An Bord Pleanála

Inspector's Report

ABP-319422-24

Development	Proposed development of a 400 kV underground cable
Location	Between the existing Woodland Substation, Batterstown, County Meath and the existing Belcamp Substation, Clonshaugh, Fingal, County Dublin, known as the 'East Meath – North Dublin Grid Upgrade. https://www.eirgrideastmeathnorthdublin.ie/
Planning Authority	Fingal County Council & Meath County Council
Applicant(s)	EirGrid
Type of Application	Application under Section 182A of the Planning & Development Act, 2000 (as amended)
Prescribed Bodies	1. Fingal County Council 2. Meath County Council 3. National Transport Authority 4. Department of Housing, Local Government and Heritage

	5. Health Services Executive 6. Inland Fisheries Ireland 7. Transport Infrastructure Ireland
Observer(s)	1. McGarrell Reilly Group 2. Marine Quarter Ltd.
Date of Site Inspection	5th December 2024
Inspector	Donal Donnelly

Contents

1.0 Introduction

1.1. An application under the provisions of Section 182A of the Planning and Development Act, 2000 (as amended) was received by the Board from EirGrid for the development of the East Meath – North Dublin Grid Upgrade Project. This proposal comprises the laying of approximately 37.5km of new 400 kV underground cable between the existing Woodland Substation, Batterstown, Co. Meath and the existing Belcamp Substation, Clonshaugh, Co. Dublin.

1.2. EirGrid as the Transmission System Operator (TSO) is progressing the proposed grid upgrade in order to strengthen the electricity transmission network in Counties Meath, Fingal and Dublin, to provide capacity to connect new demands for electricity to support economic growth in the area, and to assist in meeting the Government target that up to 80% of Ireland's electricity will be generated from renewable sources by 2030.

1.3. The direct application to the Board follows pre-application consultations (ABP-317599-23), where the Board determined on 12th January 2024 that the proposed development falls within the scope of Section 182A.

2.0 Site Location and Description

2.1. Approximately 20.5 km of the overall 37.5km proposed underground cable circuit is located in Co. Meath and the remainder is in the Fingal County Council area. The route will continue in-road for 24.4km and the remainder will mostly pass through agricultural lands.

2.2. In the Meath County Council area, the route continues through the townlands of Barstown, Woodland, Gaulstown, Culcommon, Cullendragh, Creemore, Portan, Lynaghstown, Blackhall Big, Staffordstown Little, Harlockstown, Waynestown, Vesingstown, Baytownpark, Sarney, Cushinstown, Colliersland North, Dunboyne, Bennetstown, Pace, Woodpark, Piercetown, Ballymagillin, Whitesland, Normansgrove, Stokestown, Kinoristown, Rowan, Nuttstown, Ballintry, Belgree, Priest Town, Ballymacarney and Court.

2.3. In the Fingal County Council area, the proposed route will pass through the townlands of Court, Gallanstown, Yellow Walls, Hollywood, Irishtown, Spricklestown,

Killamonan, Cherryhound, Ward Upper, Ward Lower, Newpark, Shallon, Corrstown, Common, Skephubble, Ballystrahan, Kilreesk, Kingstown, Barberstown, Pickardstown, Forrest Great, Forrest Little, Cloghran, Glebe, Baskin, Stockhole, Middletown, Clonshagh and Belcamp.

2.4. From Woodland Substation, the cable route will continue south across fields for a distance of approximately 3.2km along a corridor shared with the proposed 400kV underground cable which forms part of the Kildare – Meath 400kV Grid Upgrade (ABP-316372-23). The route then turns east along the public road (R156) to Newtown Bridge roundabout before turning north-east along R157 to the north of Dunboyne. To the north of Pace roundabout, the route will pass under the M3 and along the short section of the R147, before turning east and passing along local roads to the junction of the R121. The route then travels under the M2 and along the R121 and R122, then along a short section of local road. The route will pass through agricultural lands for approximately 500m and then along the R108 and Naul Road at the northern side of Dublin Airport. At Cloghran, the route passes under the M1, then curves south through a mix of agricultural fields and local road to the location of the Belcamp Substation.

2.5. In Co. Meath, the route passes through several landscape character areas including Tara Skryne Hills (exceptional value and high sensitivity), South-East Lowlands (very high value and moderate sensitivity), and Ward Lowlands (low value and high sensitivity). In Fingal, the location of the route passes through mostly low-lying agricultural areas and a small section of rolling hills with tree belts.

3.0 **Proposed Development**

3.1. The proposed East Meath – North Dublin Grid Upgrade project connecting the 400 kV Woodland Substation to the 220kV Belcamp Substation comprises of (a) the underground cable circuit over 37.5km, (b) upgrades to the existing 400kV Woodland Substation, and (c) upgrades to the existing 220kV Belcamp Substation.

3.2. The underground cable circuit works consists of the following:

- Construction of a trench of approximately 1.5m wide and 1.3m deep over a distance of 26km in the public road, and to a depth of 1.8m over a distance of

11.5km in private lands for the laying of an underground cable circuit, with associated above ground route marker posts.

- Construction of 49 no. joint bays (10m x 2.5m x6 2.5m) with adjacent communication chambers and link boxes, and handstandings (off road only). Passing bays will be provided at certain joint bay locations.
- Laying of communication links and fibre optic cables between both substations.
- Provision of 7 no. temporary construction compounds ranging from 0.8ha to 1.6ha., and temporary horizontal directional drilling compounds and both reception and launch locations for three motorway crossings, with associated laydown area, ranging from approximately 0.15ha to 0.45ha.
- Laying of temporary (c. 12km) and permanent (c. 4km) access tracks.
- All associated water, rail, road, and utility underground crossings and above and below-ground site development works.

3.3. The proposed upgrades to the existing 400kV Woodland Substation are summarised as follows:

- Installation of 400kV feeder bay, insulators, instrument transformers, overhead conductors, disconnectors, circuit breakers, surge arrestors, and gantries.
- All ancillary site development works.

3.4. The proposed upgrades to the existing 220kV Belcamp Substation will include the following:

- Construction of a new steel framed and clad building, installation of 400kV switchgear, electrical shunt reactor, 2 no. lightning masts, and new 400/220kV transformer.
- Internal access road and all ancillary site development works.

3.5. The construction phase is expected to last 42 months. Overall, the works will involve above and below ground works related to permanent and temporary construction and reinstatement, roadworks, utility diversions, and site and significant vegetation clearance.

3.6. The strategic purpose of the proposed development is to strengthen the electricity network in East Meath and North Dublin to improve the transfer of power across the existing transmission network to:

- Address the increased electricity demand in east Meath and north Dublin due to economic development and population growth;
- Reduce the use of and reliance on fossil fuels for electricity generation;
- Facilitate further development of renewable energy generation, onshore and offshore; and
- Assist in achieving climate action targets of having up to 80% of electricity coming from renewable sources by 2030.

4.0 **Planning History**

An Bord Pleanála Ref: ABP-316372-23

4.1. Approval sought for the 'Kildare-Meath Grid Upgrade' – proposal for a transmission network reinforcement project comprising a 400 kV underground cable between Dunstown 400 kV substation and Woodland 400 kV substation over a distance of c. 53km.

4.2. This proposal overlaps with works proposed at Woodland Substation and along the ‘Woodland Corridor' for 3.5km between Woodland Substation and the R156 Regional Road.

An Bord Pleanála Ref: PCI0001-ABP

4.3. Permission granted in 2016 for the North South Interconnector project involving a second, higher-capacity interconnector being added, to connect the electricity grids of Ireland. It will connect to the network in Co Tyrone, cross the border between Armagh and Monaghan, and then join the network at an existing substation in County Meath.

4.4. Permitted works at Woodland Substation include a western extension of the existing substation compound.

Meath County Council Reg. Ref: 22/1550

4.5. Permission granted for new AIS substation equipment and associated earthworks at Woodland Substation.

4.6. These works are separate to the current proposal and will be progressed regardless.

Fingal County Council Reg. Ref: F23A/0040

4.7. Permission granted for installation of an additional 220kV GIS building and an extension of the substation compound to the north.

4.8. The development will generally be located within the extension to the compound and has been designed to tie-in to the existing infrastructure and the extension of services also permitted under Reg. Ref. F23A/0040 with modifications.

Exempted Development (FS5-026/16)

4.9. Recently completed development of 220kV underground electrical infrastructure associated with the Collinstown to Dardistown line at Belcamp Substation. The proposed development will utilise the same access.

An Bord Pleanála Ref: VA29N.317831

4.10. Proposed development of three 110kV electricity circuits at various locations in North Dublin between Forrest Little, Belcamp, Clonshaugh and Harristown, Co. Dublin.

An Bord Pleanála Ref: ABP-314232-22

4.11. The DART+ West Railway Order - Dublin City to Maynooth and M3 Parkway was made on 18th July 2024. This development is directly adjacent to the planning application boundary for the proposed cable route at M3 Parkway.

An Bord Pleanála Ref: ABP-301908-18 / ABP-302039-18

4.12. Greater Dublin Drainage Project consisting of new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility. The alignment of the underground cable intersects the alignment of the GDD pipeline in the vicinity of Belcamp Substation.

4.13. The above approval was subsequently challenged by judicial review in the High Court and the application was remitted back to An Bord Pleanála. The reactivated case number is ABP-312131-21.

An Bord Pleanála Ref: ABP-314724-22

4.14. Permission sought for Metrolink from Estuary through Swords, Dublin Airport, Ballymun, Glasnevin and City Centre to Charlemont, Co. Dublin.

4.15. This proposal overlaps with the planning application boundary for the proposed cable route at the R132.

An Bord Pleanála Ref: ABP-317121-23

4.16. BusConnects Swords to City Centre bus corridor scheme was approved by the Board in June 2024. This development overlaps the proposed planning application boundary for the proposed cable route at the R132.

Meath County Council Reg. Ref: 23/60290 (ABP-320049-24)

4.17. A third party appeal was submitted by Bennettstown Residents against MCC's decision to grant Marine Quarter Ltd. permission for a large-scale residential development consisting of 267 residential units and all ancillary development works, principally located in Bennetstown (townland) to the south of the M3 Parkway Park and Ride and Rail Station and also extending into Pace & Dunboyne (townlands), Dunboyne North, Co. Meath.

4.18. The Board granted permission for the proposed development on 20th November 2024.

Meath County Council Reg. Ref: 23/424 (ABP-320091-24)

4.19. First party appeal against Condition 2 attached to the decision to grant permission to McGarrell O'Reilly Homes for construction of three office buildings ranging in height from three to four stories and all associated ancillary development works at Bennetstown, Pace, Dunboyne, Co. Meath.

4.20. Condition 2 requested the relocation of Building 3 outside of Flood Zones A & B. There is no decision on this case at the time of writing.

5.0 Application for Approval to An Bord Pleanála

5.1. The application was submitted by EirGrid to the Board seeking approval for planning approval under the provisions of Section 182A of the Planning and Development Act,

2000 (as amended) for the East Meath – North Dublin Grid Upgrade Project. The application was accompanied by the following information:

- Application Cover Letter;
- SID Application Form, signed and dated and supporting Statutory Particulars Document;
- Newspaper Notices, as published within the Meath Chronicle on 26th March and the Northside People on 27th March 2024;
- Site Notices as erected at 4 no. locations;
- Shapefile of the planning application boundary;
- Schedule of Prescribed Bodies to whom a copy of the application has been sent;
- Copy of the Letter to Prescribed Bodies;
- Planning Report ;
- Planning Application Drawings;
- Environmental Impact Assessment Report comprising:
  - Volume 1 – Non-Technical Summary;
  - Volume 2 – Main Report;
  - Volume 3 – Appendices;
  - Volume 4 – Figures; and
  - Volume 5 – Supporting Documentation;
- Natura Impact Statement;
- AA Screening Report;
- EIA Screening Report.

5.2. A standalone website containing application information was provided by the applicant: http://www.eirgrideastmeathnorthdublin.ie

5.3. In accordance with the provisions of Section 182A(4)(b) of the Act, Meath County Council, Fingal County Council and the following prescribed bodies were notified with regard to the application:

- Minister for Housing, Local Government and Heritage
- Dublin Airport Authority
- Minister of the Environment, Climate and Communications
- Minister for Transport, Tourism and Sport
- Inland Fisheries Ireland
- Iarnród Éireann
- Office of Public Works
- Transport Infrastructure Ireland
- Uisce Éireann
- Commission for Regulation of Utilities
- Fáilte Ireland
- An Taisce
- The Heritage Council
- An Chomhairle Ealaíon
- Córas Iompair Éireann
- Commission for Railway Regulation

5.4. The following bodies were consulted during scoping and received notification of the planning lodgement along with a link to the planning documents:

- Waterways Ireland
- Dublin Bus
- Gas Networks Ireland
- Environmental Protection Agency
- Electricity Supply Board
- Health and Safety Authority
- Irish Aviation Authority
- National Parks and Wildlife Services

- Teagasc
- National Transport Authority
- Health Service Executive
- Dublin City Council
- The Commissioners of Public Work
- Eastern and Midlands Regional Assembly

6.0 Written Submissions/ Observations Received by the Board

6.1. Fingal County Council

6.1.1. Fingal County Council Planning Authority's comments on the proposed development are summarised as follows:

Principle of Development

- Under the HT zoning, utility installations are listed as permitted in principle. The cabling also passes through four other zonings, including 'GB' Greenbelt and 'OS' Open Space. In these areas, proposals shall be assessed in terms of their contribution towards the zoning objective and vision, and their compliance and consistency with the policies and objectives of the Development Plan.
- Overall, it is considered that the principle of the proposed development is acceptable subject to the provisions and policies of the Development Plan. The proposal is also supported by national and regional planning policies and sustainable development and renewable energy targets.

Impact on Visual and Residential Amenity of the Area

- Not considered that the proposed development would have any negative impact on the visual and residential amenity of the area.
- Principle of the proposed 400kV GIS hall was accepted under Reg. Ref: F23A/0040. Condition recommended that external finishes of the GIS hall shall be submitted for agreement prior to commencement of development.

- Position of construction compounds near residential areas should be fully and carefully considered, and potentially amended to ensure protection of residential and visual amenity.
- Proposal would be consistent with and would support the overall energy policies and objectives of the Development Plan.

