur particularly within Templerainey Stream, the impact to the quality of water within this watercourse has not been assessed nor the downstream consequences.
- Frac out at the substation has also not been assessed.
- No consideration of waste materials from the HDD works.
- Risk of cliff collapse could potentially impact on Mediterranean salt meadows.
- Increase in silt could potentially impact on conservation objectives of the Buckroney-Brittas Dunes and Fen cSAC.
- The splitting of on shore element splits the assessment. No proper AA or EIA or screening for the offshore elements has been carried out.
- Process is developer led and not plan led. The proposed development is premature pending Government policy on the future ownership of the grid connection from wind array to the shore or the onshore grid.
- Inadequate assessment of the in-combination effects with existing 7 turbines on the Arklow Bank, reference made to dumping at sea licence.
- Consequences from the dumping at sea licence has not been assessed within the NIS.
- Impacts to bird population has not been assessed, up to date bird data should be provided to allow the board to properly consider the risk to conservation interest bird species from the proposed licence and any related proposal to prolong the life of the defaulted lease.

- Further potential designations should be considered, and the Kilpatrick Sand Dunes should not have been screened out given the hydrological link from the substation.
- Habitat and species surveys are insufficient. Usage of fields near to north of planning boundary by curlew and whooper swan has been inadequately considered.
- Inappropriate to rely on online database as a substitute for surveying invasive species.
- Impacts to water bodies including, Templerainy Stream and Redcross River and their habitats and species have not been considered properly.
- Combined impacts from air emissions from Data centre and substation have not been assessed.
- The implications of environmental damage have not been properly assessed.
- NPWS should be formally involved in the process.
- Planning drawings and documents do not meet the requirements of the Planning and Development Regulations, 2001 as amended.
- An oral hearing is requested.

4.11. **ABO Wind**

- The observer has permission for a wind project at Ballymanus and has secured a way leave agreement for a 38kV cable, 500m of this cable will follow the same route as the proposed 220kV where it leaves the proposed 200kV substation.
- It is requested that a technical drawing that is compliant with the EirGrid standards for underground cable installations is submitted and shows all other existing services within the road in order to determine whether there is sufficient space for the proposed development and the observers 38kV line.

4.12. **Arklow and District Chamber of Commerce**.

- The observer supports the proposed development.
- Further development of offshore wind is welcomed.

- Proposed development will create employment.
- Proposal will assist in the achievement of climate change policies.
- Community benefit fund will assist in the sustainable development of the town and county.

4.13. **Echelon Data Centre**

- Proposal will assist in the achievement of climate change policies.
- The new substation at this development site will power the data centre and form part of the national grid.
- Further development of offshore wind along the Arklow Bank is welcome.
- The proposed development will create new employment opportunities.
- The proposed development will play a key role in urban regeneration and future proofing and will bring a multimillion-euro community fund.

5.0 Planning History

5.1. There are a number of planning applications relating to the Shelton Abbey site in the vicinity of the proposed substation site. Specifically, the lands immediately to the south of the substation site have been the subject of a permission for the development of a data centre and it is stated by the prospective applicant during the second pre application meeting that the substation site would likely overlap with part of the permitted data centre site. It was also stated by the prospective applicant that the permitted data centre may seek to connect to the grid via the 220kv substation proposed as part of the Arklow Wind Park development and that this connection would supersede the extant 38kv connection.

- Wicklow Co. Co. Ref. 18/940; ABP Ref. ABP-303938-19 – Permission granted by the Planning Authority and granted on appeal by the Board for development comprising the demolition of buildings and structures on site and construction of Data Storage Facility comprising 3 data storage buildings and all associated site infrastructure.

5.2. ABP 309252 Permission was granted for the following development: proposed development of a two storey 110kV GIS substation with all associated site works and ancillary works

5.3. It is also noted that there is a permitted solar farm development located at Johnstown North a short distance to the north of the proposed cable landfall site.

- Wicklow Co. Co. Ref. 17/1497; ABP Ref. ABP-301726-18 – Permission granted by the Planning Authority and granted on appeal by the Board for the development of a solar farm within a site area of approximately 39 hectares at Johnstown North consisting of solar photovoltaic panels covering an area of up to 27.2 ha on site substation, 8 no inverter / transformer stations, underground cables and ducts, boundary security fence, new internal tracks, CCTV cameras and all associated site services. Permission is sought for a period of 10 years.

6.0 Policy Context

6.1. European Green Deal

This is an action plan to boost the move to a clean circular economy. One of the aims of this plan is to decarbonise the energy sector. It is stated within this plan that the production and use of energy across the economic sectors account for 75% of the EU's greenhouse gas emissions. Energy efficiency must therefore be prioritised. With renewable sources having an essential role, in particular offshore wind production.

6.2. 2021 EU Strategy on Adaptation to Climate Change

This document sets out the pathway to adapt to the unavoidable impacts of climate change. With the overall aim to reach climate neutrality by 2050.

6.3. Climate and Energy Framework

This document sets out targets in relation to climate change. Greenhouse Gas emission reduction will increase to at least 55% of 1990 levels. All sectors will contribute to the achievement of the 40% target by both reducing emissions and increasing removals.

Integrated monitoring and reporting rules have been adopted at EU level to ensure progress towards 2030 climate and energy targets and agreements made under the Paris Agreement. These are outlined in Regulation EU 2018/1999 on the Governance of the Energy Union. Under the governance regulation members states are required to adopt integrated national energy and climate plans for the period 2021-2030 and national long-term strategies.

The proposed development would help meet the 2030 targets and objectives set out in the Climate and Energy Framework by providing a new renewable source of energy that would reduce reliance of Fossil fuels and dependency on energy imports.

6.4. **EU Strategy for Offshore Renewable Energy, 2020**

The aim of the strategy is to ensure that offshore renewable energy helps to reach the EU's ambitious energy and climate targets**.** The European Commission estimates that between 240 and 450 GW of offshore wind power is needed by 2050 to keep temperature rise below 1.5^{o}C. This Strategy seeks to increase Europe's offshore wind capacity from its current level of 12 GW to at least 60GW by 2030 and to 300GW BY 2050.

6.5. **National Planning Framework**

6.6. One of the National Strategic Outcomes (8) set out in the NPF is the "Transition to a Low Carbon and Climate Resilient Society". It is stated in the NPF 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, renewables-focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand".

6.7. Section 9.2 of the Plan addresses Resource Efficiency and Transition to a low carbon economy. There are a number of National Policy Objectives which seek to reduce carbon footprint by integrating climate action into the planning system. The NPF states, in relation to energy policy and planning that Ireland's national energy policy is focused on three pillars: "(1) sustainability, (2) security of supply and (3)

competitiveness. The Government recognise that Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% by 2050, compared to 1990 levels, while at the same time ensuring security of supply of competitive energy sources to our citizens and businesses".

6.8. The NPF further states that "in the energy sector, transition to a low carbon economy from renewable sources of energy is an integral part of Ireland's climate change strategy and renewable energies are a means of reducing our reliance on fossil fuels. The forthcoming Renewable Electricity Policy and Development Framework will aim to identify strategic areas for the sustainable development of renewable electricity projects of scale, in a sustainable manner, compatible with environmental and cultural heritage, landscape and amenity considerations.

6.9. National Policy Objective 55 states: "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".

6.10. **National Energy and Climate Plan 2021-2030**

The NECP seeks to meet a target of at least 3.5GW of offshore renewable energy. This has been revised upwards since the adoption of the plan in 2020 to 5 GW of offshore renewable energy.

The NECP highlights that the main area for offshore fixed bottom wind will be the Irish Sea East Coast due to the relatively favourable sea depth and wave conditions, the more developed and robust onshore transmission system and the close location to big electricity demand growth centres.

6.11. **Climate Action Plan 2021**

The plan sets out a target of 80% renewable electricity generation by 2030 and includes an increased target from that outlined within the 2019 plan of up to 5GW of offshore wind energy.

The Arklow Bank Wind Park will be capable of generating 1.8TWh of renewable electricity annually, enough to offset 530,225 tonnes of carbon emissions annually.

6.12. **Offshore Renewable Energy Development Plan, 2014**

The OREDP looks towards 2030 and 2050 setting goals to decarbonise Ireland's electricity system which will require the expansion of our renewable generation including offshore wind. Actions listed within the plan to facilitate this include:

> '*10. Ensure Appropriate Infrastructure Development: The development of offshore renewable energy is critically dependent on the development of enabling infrastructure at a number of points in its value chain, including grid and port facilities.'*

6.13. **Regional Planning Context**

Regional Spatial Economic Strategy for the Eastern and Midland Region 2019-2031

6.14. Section 10.3 of the strategy outlines the documents support for the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks as well as new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid's (2017) Grid Development Strategy which will serve the existing and future needs of the Region and strengthen all-island energy infrastructure and interconnection capacity.

6.15. The following Regional Policy Objectives are noted:

- RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.
- RPO 10.22: Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people.

Local Policy Context

It is of note that the review of the current Wicklow County Development Plan has commenced and is at pre-draft stage.

Wicklow County Development Plan 2016-2021

Chapter 5 – Economic Development:

EMP1 To support all forms of employment creation, especially where this can mitigate long distance commuting, subject to the proper planning and sustainable development of the area and compliance with all other objectives of this plan.

EMP2 To normally require new employment generating developments to locate on suitably zoned or identified land in settlements. Proposals in settlements with no zoning plan should be assessed on the basis of their individual merits, taking into consideration the objectives set out in this chapter of the plan and all other matters pertaining to the proper planning and sustainable development of the area, including ensuring that the proposal is appropriately sited in a location so that it enhances, complements, is ancillary to or neutral to the existing land uses in the area. All other proposals for employment generating developments outside of settlements will be assessed on the 'Objectives for Wicklow's Rural Economy'.

EMP7 To encourage the redevelopment of brownfield sites for enterprise and employment creation throughout the County and to consider allowing 'relaxation' in normal development standards on such sites to promote their redevelopment, where it can be clearly demonstrated that a development of the highest quality, that does not create an adverse or unacceptable working environment or create unacceptable impacts on the built, natural or social environment, will be provided.

Arklow and Environs Local Area Plan 2018

The connection point of the proposed development site is zoned E1 Employment with a stated objective 'to provide for the development of enterprise and employment. Use indicated as being acceptable with the EI zoning are noted as follows… "Uses include general and light industry, office uses, enterprise units, appropriate warehousing, petrol filling stations (as deemed appropriate), public transport depots, open space, community facilities, educational, utility installations and ancillary developments for employment and industry uses in accordance with the CDP".

6.16. **Policy Statement on Security of Electricity Supply, Department of the Environment, Climate and Communications. 2021**

The Government recognises that:

- ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions.
- there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection and storage in order to ensure security of electricity supply
- The Government has approved that:
    - it is appropriate for additional electricity transmission and distribution grid infrastructure, electricity interconnection and electricity storage to be permitted and developed in order to support the growth of renewable energy and to support security of electricity supply;
- The challenges to ensuring security of electricity supply include:
    - ensuring adequate electricity generation capacity, storage, grid infrastructure, interconnection and system services are put in place to meet demand – including at periods of peak demand;
- It is expected that the majority of renewable energy generated by 2030 will be from wind and solar. These sources of renewable energy are variable in nature and therefore will require other technologies to both support their operation and provide electricity supplies when they are not generating. This will require a combination of conventional generation (typically powered by natural gas), interconnection to other jurisdictions, demand flexibility and other technologies such as energy storage (e.g. batteries) and generation from renewable gases (e.g. biomethane and/or hydrogen produced from renewable sources).

Legislative Context

Strategic Infrastructure Development

6.17. Section 182A(1) of the Planning and Development Act, 2000 (as amended) requires, where a person (referred to as the 'undertaker') intends to carryout development

comprising or for the purposes of electricity transmission, the undertaker shall prepare an application for approval of the development to the Board. Section 182A(9) of the Act states that the term 'transmission' shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999, and for the purposes of section 182A, shall also be construed as meaning the transport of electricity by means of a high voltage line (equal to or greater than 110kilovolts) or an interconnector (whether ownership of the interconnector will be vested in the undertaker or not).

6.18. Section 2(1) of the Electricity Regulation Act, 1999 defines transmission as '…*the transport of electricity by means of a transmission system, … a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying of electricity from a generating station to a sub-station, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board may, from time to time, …specify as being part of the distribution system …'*

6.19. Electric plant is defined as '*any plant, apparatus or appliance used for, or for purposes connected with, the generation, transmission, distribution or supply of electricity, other than by (a) an electric line, (b) a meter…, or (c) an electrical appliance.'*

6.20. **Natural Heritage Designations**

The site is not within any European Designated site.

- Buckroney-Brittas Dunnes and Fen SAC is located c. 320m to the north of the landfall site at the coast.
- Kilpatrick Sandhills SAC is located c.8.2km southeast of the proposed development site, also at the coast.

6.21. **EIA**

6.22. Section 182A(2) of the Planning and Development Act, 2000 (as amended) requires that in respect of development referred to in section 182A(1), which belongs to a class of development for the purposes of section 176 (prescribed classes of development requiring environmental impact assessment), the undertaker shall prepare an environmental impact statement or Natura Impact Statement in respect of the proposed development.