Access and Transportation

- Transport Planning Section has no objection subject to conditions.

Waste Management

- Environment Section has no objection subject to preparation of a Construction and Demolition Resource Waste Management Plan.
- Should be conditioned that development takes place in accordance with CEMP.

Landscaping

- The Parks and Green Infrastructure Division has no objection subject to conditions relating to tree and hedgerow removal and replacement.

Biodiversity

- NIS could be improved with the inclusion of evidence of the effectiveness of the mitigation measures proposed.
- Applicant should be requested to confirm the minimum width of the construction swathe when crossing hedgerows or tree lines - include appropriate mitigation measures to ensure that hedgerows and tree lines can continue to be used as commuting corridors.
- Applicant should provide details as to how riverbanks will be accessed and what standard best practise guidelines will be followed to ensure no impacts to downstream receptors from HDD works. However, the Board is the competent authority for the purposes of AA.

Financial Contributions

- Planning Authority would support the imposition of a condition towards a financing and education and awareness programme in respect of renewable energy and energy conservation for the community in the area.

- There are no contributions levied on underground works and the 400kV UGC circuits are exempt from financial contributions. A bond is requested to ensure reinstatement works are undertaken to a satisfactory standard.

6.1.2. Internal reports were received from the Parks and Green Infrastructure Division, the Transport Planning Section, the Environment Section (Waste Enforcement and Regulation), the Water Services Section, and the Conservation Officer Section. There were no objections from these sections subject to conditions. General comments were received from the Ecologist Officer and the Public Lighting Section.

6.1.3. A total of 17 conditions to be attached to any grant of permission are recommended by Fingal County Council.

6.2. **Meath County Council**

6.2.1. The planning assessment contained within the submission on the proposed East Meath – North Dublin Grid Upgrade by Meath County Council (MCC) is summarised as follows:

Principle of the Development

- A development proposal that will strengthen the grid connection, allow for greater capacity and underpin a transition to low carbon society, is acceptable in principle. Proposal is also consistent with regional and national planning policy.
- Utilities are all permitted uses under most zoning objectives, except for R1 – Rail Corridor – this has a single purpose use which is to protect the designated route, so suitability of individual uses is not set out.
- Board invited to consider if works at Chainage 15250-15500 are outside of red line boundary.

Appropriate Assessment

- There are 23 no. proposed watercourse crossings, which are considered hydrological pathways to European Sites, namely the Tolka, Dunboyne Stream, Ward River, Sluice and Mayne watercourses.

- Fluming is the preferred option for cut crossings – watercourses are dammed and diverted whilst the cable is installed beneath the bed of the watercourse and once reinstated, the water resumes its natural course.
- WFD status for the watercourse crossings is poor to moderate with most ‘at risk’ and some ‘under review’.
- Screening identifies 19 European Sites with hydrological connection to the application site. Potential for significant effects could not be excluded on 14 European Sites from changes to water quality and human induced disturbance.
- Concludes that based on best available scientific information and professional judgement, and with the mitigation measures detailed, there will be no adverse effects on the integrity of European Sites, alone or in combination with other plans or projects, in light of the conservation objectives.
- In the event of a grant of permission, the Board is requested to include appropriate planning conditions that will implement the mitigation measures set out in the NIS.

EIAR

- Notes that previous EirGrid project for a 400kV cable did not require EIAR. With the introduction of the new Regulations in 2023 (rural restructuring), this became a requirement for the current application.
- Public participation is a key component of EIAR, and it is a matter for the Board to determine if there was sufficient opportunity for same.
- Assessment identifies an adverse, significant and temporary potential noise impact to receptors (nearby dwellings) due to HDD works at M2 and M3 crossings.
- Four road closure and diversion routes are anticipated to have adverse, significant and temporary residual noise impacts over a period of <1 year, despite implementation of mitigation measures.
- A negative, significant and permanent residual impact is estimated at local to county level from the loss of hedgerows and treelines until new species rich hedgerows and treelines are established.

- A negative, significant and permanent residual impact is estimated at county level from the loss of mature trees, and this cannot be compensated with replacement planting due to the time taken for trees to reach maturation.
- Grassland losses at Belcamp Substation are assessed as negative, significant and permanent residual impacts, estimated at a local (high) geographic scale.
- Significant hedgerow/ tree removal is proposed which will have a significant local impact on ecological corridors – Board invited to consider the cumulative impact of the proposed removal of hedgerow and trees across this project in combination with the Kildare-Meath 400kV cable and substation upgrade project.
- Planning condition recommended on planting and landscaping and Board is invited to consider All-Ireland Pollinator Plan. Invasive Species Eradication and Management Strategy also required.
- Construction phase has the potential to have a significant impact on groundwater quality of public supply wells, as well as the Inner Protection Area of Dunboyne Public Water Supply. Standard best practice pollution prevention measures set out in the CEMP. Board is requested to consider any comments from Uisce Éireann.
- Potential for changes in baseline hydromorphology of the water body due to permanent culvert crossing, which is assessed to be a significant impact. Board is requested to consider recommended conditions proposed in relation to flood risk and surface water management.
- A mound which is a recorded monument (AY_47) will be removed due to construction activities; potential for accidental damage to a graveyard wall (AY_24); most of an enclosure (LI_40) and 3 ring ditches (CH_78) will be removed because of construction; footings of a small groups of building (LI_08) will be removed; e ring-ditches and partial removal of two ring-ditches (CH_62); half and enclosure (CH_75) and curvilinear features forming part of CH_67 would be removed. Each of these interventions will result in direct significant impacts.
- It is considered that following mitigation, there will be a significant impact on AY_47 during construction. Board is invited to consider the specific

recommendations of MCC archaeologist. A range of archaeological evidence has been noted, including around Dunboyne.

- The traffic and transport effects at one location is deemed significant by MCC (M3 motorway on-off slips).
- Following mitigation, four temporary traffic management sections, 9.1km in length, will have a negative, moderate (deemed significant) and temporary impact on traffic and transport due to the requirement for traffic diversions. MCC Transport Department has advised of several conditions for the Board to apply in the event of a grant of permission. It is noted that the proposed development is located along a route with high levels of traffic, particularly at peak times.
- Most farm enterprises, including two equine-only facilities, that will be impacted are of medium sensitivity, with only one dairy farm being of high sensitivity.
- EirGrid intends to compensate for permanent loss of agricultural land and temporary and permanent agricultural land take is 0.02% of the combined agricultural area of Co. Meath and Co. Dublin.
- 96.9% of soils and fill material require removal during construction – potential impact prior to mitigation is assessed as negative, significant and short-term. Effects will be reduced by a Construction Resource and Waste Management Plan. MCC invites the Board to consider the recommended conditions in relation to waste and resource management.
- In terms of material assets, improvement to the electricity infrastructure of the region once the proposed development is operational will be positive, significant and long term.
- There will be permanent landscape and visual impacts during the operational phase at certain locations. Permanent and temporary hedgerow and mature tree loss, including the felling of 1,174 trees within the study area. Hedgerow to be removed for temporary works will be replanted and between 705 and 1,528 new trees will be planted.
- No significant risk of major accident and/ or disaster following mitigation.

- 20 projects were assessed for potential cumulative impacts. Additional mitigation proposed for the CP0996 Kildare-Meath Grid Upgrade SID application as there is spatial overlap.
- Cumulative impact to grassland deemed to be negative, significant and medium-term.
- Cumulative negative, significant and permanent residual impact on a single archaeology, architectural heritage and cultural heritage receptor due to two Glenveagh Homes developments and one Montague Ventures Ltd. development – permanent access track and joint bays within this demesne.
- Significant positive cumulative impact on regional electricity network once North South Interconnector, Kildare Meath Upgrade, Mayne Stability Ltd. development, ESB Engineering & Major Projects development (Macetown/ Corduff underground cable), CP1213 EirGrid development, ESB development at Darndale and the CP1194 EirGrid Station redevelopment are operational.
- In the event of a grant of permission, MCC request that the Board condition the mitigation and monitoring measures set out in Chapter 21 of the EIAR.

Design and Layout

- Generally considered that the proposed cable route design and reinstatement of roads infrastructure is acceptable to MCC, subject to conditions, including those relating to compensatory planting due to large area of hedgerow/ trees to be removed. Extension to Woodland Substation generally considered acceptable.
- Fire safety details may need to be considered and applicant is advised to consult with the Fire Office of MCC.

Traffic, Transportation, etc.

- Board is invited to consider comments and recommended conditions of MCC Transport Departments.
- Board requested to include a condition to ensure that the applicant demonstrates that any obtrusive light is mitigated.

Water Services / Other Utilities

- Board may wish to consider the observations of Uisce Éireann in relation to water services utilities. Applicant should also adhere to IFI (2016) Guidelines on Protection of Fisheries During Construction Works in and adjacent to Waters, and all works will be supervised by an Environmental Clerk of Works and Project Hydrologist.

Conclusion

- Proposed development is supported in national, regional and local planning policy and such development must be appropriate from an environmental, technical and visual perspective, etc.
- Cumulative impact of hedgerow removal must be considered by the Board. Works will alter the existing local landscape with removal/ damage to hedgerow and trees.
- Route of the proposed development is heavily trafficked but following completion, the proposed development will not have a negative impact on access, traffic and movement.
- In the event of planning permission being granted, development contributions are applicable. Condition for a cash deposit/ bank bond or other such security for reinstatement is also requested by MCC.
- Board may also wish to include a condition referring to EirGrid's Community Benefit Fund.
- MCC recommends that permission is granted subject to conditions. A total of 49 conditions are recommended.

6.2.2. Reports were received from the Transportation Department, the Archaeology Section and the Fire Safety Officer after referral of the application within Meath County Council. The Transportation Department considered the proposed road closures and durations, traffic management proposals, diversion routes, conflict with watercourses and third-party services, impact on planned road improvement works, cable trench impacts, and HV cable and joint bay impacts. A total of 20 no. conditions are recommended by the Transportation Department.

6.2.3. The Archaeology Section noted that the Cultural Heritage Chapter of the EIAR is well prepared and presented but that it would be helpful to clarify the level of test

trenching proposed. No general construction phase monitoring is proposed, and it is stated that this is acceptable if there is a high level of pre-construction test trenching.

6.2.4. The Fire Safety Officer confirmed that there is no requirement to submit a Fire Safety Certificate for the proposed works.

6.3. National Transport Authority

6.3.1. The NTA refers to the planning consent application for the Swords to City Centre BusConnects core bus corridor (CBC) scheme. The consideration given to the CBC scheme where the proposed grid upgrade project would cross Cloghran Roundabout on the R132 is welcomed.

6.3.2. It is highlighted that the proposed timelines for completion of the CBC scheme and the grid upgrade project would overlap and there is potential for works to clash, if not coordinated effectively. It is requested that the applicant is conditioned to engage with the NTA as part of any grant of permission and that the detailed design and pre-construction stages are co-ordinated, so that the delivery of the CBC scheme is not compromised.

6.4. Department of Housing, Local Government and Heritage

6.4.1. The following archaeological observations/ recommendations were submitted by the Department's Development Applications Unit:

- No advance Archaeological Geophysical Survey or Archaeological Test Excavation has been carried out to inform the EIAR.
- Notes that the proposed development will have a direct impact on Recorded Monument DU015-001 (Mound) and that preservation by record is proposed. Department advises that recommended conditions of planning permission align with Sample Conditions C3, C5 and C6 as set out in OPR Practice Note PN03: Planning Conditions (October 2022), with appropriate site-specific additions/ adaptations.
- Conditions set out on archaeological requirements, underwater archaeology and the submission of an Underwater Archaeological Impact Assessment.

6.5. Health Services Executive

6.5.1. The HSE submission is summarised as follows:

- The National Environmental Health Service (NEHS) is satisfied that the EIAR provides an adequate description of the proposed project.
- NEHS satisfied that the Non-Technical Summary provides an adequate description of the proposed development and the potential impacts on human health.
- Mechanism for feedback including complaints should be in place during all phases of the proposed development.
- No reference can be found for the decommissioning phase of the development.
- NEHS recommends that mitigation measures listed under Section 7.5 of the EIAR are set as minimum conditions of planning. Monitoring in the context of dust during track out should take place at or near potential sensitive receptors along track out routes.
- No evidence of how the proposed development intends to further mitigate GHGs through carbon sequestering to deliver as close as possible a carbon neutral development.
- No opportunities to support health gain were identified under the climate chapter.
- NEHS recommends that the mitigation measures to reduce GHGs are set as a minimum of planning.
- Recommends that an assessment of hazards and vulnerability during the construction phase is undertaken and appropriate adaptation measures taken to protect the proposed development, facilities and welfare of staff.
- Recommends all the mitigation and monitoring measures described under section 9.5.5.1 of the EIAR for noise and vibration are adopted as minimum conditions of planning.

6.5.2. A report attached to the submission from a consultant in public health medicine submits that environmental impacts from the development of electricity infrastructure and technologies may include carbon dioxide emissions, construction and operation

phase impacts, extraction of minerals for technologies to support the operation phase, and generation and disposal of e-waste from both construction and operation phases. It is recommended that all measures are in place to mitigate for the above effects and careful consideration will need to be given on how the development will affect the capacity of local regional infrastructure.

6.6. Inland Fisheries Ireland

6.6.1. The submission from IFI is summarised as follows:

- The proposed development will interact with several important catchments, which support Lamprey, Brown Trout, Salmon, European Eel and other fish species.
- All works will be completed in line with a construction management plan that shall contain mitigation measures and a mechanism for ensuring compliance with environmental legislation and statutory consents.
- There can be no direct pumping of contaminated water from the works into a water course at any time, and dewatering must be treated by either infiltration or to a settlement pond.
- Measures should be taken to ensure comprehensive protection of local aquatic ecological integrity.
- Measures should be taken to ensure that concrete is properly handled near water, and there should be adequate drainage and silt trapping on construction roads.
- Disturbance to riparian habitats should be minimised, and the short-term storage and removal / disposal of excavated material must be considered and planned.
- Regular inspections of water courses should be carried out.
- An invasive species and biosecurity plan should be included.
- Appointed contractor will consult IFI prior to a final decision being made on water crossing techniques.
- Suitably qualified person should be assigned to monitor and ensure all conditioned and agreed environmental mitigation measures are implemented correctly.