6.23. Schedule 5 of the Planning and Development Regulations, 2001 (as amended) transposes Annex I and II of the EIA Directive and sets out prescribed classes of development, for which an environmental impact assessment is required. The following classes are noted:

- Part 2(3)(b) refers to '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'.

7.0 **Assessment**

7.1. The proposed development as outlined above will comprise I have considered the application and the plans and particulars submitted and the submissions received and consider that the issues for consideration before the Board pertain the following:

- Principle of Development
- Visual Impact
- Residential Amenity
- EIAR
- Appropriate Assessment

7.2. It is important to note at this juncture that the proposed submarine and foreshore elements of the Arklow Bay Wind Park are not within the jurisdiction of the Board for the purpose of determination and have been the subject of a separate consenting process. Whilst the EIAR submitted considers the wind park in a cumulative manner with the proposed terrestrial development it is solely for the purpose of carrying out a robust cumulative assessment. A number of submissions have raised the concerns in relation to the Arklow Wind Park development.

7.3. Whilst I note the concerns raised, I consider it prudent to reiterate at this juncture that the element of the project under consideration by the Board relates solely to the terrestrial element of the development from the landfall site at the high-water mark to the Avoca Business Park in Co. Wicklow. The assessment hereunder will consider the foregoing and will consider the cumulative impacts of the project in the context of

existing and proposed development within the vicinity of the development as well as the development in its entirety under the relevant headings outlined within the EIAR.

7.4. Given the variety of issues raised within the submissions received, I consider it prudent to consider the issues raised on a themed basis within the relevant sections of the report hereunder. All submissions are summarised above for ease of reference.

Principle of Development

7.5. The proposed development, as mentioned above, comprises the following:

- Landfall for two offshore export cable circuits from the High Water Mark to two Transition Joint Bays at Johnstown North located c. 4.5km to the northeast of Arklow Harbour.
- Connection by two underground 220kV high voltage alternating current cable circuits, and fibre optic cables over a distance of c.6km, from the landfall to the new onshore 220kV substation.
- A new onshore 220kV substation to be located at Shelton Abbey, north of the Avoca River, approximately 2.1km northwest of Arklow consisting of two connected compounds:
    - The transmission compound with the infrastructure to physically connect to the NETN and,
    - The connection compound with the infrastructure to allow the connection of the windfarm in accordance with EirGrid grid code requirements.
- Flood defence improvement works to the existing Avoca River Business Park flood defences located c. 500m west of substation site,
- A 220kV overhead line connection from the new 220kV substation at Shelton Abbey to the existing 220kV transmission network located c. 200m from the substation site.

7.6. The development site will commence at the coast at Johnstown north and continue across agricultural lands until it crosses the M11 and connects into the substation within the Avoca River Park Industrial Estate where the development lands are subject to an E1 Employment zoning objective as outlined within the Arklow and Environs

Local Area Plan 2018. The provision of utilities such as that proposed are acceptable in principle under this zoning objective. The proposed development has been designed in order to support current power demand and future growth within the area. The proposal will provide the onshore grid connection to the offshore wind development at Arklow Bank.

7.7. Having regard to the zoning objective relevant to the Avoca River park element of the development site and that the Wicklow County Development Plan supports the redevelopment of such brownfield sites, I am satisfied that this element of the proposed development is in accordance with the requirements of local policy for this area.

7.8. The remaining element of the development site lies with agricultural lands and is not subject to a particular zoning objective. As the proposed development will cater for future renewable energy production from offshore wind, it is of note that renewable energy development is supported 'in principle' at national, regional and local policy levels, with collective support across government sectors for a move to a low carbon future and an acknowledgement of the need to encourage the use of renewable resources to reduce greenhouse gas emissions and to meet renewable energy targets set at a European Level.

7.9. It is an action of the NPF under National Policy Objective no. 8 to reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres. At a local level it is an objective of the Wicklow County Development Plan 2016-2022 under objective CCE17 'to support the development and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations as required'.

7.10. Having regard to the foregoing, I am satisfied that the proposed development accords with national and local policy and is therefore acceptable in principle.

Visual Impact

7.11. As outlined above the proposed development site is extensive and is contained with within a central area of the Avoca River Business Park and across largely agricultural lands to the coast at Johnstown north. The existing Avoca River Business Park, which will contain the most visible above ground elements of the development, currently

accommodates businesses such as timber processing, vehicle storage and several warehouses. The Park also accommodates a plastics manufacturing facility and an existing substation. The Park is bound to the east and west by undeveloped greenfield lands. Beyond these lands Shelton Abbey is located which is currently used by the prison service. The Avoca River bounds the site to the south and the Dublin-Rosslare rail line is located adjacent to the river. The M11 is c. 800 m to the east of this element of the proposed development site and Arklow town is located c. 1km to the southeast. The site boundaries are defined by a mix of hedgerows, trees and fences and the overall lands are low-lying and relatively flat with a gentle slope from N to S.

7.12. An examination of the visual and landscape impacts has been under taken within the EIAR assessment hereunder and will not be repeated with this section of the report, however it is important to note at this juncture that the above ground element s of the proposed development namely those within and adjacent to the Avoca River Business Park, does not interrupt any protected views or prospects and given the significant scale of both existing and permitted development within the Business Park and adjacent to the development site, I consider that the proposal would not introduce a new form of development to this landscape. Based on the location of the lands within an established Business Park I consider the potential to give rise to significant visual impacts is significantly limited in this instance.

Residential Amenity

7.13. The substation element of the development, as aforementioned, is located in an existing Business Park on previously developed lands. The site is c. 800 metres from the nearest dwelling and is out of sight of residential properties within the immediate vicinity. The nearest grouping of residential properties is located within the outskirts of the adjacent town of Arklow c. 1km away, and given the location and distance of such properties it is unlikely that any impacts in relation to the construction or operation phases of the proposed development would arise.

7.14. As mentioned below the nearest properties to the cable development at between 10 and 20 metres from the development site. Residential amenity with regard to the potential for traffic, dust and noise disturbance are examined within the relevant sections of the EIAR assessment hereunder and will not be repeated within this section of the report. However, it is important to note at this juncture that no such

significant effects are expected to arise. Given the location, nature and duration of works I am therefore satisfied that the residential amenity of nearby properties will be preserved and unaffected by the development.

8.0 **EIAR**

8.1. The application is accompanied by an Environmental Impact Assessment Report (EIAR) which was prepared by ARUP Consulting on behalf of the applicant. Reference is made to Schedule 5 Part 2 Class 3 of the Planning and Development Regulations 2001 as amended, which refers to Energy Projects (i) Installations for the harnessing of wind power for energy production (windfarms) with more than 5 turbines or having a total output greater than 5 megawatts. Given that the onshore grid infrastructure is integral to such a development the applicant has submitted an EIAR.

8.2. This EIA section of the report should, where appropriate, be read in conjunction with the relevant parts of the Planning Assessment above.

8.3. The application falls within the scope of the amending 2014 EIA Directive (Directive 2014/52/EU) on the basis that the application was lodged after the last date for transposition in May 2017. The application also falls within the scope of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, as the application was lodged after these regulations come into effect on 1st September 2018.

8.4. The impact of the proposed development is addressed under all relevant headings with respect to the environmental factors listed in Article 3(1) of the 2014 EIA Directive. The EIAR sets out a case regarding the background to the project (Section 1.4). The EIAR provides detail with regard to the consideration of alternatives in Section 4.1. An overview of the main interactions is provided at Section 20. Appendix 3.1 volume 3 of the EIAR lists the main contributors / authors and the qualifications of the EIAR manager, which meet the requirements of the EIA Directive in my view. Details of the consultation entered into by the applicant with Wicklow County Council and other prescribed bodies as part of the preparation of the project are also set out and can be reviewed Chapter 4 the EIAR.

8.5. Article 3 (2) of the Directive requires the consideration of the effects deriving from the vulnerability of the project to risks of major accidents and / or disasters that are

relevant to the project concerned. The potential for 'unplanned events' is addressed in Chapter 19.

8.6. The potential for 'flooding' is considered in Section 10 Water. I consider that the requirement to consider these factors under Article 3(2) is met.

8.7. In terms of the content and scope of the EIAR, the information contained in the EIAR generally complies with article 94 of the Planning and Development Regulations 2001, as amended, all studies informing the EIAR are up to date and recently acquired.

Alternatives

8.8. Section 4 of the EIAR submitted outlines the alternatives considered in relation to the proposed development. Alternatives were considered in relation to the landfall site, connection from landfall to a new 220kV onshore substation, connection to the NETN and alternatives in relation to the project design, technology, size and scale for the proposed development.

8.9. It is stated by the applicant that the routes consented under the Foreshore lease and the construction requirements constrained the consideration of alternative locations for the landfall site. Additional requirements in relation to the construction of the onshore cable also impacted on the alternatives that could be considered.

8.10. It is necessary for the landfall site to be as close to the High Water Mark as possible, in order to minimise the landfall horizontal directional drilling. Two potential cable landfall locations were identified, termed the northern and southern landfalls. The northern site was located within the townland of Johnstown north c. 4.5km northeast of Arklow close to Ennereilly Beach. The lands comprise of accessible agricultural lands. The southern site is located within the townland of Arklow on a parcel of land to the north of the Avoca River, adjacent to the coastline with the Irish Sea which is formed by a coastal erosion protection embankment.

8.11. A cable landfall feasibility was undertaken by the applicant, this preliminary appraisal was based on technical and environmental considerations. This study identified a number of technical constraints which are outlined in Section 4.4.1 of the EIAR submitted. It is stated that the northern site could accommodate the access and space requirements for the proposed construction works and appeared to be more favourable at the outset. Two of the three southern sites identified were subject to

planning applications and were discounted on this basis, and the third is located within an existing public amenity containing a running track. The southern sites were also subject to a number of constraints such as flooding and subsidence. A multicriteria assessment was carried out in relation to all sites and is documented within table 4.1 of the EIAR. In conclusion it was considered based on a number of factors, as outlined within the multicriteria assessment that the northern site was the preferable site and this was therefore brought forward as the preferred option.

8.12. Alternative construction methods were also considered in relation to the importation of cables at the landfall site, such as open cut trench, horizontal directional drilling, direct pipe and micro tunnelling an appraisal of all methods was carried out and is outlined within table 4.2 of the EIAR. Due to the environmental and technical risks associated with a number of methods it was considered that HDD was the most effective method of construction at this location.

8.13. It is of note that there are two consented (Forehshore Lease) offshore export cable routes associated with the northern landfall, the applicant has also stated that one or both may be used. As such both routes are examined within the EIAR submitted. In addition, construction compounds associated with both cable routes are also examined within the EIAR.

8.14. Alternatives were also considered in relation to the 220kV substation with regard to the substation configurations, the connection to the NETN and the location of the substation site. Details of alternatives are outlined within section 4.5 of the EIAR and include the consideration of both an AIS and GIS configuration. Variations relating to the connection to the national grid were considered and are outlined within section 4.5.1 of the EIAR. It was concluded that a GIS configuration would be brought forward as the preferred option for the substation.

8.15. With regard to the location of the substation, it is of note that the applicant considered four sites in detail located at Carrycole, Shelton Abbey, Johnstown North and Seabank. All sites were examined in relation to a number of criteria which includes, site land use, history, results of an engineering appraisal, zoning, ecology, potential for landscape and visual impacts, noise sensitivity, geology and hydrogeology, flooding and archaeological and cultural heritage constraints. The advantages and disadvantages of all four sites in relation to the foregoing criteria is outlined within 4.5.2

of the EIAR. The preferred site on the basis of a detailed evaluation undertaken was the Shelton Abbey site. This site was chosen as it offered distinctive advantages in that it is a level brownfield site with many existing services and utilities already available in an easily accessible industrial setting.

8.16. A number of cable route options were considered, undergrounding of the cable was decided at the outset given the sensitivity of the surrounding landscape. Alternative cable routes are illustrated on Figures 4.18 – 4.25 of the EIAR. Following phase 1 and 2 desktop studies and phase 3 ground truthing and surveying it was determined that Route Combinations 1 and 2 were both suitable routes. A further period of assessment was carried out in relation to landowner engagement and a technical assessment in relation to road and water crossings resulted in the final preferred route being identified as illustrated in Figure 4.26.

8.17. Mitigation measures were also considered based on the effect on quality, duration of impact, probability, and significance of effects.

8.18. In my opinion reasonable alternatives have been explored and the information contained in the EIAR with regard to alternatives provides an adequate justification for the alternatives chosen and is in accordance with the requirements of the 2014 EIA Directive.

8.19. **Air Quality**

8.20. Chapter 7 of the EIAR submitted addresses the potential for impacts to arise in relation to Air quality. Air borne quality assessments are concerned with the presence of airborne pollutants in the atmosphere. It is stated within the EIAR submitted that the assessment submitted has been carried out with regard to the National Roads Authority (now TII), 2011 Guidelines for the Treatment of Air Quality during the Planning and Construction of National Roads Schemes, and the Institute of Air Quality Management (IAQM) (2014) Guidance on the assessment of dust from demolition and construction. Regard was also had in relation to the Air Quality Standards (AQS) regulations 2011. I have reviewed these documents and note the requirements within.