- All discharges must be in compliance with the European Communities (Surface Water) Regulations 2009, and the European Communities (Groundwater) Regulations 2010.

6.7. Transport Infrastructure Ireland

6.7.1. The submission from TII is summarised as follows:

- Acknowledges the strategic importance of the proposed development.
- Seeks to ensure that the subject development can proceed complementary to safeguarding the strategic function and levels of safety on the national road network.
- Any proposed crossing of the motorway network to facilitate the national grid upgrade should adhere to established procedures and standards concerning such crossings.
- Sets out general requirements for directional drilling under a motorway. However, there is only very limited information included in the planning application in relation to HDD motorway crossings, e.g. no standard details, no information on depth, no construction methodology, etc.
- Requests that any permission granted by the board for the proposed development would provide conditions in relation to motorway HDD crossings of the M1, M2 and M3.
- Traffic impact assessment only appears to consider the impact of construction traffic generation, and no assessment has considered the impact of temporary traffic management (TTM) on network traffic. TTM in the vicinity of motorway junctions such as M3 J5 may result in queuing rapidly developing back onto the motorway. TTM should therefore be understood and mitigated, e.g., scheduling works at nighttime.
- Recommends consultation with relevant PPP companies MMaRC contractors and road authorities.
- Sets out planning condition to be attached to any grant of permission in relation to TTM in the vicinity of national roads and associated junctions.

- Transformer represents an exceptional abnormal load – no bridge structures on the Irish road network have been designed and checked for such a load. Condition set out to be attached to any grant of permission relating to abnormal and exceptional abnormal loads.

6.8. Public Submissions

6.8.1. Two submissions were received by the Board from adjacent landowners. These submissions were both submitted by McCutcheon Halley planning consultants and are summarised as follows:

McGarrell Reilly Group

- Welcomes proposed grid upgrade aimed at enhancing the region's energy infrastructure and security of supply and recognises its importance in meeting the growing energy demands of the east Meath and north Dublin region.
- EirGrid is seeking to install underground cables and a temporary HDD compound in observer's land to the north of Dunboyne.
- Lands are zoned E1/E3 Strategic Employment Zones (High Technology Uses/ Warehousing & Distribution) and are included in the Dunboyne North Masterplan.
- In its current form, EirGrid's proposal will have significant economic impacts on the site which is earmarked in the masterplan for a 'landmark' building.
- Requests that the route of the proposed cabling through observer's lands be altered to provide for more favourable alignment that would reduce the land take and preserve a greater proportion of the site's developable area.
- Importance of retaining the development potential of observer's site is underscored by its designation as a 'strategic employment site'. Plans are located along a multimodal road and rail corridor in the Dublin Metropolitan Area in an area targeted for significant population growth and economic investment.
- Adjusting the route through observer's lands to more closely hug the site boundary before it turns east across the M3 motorway would facilitate a more optimal solution and still ensures the delivery of important enabling electricity infrastructure without compromising future development in the eastern part of the

observer's site. Asks the Board to require an adjustment to the proposed cable route via a request for further information.

- As currently proposed, the cable route would effectively sterilise the land from the point of the 5m wayleave east to the site boundary by precluding any structures from being built on this portion of the site.

Marine Quarter Ltd.

- Strongly supports the proposed development but wishes to set out a critical project consideration: "The depth and alignment of the SID proposal conflicts with a live Large Scale Residential Development (LRD) planning application (Meath County Council Ref: 23/60290) and the future development of masterplanned residential and commercial zoned lands east and west of the R157 and proposed SID. Specifically, the SID proposal as currently set out, clashes with critical services crossing the R157 between zoned parcels of land and also with proposed junction upgrades."
- Proposed SID runs to the west of this site and a second LRD for a further 289 residential units was at pre-planning stage. Other applications on masterplan lands will be lodged in the near future.
- Clash is currently evident with planned infrastructure including road/ junction design, public lighting, foul drainage, watermains and communication networks - must be addressed in the SID application, so that it does not sever critical infrastructure serving zoned lands at this location either side of the R157.
- Proposed SID has not made any accommodation for the delivery of Reg. Ref: 23/60290 or inevitable connection requirements on zoned land opposite.
- There is a joint box proposed just north of the existing roundabout, which is likely to conflict with the proposed junction, given the need for some localised widening in this location.
- Ducting, joint boxes and other ancillary components of the SID should be fully coordinated to ensure that no conflicts arise with the road design and the LRD.
- A coordination strategy should be agreed between all project stakeholders - suggests that the 400KV lines need to be laid much deeper in the ground at this

location of the R157 so as to avoid sterilising the development potential of zoned lands.

- It should be a condition of planning that the horizontal and vertical alignment of EirGrid infrastructure is agreed and coordinated to avoid conflicts with servicing requirements of zoned lands.

7.0 Applicant's Response to Written Submissions

7.1. The applicant was invited by the Board to make a submission on the observations received in relation to the application. The response is summarised as follows:

7.2. **Observations on Conditions Recommended:**

- Attachment of conditions is a matter for the discretion of the Board.
- Some conditions recommend very specific works and / or compliance with sectoral specific technical guidelines – such conditions are too detailed and / or specific at approval stage, and it may be most appropriate that, for one or more conditions addressing general requirements for technical interface design matters, be agreed prior to construction.

7.3. **Response to DHLGH:**

- Applicant acknowledges the recommended conditions and accepts the principle, spirit and intent of the suggested conditions. Applicant will comply with the conditions attached to any grant of planning approval, in addition to those already included as mitigation or monitoring measures in the EIAR and CEMP.

7.4. **Response to Fingal County Council:**

- *NIS* stipulates that it will be a contractual obligation for the Ecological Cleck of Works (ECoW) to be on site to oversee the implementation of all mitigation measures, particularly where sensitive habitats or species maybe impacted.
- ECoW will make adaptive mitigation measures in response to extreme weather and the integrity of silt fencing to protect watercourses.

- Standard industry guidance will be used to supplement any contractual requirements, and the guidance will be implemented by the on-site ECoW.
- ECoW will be present for in-stream works where watercourses are hydrologically connected to European site; at locations where there is the potential for disturbance to SCI bird species; where visual and noise barrier hoarding will be erected; and in areas of vegetation reinstatement.
- *Construction Swathe* width reduces to approximately 10-15m where it crosses field boundaries. Overall width is modified to accommodate the working area and a temporary construction access track. Stockpiles will not be sited at field boundaries, and this will facilitate a reduced construction swathe at hedgerow and treeline crossings.
- Once cable construction is completed, hedgerows will be reinstated except where field gates are required for new permanent access tracks.
- No bat roosts were recorded in the study area – main embedded design measure is the routing of the proposed cable mostly within existing road structures. Loss of habitat within the section of the route that goes through fields is not considered significant, as these habitats are common and widespread and linear features being altered are only susceptible to the local population.
- Mitigation measures will ensure that there will be no significant residual impact to bats as a result of the proposed development.
- *HDD and riverbank access* - there are no proposed crossings of watercourses by HDD methods. Open cut crossing methodology is proposed for watercourse crossings, as there is a greater footprint required for HDD compounds.
- *Historical landfills* at Belcamp Lane and Castlemoate are not recorded on the EPA online mapviewer. Possible unlicenced landfill identified in EIAR and other possible landfill are not considered a risk due to the distance from the proposed development. Ground investigations did not show any evidence of contamination to the north of Naul Road, in proximity to Castlemoate. Any risk of contamination to construction workers during groundworks will be mitigated and managed appropriately.

- *Community gain* - Applicant is the Transmission System Operator (TSO) and already spearheads support and learning and skills development including outreach events to schools and supporting education initiatives through the Community Benefit Fund initiative. Applicant has already set up the East Meath – North Dublin Community Forum.

7.5. **Response to Meath County Council:**

- Applicant notes and welcomes MCC support for the proposed development.
- *Cultural heritage* - scope of test excavation will be based on archaeological geophysical survey and will be agreed with the DHLGH.
- In accordance with Cultural Heritage Guidelines for Electricity Transmission Projects (EirGrid 2015), relevant images were provided to illustrate assets on their settings.
- *Planning application boundary* - proposed cable route lies entirely within the planning application boundary for its full extent.
- *Spatial overlap with the Kildare Meath Grid Upgrade* - impact of the proposed development on Woodland corridor is assessed thoroughly in the EIAR and cumulatively with the Kildare Meath Grid Upgrade. Appropriate mitigation measures specific to the overlap are included.
- *Cumulative removal of hedgerow* - for both developments, the loss of treelines hedgerow is considered a likely significant impact. Loss along the woodland corridor will be the same between the two developments. Compensatory measures are included, if mitigation is not possible. Offsite compensatory planting will deliver 130% of trees permanently lost within the planning application boundary.
- *All-Ireland Pollinator Plan* - considered as document relevant to the proposed development and included in mitigation.
- *Invasive species eradication and management strategy* - included in CEMP.
- *Location of joint bays* - alternatives have been investigated but best international practice is to install joint bays.

- TSO must ultimately determine the appropriate citing and design of joint bays, having regard to the requirements of the transmission system, necessary electrical functional specifications, and construction methodologies for cabling.
- *Diversion routes* - requirement for diversions is largely dependent on the need to excavate trenches in the road and to provide an adequate and safe working area for the contractor.
- Construction Traffic Management Plan and the Temporary Traffic Management Plan will be further developed by the contractor prior to construction. Plans will highlight timelines for works to all affected residents landowners and business owners, and any exceptional circumstances such as high traffic volumes, adverse weather conditions and emergency access will be considered.
- *CPO powers* – applicant's approach is to seek to enter into voluntary arrangements with landowners where transmission infrastructure is proposed on their lands.
- *Reinstatement bond* - form of security shall be as agreed.
- *Proposed conditions* - some of the recommended conditions are not appropriate having regard to the applicant's statutory role and responsibility as TSO.
- *Development Contributions* cannot be applied to SIDs proposed under Section 182A of the Act. However, Section 128(B)(6) Provides for the payment of a contribution in relation to community gain. Applicant will abide by any such conditions and contributions that the Board may lawfully attach to an approval. Applicant has a community benefit policy based on 3% of the capital cost of works. Fund supports local initiatives in sustainability, community and biodiversity.

7.6. Response to Transport Infrastructure Ireland

- Applicant notes and welcomes TII's support for the proposed development.
- *Motorway crossings* - prior to commencing construction, there will be further discussions on the design detail, timing, and other related matters.
- Applicant provided TII with technical notes on design details and construction methodology as part of pre planning consultations.

- Applicant is working with TII on a number of other similar proposals.
- *TTM* - determined not to have a significant impact on any motorway junctions. TTM or delivery of large or abnormal loads around motorway junctions will be undertaken overnight or at the very least avoiding peak hours.
- *Consultation* - applicant committed to continuing ongoing consultation with TII, local road authorities, PPP companies and MmaRC contractors.
- *Exceptional abnormal load* - does not alter applicant's assessment of the ability of the road network to accommodate the loads.
- *Proposed conditions* – applicant agrees with the spirit and intent of proposed conditions as recommended.

7.7. Response to National Transport Authority

- Applicant committed to continuing ongoing consultation with the NTA throughout detailed design stage and construction phase to ensure that the proposed development and BusConnects are coordinated effectively.

7.8. Response to Inland Fisheries Ireland

- Acknowledges recommended conditions and accepts the principle, spirit, and intent of the suggested conditions.

7.9. Health Services Executive

- Welcomes the statement from the HSE that the EIAR provides an adequate description of the proposal and its potential impact on public health.
- *Public consultation* - applicant committed to continuing ongoing consultation with local communities, facilitated through community liaison officers. Dedicated community liaison officer will be appointed for the duration of the construction phase and agricultural liaison officers are committed to continuing discussions with affected landowners.
- *Decommissioning* – EIAR states that it is not intended to decommission the proposed electricity infrastructure.

- *Mitigation and monitoring* - good practice dust mitigation measures will be implemented in full.
- *Carbon sequestration* - Magnitude of GHGs that will result from the proposed development are minor adverse. Proportion of GHG emissions will be offset over time through the provision of renewable energy to support vehicle charging, etc. Proposed development will use low carbon materials and low energy construction processes is to reduce carbon emissions.
- *Hazards and vulnerability* - identification, control and management of risk is an integral part of the design and assessment process throughout all stages of the proposed development.

7.10. **Marina Quarter Ltd. (MQL)**

- Applicant notes and welcomes MQL's support for the proposed development.
- *Land use zoning and facilitating development* - proposed development is consistent with the zoning objectives of the lands through which it will pass, and the alignment adjacent to the R157 minimises the extent of zoned lands affected.
- Applicant is satisfied that through agreement with the observer at the detailed design stage, the proposed development can resolve the alignment of services, such that the zoned land can be serviced satisfactorily, and that development of those lands in line with their zoning objectives can be successfully achieved.
- *Cable routing* - design of proposed underground cable has been developed with consideration of existing baseline conditions, including roadways and utilities and infrastructure associated with zoned lands to the east and west of the R157.
- *Joint bay siting* - applicant has ensured that joint bays are not sited at proposed junction/ junction upgrade locations. Interface between proposed underground cable and proposed road will be designed in detail following post consent completion of confirmatory surveys and investigations. Further stakeholder engagement will also be undertaken, with all clashes resolved during the detailed design stage. Design of joint bays and verges will be optimised to avoid clashing with proposed road and utilities. May be necessary to widen road embankment in advance.

- *Trenching / ducting depth* – vertical alignment design of proposed underground cable trench will be further developed at detailed design stage and further stakeholder engagement will enable the design of the proposed underground cable to be fully coordinated with the vertical alignment and layout of the proposed road design widening.
- *Interface with utilities* – applicant is aware of interface between proposed underground cable and utilities, and this will be designed in detail following post approval completion of confirmatory surveys and investigations. Stakeholder engagement will take place, and all clashes will be resolved during detailed design.
- Underground cable circuit will be designed to pass below the proposed utilities in accordance with the applicant's standards and specifications for utility crossings.
- *Proposed conditions* – applicant acknowledges the recommended condition and accepts its principle, spirit and intent. Applicant will engage with MQL to further develop the design, resolve design clashes and prepare a fully coordinated design proposal considering road improvements and utilities.

7.11. McGarrell Reilly Group

- Notes and welcomes McGarrell Reilly Group's support for the proposed development.
- *Re-routing observation* - Previous proposals received from McGarrell Reilly Group were reviewed and informed the development of the design of the proposed underground cable and the siting of the HDD compound adjacent the M3 motorway and railway.
- Route of proposed underground cable through observer's land seeks to follow the field boundary as closely as practicable to reduce the potential for impacts.
- Exact reroute alignment indicated in McGarrell Reilly's submission is not technically feasible, as HDD compound requires minimum setback from railway line and motorway to ensure appropriate vertical alignment.

- Applicant satisfied that the horizontal alignment of the cable can be adjusted such that the effects on zoned lands can be resolved so that development of zoned lands can be optimised.
- Board is advised that discussions took place with McGarrell Reilly on 26th June 2024 and an alternative route exists along the northern and western boundary of the observer's lands, which is to their satisfaction. The applicant considers that this would result in no material change to the provisions of the EIAR or NIS, including mitigation measures identified. Alternative route would represent a minor rerouting of the proposed development, which would be consistent with the proper planning and sustainable development of the area. Applicant requests the Board to consider this modification and condition local realignment in agreement with the Planning Authority.
- Applicant's West Dublin Project (VA0019) had the following condition: "The final route of the proposed 220kV cable shall be notified to the planning authority prior to commencement of any construction works on site. Prior to commencement of development, revised drawings confirming the cable route shall be submitted to, and agreed in writing with, the planning authority."
- *Land use zoning and development potential* – Applicant has taken into consideration the zoning objectives of the land and the proposed development has been designed to facilitate the development of these lands. Applicant is satisfied that, through agreement with the observer, the proposed development can adjust the horizontal alignment of the cable, such that the effects on further planning application lands can be resolved.
- *Consultation* – Applicant's land management team have actively engaged with landowners throughout the proposed development. There are established lines of communication in place between the applicant and McGarrell Reilly, and they are already working on feasible solutions.

8.0 Policy Context

8.1. European Green Deal

8.1.1. The European Green Deal is a set of policy initiatives approved in 2020 that pledge to transform the EU into a modern, resource efficient and competitive economy, ensuring:

- No net emissions of greenhouse gases by 2050;
- Economic growth decoupled from resource use; and
- No person and no place left behind.

8.1.2. The European Green Deal will improve the well-being and health of citizens and future generations by providing fresh air, clean water, healthy soil and biodiversity; renovated, energy efficient buildings; healthy and affordable food; more public transport; cleaner energy and cutting-edge clean technological innovation; longer lasting products that can be repaired, recycled and re-used; future-proof jobs and skills training for the transition; and globally competitive and resilient industry.

8.2. Renewable Energy Directive[1]

8.2.1. The Renewable Energy Directive is a legal framework for the development of clean energy across the EU. Directive EU2018/2001 has been legally binding since June 2021 and this sets an overall European renewable energy target of 32% by 2030. The Commission proposed a revision of this Directive in July 2021 raising the 2030 target to 40%. However, following Russia's invasion of Ukraine, and the need to accelerate the EU's independence from fossil fuels, it was proposed to raise the target further to 45% by 2030. The European Parliament gave its final approval to

[1] Directive (EU) 2023 of the European Parliament and of the Council of amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652

the legally binding target on 12th September 2023 requiring at least 42.5%, aiming for 45%, of EU energy to be renewable by 2030.

8.2.2. Guidance on Article 20a on sector integration of renewable electricity of Directive (EU) 2018/2001 on the promotion of energy from renewable sources, as amended by Directive (EU) 2023/2413, states that *"there is an urgent need to tackle the remaining barriers that still prevent a massive roll-out of renewable electricity. These include the need for expanding grid capacities at distribution and transmission levels and developing a more flexible and smarter grid infrastructure that can integrate an increased amount of variable renewable electricity, and distributed energy resources such as electric vehicles (EVs), PVs and heat pumps. The EU Action Plan on Grids (13) proposes concrete measures to accelerate investments in deployment and digitalisation of the grids."*

8.3. EU Action Plan on Grids, November 2023

8.3.1. This Plan recognises that electricity grids, as a backbone to our energy systems, are critical for the clean energy transition. It states that an accelerated energy transition requires a shift towards a decentralised, digitalised, integrated and flexible system, with the expansion and upgrade of both the transmission and distribution grids.

8.3.2. A grids action plan is necessary for *inter alia* improving the long-term planning of grids to accommodate more renewables and electrified demand in the energy system, and for incentivising a better usage of the grids with enhanced transparency and improved network tariffs for more smart grids network efficiency and innovative technologies.

8.4. National Planning Framework, 2018

8.4.1. The National Planning Framework provides policies, actions and investment to deliver 10 National Strategic Outcomes (NSO) and priorities of the National Development Plan. Transitioning to a low carbon and climate resilient society is the main NSO that pertains to the proposed development. It is stated that new energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system.

8.4.2. Chapter 9 of the NPF: Realising Our Sustainable Future recognises the need to accelerate action on climate change for a low carbon energy future. In this regard, National Policy Objective 54 seeks to *"reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions."*

8.4.3. The transition to renewable sources of energy is an integral part of Ireland's climate change strategy as a means of reducing reliance on fossil fuels. Reflecting this, National Policy Objective 55 will *"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."*

8.5. **Climate Action Plan, 2024**

8.5.1. The Climate Action Plan (CAP24) sets out a roadmap to halve emissions by 2030 and reach net zero by no later than 2050. CAP24 builds upon CAP23 by refining and updating the measures and actions required to deliver carbon budgets and sectoral emissions ceilings that were introduced under the Climate Action and Low Carbon Development (Amendment) Act, 2021. Sector emission ceilings were approved by Government in July 2022 for the electricity, transport, built environment – residential, built environment – commercial, industry, agricultural and other (F-gases, waste & petroleum refining) sectors. Reflecting the continuing volatility for Land Use, Land Use Change and Forestry (LULUCF) baseline emissions to 2030 and beyond, CAP24 puts in place ambitious activity targets for the sector reflecting an EU-type approach.

8.5.2. Citizen engagement and a strengthened social contract between the Government and the Irish people will be required around climate action. It is also recognised that policies on spatial planning, taxation, sustainable finance, and non-financial reporting have a key role to play in supporting and enabling the delivery of emissions reductions across multiple sectors and in mobilising climate finance, facilitating a just transition to a carbon neutral society. A just transition framework structures how we will integrate just transition considerations into our climate action policies, as highlighted by sectoral examples provided throughout this Plan.

8.5.3. The electricity sector will help to decarbonise the transport, heating and industry sectors and will face a huge challenge to meet requirements under its own sectoral emissions ceiling. A large-scale deployment of renewables will be critical to decarbonising the power sector, as well as enabling the electrification of other technologies. CAP24 seeks to accelerate the delivery of onshore wind, offshore wind and solar through a competitive framework to reach 80% of electricity demand from renewable energy by 2030.

8.5.4. CAP24 details the significant changes required to enhance the electricity grid's capacity and flexibility to accommodate the significant upsurge in renewable energy while ensuring the system's reliability and efficiency. To reach 80% of electricity demand from renewable sources by 2030, a streamlined electricity generation grid connection policy and process will need to be delivered, and where possible, barriers for the installation of renewables and flexible technologies should be removed and the need to build new grid, including hybrid (wind/solar/ storage) connections reduced.

8.6. **National Adaption Framework, 2018**

8.6.1. The Framework was developed under the Climate Action and Low Carbon Development Act, 2015. A number of Government Departments are required under this Framework to prepare sectorial adaptation plans to reduce the vulnerability of the country to the negative effects of climate change and to avail of the positive impacts. The Climate Change Adaptation Plan for Electricity and Gas Networks Sector has been prepared under the National Adaption Framework to identify the potential impacts of climate change on energy infrastructure, assess associated risks and set out an action plan for adapting to those impacts.

8.6.2. The Transmission System Operator, EirGrid, and the Distribution System Owner, ESB Networks have identified, categorised, and prioritised risks to the electricity infrastructure.

8.7. National Energy and Climate Plan for Ireland, 2021–2030

8.7.1. The plan establishes key measures to address the five dimensions of the EU Energy Union: decarbonisation, energy efficiency, energy security, internal energy markets and research, innovation and competitiveness.

8.8. Government Policy Statement on Security of Electricity Supply, November 2021

8.8.1. The policy statement seeks to ensure that the continued security of electricity supply is a priority at national level and within the overarching EU policy framework in which the electricity market operates. Adequate electricity generation capacity, storage, grid infrastructure, interconnection and system services should be put in place to meet demand, including peak periods.

8.9. Regional Spatial & Economic Strategy for the Eastern & Midlands Region, 2019

8.9.1. This document is a 12-year strategic regional development framework that will facilitate the delivery of the NPF. The document sets out 16 regional strategic outcomes based on economic opportunity, healthy placemaking and climate action. The RSES supports the transition to low carbon and clean energy and to harness the potential for a more distributed renewables-focussed energy system to support the transition to a low carbon economy by 2050. Enhanced strategic connectivity is also emphasised to support economic development, build economic resilience and support strengthened rural communities and economies including the blue-green economy and tourism.

8.9.2. Belcamp Substation and part of the proposed grid route is within the Dublin Metropolitan Area Strategic Plan, which provides a 12 to 20 year strategic planning and investment framework for the Dublin metropolitan area. It is stated that a key aim of the MASP is to unlock the development capacity of strategic development areas within the metropolitan area by identifying the sequencing of enabling infrastructure and by directing the cross sectoral investment required to deliver development. In this regard, it is recognised that development of the energy distribution and transmission network in the Region will enable distribution of more renewable sources of energy to facilitate future energy demand in strategic

development areas, along with the roll-out of the Smart Grids and Smart Cities Action Plan, enabling new connections, grid balancing, energy management and micro grid development.

8.9.3. In terms of decarbonising the energy section, the RSES acknowledges that the generation of electricity supply from indigenous renewable sources requires, inter alia, the expansion and upgrading of the grid with the aim of increasing the share of variable renewable electricity that the all-island system can accommodate. A secure and resilient supply of energy is considered to be critical to a well-functioning region, being relied upon for heating, cooling, and to fuel transport, power industry, and to generate electricity. It is also highlighted that with the projected increases in population and economic growth, the demand for energy is set to increase in the coming years.

8.9.4. Developing the grid in the Region will enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand. These developments will strengthen the grid for all electricity users, and in doing so will improve the security and quality of supply.

8.9.5. Regional Policy Objectives RPO 10.19 to RPO 10.24 are outlined to ensure the development of the energy networks in a safe and secure way to meet projected demand levels, to meet Government Policy, to ensure a long-term, sustainable and competitive energy future for Ireland, and to enable energy service providers to deliver their statutory function.

8.10. Fingal County Development Plan, 2023-2029

8.10.1. The following policies are of specific relevance to the proposed development:

> **Policy CAP1 – National Climate Action Policy:** Support the implementation of national objectives on climate change including the national Climate Action Plan 2024 (CAP24), the National Adaptation Framework 2018 and the National Energy and Climate Plan for Ireland 2021–2030 and other relevant legislation, policy and agreements in relation to climate action.

Policy CAP13 – Energy from Renewable Sources: Actively support the production of energy from renewable sources and associated electricity grid infrastructure, such as from solar energy, hydro energy, wave/tidal energy, geothermal, wind energy, combined heat and power (CHP), heat energy distribution such as district heating/cooling systems, and any other renewable energy sources, subject to normal planning and environmental considerations.

Policy IUP27 – Energy Networks and ICT Infrastructure: Facilitate and promote the development of energy networks and ICT infrastructure where necessary to facilitate sustainable growth and economic development and support the provision of critical energy utilities and the transition to alternative, renewable, decarbonised, and decentralised energy sources, technologies, and infrastructure.

Policy IUP29 – Enhancement and Upgrading of Existing Infrastructure and Networks: Work in partnership with existing service providers, businesses and local community groups to facilitate required enhancement and upgrading of existing infrastructure and networks and support the development of new energy systems, local community sustainable energy generation projects and transmission grids, which 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 energy.

Policy IUP31 – Enhancement and Upgrading of Existing Infrastructure and Networks: Support EirGrid's Grid Development Strategy – Your Grid, Your Tomorrow 2017, Implementation Plan 2017–2022, Shaping our Electricity Future-A Roadmap to achieve our Renewable Ambition 2021 and Transmission Development Plan (TDP) 2020-2029, and the Government's Policy Statement on Security of Electricity Supply November 2021 and any subsequent plans prepared during the lifetime of this Plan, to provide for the safe, secure, and reliable supply of electricity.

Policy IUP32 – East Meath – North Dublin Grid Upgrade: Support the development of the East Meath-North Dublin Grid Upgrade to strengthen the electricity supply network in anticipation of the future development of renewable energy, onshore and offshore.

Objective DMSO228 – Design of New Utility Structures: Require new utility structures such as electricity substations and telecommunication equipment cabinets to be of a high-quality design and to be maintained to a high standard by the relevant service provider.

8.10.2. The route of the proposed grid connection will mostly pass along public roads. There are occasions where the route passes through HT – High Technology, GB – Green Belt, GE – General Employment, OS – Open Space, DA – Dublin Airport, FP – Food Park and RS – Residential zonings.

8.11. Dublin Airport Local Area Plan, 2020

8.11.1. The grid connection route passes along the northern boundary of the LAP. As Dublin Airport continues to grow, the electrical load is expected to increase, with growth depending on the evolution of renewable resources and technologies. It will be a requirement of the airport to build additional resilience into the electrical system, separate to the Dardistown Substation, which supplies the airport's high-voltage electrical network operated at 110 kV.

8.11.2. It is an objective of the LAP (UT01) to *"support and facilitate the development and upgrade of strategic information telecommunications technology, electricity network and other required utilities infrastructure."*

8.12. Meath County Development Plan, 2021-2027

8.12.1. The Plan emphasises that the strengthening of the national grid is important to improve security of supply for the domestic, residential and the enterprise market as well as attracting high-end enterprise. The following policies are of specific relevance to the proposed development:

INF Pol 46 - To support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing

and future needs of the County and to facilitate new transmission infrastructure projects that may be brought forward during the lifetime of the plan including the delivery and integration, including linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner.