8.21. As per section 7.3 of the EIAR I note that the proposed development site is located within Zone D defined as Rural Ireland as per the Air Quality Standards Regulations 2011. In the absence of baseline data for Zone D, I note that the applicant has applied the baseline data from Zone C for the purpose of this assessment.

8.22. As outlined above the proposed development comprises the onshore export cable circuits and fibre optic cables from the landfall of the offshore export cable circuits at Johnstown North to the proposed onshore 220kV substation at Shelton Abbey. Most of the cable route is through private lands with small sections along the public road. Land use proximate to the route comprises some private dwellings and main agricultural lands. Some of the development passes under the public roads around Arklow. Sensitive receptors have been identified as residential housing, schools, hospitals, places of worship, sports centres, and shopping areas, ie. places where members of the public are likely to be regularly present. The closest receptors are residential dwellings located 10-20 metres from the roadside along the cable route.

8.23. The greatest potential impact on air quality will arise from dust generated during construction and demolition associated with the following:

- Construction activities at the Johnstown North landfall site
- Open cut trench and horizontal directional drilling for the proposed cable particularly at road crossings.
- Substation site and NETN connection at Shelton Abbey.

8.24. Temporary construction compounds will also be erected at various locations and may give rise to dust during construction activities.

8.25. The applicant has assigned each dust generating activity a dust emission magnitude which is outlined in table 7.2.5 of the EIAR. Taking into account the dust emission magnitude and the sensitivity of the area, the risks of dust impacts in the absence of mitigation measures are stated to be low for demolition and medium for construction, earthworks and track out.

8.26. I note from table 7.15 that predicted air quality increases during the construction phase will be negligible. No significant direct or indirect effects are expected in relation to the operational stage of the development. Similarly, effects relating to the decommissioning of the development are predicted as being imperceptible and temporary in terms of magnitude. The surrounding area is considered to be of low sensitivity to dust related human health impacts and there is an overall low risk in this regard, as mentioned above.

8.27. Notwithstanding the predicted insignificant impacts arising from dust generation, mitigation measures are nonetheless proposed in relation to the construction phase of the development and are outlined in section 7.6.1.1 of the EIAR. Such measures include good site management, the employment of a community liaison officer, recording of complaints, regular dust monitoring and dust suppression, location of dust generating activities away from sensitive locations, erection of a 2m hoarding around construction compounds, speed restrictions, use of covered chutes, wheel wash, revegetation of earthworks and the removal of small areas at a time. Mitigation measures outlined are mostly standard practice and are known to be effective. I am satisfied that the mitigation measures proposed will adequately address any issues that should arise in this regard.

8.28. Cumulative impacts are considered within the EIAR within Section 7.7. The proposed development is considered cumulatively in the context of Phase two offshore infrastructure, operations and maintenance facility, EirGrid upgrade works, Irish Water works and other proposed, permitted and operational development in the area. All developments are examined individually in combination with the proposed development within section 7.71 of the EIAR. No significant cumulative air quality effects are expected in relation to Tier 1 developments as air quality impacts are not expected from the operation of these development. Additional development considered in combination with the proposed development are identified by the applicant as Tier 2 developments. Developments such as the development of the Avoca River Business Park, flood defence works in the Avoca River Business Park, Crag Digital permitted data centre and proposed development and other such developments within the vicinity of the Avoca River Business Park, have been examined and no significant cumulative effects to air quality are expected.

8.29. I have considered all of the written submissions made in relation to air quality and note the issues raised within the IFI submission in relation to dust, and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on air quality can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on air quality can be ruled out I am also satisfied that cumulative effects, in

the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Climate

8.30. Chapter 8 of the EIAR considers the potential for impacts to arise in relation to Climate. Potential effects of carbon emissions due to construction, operation and decommissioning are considered in the context of Ireland's national climate change obligations. The climate assessment for the development estimates the potential for greenhouse gas emissions for the proposed development.

8.31. EU greenhouse gas emission reduction targets are split into two categories, the first category covers large energy and power intensive industry which have their emissions controlled under the EU Emissions Trading Scheme, the second category deals with the non-Emission Trading Scheme sectors such as agriculture, transport, residential, commercial, waste, and non-energy intensive industry. As construction materials are manufactured using energy intensive practices, the carbon impact is assessed against the ETS category.

8.32. It is stated that the proposed development has been compared to the EPA's projected GHG emissions for 2024 as this will be the final year of construction.

8.33. I note that given the type of development and the practices involved that fugitive SF_6, which is the most potent GHG that has been tested, are unlikely and further assessment of this is not required in this instance.

8.34. The aspects of the development which have the potential to give rise to carbon emissions include, earthworks, transportation of materials and use of carbon intensive construction materials. The loss of carbon sinks such as soils and trees during construction. The use of HDD at the M11 would result in the loss of 4000m^2 of immature woodland, additional 8460m^2 of woodland will occur to the north and west of the substation. It is stated that this woodland would be replaced with the planting of 16,000m^2 of planting for biodiversity enhancement. I note the Departments submission in this regard, whereby reference is made to the location of this replacement woodland. It is recommended within the submission that such woodland is planted adjacent to the existing broad-leaved woodland as this would provide more biodiversity value. Replacement habitat at the coast is recommended as hay meadows, hedgerows and scrub which would be more beneficial to species such as yellow hammer. Such

measures will be considered within the biodiversity section of this report hereunder but can nonetheless be adequately addressed by condition, should the Board be minded to grant permission.

8.35. Overall, the carbon footprint of the emissions from the construction of the proposed development are expected to be 0.15% of the projected ETS sector CO_2 eq. emissions in 2024.

8.36. The carbon emissions from the construction of the proposed development are expected to be 0.05% of Ireland's projected total CO_2 eq. in 2024.

8.37. On this basis it is stated by the applicant that effects to climate arising from construction are considered slight, negative and long term. Given the limited maintenance required during the operational phase of the development it is considered that the potential impacts to climate will be imperceptible.

8.38. It is of note that the proposed project is part of an overall development which will support an increased capacity of 520MW of clean energy which is enough to offset 530,225 tonnes of carbon emissions annually. It is therefore anticipated that the development will have an overall indirect, significant positive effect on climate and the operational stage of the development will offset the slight negative predicted within the construction stage. The overall impact on climate is therefore predicted as being a significant long term positive effect.

8.39. Cumulative impacts are considered within the EIAR within Section 8.7. The proposed development is considered cumulatively in the context of proposed, permitted and operational development in the surrounding area and predicted impacts are considered to have a significant positive effect on Climate.

8.40. Mitigation measures are embedded into the design of the development and include the use of low carbon construction materials. Given that overall effects of the operational stage of the development are positive mitigation is not proposed.

8.41. I have considered all of the written submissions made in relation to climate and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on climate can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for

direct or indirect impacts on climate can be ruled out I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Land and Soils

8.42. Chapter 9 of the EIAR examines the potential for impacts to arise in relation to land and soils. A study area of 2km in radius of the proposed development boundary was identified. In order to establish baseline conditions a desktop study was conducted, the sources reviewed are listed in table 9.1 of the EIAR. Historical ground investigations were also examined, and site walkovers were carried out between July and November 2020 to confirm the findings of the desktop study. I note that there are no wells within the boundary of the proposed works. The proposed development will cross the following watercourses namely Johnstown North, Johnstown South, Ticknock, Coolboy, Templerainy, Kilbride Streams.

8.43. The following baseline conditions were noted in relation to each element of the development:

Landfall

8.44. The proposed landfall location is used as agriculture land at present. The landfall site lies either side of the R750. The eastern side of the landfall site is adjacent to approximately 10m high sea cliffs. No notable geomorphological features were identified at this location. It is proposed to bring the cable onshore via HDD process. The soils encountered at this area are predominantly topsoils with a depth of 0.3 metres underlain by glacial tills. Shallow bedrock was encountered across the site.

Cable Route

8.45. The lands surrounding the cable route are predominately used for agriculture with some dwellings located nearby and localised areas zoned for residential uses. The geomorphology within this section of the development boundary is characterised by glacial meltwater channels. Topsoil's have an average thickness of 0.2m, subsoils are predominantly Irish Sea Tills derived from Lower Palaeozoic sandstones and shales. Rock outcropping /sub out cropping is noted near to the M11. The Glacial tills encountered varies from 0.2m to 29.4m. Shallow bedrock is encountered at

watercourses and ground conditions at the M11 underpass show the rock to be approximately 6.5mbgl.

Substation site

8.46. The substation is a brownfield site and comprises mainly paved asphalt, the soil type is stated to comprise largely of clay/silt. Depth of bedrock was found to be between 9.8-25.5mbgl and the site is within an area of a locally important gravel aquifer, which is within the Wicklow ground water body identified as having a good water quality status. Water samples taken indicate however, that the underlying gravel aquifer has been impacted by the historical use of the site as a fertiliser factory as there were elevated levels of ammonia, potassium, sulphate, and sulphur in the samples collected.

8.47. I note that soil samples were classified as inert to hazardous due to high levels of Arsenic, Molybdenum, Cadium, Copper and Zinc, these results arise from the site's previous use as a fertiliser factory. A white material was found in the trial holes and appears to be similar to Phosphogypsum, in addition elevated levels of sulphate concentrations were noted which would confirm that the white substance observed is Phosphogypsum.

8.48. No significant radiological contamination is present at the surface or within the immediate subsurface. I note concerns are raised within the third-party submissions in relation to the potential for disturbance of this contaminate land to give rise to environmental effects. The applicant does not propose to reuse any contaminated soils from this site. Soil and demolition debris will be removed from the site as waste and disposed of accordingly and a remediation strategy will be employed as outlined in Section 9.3.2.9 of the EIAR. The applicant states that clean material will be imported to level the site and for the building of hard standings. I am satisfied that sufficient information has been provided within both Chapter 6 and Chapter 9 of the EIAR to facilitate an adequate examination of the potential environmental effects from such an activity.

NETN connection

8.49. This element of the site is located to the south and east of the Avoca River Business Park and will comprise two new overhead line towers. The Avoca River is located to the north of this element of the development where there are flood defence

embankments currently present. I note that lands at this location slope from north to south. Soils are similar to that found within the substation site as outlined above.

8.50. I note from the information submitted that no karst features have been identified within the study area.

Potential Direct/Indirect effects

8.51. There is a potential for impacts to arise lands and soils during the construction phase of the development at all locations as follows:

Landfall

8.52. Works relating to the construction of the development have the potential to result in the loss of topsoil, subsoil and rock due to clearance, excavation and HDD process. It is stated that all excavated materials will be stored adjacent to the development works and will be reinstated once construction is complete. The likelihood of instability or collapse of the cliff at this location has been examined within the EIAR and I note the concerns raised in this regard within the submissions received. Such collapse is considered to be low given the distance of the HDD entry point from the edge of the cliff and the proposed depth of the HDD below the base of the cliff and the proposed depth of HDD below the coastline.

8.53. It is of note that the HDD process will remove a small portion of bedrock aquifer, however these activities are localised and will not affect the overall integrity of the underlying aquifer. The magnitude of effects in this regard are predicted to be imperceptible. In terms of other potential impacts to the underlying aquifer I note that potential impacts could arise in relation to spills and leaks of contaminants and from temporary pumping of excavations of deep trenches. Effects arising from these activities in the absence of mitigation range from moderate to imperceptible.

Cable Route

8.54. Impacts within the cable route have the potential to arise in relation to construction activities also. It is stated that the removal of soils and rock are limited in area and quantity and will result in imperceptible impacts. Similar to the landfall site, excavated material will be reused and lands reinstated after the cable has been laid. Works will also result in similar impacts to the underlying aquifer as identified at the landfall site and will give rise to imperceptible to moderate effects. I note that works at the M11

crossing via HDD will require temporary sheet piling and pumping in order to maintain a dry works area. Pumping at this location similar to the entire cable route will be temporary and localised and as such the significance of predicted effects as a consequence of such activities is predicted to be moderate to slight. I note concerns have been raised within both the third party and submissions received and within the submission received from IFI in relation to the methodology proposed for HDD. I draw the Board's attention to Chapter 6 of the EIAR in this regard, in which the HDD process relating to each element of the development where it will be employed is outlined.

8.55. It is stated within this section of the report that during the process, drilling mud is continuously pumped to the drill head to act as a lubricant, solids are removed from the returning mud via a mud recycling plant and spoil is transported off site or via a mud pit to settle before being removed to a licenced waste facility. Water will be required for the proposed development and will be tankered into each site. The water is stated to be non-saline and non-portable with an average demand of $10m^3$/hr at each HDD site. Full details including diagrams are contained within Chapter 6 of the EIAR and I am satisfied that the applicant has provided sufficient detail to make an assessment on the potential effects of this process on the receiving environment.

8.56. Ground water dependent habitats are considered in the context of the proposed cable route, and it is stated that the Avoca River Valley pNHA is too far from the proposed development for there to be a potential effect to either the groundwater regime or ground water quality given the nature of the proposed works and the limited potential for effects to arise. Further assessment of ground and surface water will be examined hereunder within the Water section of this report.