INF Pol 47 - To co-operate and liaise with statutory and other energy providers in relation to power generation in order to ensure adequate power capacity for the existing and future business and enterprise needs of the County.

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

INF Pol 50 - To require that the location of local energy services such as electricity, be undergrounded, where appropriate.

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

8.12.2. In the Meath County Council area, the proposed route also continues mostly along existing roads and pathways, with some of the route located within lands zoned RA – Rural Area, E2 – General Enterprise and Employment, A2 – New Residential, C1 – Mixed Use, TU – Transport and Utilities, F1 – Open Space, A1 Existing Residential and E3 – Warehousing and Distribution.

8.13. Natural Heritage Designations

8.13.1. The table below sets out all the designated sites within 5km of the proposed grid upgrade route:

Site Name	Site Code	Distance (nearest point to proposed development)
Feltrim Hill pNHA	001208	1km north-east
Santry Demesne pNHA	000178	2km south-west
Sluice River Marsh pNHA	001763	3.4km east
Malahide Estuary pNHA	000205	3.3km north-east
Baldoyle Bay pNHA	000199	3.9km east
North Dublin Bay pNHA	000206	4.5km south-east
Malahide Estuary SAC	000205	3.44km north-east
Baldoyle Bay SAC	000199	3.9km east
North Dublin Bay SAC	000206	4.5km south-east
Malahide Estuary SPA	004025	3.44km north-east
Baldoyle Bay SPA	004016	4km east
North Bull Island SPA	004006	4.5km south-east

9.0 **Assessment**

9.1. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts, the planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, reference is made to issues raised by all parties. There is an inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated but such overlaps are indicated in subsequent sections of the report.

10.0 Planning Assessment

10.1. Having regard to the above, and in view of national, regional and local policy guidance, and the submissions/ observations received, I consider that the main issues to be addressed in this case are as follows:

- Policy context/ principle
- Other issues raised in submissions
- Environmental Impact Assessment
- Appropriate Assessment
- Overall Conclusion

10.2. Policy Context/ Principle

10.2.1. The Climate Action Plan (CAP24) sets out a roadmap to halve emissions by 2030 and reach net zero by no later than 2050. CAP24 builds upon CAP23 by refining and updating the measures and actions required to deliver carbon budgets and sectoral emissions ceilings that were introduced under the Climate Action and Low Carbon Development (Amendment) Act, 2021. Sector emission ceilings were approved by Government in July 2022 for sectors including electricity, transport, built environment – residential, built environment – commercial, industry, and agricultural.

10.2.2. The electricity sector will help to decarbonise the transport, heating and industry sectors and will face a huge challenge to meet requirements under its own sectoral emissions ceiling. A large-scale deployment of renewables will be critical to decarbonising the power sector and CAP24 builds on CAP23 by seeking to increase renewable generation to supply 80% of demand by 2030 through the accelerated expansion of onshore wind and solar energy generation, developing offshore renewable generation, and delivering additional grid infrastructure.

10.2.3. CAP2024 details the significant changes to enhance the electricity grid's capacity and flexibility and its ability to accommodate the significant upsurge in renewable energy while ensuring the system's reliability and efficiency. It is stated that grid delivery and a supportive planning framework are both critical drivers of the

investment needed in the sector as Ireland is competing for international capital and in securing supply chains as global efforts to scale up renewables intensify.

10.2.4. The proposed grid upgrade complies with the overarching aim of CAP24 of tackling climate breakdown by reducing greenhouse gas emissions and by contributing towards the target of having up to 80% of electricity coming from renewable sources by 2030. Critical to this is the expansion and reinforcement of the grid.

10.2.5. The National Planning Framework provides policies, actions and investment to deliver 10 National Strategic Outcomes and priorities of the National Development Plan. These include compact growth, support and strengthening of the economy, transitioning to a low carbon and climate resilient society, the sustainable growth of settlements, and the management of environmental resources.

10.2.6. National Strategic Outcome 8: 'Transition to a Low Carbon and Climate Resilient Society' notes that new energy systems and transmission grids will be necessary to enable a more distributed energy generation system connecting established and emerging energy sources to the major sources of demand. In this regard, NSO 8 aims 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".*

10.2.7. The NPF supports the *"…future growth and success of Dublin as Ireland's leading global city of scale, by better managing Dublin's growth to ensure that more of it can be accommodated within and close to the city; Enabling significant population and jobs growth in the Dublin metropolitan area, together with better management of the trend towards overspill into surrounding counties; Addressing infrastructural bottlenecks, improving citizens' quality of life and increasing housing supply in the right locations."* The NPF also recognises that a more balanced and sustainable pattern of development for the Mid-East Region must be prioritised, with a greater focus on addressing employment creation, local infrastructure needs and addressing the legacy of rapid growth.

10.2.8. It is highlighted that Ireland's National Energy Policy is focused on the three pillars of sustainability, security of supply, and competitiveness. The purpose of the proposed development is to strengthen the electricity network in East Meath/ North Dublin to improve the transfer of power across the existing transmission network. The

proposal therefore will comply with the NPF and National Energy Policy by addressing the increased electricity demand due to economic development and population growth, whilst reducing reliance of fossil fuels and assisting with the achievement of climate action targets.

10.2.9. The Regional Spatial and Economic Strategy provides a spatial strategy, economic strategy, metropolitan plan, investment framework and climate action strategy to support the implementation of Project Ireland 2040 and the economic policies and objectives of the Government by providing a long-term strategic planning and economic framework for the development of the Region.

10.2.10. This strategy sets out 16 Regional Strategic Outcomes aligned to the three key principles of healthy placemaking, economic opportunity and climate action. These RSOs include sustainable settlement patterns, compact growth and urban regeneration, building climate resilience, a strong economy supported by enterprise and innovation, and a global city region. It is recognised in the RSES that a secure and resilient supply of energy is critical to a well-functioning region, being relied upon for heating, cooling, and to fuel transport, power industry, and generate electricity. In addition, it is noted that projected increases in population and economic growth will see the demand for energy increase in the coming years.

10.2.11. The proposed development will contribute to the development of the grid in the region to enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand.

10.2.12. At a local level, the proposed development traverses the administrative area of Fingal County Council and Meath County Council. Fingal County Council recognise the importance of producing energy from renewable sources, and the associated grid infrastructure. This is reflected in Policy CAP13. Facilitating sustainable growth and economic development and supporting the provision of critical energy utilities and the transition to alternative, renewable, decarbonised, and decentralised energy sources, technologies, and infrastructure is recognised under Policy IUP27. Policy IUP29 and IUP31 also refer to the enhancement and upgrading of existing infrastructure and networks. Finally, Policy IUP32 supports *"…the development of the East Meath-North Dublin Grid Upgrade to strengthen the electricity supply*

network in anticipation of the future development of renewable energy, onshore and offshore."

10.2.13. The Meath County Development Plan emphasises that the strengthening of the national grid is important to improve security of supply for the domestic, residential and enterprise market as well as attracting high-end enterprise. This is reflected under Policies INF Pol 46 and INF Pol 47. INF Pol 50 requires the electricity services to be undergrounded, where possible. The proposed cable is underground for its entire length. Finally, the proposed development accords with INF OBJ 50, which seeks *"…the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner."*

10.2.14. The proposed development mainly passes along agricultural fields and public roads; however, there are a number of areas where the cable route passes through zoned lands. At the eastern end, the cable route and substation at Belcamp are within HT – High Technology zoned lands and then through GB – Greenbelt before joining the public road at Cloghran. A small area of FP – Food Park zoning is impacted by the proposed development at Barberstown and then the route passes through another section of greenbelt at Kingstown. Areas of land zoned greenbelt are also included within the site boundary along the route in places before exiting the county to the north-west at Gallanstown. As noted by Fingal County Council, the proposed development of utility installations is permitted in principle under the HT zoning objective. The proposal is unlikely to adversely impact on the use of the land at surface level within open space/ green belt zonings during the operational phase.

10.2.15. Within County Meath, the proposed route will pass through an area of land to the north of Dunboyne that is zoned "E1/E3 - Strategic Employment Zones (High Technology Uses)/ Warehousing & Distribution", as well as open space zoning. The potential impact on these zoned lands is assessed in further detail below.

10.2.16. Overall, the proposed development of the North Meath – South Dublin Grid Upgrade is a critical element of the requirement to tackle climate change by facilitating the strengthening of the electricity network to accommodate an upsurge in renewable energy generation, both onshore and offshore. I would be satisfied that the proposed development is acceptable in principle and follows the consistent message

within all levels of policy that there must be a transition to a low carbon and climate resilient society. Moreover, the proposal is essential for economic development and population growth in the wider region. I am therefore satisfied that the proposed development is in accordance with the policy objectives set out in various plans and documentation referred to above, and subject to the following assessment.

10.3. Other Issues Raised in Submissions

10.3.1. The Board received a total of nine submissions on the proposed development. Seven submissions came from public bodies including the DHLGH, Fingal and Meath County Councils; Transport Infrastructure Ireland, the National Transport Authority, Inland Fisheries Ireland, and the HSE. Two submissions were received on behalf of adjoining landowners.

10.3.2. Issues raised by public bodies are mainly addressed in the Environmental Impact Assessment and Appropriate Assessment below.

10.3.3. The submissions from **public bodies** included Fingal County Council's observation that that the positioning of construction compounds near residential areas should be fully and carefully considered, and potentially amended to ensure protection of residential and visual amenity.

10.3.4. This issue is addressed in the EIA below. Impacts on residential and visual amenity will occur during the construction phase, and in particular, during horizontal directional drilling, which will give rise to adverse noise, vibration and visual impacts. A total of 43 dwellings and three nursing homes are expected to experience increases in noise levels of 65 decibels or greater during construction. Mitigation measures will include acoustic enclosures, community engagement and the following of good construction practices. Having regard to the temporary nature of the construction works, and to the proposed mitigation, I do not consider that impacts in terms of noise, vibration and dust from construction compounds are of an extent that would warrant any relocation.

10.3.5. All other issues raised in submissions relating to biodiversity, including loss of trees and grasslands, pollution prevention, archaeology, traffic management during construction, impact on farming, impact on the water environment, and cumulative

impacts are assessed in detail in the Appropriate Assessment and Environmental Impact Assessment below, or are addressed by way of condition.

10.3.6. The issues raised within the submissions from the two adjoining landowners are considered hereunder. The submission received by the Board on behalf of the **McGarrell Reilly Group** refers to the proposal to install underground cables and a temporary HDD compound within their lands to the north of Dunboyne. Lands in the observer's ownership are zoned E1/ E3 Strategic Employment Zones (High Technology Uses/ Warehousing & Distribution) and were included in the Dunboyne North Masterplan (October 2002). It is submitted that the proposal will have significant economic impacts on the site, which is earmarked for a landmark building in the masterplan. The proposed cable route would traverse the location of Building A and a portion of Building C within the master plan layout, rendering the design no longer feasible.

10.3.7. The observer now requests that the route of the proposed cabling is altered to preserve a greater proportion of the site's developable area. It is considered that partial realignment of the cable route along the eastern boundary before turning east and crossing the M3 would reduce the land take at this location, thereby facilitating more efficient use of the lands. The observer also highlights that the lands are located along a multimodal road and rail corridor in an area targeted for significant population growth and economic investment.

10.3.8. In response to the observation, the applicant confirms that the exact reroute alignment indicated in McGarrell Reilly's submission is not technically feasible, as it would require suboptimal horizontal radii in the cable route alignment, resulting in excessive cable pulling forces and associated friction forces during installation. The HDD compound also requires a minimum setback from the railway line and motorway. This is to ensure appropriate vertical alignment for the cable route to pass below existing transport infrastructure with minimum clearance. Notwithstanding this, the applicant considers that the horizontal alignment of the cable can be adjusted such that the effects on the observer's lands can be minimised. The applicant advises the Board of subsequent discussions that have taken place with the observer regarding the minor alteration of the route that would result in no material change to the provisions of the NIS or EIAR, including mitigation.

10.3.9. I would be in agreement that the alteration of the cable route at this location would be minor and would not impact on the overall assessment of the proposed development. I would therefore be satisfied that this can be addressed by way of condition requiring the final route of the proposed 400kV cable to be notified to the Planning Authority prior to commencement of any construction works on site.

10.3.10. I also concur with the applicant that the proposed development is consistent with the zoning objectives for the site. The minor alteration of the cable route at this location, as suggested, will optimise the development of the lands in line with the zoning objective, whilst meeting the technical requirements of the proposed development.

10.3.11. The submission on behalf of **Marina Quarter Ltd.** refers to the Large Scale Residential Development (Reg. Ref: 23/60290) for 267 residential units, a childcare facility, link road, road upgrades along the Old Navan Road (R157) and associated development at Bennetstown, Pace & Dunboyne townlands. Following a third party appeal, the Board granted permission to Marina Quarter Ltd. for this development on 20th November 2024 (ABP-320049-24).

10.3.12. Marina Quarter Ltd. submitted to the Board on 22nd May 2024 that the depth and alignment of the proposed grid upgrade project conflicts with the (then) live Large Scale Residential Development (LRD) and the future development of the masterplanned residential and commercial zoned lands east and west of the R157. In particular, it is considered that the proposed grid upgrade project at this location clashes with critical services crossing the R157 between zoned parcels of land and also with the proposed junction upgrades. The LRD proposal included changes to the existing carriageway/ traffic lanes and the replacement of an existing roundabout with a new signalised junction, a new signalised junction and link road (including new bridge over the River Tolka) connecting the R157 and Old Navan Road, the provision of footpaths, cycle lanes and 2 no. pedestrian crossings on the existing M3 Parkway access road, a foul pumping station and connection to the existing public sewerage system via the Old Navan Road, and a watermain connection to the north of the site at Pace townland. The observer highlights that further development is planned either side of the R157 as per the provisions of the masterplan.

10.3.13. In terms of road design, the observer submits that a joint box is proposed just north of the existing roundabout, and this is likely to conflict with the proposed junction and

requirement for localised road widening. The protected cycle junction will also require additional space at this location. There is concern that junction boxes could cause specification/ structural issues for the road design/ construction. The observer considers that it is important that ducting, joint boxes and other ancillary components of the proposed grid upgrade are fully coordinated.

10.3.14. The observer also submits that there are a number of conflicts with the proposed 400kV lines and the proposed communications, public lighting and watermain forming part of the LRD application. EirGrid standards require a minimum of 300mm clearance from 400kV lines, with a 5m easement and 950mm minimum cover to all HV cables. The observer suggests that the 400kV line needs to be laid deeper at the location of the R157 so as to avoid sterilising the development of potentially zoned land. A condition is recommended that the horizontal and vertical alignment of the proposed electricity infrastructure is agreed and co-ordinated to avoid conflicts prior to commencement of development.

10.3.15. In response to this submission, the applicant states that the proposed alignment is in accordance with the zoning objectives at this location and minimises the extent of zoned lands affected. The applicant is satisfied that the alignment of services can be resolved at detailed design stage so that zoned lands can be satisfactorily serviced. It is also noted that the design of the proposed underground cable takes consideration of existing and proposed roadways, utilities and infrastructure associated with zoned lands either side of the R157. The interface of the proposed underground cable and the proposed utilities will be designed in detail following the post-approval completion of confirmatory surveys and investigations, and stakeholder engagement. The underground cable circuit will be designed to pass below the proposed utilities in accordance with standards and specifications.

10.3.16. With respect to the siting of the joint bay and the depth of trenching/ ducting, the applicant confirms that these elements will also be designed in detail following post-consent completion of confirmatory surveys and investigations, with ongoing stakeholder engagement. The joint bay will not be sited at the proposed junction/ junction upgrade locations; however, it may be necessary to widen the road embankment in advance to avoid clashing with road widening proposals.

10.3.17. In my opinion, the matters raised in this submission relate to the detailed design stage. It is in the interests of both the applicant and observer that utilities and infrastructure are development in coordination. As recommended above, the final details relating to the localised routing of the proposed 400kV cable can be notified to the Planning Authority, as necessary, prior to commencement of any construction works on site.

11.0 Environmental Impact Assessment

11.1. Statutory Provisions

11.1.1. The Environmental Impact Assessment Directive requires that projects that are likely to have significant effects on the environment must be suitably assessed prior to any consent decision being made. The proposed development of a 400kV underground cable over a distance of 37.5km and upgrades to substations does not fall under any class of development in Part 1 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) for the purposes of Part 10 (Environmental Impact Assessment).

11.1.2. Paragraph 1(a) of Part 2 of Schedule 5 of the Regulations includes “projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.” The likely temporary and permanent field boundary removal would exceed the relevant specified amount in this paragraph and the applicant has prepared an EIAR for the proposed development to accompany the planning application and to assist the Board with its EIA.

11.2. EIA Structure

11.2.1. This section of the report comprises the Environmental Impact Assessment (EIA) of the proposed development in accordance with Planning and Development Act 2000 (as amended) and the associated Regulations, which incorporate the European

Directives on Environmental Impact Assessment (Directive 2011/92/EU as amended by 2014/52/EU). Section 171A of the Planning and Development Act, 2000 (as amended) defines EIA as:

a. consisting of the preparation of an Environmental Impact Assessment Report (EIAR) by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and

b. including an examination, analysis, and evaluation, by the Board, that identifies, describes and assesses the likely direct and indirect significant effects of the proposed development on defined environmental parameters and the interaction between these factors, and which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

11.2.2. Article 94 of the Planning and Development Regulations, 2001 and associated Schedule 6 set out requirements on the contents of an EIAR. This EIA section of the report is therefore divided into two sections. The first section assesses compliance with the requirements of Article 94 and Schedule 6 of the Regulations. The second section provides an examination, analysis and evaluation of the development and an assessment of the likely direct and indirect significant effects of it on the following defined environmental parameters, having regard to the EIAR and relevant supplementary information:

- population and human health,
- biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
- land, soil, water, air, and climate,
- material assets, cultural heritage, and the landscape,
- the interaction between the above factors, and
- the vulnerability of the proposed development to risks of major accidents and/or disasters.

11.2.3. It also provides a reasoned conclusion and allows for integration of the reasoned conclusions into the Board's decision, should they agree with the recommendation made.

11.3. Compliance with the Requirements of Article 94 and Schedule 6 of the Regulations

11.3.1. Compliance with the requirements of Article 94 and Schedule 6 of the Regulations is set out below.

Section 94 (a) Information to be contained in an EIAR (Schedule 6, para. 1)	
A description of the proposed development comprising information on the site, design, size, and other relevant features of the proposed development (including the additional information referred to under section 94(b)).	The proposed development is comprehensively described in Section 4 of the EIAR and depicted in the associated drawings. Information is included on the site, design, size and features of the proposed underground cable circuit and the associated substations, together with details on joint bays, crossing points, construction compounds, passing bays, and access tracks. The EIAR also describes the construction, reinstatement and operation phases of the development. I am satisfied that adequate detail has been provided to enable decision making.
A description of the likely significant effects on the environment of the proposed development (including the additional information referred to under section 94(b)).	An assessment of the likely significant direct, indirect, and cumulative effects of the development is carried out for each of the technical chapters of the EIAR (Chapters 5-18). I am satisfied that the assessment of significant effects is comprehensive and robust and enables decision making.
A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development (including the additional information referred to under section 94(b).	These are included in each of the technical chapters of the EIAR and the associated appendices. They are brought together in Chapter 21 of the EIAR and in the CEMP.
A description of the reasonable alternatives studied by the person or persons who prepared	Chapter 3 of the EIAR considers alternatives in respect of do nothing, strategic alternatives,

the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment (including the additional information referred to under section 94(b)).	route alternatives (initial high-level route alternatives and route option assessment), and design alternatives (development of best performing option and amendments to best performing option). This section provides the main reasons for selecting the proposed option(s) and a comparison of environmental effects, taking account of environmental impacts, alongside other factors including economy, safety and accessibility, at all stages of the process. I consider, therefore, that the description of alternatives is reasonable, in the context of the proposed development, and satisfactory.
Section 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Para. 2).	
A description of the baseline environment and likely evolution in the absence of the development.	A detailed description of the baseline environment is included in each of the technical chapters of the EIAR and I am satisfied, is sufficient to enable the assessment of likely effects and to enable decision making
A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved	Forecasting methods and/or evidence to identify and assess significant effects are included in the EIAR, as required for relevant environmental topics. Technical difficulties are identified where necessary, and I am satisfied that there are no significant deficiencies that prevent decision making.
A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.	Likely significant effects of the development on the environment, arising from its vulnerability to risks of major accidents and/or disasters addressed, are described in Chapter 19 of the EIAR and are adequate to support decision making.
A summary of the information in non-technical language.	This information has been submitted as a separate standalone document (Volume 1 – Non-Technical Summary). I am satisfied that the document is concise and comprehensive and is written in a language that is easily understood by a lay member of the public.

Sources used for the description and the assessments used in the report	Sources used for the description and assessment of environmental effects are included in each technical chapter of the EIAR.
A list of the experts who contributed to the preparation of the report	The experts who prepared the technical assessments are identified in Table 1.4 of the EIAR including relevant qualifications.

11.4. Consultations

11.4.1. Issues were raised in respect of EIA within written submissions regarding the impact of the proposal on visual and residential amenity, public participation, road closures and traffic, hedgerow, treeline and mature tree removal, grassland loss, in-combination effects with the Kildare-Meath 400kV cable and substation upgrade project, groundwater, recorded monuments, agricultural operations, rivers and fish species, and development land.

11.4.2. Meath County Council noted that a previous EirGrid project for a 400kV cable did not require EIAR but with the introduction of the new Regulations in 2023 (rural restructuring), this became a requirement for the current application.

11.4.3. The application has been submitted in accordance with the requirements of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended), in respect of public notices. I note that these, the public notices, refer to all of the townlands in which the development is proposed. The applicant has provided a report setting out the statutory particulars including the SID application form, letters of consent, letter from the Board on closure of pre-application consultation, site and newspaper notices, prescribed body schedule and notice letter and the planning drawing schedule.

11.4.4. The applicant's planning report includes details of all public, stakeholder and landowner engagement in the context of The Aarhus Convention, the EIA Directive, and national law and best practise. EirGrid's Six Step Grid Development Process ensures that the project development occurs in a consistent and structured manner, with adequate and appropriate opportunities for public and stakeholder participation in project decision-making.

11.4.5. Overall, I am satisfied that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposed development and engage with the application process in advance of decision making.

11.5. Compliance

11.5.1. Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and the supplementary information provided by the developer is sufficient to comply with article 94 of the Planning and Development Regulations, 2001.

11.6. Assessment of Likely Significant Effects

11.6.1. This section of the report sets out an assessment of the likely environmental effects of the proposed development under the following headings, as set out in Section 171A of the Planning and Development Act, 2000, as amended.

- Population and human health,
- Biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives (Directive 92/43/EEC and Directive 2009/147/EC respectively),
- Land, soil, water, air and climate,
- Material assets, cultural heritage and the landscape, and
- The interaction between these factors.

11.6.2. In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR, the associated drawings, documents/appendices and the submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on the environmental parameters set out in the Regulations and the interaction of these. Each topic section is therefore structured under the following headings:

- Issues raised.
- Examination, analysis and evaluation.
- The Assessment: direct and indirect effects.

- Conclusion.

11.7. Population and Human Health

Issued Raised

11.7.1. Issues raised in respect of population and human health by Fingal County Council include the positioning of construction compounds near residential areas, which should be fully and carefully considered, and potentially amended to ensure protection of residential and visual amenity. Meath County Council submit that public participation is a key component of EIAR, and it is a matter for the Board to determine if there was sufficient opportunity for same. The potential for noise impacts to nearby dwellings due to HDD works at the M2 and M3 crossings, and due to traffic diversions, was also raised. The impact on farm enterprises includes one dairy farm of high sensitivity, with the cumulative impact on grassland deemed to be negative, significant and medium-term.

11.7.2. Two submissions were received by the Board from adjacent landowners welcoming the proposed grid upgrade and enhancement of the region's energy infrastructure and security of supply. However, there are concerns in both cases that the proposal will affect the development potential of the observers' lands, which are zoned for residential and commercial uses.

Examination, Analysis and Evaluation

11.7.3. Chapter 5 of the EIAR addresses Population, and Human Health is considered in Chapter 6. Associated appendices include the following:

- Appendix A15.1 - Assessment of Agricultural and Equine Land Parcels
- Appendix A6.1 – Human Health Scoping
- Appendix A7.1 – Construction Dust Risk Assessment Methodology
- Appendix A19.1 – Hazard Identification Record

11.7.4. The baseline assessment for population in the EIAR includes an overview of Co. Meath and Fingal County Council areas. The fertile soils of Co. Meath provide the basis for a thriving agricultural and food sector, and Fingal is the fastest growing local authority area in Ireland. The population of Meath and Fingal in the 2022

Census was 220,826 and 330,506 respectively. Approximately 13,024 people reside in the SAPS areas within 300m of the planning application boundary.

11.7.5. The route of the proposed development will pass through both rural and urban areas and the closest settlements are Dunboyne, Fosterstown, Swords and Darndale. There are approximately 652 residential, 11 community and 56 commercial receptors within 300m of the planning application boundary.

11.7.6. In terms of land use, the study area in Co. Meath is generally dominated by agricultural fields and in Co. Dublin it presents as a typical modified landscape under anthropogenic influence. The sections of the cable route that are off-road comprise of agricultural lands with crossings of watercourses and the national road network.

11.7.7. The positive economic outlook will result in higher demand for electricity in future years and this demand is likely to be highest in the GDA. There are a number of large industrial energy consumers, and the population is forecasted to increase. County Meath's labour force participation rate was 64.1%, which is the third highest labour force participation rate in the State. Fingal's labour force participation rate at 65.6% is the highest in the state.

11.7.8. Health indicator data for Fingal and Meath suggests resilient populations with lower-than-average levels of people who are unemployed or unable to work due to disability below the national average. A small number of small areas have substantially higher than average levels of people who are unemployed or unable to work due to illness or with some level of disability.

11.7.9. A number of key routes affected by the proposed development are identified in the EIAR for vulnerable users (children, older people and people with disabilities). Noise from road traffic is the second most harmful environmental stressor in Europe, behind only air pollution. Consistent with best practice guidelines, the EIAR refers to the baseline environment in respect of air quality, water quality, noise and vibration and traffic and transport and the vulnerability of the project to/from major accidents and natural disasters, (considered in detail in the relevant technical section of the EIAR), with the potential for significant changes to these parameters to impact on the health of the population.

11.7.10. Table 11.7.1 below summarises the likely significant effects of the proposed development on population & human health as identified in the EIAR.