Substation

8.57. The proposed works will result in the permanent excavation of a small proportion of made ground, as made ground is of medium significance the magnitude of effects is predicted to be slight. Overall impacts arising from the construction of this element of the development range from slight to imperceptible. I note that concerns are raised within the submission received in relation to the potential for disturbance of this made ground to mobilise contaminates within the surrounding area. As outlined above, it is known that lands within the substation site are contaminated as a result of the previous use of the site as a fertiliser factory. It is proposed that soils in this area are tested and

removed to an appropriately licenced disposal facility. It is further proposed to line this element of the development site in order to prevent rainfall from carrying contaminates into the ground water. Based on the information submitted I am satisfied that the applicants have adequately addressed the treatment of contaminated materials and the prevent of such contaminates from impacting the surrounding receiving environment.

Connection to NETN

8.58. Similar to the substation work activities this element of the development will result in the excavation of a small area of made ground. The removal of this ground may give rise to the mobilisation of contaminates any dewatering of this area will be carried out in a manner which minimises the mobilisation of such contaminates into the surrounding area. Excavated material that is suitable for reuse will be used within the foundations of the proposed towers, unsuitable material will be recycled or removed to an appropriately licenced facility. As outlined above, the significance of impacts to water dependent habitats is stated as being moderate and will be examined in more detail hereunder.

8.59. With regard to the operational phase of the development, the lands will be reinstated along the cable line and the proposed substation will be operated remotely and will generally be unmanned. The significance of effects are therefore predicted as being imperceptible. I note that the implementation of a remediation strategy will result in a reduction in the percolation of rainfall through contaminated made ground and reduce groundwater contamination at the Avoca River Business Park. The effects of this element of the development are stated as being slight beneficial.

8.60. In terms of decommissioning, it is stated that the overall effects are predicted as being imperceptible as only above ground structures will be removed throughout the development site.

8.61. Mitigation measures are proposed in relation to the construction activities and will be incorporated into the CEMP. Mitigation is outlined in section 9.7 of the EIAR. Such measures include the stockpiling of materials will be covered by piling mats, segregation of contaminated soils and those suitable for reuse, the use of bunded areas for storage and refuelling of vehicles. In the event of an accident, spill kits will

be readily available. Other measures include the use of ready-mix concrete and the prevention of concrete washing on site.

8.62. It is further stated that there is no requirement for bulk fuels or chemical storage during the operational stage and there will be no discharge to ground for wastewater facilities. Hydrocarbon interceptors will be inserted and will minimise any potential for impacts to the underlying aquifer.

8.63. It is stated that the storage of any liquid during the operational phase will be low, with the requirement for a small volume of oil storage for the transformers which will be sorted in a bunded area. The installation and regular monitoring of surface water run off during construction will ensure that watercourses are protected from sediment release and soil sampling will ensure wastes are disposed of appropriately.

8.64. It is concluded by the applicant that based on the natural conditions present and the mitigation measures proposed the potential for impacts on land and, soils are short term, and of imperceptible significance. No likely residual impacts are expected.

8.65. I have considered all of the written submissions made in relation to land and soils, and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on Land and soils can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on lands and soils can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Water

8.66. Chapter 10 of the EIAR submitted examines the potential for impacts to arise in relation to hydrology. A desktop study was carried out in order to identify hydrological features within the development site and the surrounding area. EPA Water quality monitoring data was reviewed as were relevant policy documents.

8.67. Within Section 10.3.2.2 of the EIAR submitted the applicant outlines the relevant waterbodies adjacent to the proposed development. The proposed landfall site is located adjacent to the Southwestern Irish Sea -Brittas Bay coastal waterbody which extends c. 20km along the coast of counties wicklow and wexford. The proposed cable

route will traverse 8 watercourses as outlined above, three of which are identified as permanent flow watercourses and all of which discharge to the Irish sea. I draw the Board's attention to Section 6.5.3.8 of the EIAR in which all water crossing locations and methods are outlined. The applicant has provided details of all installation, crossing and reinstatement methods to be employed at each crossing. I note that HDD will be required at two locations whilst the remainder will be carried out by open trenching.

8.68. The Avoca River is the primary watercourse in the vicinity of the substation and NETN connection site. It is stated that the Avoca River contains some of the most polluted stretches of river in the Country. Two minor streams were identified, the Raheen Stream and the Sheepwalk stream which flow into the Avoca River, both were c. 500 and 700 m respectively to the east of the site. A small drainage stream crosses the lands to the north of the Avoca River Park facility. It is assumed that this stream flows into the Avoca River. The Overhead lines will traverse this stream when entering the site. The Avoca River upstream of the development currently has a bad status and is unassigned downstream but under review.

8.69. I note that land drainage within the vicinity of the substation has been significantly altered by drainage channels and flood defence embankments. Drainage within this element of the development discharges to the Avoca River and is controlled by a flap valve. In times of flood water is pumped over the embankment.

8.70. Section 10.3.3 of the EIAR reviews water quality within the surrounding water bodies in the vicinity of the site which range from bad to good. Surface water sampling carried out found exceedances of dissolved zinc, ammoniacal nitrogen and low levels of PAHS within the Avoca River.

8.71. The proposed development site has a hydrological connection with a number of pNHA sites, namely Avoca River Valley, Arklow Town Marsh and the Arklow Sand Dunes. There is no meaningful connection to any Natura 2000 sites, however such sites will be examined in detail within the Appropriate Assessment Section of the report.

Flooding

8.72. It is of note that the development in its entirety has been examined in relation to flooding. A flood risk assessment was carried out in relation to the substation site and is contained in Appendix 10.1 of the EIAR. The cable route was not subject to an FRA

as the proposed development route is not located within any flood zones and the topography of route is elevated above the adjacent watercourses present along the route. Minor out of bank flooding was noted in relation to Johnstown North, Templerainy Stream, Kilbride watercourse and Sheepwalk watercourse which are in the vicinity of the cable route, there is no record of flooding in the vicinity of these watercourses and the risk of flooding is therefore low.

8.73. The substation site is located in flood zone C. The main risk of flooding at the substation site is from the Avoca River. A flood embankment around the Avoca River currently protects the substation. Flood risk arises in the event that there is overtopping of this flood embankment. It is proposed to improve the existing flood embankment and raise it by 0.75m to provide an improved level of protection for the proposed substation. I note that similar improvements are permitted to the embankment as a result of the permitted Data Centre development adjacent to the site. The raising of the embankment will not exacerbate flood downstream and standard mitigation measures will be employed during the importation of material to prevent any deterioration of water quality within the Avoca River in terms of sediment mobilisation.

8.74. It is stated within the information provided that the substation and associated development will not increase flood risk outside of its boundaries. In the event that current defences at the Avoca River breach, the site would be at a 1% AEP fluvial flood event.

8.75. Finished floor level of the proposed substation will be +3.3 m which will protect the structure from flooding should it arise at the site. I am therefore satisfied that the applicant has adequately addressed the issue of flooding by way of design in terms of finished floor levels and improvement works to bolster the performance of the existing embankment.

8.76. <u>Potential direct and indirect impacts</u>

8.77. Construction activities that have the potential to impact the hydrological regime of the area in the absence of mitigation include the following:

- Temporary stockpiling and excavation which can lead to the potential release of sediment laden surface water runoff.
- Washing of construction vehicles and equipment can lead to run off.

- Excavations at the landfall site, trench excavations for onshore cable, substation and tower foundations may require dewatering.
- Excavation and removal of potentially contaminated ground at the substation has the potential to release contaminates to the surface water bodies.
- Dry open cut watercourse crossings have potential to release sediment into watercourse and result in increases in velocities in streams, and potentially increase flooding.
- HDD at the landfall, M11, R722 crossings have the potential to generate runoff containing sediment and pollutants onto the adjoining land/and into the sea.
- High rainfall may give rise to flooding and water contamination resulting from accidental spillages of effluent and sanitary waste from construction welfare facilities.

8.78. A summary of predicted construction phase effects are outlined in table 10.3 of the EIAR and range from moderate to imperceptible.

8.79. The development will be constructed in accordance with SUDs and there will be no discharge to ground in relation to wastewater. A Construction Environmental Management Plan will be developed by the applicant which will contain all mitigation measures outlined within section 10.6.1 of the EIAR and will ensure that such measures are implemented during the construction phase.

8.80. I note that where over pumping is required for open cut watercourse crossings the water will be discharged through a filtering medium to limit silt carry over or bed disturbance. Cofferdams will be utilised at these locations to prevent mobilisation of contaminants where necessary and there will be no direct discharges into watercourses.

8.81. A monitoring regime of water quality will be implemented, and turbidity monitoring will be carried out downstream while works are being undertaken at the Templerainy, Kilbride River and Johnstown North watercourse.

8.82. Surface water will be attenuated, and clean upslope water will be collected in separate drains. Drainage will be managed in a manner which will not impact water quality in adjacent watercourses. Potential impacts arising from construction of the development relating to increases in run off will be adequately mitigated by the use of interceptors

and silt traps to ensure the protection of water quality in all adjacent water courses connected to the site. Spill kits will be available if required and fuels and oils will be stored in bunded areas. I note the Departments concerns in relation to the restoration of riparian habitat at the Avoca River and the presence of fish within the attenuation pond located within the Avoca River Business Park. I am satisfied that such concerns can be adequately addressed by way of condition, should the Board be minded to grant permission. I further note comments provided by IFI in relation to filter strips and water quality, I am satisfied that such concerns can also be adequately addressed by way of condition.

8.83. During the operational stage of the development, it is stated that hydrocarbon interceptors will be utilised, and an automated monitoring system will be employed to monitor the proposed attenuation pumping system.

8.84. All mitigation measures proposed are common practice and known to be effective. Cumulative impacts are examined within Section 10.7 of the EIAR and are not considered to be significant.

8.85. I note that concerns have been raised within the third-party submissions relating to the protection of ground water. Measures outline above such as the use of bunded areas in works areas, the use of a mud sink at HDD locations, the removal of excavated waste materials from site by licenced contractors, the monitoring of HDD works for frac out and the use of a remediation strategy are standard measures which will protect both ground water and surface water. I am satisfied based on the information provided within the application that the applicant has adequately demonstrated that ground and surface water can be appropriately protected during the course of construction works.

8.86. Following the implementation of mitigation, residual impacts are not expected.

8.87. I have considered all of the written submissions made in relation to hydrology and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on hydrology can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on hydrology can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Noise and Vibration

8.88. Chapter 11 considers impacts in relation to noise and vibration. Noise sensitive receptors present in the form of ribbon development along secondary roads. In order to establish a baseline noise environment, noise surveys were carried out at sensitive locations in vicinity of the proposed development construction works. The noise and vibration assessment considered multiple phases during construction of the proposed development.

Landfall

8.89. I note that the nearest receptor to the landfall site is located c. 300 metres away from the proposed works in particular where sheet piling will be employed. Expected noise levels from this activity are outlined in table 11.9 in which it is clear that noise experienced at the identified sensitive receptor will be below ambient noise levels.

HDD Drilling at landfall

This element of the construction is expected to be carried out over a 5-month period and each cable pull will take approximately 14 days, once commenced the HDD drilling is expected to operate continuously over 24 hour period until each borehole is complete. Noise levels from HDD drilling and duct pull back at the landfall site are estimated to be below the baseline ambient noise levels during day evening and night periods.

Cable route trenching

8.90. The majority of cable route works will be undertaken by open cut cable trenching and the noisiest works are likely to be during the use of excavators. It is stated that trenching would be undertaken during core construction hours. The nearest sensitive receptor is located within 10 meters of the proposed works with additional receptors located within 30m. Noise impacts arising from these works are outlined in table 11.11 of the EIAR. It is evident that noise emissions from trenching activities will not exceed daytime thresholds resulting in a negative but not significant impact.

8.91. Evening work hours at locations identified as R9-11 are expected to experience a negative effect from trenching works, however these works are for a limited period of time and at locations beyond 100 metres from the works noise emissions would be within permitted noise threshold limits.

8.92. Sheet piling works at the M11 are only expected to be carried out over a few days and will occur during daytime hours. Noise impacts arising from this operation are outlined in table 11.12 of the EIAR and are expected to be within the permitted daytime noise threshold. No significant negative effects are therefore expected.

8.93. With regard to pullback and HDD drilling at the M11 are expected to be carried out over 4 months. Noise impacts from this activity are outlined in table 11.13 Noise emissions from this activity are predicted to be below baseline ambient noise levels and as such the magnitude of effects is not considered to be significant.

8.94. Sheet Piling works at the HDD across the R772 are expected to be carried out over a few days and the relevant predicted noise emissions are outlined in table 11.15. Noise levels from this activity are expected to be below daytime baseline ambient noise levels. However, noise levels are expected to exceed both nighttime baseline ambient levels and nighttime noise level thresholds. These activities are expected to be carried out of a period of a week and as such given the limited duration of the works, noise emissions are not considered to give rise to significant effects.

Piling at the Substation

8.95. Two methods of piling have been examined in terms of the potential for noise disturbance and are outlined in Table 11.16 of the EIAR. I note from the EIAR that noise levels arising from both potential activities at this location are not expected to be significant.

Sheet piling at floor defences in Shelton Abbey

8.96. Sheet piling works are proposed for the flood embankment works and emissions have been considered in relation to the use of a vibratory piling rig or by the use of hydraulic jacking. These works are stated to take place during core construction hours only. I note that the nearest receptor (office) is 150 metres from the works location. Noise levels expected in relation to this activity is outlined in table 11.17 of the EIAR. It is stated that noise emissions from both activities will be below noise threshold limits and as such no significant effects are predicted in this regard.