Potential Population & Human Health Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
Construction			
Amenity	- Findings of air quality, noise and vibration, traffic and transport, and landscape and visual assessments are considered in combination to determine overall impact on amenity. - Temporary adverse impacts on air quality, in particular construction related dust emissions, site plant and machinery emissions, and road traffic emissions, will not be significant. - Temporary adverse and not significant noise and vibration impacts from construction activities and HDD. - Temporary adverse and significant/ moderate impacts from some diversion routes. - Landscape and visual impacts will be negative, slight to imperceptible and short-term.	- Mitigation measures are included in the Construction Environmental Management Plan (CEMP). - No other significant negative impacts are anticipated during the construction phase in respect of any of the assessment topics and therefore no mitigation and monitoring measures are proposed. - No appropriate measures to mitigate impacts from diversion routes – impacts will be temporary in nature.	Neutral, slight and temporary
Accessibility and Severance	- Access to all residential, commercial and community receptors will be maintained and the proposed development will be constructed on a section by section basis. - Duct and joint bay installation will be the most construction-intensive and invasive elements of the cable route installation, with	- As above - Temporary measures will be implemented to facilitate access at all times.	Negative, moderate and temporary

	the potential for rolling road closures and diversions.		
Land use / land take	- Approximately 70% of cable route on road and 30% off-road. - Off-road sections will be situated in agricultural fields (assessed below). - No impact on residential, commercial receptors or community/ recreational facilities.	- As above	No impact
Local economy	- 20 construction workers required for each substation and 12 persons per crew with 2 crews working simultaneously for cable works. Four traffic management operatives also required and 5 staff and 7 compound locations. Number of daily workers will not excess 215. - Construction phase is expected to take 3 years. - Magnitude of change in terms of employment is considered to be very low when considered against the wider labour force in the study area. - Not expected to be any impact on the ability of any commercial receptors to operate during construction.	- As above	Negative, slight and temporary
Open space, leisure & recreation	- A number of sports facilities will be affected by construction noise and dust – duration of impacts will be very short-term.	Mitigation measures are included in the Construction Environmental Management Plan (CEMP).	Negative, imperceptible and temporary
Employment & income	- Job opportunities from the proposed development for local communities likely to be limited.	Mitigation set out under Agronomy & Equine.	Neutral, imperceptible and short term

	- Construction impacts would be sufficient to change the way in which seven farms are operated - potential for mental health impacts associated with concerns over financial insecurity in the short term.		
Transport modes, access & connections	- Access points to community facilities and other transport modes will be maintained throughout construction. - Maximum increase in journey time resulting from road closures is assessed to be 20 minutes and, in most cases, less than 10 minutes. - Four locations where a large percentage increase in HGV flows is anticipated are particularly sensitive to older people or children (schools/ nursing homes). - journey times on 34 bus routes are anticipated to increase as a result of road closures - all routes will remain operational.	- Mitigation set out under Traffic and Transport. - Provision of community liaison officer. - Implementation of CEMP.	Negative, not significant and short-term
Air quality	- Majority of route will be located in rural areas with relatively few nearby residents or users of community facilities. - there will be a negligible to low risk of human health impacts from dust within more populated areas.	- Mitigation set out under Air Quality. - Implementation of CEMP.	Negative, not significant and temporary.
Noise & vibration	- 43 dwellings and three nursing homes are expected to experience increases in noise levels of 65 decibels or greater during construction. Nature of work will minimise the duration of exposure.	- Mitigation set out under Noise & Vibration. - Implementation of CEMP.	Negative, slight and temporary.

	- traffic diversion routes will result in noise increases for residents - this will also be temporary in nature. - night working will not be routinely required. - majority of residential locations are located in close proximity to Dublin airport or to motorways on regional roads.		
Operational Phase			
As above	- Proposed underground cable will be buried and sporadic access for maintenance will only be required on agricultural land and along the existing road network. - Proposed works at Woodland and Belcamp Substations will be within the footprint of, or within the immediate vicinity of the existing substations, and maintenance activities will occur in the same manner as currently carried out at these substations. - No permanent land take required from areas of open space or facilities used for leisure and recreational purposes.	- No significant negative impacts are anticipated during the operational phase in respect of any of the assessment topics and therefore no mitigation and monitoring measures are proposed.	- No significant residual negative impacts are anticipated in regard to people and communities. - No impact on health associated with open space, leisure and recreation.
Do Nothing:			
- Proposed development would not be implemented and there would be no changes to amenity, accessibility and severance, land use/ land take and economy. - Health status of the population would be expected to change with time in accordance with current trends across Ireland.			
Decommissioning:			
It is not intended to decommission the proposed electricity infrastructure.			
Cumulative Effects:			

- No significant effects on population and human health with the subject development. Therefore, no potential for significant effects from construction or operation of proposed development with any existing, permitted, or proposed project/plan listed in Table 20.2 of Chapter 20 of the EIAR. - Limited potential for cumulative impacts during the operational phase as fewer impacts are anticipated during this phase.

Table 11.7.1 – Consideration of Impacts, Significance and Mitigation Measures for Population and Human Health

The Assessment: Direct and Indirect Effects

11.7.11. I have examined, analysed, and evaluated Chapters 5 and 6 of the EIAR, and all of the associated documentation and submissions on file in respect of effects on population and human health. I am satisfied that the applicant has presented a good understanding of the baseline environment, and that the key impacts in respect of likely effects on population and human, have been identified.

11.7.12. I am also satisfied that the key direct and indirect effects will be the short-term effects on people living, working, and travelling on the public road network in the area of the site during construction, for example by way of noise, dust, additional traffic, and short-term road closures. Construction noise and dust will affect nearby dwellings and local community facilities. Traffic diversion will also result in noise increases along the routes affected. Some direct and indirect positive effects will also arise, with local economic effects. A number of farms will be affected during construction that there will be some economic benefits during the construction phase. However, I am satisfied that the proposed development is not likely to have any significant adverse health effects. There is potential for mental health impacts associated with concerns regarding the operation of affected farms in the short term. These effects will be short term, and the provision of a community liaison officer will be engaged as a point of contact for those who have concerns about construction works.

11.7.13. During the operational phase, the proposed underground cable will be buried, and sporadic access will only be required on agricultural land and along the public road for maintenance. No permanent land take is required from areas of open space.

11.7.14. Mitigation measures typically comprise standard good construction practices, which if implemented comprehensively will offset any significant effects. No mitigation or monitoring measures are necessary during the operational phase. Following the assessment, it can be concluded that the proposed development will have no significant negative impact on people and communities. There will be no significant effects on population and human health with any existing, permitted or proposed project/ plan. Projects assessed for cumulative effects include the Kildare Meath Upgrade EirGrid development, Greater Dublin Drainage Scheme, BusConnects Swords, and the Marina Quarter Large Scale Residential Development.

Conclusion

11.7.15. Having regard to the foregoing, it is considered the main significant direct and indirect effects on population and human health are as follows:

- Short term adverse impact arising from the construction phase on residential amenity, from traffic diversions on the public road, and on the operation of businesses and farm enterprises. Construction phase impacts will be mitigated by standard good construction practices. Diversions will be temporary in nature and appropriate traffic management arrangements will be put in place. A community liaison officer will be engaged as a point of contact during construction.

11.8. **Biodiversity**

Issues Raised

11.8.1. The main biodiversity issue raised in the submission from Fingal County Council related to the impact of hedgerow and treeline removal. Meath County Council also estimate that there will be a negative, significant and permanent impact at local to county level from the loss of hedgerows and treelines until new species rich hedgerows and treelines are established. Mature tree and grassland loss are also highlighted. A condition is recommended on planting and landscaping and the Board is invited to consider All-Ireland Pollinator Plan and the need for an Invasive Species Eradication and Management Strategy. Inland Fisheries Ireland submit that measures should be taken to ensure comprehensive protection of local aquatic ecological integrity, and that disturbance of riparian habitat should be minimised.

Examination, Analysis and Evaluation

11.8.2. Biodiversity is addressed in Chapter 10 of the EIAR. Associated appendices include the following:

- Appendix A10.2 – Desk Study and Field Data Collection Methodologies
- Appendix A10.3 – Watercourse Data
- Appendix A12.2 – Field Walkover Survey Notes
- Appendix A18.2 – Arboricultural Assessment
- Appendix A8.2 – European, National and Local Policy

11.8.3. The baseline assessment for biodiversity in the EIAR was established from a desk-based study, results from the site visit and an evaluation. The desk study involved collection and review of relevant published and unpublished sources of data, collation of existing information on the ecological environment and consultation with relevant statutory bodies. Field surveys were undertaken between October 2022 and October 2023 on habitat, birds, bats, mammal species, smooth newt, freshwater fish and white clawed crayfish.

11.8.4. A total of 19 European sites are potentially within the zone of influence (ZoI) of the proposed development due to their connectivity (proximity / ecological / hydrological etc.) Four pNHAs were identified as being within the potential ZoI of the proposed development on the basis of hydrological connectivity. The three main river catchments that the study area is hydrologically connected to are the River Tolka, the River Broadmeadow, and the River Mayne. In terms of habitat, the study area comprises mostly of arable and pasture farmland with hedgerows, treelines, river catchments, and roads.

11.8.5. Non-native invasive species, including Three-cornered leek, Spanish bluebell, Giant hogweed, Japanese knotweed and Rhododendron, were recorded in ecological surveys. Five bat species were recorded in the vicinity of the proposed development and potential roost features were noted in 19 trees. Ten badger setts were identified along with signs of badger activity. There was no evidence of otter at watercourse crossings and the closest evidence of otter was approximately 33m east of the planning application boundary near Nuttstown. Evidence of Red squirrel, hedgehog and red deer was also recorded in the study area. Three fish species of conservation interest (lamprey, brown trout, European eel) were recorded in watercourses in the vicinity of the proposed development and there was no evidence of white-clawed crayfish. There was evidence of common frog but no evidence of smooth newt or common lizard.

11.8.6. A total of 18 breeding bird species and 27 wintering bird species were recorded within the vicinity of the proposed development. Black-tailed godwit, Brent goose, coot, little grebe, mute swan and oystercatcher were observed exclusively in Darndale Park, which is located approximately 38m to the south-east of Belcamp Substation. A total of 18 SCIs were recorded within breeding bird surveys.

11.8.7. Table 10.24 of the EIAR lists the important ecological receptors for the proposed development as being 14 European sites, six pNHAs, Recolonising bare ground (ED3), Other artificial lakes and ponds (FL8), Depositing lowland rivers (FW2), Drainage ditches (FW4), Marsh (GM1), Dry calcareous grassland (GS1), Dry meadows and grassy verges (GS2), Wet grassland (GS4), (Mixed) broadleaved woodland (WD1), Mixed broadleaved / conifer woodland (WD2), Hedgerows (WL1) species rich, Treeline (WL2), Riparian woodland (WN5), SCI bird species, European eel, Otter, Lamprey spp., all other Red, Amber or Green listed bird species (non-SCI breeding populations), bats, badger, other small mammal species protected under the Wildlife Act, Smooth newt, Common frog, Common lizard, other fish species including trout, and non-native invasive plant species.

11.8.8. The Appropriate Assessment of European Sites is carried out in Section 12.

11.8.9. Table 11.8.1 below summarises the likely significant effects of the proposed development on biodiversity as identified in the EIAR.

Potential Biodiversity Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
Construction			
Waterbodies	- Potential for change in water quality from hydrological impacts. - Potential for sedimentation, bank erosion, chemical contamination, and changes in hydrology and riparian habitat degradation from in-stream trenching and construction works near sensitive water bodies. - Accidental pollution events from construction site activities such as runoff into water bodies. - Accidental spread of non-native invasive species.	- Ecological Clerk of Works (ECoW) to carry out pre construction surveys to ensure that the ecological baseline remains current and to implement appropriate mitigation measures as needed. - ECoW will give toolbox talk to site personnel. - CEMP will contain site management and pollution control measures, including silt fencing, to protect species and water bodies, and to properly manage and prevent the spread of non-native invasive species (chemical and physical control and eradication and exclusion zone to avoid spread). - Mitigation measures for stockpiling and storage of materials, spills, handling of fuels and oil leaks and concrete. - Vegetation clearance will take place outside the breeding bird season, and any habitats to be removed in season will be inspected by ECoW and an exclusion zone will be established around any active nest.	- Habitat loss and habitat degradation at drainage ditches – impact not significant (0.01km). - No other significant residual effects.
Nationally Designated Sites	- 4 pNHAs are hydrologically connected to the proposed development site and a pollution event has the potential to lead to habitat degradation within the designated sites. 2 of the pNHAs are outside the ZoI.		- No significant residual effects.
Habitats	- Temporary and permanent loss of habitats to facilitate construction works, most notably in off-road sections. - Habitat degradation from construction works, most notably in off-road sections. - Fragmentation of habitats for the proposed cable and access tracks which can cause a barrier / severance effect on species. - Habitat degradation has the potential to occur within other artificial lakes and ponds		- Significant residual impacts for dry calcareous and neutral grassland, dry meadows and grassy verges, wet grassland, scrub, mixed broadleaved woodland, immature woodland, hedgerows,

	(FL8), depositing lowland rivers (FW2), drainage ditches (FW4), wet grassland (GS4), marsh, and riparian woodland (WN5). - Likely significant impact on dry calcareous and neutral grassland (GS1), dry meadow and grassy verges (GS2), mixed broadleaved woodland (WD1), hedgerow and treelines (WL1 & WL2), scrub (WS1) and immature woodland (WS2).	- Non transparent visual and noise screening barrier will be erected along the perimeter of the site and a noise and vibration management plan will be developed by the contractor. - Excavations will be covered at night to prevent small mammals from being trapped. - Felling will only be carried out from Oct. to Jan. where suspected or confirmed red squirrel dreys are discovered. - Pre-construction surveys and mitigation measures for otter and badger in accordance with guidelines. - Control measures to reduce machinery noise and vibration and to work within holts. Temporary lighting will be controlled and directed and there will be seasonal limitations. Habitat reinstatement and derogation licence where necessary. - Bat roosts recorded during pre-construction surveys will be felled under derogation licence. Bat boxes will be used as mitigation. - Control measures will be implemented in or adjacent to a watercourse and additional mitigation measures will be undertaken to protect fish species.	treelines and individual trees – no compensatory options available at present to offset the significant residual impacts upon grassland (GS1, GS2 & GS4). - Following proposed compensation, habitat gain for (mixed) broadleaved woodland, hedgerow, treeline, scrub, immature woodland, and individual trees. - No residual impacts predicted following reinstatement of dry meadows and grassy verges. - Permanent residual impact from loss of mature trees due to time taken for replacement trees to reach maturity.
Groundwater Dependent Terrestrial Ecosystems (GWDTE)	- Risk of trenching excavation interfering with groundwater yield, quality or flow direction, where groundwater is required to be abstracted (marsh (GM1), wet grassland (GS4), and riparian woodland (WN5) identified as potential GWDTE within the study area).		- No significant residual effects for GM1 and WN5 - Permanent loss of 0.93 ha of wet grassland (GS4)

		- Water levels maintained in water features potentially used by amphibians. - Hedgerows and tree lines will be reinstated to a species-rich condition and all other sites will be returned as close as possible to their pre-existing condition using the same woody species removed. - Compensation proposed for mixed broadleaved woodland, hedgerow, treeline, scrub, immature woodland and individual trees at a rate of 130%. - Other measures relating to habitat reinstatement outside of cable easement, noise barrier erections, control measures to reduce machineries noise and vibration, working distances, individual translocation (amphibians), and exclusion zones and chemical/ physical control and eradication (invasive plants).	
Wintering birds	- Linear habitats affected by the proposed development do not support wintering birds. - Works may take place within supporting habitat for bird species that use agricultural land to forage and roost. - Potential for mortality from indirect impacts from pollution leading to a reduction in water quality and a reduction in prey availability.		- No significant residual effects.
Breeding birds	- Loss of nesting and foraging habitat and displacement of breeding birds from temporary and permanent loss of trees and hedgerow. - Increased noise, vibration, lighting, construction traffic and human presence will likely disturb breeding bird species, resulting in displacement. - Potential to change the water quality and reduce the prey availability of waterbird species downstream of the pollution event. - Potential for mortality risk to breeding birds associated with the potential destruction of nests during vegetation clearance.		- No significant residual effects.
Bats	- Risk that roosts could be lost, and bats killed, injured or disturbed. - Felling of trees may lead to the loss of foraging opportunities for bats. - Loss of hedgerow and treelines has the potential to lead to severance effects, as bats commonly use linear features to commute to their foraging area and roost. - Linear features being altered are only susceptible to the local population as the		- No significant residual effects.