8.97. Vibration arising from construction works are considered within section 11.5.3 of the EIAR. Works relating to the HDD process at the M11 are expected to be imperceptible in terms of effects. Excavation works and backfill of the cable route at receptors R8

and R12 will experience short perceptible vibrations but are unlikely to result in any significant negative impact.

8.98. I note that HDD works across the R772 will result in perceptible impacts at the nearest residential property R9 during night-time hours which will result in a negative impact but only for 1 week. The overall magnitude of effects arising from this activity is therefore not expected to be significant.

8.99. Consideration has also been given to the potential for effects arising from construction traffic. Increases in noise emissions are outlined in table 11.18 and as is evidenced within this table, the rise in noise levels is very low and not of any significance.

8.100. In terms of the operational stage of the development. The potential for noise emissions to be generated by the operation of the proposed substation has been considered and is outlined in table 11.19. I note that a noise penalty of +5 has been added due to the tonal noise emitted from such facilities. The resultant noise emissions are below the daytime threshold limits however is above nighttime baseline noise levels. Having considered the potential effects of this increase in noise levels at night it is concluded that the magnitude of effects is expected to be long-term but not significant.

8.101. In order to ensure noise levels are kept to a minimum during the construction phase of the development, standard mitigation measures are proposed and are outlined in section 11.7 of the EIAR and include limiting works which are noise generators to daytime hours, monitoring noise levels on a regular basis and maintaining communication with residents affected, selection of plant with low potential for noise generation and vibration, erection of noise barriers if required and siting of noisy plant within the furthest reaches of the site. No mitigation measures are required for the operation of the site.

8.102. With regard to cumulative effects, I note that the applicant has adopted a tiered approach to provide an assessment of the ABWP Phase 2 project as a whole and cumulatively with other projects. Road traffic cumulative effects are considered within the EIAR and particular reference is made to the M11 whereby traffic generated from the development would be most likely to meet traffic from other developments within the area. Cumulative noise emissions from this source are not expected to be of sufficient levels to be perceptible.

8.103. Tier 2 projects are listed within the EIAR as follows:

- Flood Defence Embankment Works within the Avoca River Business Park,
- BNRG Solar Farm Johnstown,
- Crag Digital Avoca Ltd Data Centre,
- Harmony Timebr Solutions Office and Factory.

8.104. After examination of the foregoing development, it was concluded that cumulative effects due to construction noise are unlikely.

8.105. Cumulative effects with regard to the operational phase of the development in relation to the foregoing developments is examined within section 11.6.2 of the EIAR. The potential for cumulative noise effects arises in relation to the Crag Digital Avoca Ltd Data Centre. In order to address such cumulative noise effects a 5dB reduction of the sound power levels are proposed for the harmonic filters and the 33kV Statcom reactors, this can be achieved by the use of quieter plant than assumed in the assessment or by the use of integrated noise control measure such as enclosures, louvres, sound shields, reactor top hats, vibration absorbers or active noise cancelling. I am satisfied that such minor noise reductive measures can be addressed by way of condition should the Board be minded to grant permission.

8.106. Predicted cumulative noise levels are outlined in table 11.20 in this regard. I note that an amended application for the data centre was permitted in which noise levels have been reduced further. The applicant has documented these reductions within table 11.21. It is evident from the information submitted that cumulative noise emissions will not exceed daytime, evening or night time thresholds and as such significant effects are not expected to arise.

8.107. No residual noise impacts are predicted in relation to either the construction or operation of the development.

8.108. I have considered all of the written submissions made in relation to noise and vibration and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on noise and vibration can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on noise and vibration can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the

surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Biodiversity

8.109. Chapter 12 of the EIAR submitted examines the potential for impacts to arise in relation to biodiversity. An Appropriate Assessment screening was undertaken as part of this section of the EIAR and will be examined separately within this report. This element of the development will focus on biodiversity in general within the site and its surrounds. A desktop study was carried out to identify any site and /or features of significance in within the site and the surrounding area. Surveys were carried out within the study area between June 2019 and February 2021 and consisted of habitats, invasive plants species, rare floral species, mammal with a particular focus on otter, badger and roosting sites for bats, electro fishing surveys were carried out as were aquatic surveys and bird surveys.

8.110. Baseline conditions are documented within 12.3.1 of the EIAR, as mentioned above the landfall site and cable route is located within agricultural lands. Survey results found that due to intensive agricultural practices semi natural habitats are generally limited in extent and are generally confined to field boundaries along watercourses, hedgerows and within small pockets of woodland. The proposed substation site is within a brownfield site.

8.111. Surveys revealed that the majority of habitats found within the boundary of the development site were of local value with none recorded as being of international importance. No rare plant species were recorded within the development boundary and no otter were recorded. It is of note that signs of badger were observed however no setts were encountered. Linear features within the planning boundary are likely to provide moderate foraging for bats but it is noted within Section 12.6.1 of the EIAR that there are no mature trees or derelict buildings within the proposed development site with the potential to be used as significant bat roosting sites.

8.112. It is outlined within Section 12.6.3.2 of the EIAR that due to the habitats recorded within the proposed development site and surrounding landscape, Hedgehogs are likely to occur. The Common Frog has been recorded within the attenuation pond at the proposed substation site and although not specifically recorded, this pond could also provide suitable habitat for the Smooth Newt.

8.113. I note from section 12.4.1.1 of the EIAR submitted that the cliffs at the landfall site are Vegetated Sea Cliffs which are listed on Annex I of the EU Habitats Directive. However, I further note that the cliffs within the survey area consist of vegetated cliffs which are not steep and contain large areas of relatively common grassland and herbaceous species. This habitat is not considered to be to a particularly valuable example of this Annex I Habitat type.

8.114. North of the M11 the planning boundary passes through an area of Mixed Broadleaved Woodland (WD1). It is stated within the EIAR that this is an old woodland with well-established ground flora, which is dominated by plantation of c. 50 years old. Immature woodland traverses the remainder of the cable route to the substation site and is dominated by Hazel, Elm and Alder with poorly developed ground layer with Bramble and Ivy. It was noted within the surveys carried out that there is a plantation of mixed Broadleaved woodland Sycamore and Beech outside of the development boundary to the northeast of the proposed substation whereby 80% of the trees are dead. This habitat is considered to provide an important feeding area for Great Spotted Woodpecker.

8.115. I note concerns raised within the third-party submissions in relation to the quality of bird data obtained by the applicant. I draw the Board's attention to Section 12.6.5.1 of the EIAR in which survey findings in relation to both breeding and overwintering birds are outlined. A full list of birds recorded is included within table 12.8. I note that whilst breeding birds were not encountered during surveys there is nonetheless potential for breeding birds to be present within the development site and surrounding area due to the presence of suitable habitat in the surrounding area. Of particular note is the discovery of suitable habitat for breeding Yellow Hammer within the survey site. This species is of red list conservation status with signficantly declining populations.

8.116. Six wintering bird surveys were carried out between November 2019 and March 2020. Bird usage at each location was dominated by gulls and small piscivorous bird species such as Common Guillemot, Red Throat Diver and Cormorant. Red Throat Diver is listed on Annex I of the Birds Directive and two red listed gulls namely Black Headed Gull and Herring Gull were also recorded during site surveys.

8.117. I note that concerns have been raised within the submissions received in relation to a lack of involvement and consultation with the NPWS. I draw the Board's attention to

both section 3.9.3 of the EIAR in which it is stated that a meeting was held with NPWS on the 18th September 2020 in relation to the proposed development and to section 12.6.5.4 of the EIAR in which it is stated that following consultation with the NPWS a site to the northeast of the landfall location was identified as being potential feeding and roosting grounds for terrestrial waders and waterfowl. This area was included within the surveys carried out, I note that no wading birds or waterfowl were recorded at this site on any of the survey dates between November 2020 and February 2021.

8.118. Based on the findings of the surveys carried out I am satisfied that the proposed development site is not a significantly important area for breeding or over wintering birds. The EIAR concludes in this regard that the development site is classed as being of local value to bird species for a range of terrestrial birds that are relatively common in the Irish landscape.

8.119. Fish stock assessment confirmed that fish are present within the Templerainy and Kilbride Streams, no fish were captured within the Johnstown North. Due to the presence of fish in the Templerainy and Kilbride Streams it is plausible that otter and kingfisher could occur within the vicinity of the proposed development boundary, however as mentioned above no Otters were recorded within the development boundary.

8.120. Concerns are raised within the third-party submissions in relation to the identification of invasive plants species within the development site. I note from Section 12.5.1 of the EIAR submitted that Japanese Knotweed and Himalayan Knotweed have been recorded along the banks of the Avoca River. I further note that Buddleia was recorded on bare ground between the substation and the M11 and Hottentot was recorded at the landfall site, however it is of note that no works are proposed in the vicinity of the Hottentot.

8.121. An Invasive Species Management Plan has been prepared and is contained within Appendix 6.1 of the CEMP. The plan contains measures to address invasive plant species as they are encountered within the development site. I am satisfied that measures proposed are adequate and will prevent the spread of such species within the development site and beyond. Should the Board be minded to grant permission, I recommend a condition which ensures all measures proposed are implemented and that a visual survey is carried out by an ECoW prior to each stage of construction in

order to confirm whether invasive plant species are present within the works area or within the immediate vicinity.

8.122. Potential impacts to biodiversity during the construction stage of the development include, direct removal of habitats, or indirect spread of invasive species and impacts to water quality. All potential effects are detailed within Section 12.8.3 to 12.8.15 of the EIAR submitted.

8.123. I note that the proposed route minimises the crossings of roads and watercourses and the use of HDD will avoid impacts on habitats of greater value such as larger watercourses like Templerainy Stream and the Cliffs at the landfall site. HDD is also an option for the crossing of the M11 and the Sheepwalk Stream. Open cut trenching at water crossings is stated to result in a temporary loss of instream habitat. Such impacts are considered within the EIAR to be temporary in nature and not of significance.

8.124. I note that pilot lines for the overhead lines which cross the Avoca River will be taken across by boat or drone and will therefore avoid any impact to the river channel at this location.

8.125. I have had regard to the relevant sections of the EIAR namely 12.8.3 to 12.8.15 in which potential effects identified range from temporary imperceptible to long-term slight, with the exception of impacts to foraging bats which is predicted as being slight to moderate, negative and medium term due to the removal of hedgerows and trees within the permanent wayleave associated with the cable route. Section 12.9 of the EIAR outlines the proposed mitigation measures. It is stated that mitigation measures will be outlined within the CEMP and will be implemented accordingly. Such measure includes a toolbox talk for site workers, the clear delineation of the proposed works area around watercourses, the availability of spill kits, the use of bunded areas for fuel storage and refuelling, cessation of excavation works during period of heavy rain, remediation of works areas to reinstate ground to original state and backfilling of cable trench as soon as cable is laid. Further mitigation measures include the monitoring of sheet piles for movement, treatment of water from dewatering prior to discharge, sampling of soils suspected of contamination, monitoring of water quality, the use of silt control measures such as silt traps, plant machinery will use existing access used

by landowners. It is also proposed to reinstate riverbanks through the use of geotextile membranes and reseeding.

8.126. I note that the applicant will consult NPWS and IFI prior to bank stabilisation works being carried out to ensure materials and methods employed are in keeping with the surrounding environment. I note the departments submission on this matter and note that preference for the use of soft engineering techniques such as willow soiling should be used for bank reinstatements, and I am satisfied, should the Board be minded to grant permission that such matters be adequately dealt with by way of condition.

8.127. I further note concerns raised within the submissions received in relation to the protection of riparian areas, the retaining of filtration strips and the use of an alternative access track at proposed tower 6B which lies adjacent to the Avoca River. All such measures can be adequately addressed by way of condition, should the Board be minded to grant permission.

8.128. With regard to HDD a number of mitigation measures are proposed within section 12.9.1.3 of the EIAR. I note from the third-party submissions that there are concerns in relation to frac out, it is stated that such works will be monitored, in the event of a breakout or frac out, it is stated that works will cease immediately and the use of mica to plug holes if required, mud volumes will be monitored. Other mitigation relates to the prevent of light overspill, the management of invasive species as outlined above, the protection of mammals such as otters and fish and bats.

8.129. Mitigation measures proposed are largely common practice and known to be effective. I am satisfied based on the information submitted that the measures proposed will adequately ensure that significant impacts to biodiversity do not occur during the course of the proposed development.

8.130. Cumulative impacts were also considered within section 12.10 the EIAR in the context of both existing and permitted development and significant impacts are not predicted. Following the implementation of mitigation, significant residual impacts are not expected.

8.131. Section 12.11.7 examines the potential for impacts to arise in relation to the decommissioning of the proposed development, an ecology and invasive species survey will be carried out prior to decommissioning the proposed development, which is expected to have a lifespan of 50 years, the levels of habitat will be restored during

this phase, no significant effects are therefore expected during this phase of the development.

8.132. I have considered all of the written submissions made in relation to biodiversity and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on biodiversity can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on biodiversity can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Traffic

8.133. Section 13 of the EIAR examines the potential for impacts to arise in relation to traffic and transportation. A study area which included the following roads was identified:

- M11 Motorway
- Dublin Road
- L95115
- L6179 Kilbride Rd
- L2180 Beech Rd
- R750 Sea/Coast Rd
- R747 Vale Rd
- Forest Rd
- Love Lane

8.134. Traffic counts were carried out at 8 locations as outlined in section 13.2.2 of the EIAR. The character of the road network within the area of the proposed works is largely rural in nature. It is stated that given the linear nature of the proposed development a haul route will be identified from the landfall site to the substation site. This haul route will be accessed via access points to the temporary construction compounds and working areas. Three other access points from the public road network are proposed to access the haul route for the construction of the cable.

8.135. With regard to traffic generation, it is stated that crossing the M11 by HDD will generate the most traffic movements due to the removal of waste material generated by this process. It is this option that has been examined in detail within this chapter of the EIAR as the under pass will generate less volume of traffic.

8.136. In terms of traffic generation, I note the following:

- Landfall - 106 movements daily, 55 of which relate to earthworks and 10 relate to material and equipment deliveries.
- Cable route - 417 movements per day, 191 of which relate to earthworks and 30 relate to materials and equipment deliveries.
- Substation - 362 movements are expected on a daily basis, 219 of which will relate to earthworks and 40 to material and equipment deliveries

8.137. The overall daily trip generation expected during the construction phase includes 340 light vehicles and 545 heavy goods vehicles. During the operational stage less than 30 trips are expected. Decommissioning will give rise to similar trips associated with the construction phase of the development. It is stated within the EIAR that distribution of traffic assumes that all externally generated traffic will arrive to and from junction 20 on the M11 and this is the designated access point from the Motorway to the construction sites.

8.138. With regard to the landfall element of the development it is assumed within the EIAR that 100% of traffic will travel on the R772 and R750. Similarly, for the cable construction phase, although alternative routes i.e L2180 and L6179 have also been considered. With regard to the substation, it is assumed that all traffic will travel along the R772, L2180 and the L6179.

8.139. Analysis shows that the proposed development will have a slight effect on the L2180, L6179 and R750 and not a significant effect on the R772.

8.140. Potential impacts arising from the construction phase of the development are outlined in section 13.5.2 of the EIAR submitted and are expected to be ‘slight’ to ‘not significant’.

8.141. Mitigation measures relate to the management of traffic, a Traffic Management Plan has been prepared and is included within the CEMP contained within Appendix 6.1 of the EIAR. Additional mitigation includes consultation with the local community,

planning of material deliveries to avoid queuing, trucks carrying material to be covered with tarpaulin, restriction of vehicle speeds within the development site, the provision of a wheel wash, the provision of a road sweeper in the vicinity of the proposed works, and the use of signage to provide advanced warning of construction entrances. Such mitigation measures are common practice and known to be effective. I am satisfied based on the expected magnitude of effects that the proposed mitigation measures will adequately protect the receiving environment from significant issues arising in relation to traffic and transportation.

8.142. No residual impacts are expected to arise.

8.143. Cumulative impacts have been considered in the context of permitted development in the area and are not considered to be significant.

8.144. I note the issues raised within the TII submission with regard to the protection of the M11 infrastructure and am satisfied that should the Board be minded to grant permission, such matters can be adequately addressed by way of condition. Matters raised by TII relating to consents from third parties are not within the Board's jurisdiction to finally determine.

8.145. I have considered all of the written submissions made in relation to traffic and transportation and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on traffic and transportation can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on traffic and transportation can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Landscape and Visual

8.146. Section 14 of the EIAR examines the potential for impacts to arise in relation to landscape and visual amenity. It is stated within this section of the EIAR that the assessment of potential landscape and visual effects is a two-stage process that involves classifying the sensitivity of the receiving environment and describing and classifying the magnitude of change in the environment resulting from the proposed development.

8.147. The site of the proposed development comprises two distinct areas, the underground onshore export cables from the landfall to the substation and the proposed substation, connection to the national electricity transmission network and the flood defence improvement works at Shelton Abbey.

8.148. With regard to the cable route and landfall, as mentioned previously within this report, this element of the development will be routed through largely agricultural lands and will be subsurface with the occasional manhole above ground. There will be a localised disturbance to field hedgerows and trees, however these will be replanted where possible. I note that the cable route passes through a number of Landscape Character Areas as identified in the Wicklow County Development Plan 2016-2022, including Urban Area LCA, the M11 East Corridor LCA and the southern extent of the Southern Coastal Area AONB LCA.

8.149. I note that the proposed substation lands are within the Urban Area LCA.

8.150. Landscape and visual significance sensitivity for the proposed development site and surrounds is outlined in section 14.3.6.2 of the EIAR. The landfall site as mentioned above is within southern extent of the Southern Coastal Area AONB LCA. This element of the development site is considered to have a high rating in terms of sensitivity and is of medium visual significance. The remainder of the development site is stated to have a low to medium level of sensitivity. The most prominent

8.151. Potential effects arising from the cable and landfall elements of the proposed development relate to short term impacts arising during the construction phase of the development. The magnitude of these effects is considered to be short term, localised, negative ranging from minor to moderate, this is in part due to the removal of vegetation and the construction of construction compounds in the area.

8.152. The substation and NETN elements of the development forms part of the Shelton Abbey Demesne that occupied the low-lying floor of the Avoca River Valley. Shelton Abbey is now an open prison and the low-lying lands at the development site were previously developed as a fertiliser factory. The factory was disused in 2003.

8.153. The terrain to the immediate north of the site comprises steep northern side of the valley, which is covered in woodland, the landscape then levels out to become a more gently sloping farmland. The southern side of the valley is also characterised by steep wooded slopes and to the west the valley narrows towards Woodenbridge. The M11

motorway spans the Avoca River east of the industrial lands and powerlines and pylons are noticeable in the landscape. The proposed development site occupies an area of the industrial lands just west of the Shelton Abbey substation and comprises a number of older industrial buildings.

8.154. The development site is located within the Urban Area LCA, which has established industrial development and is considered to be of low sensitivity. The site is identified as an Employment Opportunity site within the Wicklow Development Plan and is not within any protected views or prospects and is not visible from any routes of amenity value.

8.155. By virtue of the low-lying position of the site it is substantially secluded from the surrounding more elevated landscape. The finished floor level of the development is proposed to be at 3.3m OD, lands behind the development rise to 40m OD with substantial tree cover, as do lands to the south.

8.156. Effects on the landscape are expected to be localised and the magnitude of effect is predicted as being negligible. Effects on the wider landscape are also expected to be negligible.

8.157. It is stated that effects associated with the decommissioning of the development would give rise to minor positive effects due to the removal of buildings and above ground infrastructure associated with the development.

8.158. Mitigation measures relate to the reinstatement of planting and lands where possible, and the use of dark finishes for the substation and associated development. Maintenance of the development is proposed in order to ensure that the buildings are maintained to a high standard. However, mitigation in relation to the wider visual impacts of the proposed development are not proposed given the limited magnitude of visual impacts associated with the development.

8.159. Cumulative effects were considered in the context of the permitted development both on shore and offshore and were not considered to be significant as per Section 14.7 of the EIAR.

8.160. Residual impacts are expected to be negligible given that the development will be largely below ground and in the case of the substation and NETN elements, substantially screened from the wider landscape.

8.161. I have considered all of the written submissions made in relation Landscape and Visual Amenity and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on Landscape and Visual Amenity can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Archaeology, Architectural and Cultural Heritage.

8.162. Section 15 of the EIAR examines the potential for impacts to arise in relation to archaeology, architecture and cultural heritage. A detailed desk top study and a walk over survey were undertaken to inform the EIAR. There are 19 recorded archaeological sites within the receiving environment, half of which date to the prehistoric period. The remaining archaeological heritage dates back to the early medieval and post medieval periods. I note that the proposed development will not impact directly upon any sites included on the Record of Monuments and Places, the National Inventory of Architectural Heritage or the Register of Protected Structures for the County. It is of note that the assessment did not identify any additional potential sites or features within the proposed development lands.

8.163. It is of note that the substation development site is located within the lands of Shelton Abbey Demesne however recent development relating to Avoca River Park has significantly altered the landscape and any potential archaeological remains would have been removed during the ground works of these developments. Impacts on archaeological, architectural and cultural heritage are therefore considered to be neutral and insignificant at this location.

8.164. The applicant does however point out that the proposed development will cross 8 no. watercourses and disturbances associated with the construction of the development may result in direct negative effects on previously unrecorded features or deposits. The magnitude of such effects ranges from moderate to profoundly negative in the absence of mitigation.

8.165. I note that no effects are expected in relation to architectural or cultural heritage as a result of the proposed development. The operation and decommissioning of the proposed development will not have any negative effect on the archaeological, architectural or cultural heritage within the area.

8.166. Mitigation measures are outlined in Section 15.6 of the EIAR submitted and relate to a programme of archaeological testing which will be carried out in advance of construction within all greenfield area of the development site. A programme of underwater surveys will also be carried out in the form of wade surveys at each watercourse. In the event that any archaeological material is encountered further archaeological mitigation will be required and will be carried out in accordance with the requirements of the National Monuments Service.

8.167. Cumulative impacts in relation to previous and permitted development in the area both onshore and offshore are considered within Section 15.7 and are not expected to arise.

8.168. I have considered all of the written submissions made in relation to Archaeology, Architectural and Cultural Heritage and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on Archaeology, Architectural and Cultural Heritage can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on Archaeology, Architectural and Cultural Heritage can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Waste Management

8.169. Section 16 of the EIAR submitted examines the potential for impacts to arise in relation to Waste. It is stated that estimates of surplus made ground and soils and stones generated during the construction phase of the proposed development have been calculated by the project engineers and are outlined in table 16.4 of the EIAR. It is envisaged that c. 102,130 tonne of waste material, 2000t of which is hazardous, will be exported from the site, a portion of this quantity will be reused on site and the remainder will be transported to appropriately licenced facilities.

8.170. General domestic waste arising from construction workers will be disposed of within the construction compound and will also be removed, segregated, and disposed of appropriately.

8.171. It is proposed that materials suitable for reuse will be used within the site boundaries, although as mentioned above the quantum of such materials are expected to be limited. Details of specific waste disposal will be outlined within the CEMP to be prepared prior to the commencement of development. I am satisfied that any issues pertaining to waste generated from the site can be adequately addressed by way of condition, should the Board be of a mind to grant permission.

8.172. Potential impacts arising from waste generation at both the construction and operational phases of the development are therefore expected to be short term and slight in magnitude.

8.173. Potential impacts arising from the decommissioning of the site are outlined within Section 16.5.4 of the EIAR. Waste materials will be reused where possible and all non-reusable waste will be transported to an appropriately licenced facility. Equipment containing SF_6 will be sent to the appropriate specialist facilities for recycling

8.174. Cumulative impacts in relation to previous and permitted development in the area both onshore and offshore are considered within Section 16.7 and are not expected to arise.

8.175. I note that a third-party submission raises concerns in relation to dumping at sea. This activity does not form part of the proposed development under consideration before the Board. Dumping at sea is related to the licenced Arklow Bay Wind development which has been the subject of a separate licencing process carried out by the Department. As mentioned above this application relates solely to the terrestrial element of the proposed grid connection from the Arklow Bay Wind Park and it is not within the Board's jurisdiction to consider any offshore development which has been subject to a separate consenting process.

8.176. I have considered all of the written submissions made in relation waste and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on waste can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Material Assets

8.177. Section 17 of the EIAR examines the potential for impacts to arise in relation to material assets. This section of the EIAR examines telecommunications, power supply, surface water infrastructure, foul drainage and water supply. Given the linear nature of the proposed development there are a number of electrical assets present in proximity to the development site. The proposed development will cross three gas pipelines and three watermains are also located close to the development site along the R772, within the pathway parallel to the canal from Avoca River Business Park to Arklow Town and along Beech Road adjacent to the Kilbride Industrial Estate.

8.178. With regard to power, it is stated that working areas will be powered by existing mains or diesel generator the potential effect of the development on electricity network is expected to be slight, negative and temporary. With regard to surface water infrastructure a drainage system will be constructed as proposed. As these works are entirely within the redline, impacts will not occur to lands outside of the development site. Welfare facilities are required for the construction crew, and wastewater will be transported off site on a regular basis. Impacts arising from wastewater are considered to be slight and short term in duration.

8.179. It is proposed to bring water by tanker to the site during construction, portable water affected by the proposed works will be reinstated as soon as possible, impacts arising to this infrastructure are also considered to be slight and short term in duration.

8.180. Traversing of gas lines may give rise to temporary disruption and will be minor in nature. All underground utilities and services have been identified through consultation with utility providers. Some utilities will need to be disconnected for a short time, such actions will be carried out by the utility provider the magnitude of such effects is considered to be slight, negative and short term.

8.181. Mitigation measures relate to surface water as outlined above and the use of trial holes to provide knowledge on exact location of services, these measures are standard in nature. No residual impacts are expected in relation to the construction phase of the development.

8.182. With regard to the operation of the development, details are outlined within Section 17.5.3 of the EIAR submitted. No mitigation is required during this phase. No residual impacts are expected in relation to material assets. Cumulative impacts were

considered within the EIAR in relation to material assets and significant effects were not considered to arise in this regard.

8.183. I have considered all of the written submissions made in relation material assets and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on material assets can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Human Health and Population

8.184. Section 18 of the EIAR submitted addresses population and human health. Effects are considered in the context of socio-economic and health and wellbeing considerations. CSO data was utilised to inform the socio-economic profile of the area. The EIAR included an examination of the population and employment characteristics of the area and states employment fell significantly in the county reflecting economic recovery in recent years.

8.185. The nearest residentially sensitive properties are located c. 10-20m from the proposed planning boundary and comprise a number of rural houses. Single residential dwellings are located 180m from the M11 crossing, 115m from the R772 crossing and 300m from the landfall.

8.186. Potential impacts were considered to arise in relation to air quality, noise, visual impact, and traffic and are dealt with under the relevant headings above. It is of note that no significant impacts are expected in relation to the foregoing. Positive impacts during construction are expected in relation to local businesses due to the presence of up to construction workers at the development site. Along with an indirect positive impact on local employment.

8.187. No impacts of significance are expected in relation to the operation of the development and no residual impacts are expected to arise in relation to human health and population. Mitigation measures in relation to air quality, noise, traffic and visual impacts are outlined within the relevant chapters and are described and have been examined above and will not be repeated hereunder.

8.188. I note that cumulative effects in relation to surrounding permitted and planned development have also been considered within the EIAR and no such impacts are expected to arise.

8.189. I have considered all of the written submissions made in relation to population and human health and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on population and human health can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on population and human health can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Major Accidents and Disasters

8.190. Chapter 19 of the EIAR examines the proposed development vulnerability to major accidents and disasters. An examination of all plausible risks was undertaken associated with the proposed development was undertaken. Fire was identified as the highest risk factor in relation to the proposed development. The outcome of the assessment is that fire is very unlikely to occur. Nonetheless mitigation measures are proposed which limit the likelihood and consequence of a fire or explosion and include the storage of minimum volumes of fuels and oils in contained bunded areas, the provision of portable fire extinguishers, the training of staff as fire marshals and first aiders and the monitoring of site activities to minimise fire risks.

8.191. Mitigation measures proposed will limit the likelihood and consequence of a fire or explosion will include fire detection and alarm and the buildings will be equipped with fire fighting mechanisms. The potential for the proposed development to give rise to a major accident or disaster is therefore considered to be low.

8.192. No residual effects are expected, and I note that cumulative effects in relation to surrounding permitted and planned development have also been considered within the EIAR and no such impacts are expected to arise.

8.193. I have considered all of the written submissions made in relation to major accidents and disasters and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on major accidents and disasters can be avoided,

managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on major accidents and disasters can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Interactions between the Factors and Cumulative Impacts

8.194. I have considered the interrelationships between factors and whether these may as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. Section 20 of the EIAR examines the potential impact of interactions.

8.195. I consider that there is potential for population and human health to interact with all of the other factors (biodiversity, water, air and climate, noise, landscape and visual, cultural heritage and material assets – traffic). The details of all other interrelationships are set out in Section 20 of the EIAR which I have considered.

8.196. I am satisfied that effects as a result of interactions, indirect and cumulative effects can be avoided, managed and / or mitigated for the most part by the measures which form part of the proposed development, the proposed mitigation measures detailed in the EIAR, and with suitable conditions.

8.197. **Reasoned Conclusion**

8.198. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information provided by the applicant and the submissions received, the contents of which I have noted, it is considered that the development will not give rise to any significant direct or indirect effects of the proposed development on the environment are as follows.

- Negative impacts on **human health and population** arising from construction include noise, traffic and dust disturbance to residents of neighbouring dwellings. All of these impacts are slight to imperceptible. Adequate mitigation measures are proposed to ensure that these impacts are not significant and include adequate mitigation for operational noise.

- Benefits/positive impacts on the **Air and Climate**, the proposed development will have a significant positive effect on human health and population as it will facilitate the transmission of offshore wind energy onto the electricity network and will indirectly reduce the country's reliance on fossil fuels for energy production.
- Potential negative impacts on air and climate relate to the release of dust into the locality and emissions arising from construction traffic. Such impacts are adequately mitigated for within the EIAR submitted and can therefore be ruled out.
- Negative impacts on **Water** could arise as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering the drainage system and discharging to the Avoca River and other watercourses along the cable route or the mobilisation of silt within watercourses during open trenching works during the construction phase. These impacts will be mitigated by measures outlined within the application and EIAR and can therefore be ruled out.
- Positive impact to **Land and Soils** relates to the removal of hazardous soils from the substation site and the appropriate disposal of such soils at a suitable waste facility. The removal of such soils will have a positive impact on the lands.
- Negative impacts to Lands and Soils relates to the stripping of topsoil from works areas and the removal of vegetation in general across the development site during the construction stage of the development. These impacts will be mitigated by measures outlined within the application and EIAR and can therefore be ruled out.
- Negative **Noise** impacts arise during the construction phase from construction activities. These impacts will be mitigated through adherence to best practice construction measures. Noise disturbance from the operation of construction plant is not likely to arise given the separation distances between the development site and residential properties. Impacts arising from noise disturbance during both the construction and operational stage can therefore be ruled out.

- Negative **traffic** impacts arise during the construction phase of the development, these impacts will be mitigated through the implementation of a traffic management plan and a construction management plan. Impacts arising from traffic can therefore be ruled out.

8.199. The EIAR has considered that the main direct and indirect effects of any significance arising from the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. I am satisfied on the basis of the submitted information that impacts can be adequately mitigated and that no residual significant negative impacts on the environment would remain as a result of the proposed scheme. I am, therefore, of the view that the potential for unacceptable direct or indirect effects on the environment can be excluded on the basis of the submitted information.

9.0 Appropriate Assessment

9.1. An NIS has been prepared by the Arup Consultants on behalf of the applicant. The Screening document describes the proposed development, its receiving environment and relevant European Sites in the zone of influence of the development. It was informed by desktop study of maps and ecological and water quality data from a range of sources.

9.2. The report concluded that, taking into account the project design and the implementation of mitigation measures identified in the NIS, the proposed development will not result in adverse effects on the integrity of any Natura 2000 site.

9.3. Having reviewed the NIS, the supporting documentation and the further information submitted, I am generally satisfied that it provides adequate information in respect of the baseline conditions, identifies the potential impacts, uses best scientific information and knowledge and provides details of mitigation measures. I am satisfied, that the information provided is generally sufficient to allow for appropriate assessment of the development.

Stage 1 Screening

9.4. Notwithstanding the submission of a NIS, it is prudent to review the screening process to ensure alignment with the sites brought forward for AA and to ensure that all sites that may be affected by the development have been considered.

9.5. Having regard to the information and submissions available, nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, I consider the following European Sites are relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects**.**

9.6. Table 1.0

European Site Name & Code	**Distance**	**Qualifying Interest**	**Source-pathway-receptor**
Buckroney-Brittas Dunes and Fen SAC 000729	**c.320m north of landfall site.**	Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150] Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170] Humid dune slacks [2190] Alkaline fens [7230]	A Surface water pathway has been identified via run off during construction and potential impacts on groundwater.
Kilpatrick Sandhills SAC	**c.8.2km**	Annual vegetation of drift lines [1210]	No meaningful pathway due to

001742		Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150	the dispersion and dilution of the Irish Sea.
Slaney River Valley SAC **000781**	**c.12.5km**	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] 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] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] 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]	No meaningful pathway due to the dispersion and dilution of the Irish Sea.

		Phoca vitulina (Harbour Seal) [1365]	
Magherbeg Dunes SAC **001766**	**c.10.3km**	Annual vegetation of drift lines [1210] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Petrifying springs with tufa formation (Cratoneurion) [7220]	No meaningful pathway due to the dispersion and dilution of the Irish Sea.
Deputys Pass Nature reserve SAC **000717**	**13.3km northwest**	Old Sessile Oak Woods with Ilex and Blechnum in the British Isles	No meaningful pathway between the development and this site.
Vale of Clara (Rathdrum Woods) **000733**	**14.5km**	Old Sessile Oak Woods with Ilex and Blechnum in the British Isles	No meaningful pathway between the development and this site.

Screening Determination

9.7. The Screening Report submitted screens out all Natura 2000 sites on the grounds that they are removed from the development and will not be affected by disturbance with the exception of the Buckroney-Brittas Dunes and Fen SAC.

9.8. I have considered the European sites as listed above and consider that the applicant's approach is reasonable. Based on my examination of the NIS report and supporting information submitted, the scale of the development, its likely effects by way of the potential to affect the qualifying interests of Buckroney-Brittas Dunes and Fen SAC by way of water pollution and sedimentation from the HDD process at the landfall site and the laying of the cable within the development site, I would conclude that a Stage 2 Appropriate Assessment is required for this Natura 2000 sites. It is important to note

that mitigation measures have not been considered in the Appropriate Assessment Screening. I note within the third-party submissions that reference is made to Kilpatrick Sandhills SAC and the potential for the proposed development to impact the integrity of this SAC. As outlined above the proposed development is 8.2km from this SAC and is connected via the Irish Sea. Given the dispersion and dilution action of the sea and the distance from the proposed works to this SAC, I am satisfied that the proposed development is not likely to give rise to significant adverse effects to this SAC and as such it is reasonable to screen this site out for the purpose of Stage 2 Appropriate Assessment.

9.9.

Stage II Appropriate Assessment

9.10. The following Appropriate Assessment of the implications of the proposed works alone and in combination with other relevant plans and projects will be carried out in relation to the Buckroney-Brittas Dunes and Fen SAC in view of the conservation objectives.

9.11. The NIS submitted on behalf of Sure Partners Ltd concluded that the proposal will not, beyond reasonable scientific doubt, adversely affect the integrity of any Natura 2000 designated sites either directly or indirectly.

9.12. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European site using the best scientific knowledge in the field. All aspects of the project which could result in adverse effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

Potential for direct and indirect effects

9.13. As outlined within table 1.0 the potential for adverse effects relates to changes to water quality arising from pollution and sedimentation of watercourses arising at various locations and associated with various operations during the construction of the development as follows. It is important to note at this juncture that no works will take place within the boundary of any Natura 2000 site and as such the potential for direct effects does not arise.

- Landfall site - where excavations in areas of high-water tables will require pumping out giving rise to the potential for sediment laden water and/or

waterborne chemical pollutants to be released and where there is a risk of cliff collapse due to HDD process.

- Various watercourse crossings – minor watercourse will be crossed instream within a dry works area using open cut technique, there is potential for generation of sediment laden water and/or waterborne chemical pollutants associated with construction.

9.14. With regard to the Zone of Influence relating to such impacts it is of note that pollution and sedimentation can have both an indirect effect by way of degradation of habitats from the changes in water quality and can also indirectly affect SCIs of Natura 2000 site by adversely affecting habitats on which SCIs rely.

Buckroney-Brittas Dunes and Fen SAC

9.15. Buckroney-Brittas Dunes and Fen SAC is a complex of coastal habitats located about 10km south of Wicklow town. It comprises two main sand dune systems, Brittas Bay and Buckroney Dunes, connected on the coast by the rocky headland od Mizen Head. The dunes have cut off the outflow of a small river at Mizen Head and a fen has developed.

9.16. An area of saline vegetation which conforms to 'Mediterranean salt meadows' occurs in the Buckroney dune system south of the inlet stream to the fen, and possibly in small areas elsewhere within the site. It is typically dominated by rushes. The area is inundated by the tide only occasionally via the narrow inlet leading to Buckroney Fen.

9.17. This site is important as an extensive sand dune/fen system with well-developed plant communities. Several coastal habitats listed on the E.U. Habitats Directive, including two priority habitats - fixed dune and decalcified dune heath - are present. The area contains two legally protected plants, as well as a number of other rare or scarce plant species. The site provides habitat for some rare species of invertebrate and for the vulnerable Little Tern. A rich flora and fauna has persisted on this site despite extensive amenity use and adjacent farming.

9.18. Downstream hydrological connectivity has been identified to this site and as such there is a potential for accidental release of hydrocarbons, cement, mortar, silt and soils, although impacts from such accidental releases is unlikely given the dilution action of the sea. Large scale silt generation, hydrocarbon spillage, frac out of HDD drilling

fluids or cliff collapse could result in impacts to the SAC. Mediterranean salt meadows are sensitive to changes in water quality and as such changes to water quality caused by pollution have the potential to result in damage to these communities. There is the potential therefore in the absence of mitigation for adverse impacts to arise in relation to this QI. All other QIs of this site are not considered further as there is no meaningful connection between these QIs and the development works.

9.19. **Mitigation Measures**

9.20. Mitigation measures in relation to water quality are outlined in table 6.4 and include measures such as regular monitoring of pH levels in watercourses, surrounding dry areas where instream works are being carried out, designated haul routes, the placement of excavated material in excess of 50 metres from any watercourse, the use of settlement ponds for over pumping,

9.21. Strict management of fuels and oils, chemicals to be stored in sealed containers, use of drip trays for refuelling, use of bunded storage areas, maintenance of plant and the use of machine nappies. Spill kits will also be available and inspected regularly.

9.22. Mitigation in relation to surface water protection for open trench water crossings includes measures such the use of cofferdams, flume pipes and by pass channels, settlement ponds, appropriate filter strips, avoidance of excavations during times of heavy rainfall, prevention of tracking machinery in watercourses and visual monitoring of works to ensure no breaches occur.

9.23. In relation to drilling, such operations will be monitored for signs of potential fracking out, drill pressures will be closely monitored, exit and entry points will be enclosed by silt barriers and a leak stopping compound may be used to prevent leaks. I note that HDD at the proposed landfall site is located at a low level within the cliff whereby there is little risk of impacting the cliff stability.

9.24. A CEMP has been submitted as an appendix to the NIS submitted and outlines all mitigation proposed in relation to the entire project.

9.25. All mitigation measures will be examined in relation to the potential for likely significant effects on the aforementioned Natura 2000 sites within the following integrity test.

9.26. **The integrity Test**

9.27. I have considered the NIS along with the information submitted with the application and have had regard to the mitigation measures outlined. Potential for impacts to arise in relation to the leakage of oils and diesels or other such contaminates from construction vehicles has been dealt with within the mitigation measures outlined in Section 6.4 of the NIS submitted and the appended CEMP. All machinery will be checked prior to entering the works area and all fuel, lubricants and hydraulic fluids will be kept in a secure bunded area removed from watercourses.

9.28. These mitigation measures are standard in nature and are known to be effective. I am therefore satisfied that the mitigation measures outlined in relation to hydrocarbon contamination of soils and waters are acceptable and will prevent impacts from such sources to the designated sites listed above.

9.29. I note mitigation measures in relation to the HDD process particularly at the Landfall site and note the methods proposed in relation to this process. Given the depth of the proposed entry and exit point, cliff collapse is considered to be highly unlikely. The use of silt traps at both ends of the pipe route will prevent sediments and materials from entering the surrounding area and therefore protecting the Mediterranean Salt Meadows associated with the Buckroney-Brittas Dunes and Fen SAC. The remainder of the QIs associated with this site are located either along the shoreline or north beyond Mizen Head.

9.30. Thus, I have considered the location of the qualifying interests of Buckroney-Brittas Dunes and Fen SAC in relation to the proposed works and the existing context of the site within various locations and the activities associated with the proposed construction, operation, maintenance and decommissioning phases of the proposed development, and I consider, on the basis of the information provided with the application, including the Natura Impact Statement, and in light of the assessment carried out, that the proposed development individually, or in combination with other plans or projects would not adversely affect the integrity of the European site Nos. 000729 in view of this site's Conservation Objectives.

Table 1.1

Buckroney-Brittas Dunes and Fen SAC (000729) **Summary of likely significant effects** • **Water Quality deterioration** • **Frac out and or cliff collapse**

Conservation Objectives: To maintain or restore the favourable conservation status of habitats					
		Summary of Appropriate Assessment			
Qualifying Interest feature at risk	**Targets - habitat area and distribution and associated attributes**	**Potential adverse effects**	**Mitigation measures**	**Significant In-combination effects**	**Can adverse effects on integrity be excluded?**
Mediterranean salt meadows (Juncetalia maritimi) [1410]	Habitat Area - The permanent habitat area is stable or increasing, subject to natural processes Habitat distribution – Stable no decline or change in habitat distribution, subject to natural processes. Physical structure: sediment supply- Maintain natural circulation of sediments and organic matter, without any physical obstructions	Increase in siltation and pollution due to construction works could have an impact on water quality.	Use of silt traps and curtains, designated bunded areas for refuelling, stockpiling of excavated material in designated contained areas, use of silt traps at entry and exit points of HDD, Monitoring of works during construction and operation.	None.	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 this European site.					

Conclusion

9.31. Thus, having regard to the foregoing assessment, I consider that given the location of the proposed development within agricultural lands and a brownfield site zoned for employment, removed from any designated sites and sensitive land uses the proposal is an acceptable form of development and is in accordance with the proper planning and sustainable development of the area. The proposal accords with the policies and objectives of the Wicklow County Development Plan 2016-2021 and the Arklow and Environs Local Area Plan 2018 and will facilitate the upgrade of the national electricity network in accordance with the overarching regional and national policy as set out in the RSES for the Eastern and Midland Region and the National Planning Framework. The provision of a secure and reliable energy supply within Ireland is essential to the country's economic growth and the prosperity of the population and this is supported in policy at a European, national, regional and local level. The proposed development is an essential infrastructure project which will assist in Irelands move to a low carbon economy and is in accordance with the sustainable development of the country and the area within which the development will be located.

10.0 Recommendation

10.1. Having considered the contents of the application, the provision of the Development Plan, the observations received, and in accordance with the foregoing assessment, I recommend that the proposed development be approved for the reasons and considerations set out below.

11.0 Reasons and Considerations

In coming to its decision, the Board had regard to the following:

European legislation, including of particular relevance:

- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.

- EU Renewable Energy Directive 2009/28/EC which aims to promote the use of renewable energy

National and regional planning and related policy, including:

- National Planning Framework,
- National Energy and Climate Plan 2021-2030,
- Climate Action Plan 2021,
- Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure, July 2012,
- Government policy Statement on Security of Electricity Supply, 2021

Regional and local level policy, including the:

- Regional Spatial Economic Strategy for the Eastern and Midland Region

The local planning policy including:

- **Wicklow County Development Plan 2016-2021**
- **Arklow and Environs Local Area Plan 2018**
- other relevant guidance documents
- the nature, scale and design of the proposed development as set out in the planning application and the pattern of development in the vicinity, including the permitted development within the vicinity of the proposed development site and the licenced offshore Arklow Bank Wind Park,
- 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 likely significant effects of the proposed development on European Sites,
- the submissions made to An Bord Pleanála in connection with the planning application, and

the report and recommendation of the Inspector, including the examination, analysis and evaluation undertaken in relation to the environmental impact assessment.

Proper Planning and Sustainable Development

It is considered that the proposed development would accord with European, national, regional and local planning and that it is acceptable in respect of its likely effects on the environment and its likely consequences for the proper planning and sustainable development of the area.

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 submissions received from the prescribed bodies and planning authority and,

(d) 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 in the course of 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 which would be mitigated by the implementation of measures set out in the Environmental Impact Assessment Report (EIAR) and the outline Construction and Environment Management Plan (CEMP) which include specific provisions relating to groundwater, surface water and drainage.

- Noise, vibration and dust during the construction and/or the operational phases would be avoided by the implementation of the measures set out in the Environmental Impact Assessment Report (EIAR) and the outline Construction and Environment Management Plan (CEMP) which include specific provisions relating to the control of dust and noise.
- The increase in vehicle movements and resulting traffic during the construction and operational phases would be avoided by the implementation of the measures set out in the Environmental Impact Assessment Report (EIAR) and the outline Construction and Environment Management Plan (CEMP).
- The impacts on residential amenity during the construction and operational phases would be avoided by the implementation of the measures set out in the Environmental Impact Assessment Report (EIAR) and the outline Construction and Environment Management Plan (CEMP) which include specific provisions relating to the control and management of dust, noise, water quality and traffic movement.

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.

Appropriate Assessment:

The Board agreed with and adopted the screening assessment and conclusion carried out in the inspector's report that the Buckroney-Brittas Dunes and Fen SAC (000729) is the only European site for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposal for the Buckroney-Brittas Dunes and Fen SAC 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.

In completing the assessment, the Board considered, in particular, the

i. Likely direct and indirect impacts arising from the proposal both individually or in combination with other plans or projects, specifically upon the Buckroney-Brittas Dunes and Fen SAC,

ii. Mitigation measures which are included as part of the current proposal,

iii. Conservation Objective for these European Sites, and

iv. Views of prescribed bodies in this regard.

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 integrity of the aforementioned European Site, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Site, in view of the site's conservation objectives.

12.0 **Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, 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 interest of clarity.

2. (a) All mitigation, environmental commitments and monitoring measures identified in the EIAR shall be implemented in full as part of the proposed development.

(b) All mitigation and environmental commitments identified in the Natura Impact Statement shall be implemented in full as part of the proposed development.

Reason: In the interest of development control, public information, and clarity.

3. In accordance with the EIAR, all works shall be monitored by an Ecological Clerk of Works.

Reason: In the interest of environmental protection

3. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of Irish Water and the planning authority for such works and services as appropriate.

Reason: In the interest of public health and to ensure a proper standard of development.

4. The developer shall comply with the transportation requirements of the planning authority for such works and services as appropriate.

Reason: In the interest of traffic and pedestrian safety.

5. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:

a) location of the site and materials compound including area identified for the storage of construction refuse

b) location of areas for construction site offices and staff facilities

c) details of site security fencing and hoardings

d) details of on-site car parking facilities for site workers during the course of construction

e) 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,

f) measures to obviate queuing of construction traffic on the adjoining road network,

g) measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network,

h) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,

i) 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,

j) off-site disposal of construction / demolition waste and details of how it is proposed to manage excavated soil

k) details of on-site re-fuelling arrangements, including use of drip trays,

l) details of how it is proposed to manage excavated soil,

m) 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.

A record of daily checks that the works are being undertaken in accordance with the Construction 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. All new surface water outfalls shall be constructed in a manner which protects riparian habitat and does not result in excessive erosion of such habitat.

   Reason: In the interest of habitat protection.

8. 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 residential amenities of property in the vicinity.

9. The site development and construction works shall be carried out such a manner as to ensure that the adjoining roads are kept clear of debris, soil and other material and cleaning works shall be carried on the adjoining public roads by the developer and at the developer's expense on a daily basis.

Reason: To protect the residential amenities of property in the vicinity.

10. The developer shall comply with the following aviation requirements:

Notify the Irish Aviation Authority of their intention to commence crane activities with a minimum of 30 days prior notification of their erection.

Consult with the Irish Aviation Authority and the Dublin Airport Authority and develop mitigation measures for bird hazards. Details to be submitted to the planning authority for written agreement.

Reason: In the interest of orderly development.

1. (a) All lighting shall be operated in such a manner as to prevent light overspill to areas outside of compounds and works areas.

(b) Prior to the commencement of development, the applicant shall submit a detailed lighting plan for the written agreement of the planning authority. The plan shall include the type, duration, colour of light and direction of all external lighting to be installed within the external areas of the development site.

Reason: In the interests of clarity, and of visual and residential amenity and protection of local biodiversity.

11. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:

a) employ a suitably qualified archaeologist prior to the commencement of development. The archaeologist shall assess and monitor all preparatory works and all site development works.

b) investigate areas of archaeological potential by means of geophysical survey and, depending on the findings, carry out test excavations if deemed necessary following consultation with the National Monuments Services Section of the Department of Culture, Heritage and the Gaeltacht.

c) notify the planning authority in writing at least four weeks prior to the commencement of any site operation relating to the proposed development, and

d) submit a report to the planning authority, containing the results of the archaeological investigations and assessment.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation in-situ or by record and protection of any archaeological remains that may exist within the site.

12. The developer shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

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

13. The delivery of abnormal loads for the construction of the development shall be managed in accordance with a Traffic Management Plan, which shall be submitted to, and agreed in writing with the planning authority prior to commencement of development. This plan shall provide details shall of the road network to be used by construction traffic, including over-sized loads, and detailed arrangements for the protection of bridges, culverts or other structures to be traversed, as may be required. The plan should also contain details of how the developer intends to engage with and notify the local community in advance of the delivery of oversized loads.

    Reason: In the interests of public safety and residential amenity

14. Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority, details of an obstacle warning light scheme which can be visible to night vision equipment.

    Reason: in the interest of aviation safety.

15. In the event that invasive plant species are found prior to or during works at the appeal site, the applicant shall submit an Invasive Management Species Action Plan for the written approval of the planning authority which shall include full details of the eradication of the such invasive species from the appeal site prior to construction on the site or if discovered during construction as soon as is practicably possible.

    Reason: In the interest of nature conservation and mitigating ecological damage associated with the development.

16. Trees to be felled and buildings to be demolished shall be examined prior to felling and demolition to determine the presence of bat roosts. Any works shall be in accordance with the TII Guidelines for the Treatment of Bats during the construction of National Road Schemes.

    Reason: In the interest of wildlife protection.

17. Detailed proposals for roadside and field boundary removal and re-instatement must be agreed with the Local Authority prior to the commencement of development. The proposals must provide for habitat creation in the event that it is deemed not practicable to re-instate roadside /field boundaries. No field or roadside boundaries should be removed where an alternative proposal which would require the active management of invasive alien species exists.

    Reason: In the interest of local biodiversity

18. No ground clearance shall be undertaken, and no vegetation shall be cleared during the bird breeding season, unless otherwise agreed with the local authority.

    Reason: In the interest of local biodiversity

19. The location and type of biodiversity enhancement areas shall be agreed with the Local Authority prior to the commencement of development.

    Reason: In the interest of local biodiversity

20. Details of the method and location of bank stabilsation works shall be agreed prior to the commencement of works, in writing with the Local Authority.

    Reason: In the interest of water quality and local biodiversity.

21. Adequate filter strips shall be provided and left undisturbed directly adjacent to watercourse.

    Reason: In the interest of maintaining water quality and local biodiversity.

22. All instream works shall be completed prior to the 30th of September in any given year, unless otherwise agreed in writing with the Local Authority.

    Reason: To adequately protect fish life.

23. 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 planning 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.

Sarah Lynch
Senior Planning Inspector

13/02/2021