	core sustenance zone for all species is 4km or under.		
Otter	- Potential for disturbance or direct mortality to arise to this species from the construction phase. - Pollution event from the works has the potential to impact on water quality and reduce otter prey availability.		- No significant residual effects.
Badger	- Disturbance and mortality considered likely upon two active setts located within 50m of the planning application boundary. - No impact predicted upon the carrying capacity of the local area in the context and duration of the construction phase and the widespread availability of suitable habitats.		- No significant residual effects.
Other protected mammals	- Construction phase unlikely to result in significant level of mortality to the larger and more mobile species such as red squirrel, as they can migrate away from the works. - Potential impact on smaller mammals in breeding season, or in the case of hedgehog, during hibernation.		- No significant residual effects.
Reptiles and Amphibians	- Construction phase has the potential to lead to disturbance and direct mortalities, particularly during hibernation (November to February) or the breeding season (January to July).		- No significant residual effects.
Fish and Aquatic Invertebrates	- Despite suboptimal spawning conditions, trout and lamprey could be affected through direct disturbance or mortality. Indirect		- No significant residual effects.

	effects could occur through pollution of waterbody. - Potential for eel to be affected through either direct disturbance or pollution causing a detrimental effect to the water quality. - On a precautionary basis, white-clawed crayfish have the potential to be affected through watercourse pollution or direct disturbance.		
Invasive Species	- Potential for significant effects from the disturbance of invasive species or degradation of habitat, leading to a potential for spread of invasive plant species at a local level.		- No significant residual effects.
Operation			
Habitat loss	- Potential for negative effects in terms of habitat loss at joint bay location where permanent access tracks will be provided (4m wide unbound tracks for a total approximate length of 4km in private land).	- Assessed under permanent loss during the construction phase. - No mitigation proposed during operational phase due to the nature of the proposed development. - Effects of operational phase expected to be minimal, with most impacts occurring during construction. - Road and vegetation will be reinstated, except along the permanent easements at joint bays, along permanent access tracks, and where over-cable planting is not technically viable.	- No significant effects.
Mortality, Pollution, Habitat Degradation and/ or Fragmentation	- Unexpected and / or emergency maintenance of the proposed underground cable could result in the same negative effects on important ecological receptors.		- No significant effects.
Do Nothing:			
- Proposed development would not be implemented and the existing baseline would remain with no immediate significant changes in the terrestrial and aquatic biodiversity (flora and fauna) of the area.			

Decommissioning:
It is not intended to decommission the proposed electricity infrastructure.
Cumulative Effects:
- Cumulative impact of proposed removal of hedgerow and trees across this project in combination with the Kildare-Meath 400kV cable and upgrade project. - Potential for significant effects on biodiversity from construction of proposed development with other existing, permitted, or proposed project/plan listed in Table 20.2 of Chapter 20 of the EIAR (including CP1213 EirGrid development, BusConnects Swords, Montague Ventures Ltd. development, and ESB Engineering & Major Projects development Macetown / Corduff underground cable. - Negative, significant, and medium-term impact on calcareous / natural grassland, at Belcamp Substation post mitigation cumulative impact. - Limited potential for cumulative impacts during the operational phase as fewer impacts are anticipated during this phase.

Table 11.8.1 – Consideration of Impacts, Significance and Mitigation Measures for Biodiversity

The Assessment: Direct and Indirect Impacts

11.8.10. I have examined, analysed, and evaluated Chapter 10 of the EIAR, all of the associated documentation (notably Watercourse Data, Field Walkover Survey Notes and the Arboricultural Assessment), and submissions on file in respect of effects on biodiversity. I am satisfied that the applicant has demonstrated a good understanding of the baseline environment and the likely environmental effects of the development.

11.8.11. The proposed development is situated largely along public roads and in agricultural land, with the key ecological receptors comprising watercourses, woodlands, grasslands, treelines and hedgerows and associated fauna and flora. The main significant effects direct and indirect effects comprise:

- Loss of grasslands, woodland, treelines and hedgerows arising from the footprint of the development,
- The potential for increased loading and pollution of waterbodies during construction with adverse effects on downstream water quality dependent habitats and species,
- The potential for significant direct and indirect effects on wintering and breeding birds and mobile species (e.g., otter, badger, bats and amphibians) during construction.
- The potential for cumulative impacts on biodiversity with other developments, including the loss of habitat as habitat will take longer periods to grow / re-establish.

11.8.12. Having regard to the application of standard best practice mitigation measures, as set out in the EIAR, the site-specific and species-specific measures referred to above, and proposals for compensatory planting leading to habitat gain for (Mixed) broadleaved woodland, hedgerow, treeline, scrub, immature woodland and individual trees, I am satisfied that significant effects on biodiversity will not arise. There will be a permanent residual impact from loss of mature trees due to time taken for replacement trees to reach maturity and no compensatory options are available at present to offset the significant residual impacts upon grassland (GS1, GS2 & GS4). There will be post-mitigation cumulative impacts on calcareous / natural grassland,

at Belcamp Substation and no other significant residual cumulative impacts for the majority of the potential cumulative impacts identified in Section 20.3 of the EIAR.

11.8.13. I agree that a condition should be attached in relation to planting locations, species, timescale, replacement planting and options for agreeing an alternative measure which benefits an action in Local Biodiversity Action Plans for Meath and Fingal Local Authorities. Consideration should also be given to the All-Ireland Pollinator Plan and the need for an Invasive Species Eradication and Management Strategy.

Conclusion

11.8.14. Having regard to the foregoing, it is considered the main significant direct and indirect effects on biodiversity are as follows:

- Permanent habitat loss of hedgerows and treelines until new species rich hedgerows and treelines are established, and of mature trees that cannot be compensated with replacement planting due to the time taken for trees to reach maturation. An offsite compensation strategy for hedgerows, treelines and individual trees has been developed.

11.9. Land, Soil, Water, Air and Climate

Issues Raised

11.9.1. A number of issues were raised in submissions pertaining to these environmental factors. The zoning objectives for any affected land parcels are set out by the Planning Authorities. Farm enterprises to be affected by the proposed development are mostly of medium sensitivity. The effects on soils and fill material will be reduced by a Construction Resource and Waste Management Plan.

11.9.2. It is noted by Meath County Council that there are 23 no. proposed watercourse crossings and fluming is the preferred option for cut crossings. The WFD status for the watercourse crossings is poor to moderate with most ‘at risk’ and some ‘under review’. Reference is made to mitigation measures to protect water quality. The Board is requested to consider recommended conditions proposed in relation to flood risk and surface water management. Meath County Council also refers to the identified adverse, significant and temporary potential noise impact to nearby dwellings due to HDD works at the M2 and M3 crossings.

11.9.3. The submission from Inland Fisheries Ireland notes that the proposed development will interact with several important catchments, which support Lamprey, Brown Trout, Salmon, European Eel and other fish species. It is advised that all works shall be completed in line with a construction management plan containing mitigation measures, and a mechanism for ensuring compliance with environmental legislation and statutory consents.

11.9.4. Two submissions were received by the Board from adjacent landowners. One submission states that the proposal will have significant economic impacts on lands that are included in the Dunboyne Masterplan zoned for strategic employment. It is suggested in the other submission that the 400KV lines need to be laid much deeper in the ground at the location of the R157 so as to avoid sterilising the development potential of zoned lands.

Examination, Analysis and Evaluation

11.9.5. There are a number of chapters throughout the EIAR that pertain to Land, Soil, Water, Air and Climate. Air quality is addressed in Chapter 7 and Climate in Chapter 8. Noise and vibration are covered in Chapter 9 and soils, geology and hydrogeology in Chapter 11. Chapter 12 focuses on hydrology. Agronomy and equine would fall under land use and are dealt with in Chapter 15. Associated appendices include the following:

- Appendix A7.1 – Construction Dust Risk Assessment Methodology
- Appendix A10.3 – Watercourse Data
- Appendix A11.1 – Contaminated Land Assessment
- Appendix A11.2 - Ground Investigation Environmental Laboratory Certificates
- Appendix A12.2 - Flood Risk Assessment
- Appendix A13.3 – LiDAR Review for East Meath – North Dublin Grid Upgrade
- Appendix A15.1 - Assessment of Agricultural and Equine Land Parcels
- Appendix A8.1 – Glossary of Climate Terms
- Water Framework Directive Assessment

11.9.6. Land quality throughout the study area is generally good and comprising a mixture of grassland and tillage (cereals), as well as mixed cereals and horticultural cropping to the north of Dublin Airport. Land quality is suitable to support very high sensitivity enterprises such as stud farms, and high sensitivity enterprises such as dairy and horticultural enterprises. Farms are larger than the national average and most are of medium sensitivity. There are two equine enterprises of medium sensitivity and one dairy farm of high sensitivity.

11.9.7. The baseline environment for air quality includes the eastern part of the proposed development located within the Dublin Conurbation air quality zone (Zone A), and the western part located in the Rural Ireland air quality zone (Zone D). The Dublin Airport air monitoring site is located approximately 2.4km north-west of the proposed development and this station shows that existing air pollutant concentrations are well within the relevant limit values.

11.9.8. The climate chapter in the EIAR includes current and future baselines. Climate averages at Dublin Airport weather and climate monitoring station show the area of the proposed development as having a temperate climate, resulting in mild winters and cool summers. Precipitation is likely to remain similar over the next century but with wetter winters and drier summers. Mean temperatures are projected to increase by as much as 3 degrees by 2100. The baseline GHG emissions inventory for Counties Meath and Fingal in 2018 were 6% and 2% respectively of the national total. It is predicted that Ireland will exceed its 2030 target under the GHG Effort Sharing Regulation.

11.9.9. Sensitive receptors for noise and vibration were identified within the 300m study area included mainly dwellings, as well as a school and three nursing homes. There will be higher noise levels closer to transport infrastructure, including major roads and the airport. A total of seven temporary construction compounds and six HDD compounds are proposed. There are no significant sources of vibration within the planning application boundary.

11.9.10. In terms of land, soils and geology, a 250m lateral buffer has been used as a study area. For hydrogeological impact, a 1km area from the planning application boundary was used. Land cover comprises mainly of agricultural land used for pasture, as well as discontinuous urban fabric and road and rail networks. The study

area is mostly underlain by a variety of soil types, comprising fine loamy drift with limestone. The geomorphology of the area is considered to have a low sensitivity, and the bedrock and superficial geology is also of low receptor value. A number of historic quarries/ pits are within approximately 240m of the planning application boundary but there are no operational quarries. No current large scale polluting industries are present within the study area, and any historical potentially contaminative land uses are generally small scale, local and of relatively low contamination potential.

11.9.11. Aquifers in the study area have a low or medium importance. There are four public water supply boreholes within the study area to the south of the River Tolka. Most of the proposed cable route will avoid areas of high, extreme and rock near surface or karst groundwater vulnerable areas. There are five areas where the proposed cable route will directly cross areas classified as either extremely vulnerable or rock at or near the surface / karstic. Groundwater levels within the limestone derived till and Lucan Formation have been between 1m to 3m below ground level in the past year (EPA 2024). Nine potential groundwater dependent terrestrial ecosystems were identified in the study area. The four groundwater bodies covering the study area are Swords (IE_EA_G_011), Dublin (IE_EA_G_008), Industrial Facility (P0480- 02) (IE_EA_G_086) and Dunshaughlin (IE_EA_G_031).

11.9.12. Geological strata encountered within ground investigations included topsoil, made ground, superficial geology, bedrock geology, and hydrogeology (groundwater strikes). Contamination representing a risk to human health from made ground is considered unlikely, and the sampled soils are not considered to represent a risk to the water environment.

11.9.13. With respect to the baseline hydrology environment, the proposed development spans the Liffey and Dublin Bay catchment and the Nanny Delvin catchment. WFD Water Bodies within the study area include Dunboyne stream_010, Rye Water_030, Tolka_020, Pinkeen_010, Ward_020, Ward_010, Ward_030, Sluice_010, and Mayne_010. Most of the proposed development is located within Flood Zone C.

11.9.14. Table 11.9.1 below summarises the likely significant effects of the proposed development on Land, Soil, Water, Air and Climate as identified in the EIAR.

Potential Land, Soil, Water, Air and Climate Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
Construction			
Land – Agronomy and Equine	In-road: - Construction machinery startling livestock in adjoining agricultural land. Magnitude of impact from dust and noise assessed as very low. - Traffic disturbance and delay affecting access for farm machinery and livestock movements. - Disturbance to land drainage and land quality. - Weed propagation on soil heaps and spread of weeds to adjoining agricultural land. - Removal of trees and hedgerow resulting in reduction of available shelter. Off-road: - Temporary land take for construction works due to the damage to land and soil structure. - Severance of services such as pasture, water pipes and power cables (electric fencing). - Spread of soil borne diseases and noxious weeds due to excavation, movement and storage of topsoil. - Dust and noise impacts on grazing livestock.	- Close liaison maintained between contractor and the local community representatives and landowners. - Mitigation measures are included in the Construction Environmental Management Plan (CEMP). - Compliance with regulations on control of farm diseases. - Drainage reinstatement shall not impede drainage of surrounding agricultural lands. - Field boundaries shall be replaced with fit for purpose stock proof fencing and hedgerows. - Mitigation in other sections (Traffic & Transport, Air Quality, Noise & Vibration, and Hydrology).	No significant residual impacts.

	- Disturbance to land access for farm machinery and livestock movements. - Disturbance to land drainage and land quality.		
Soils, Geology and Hydrogeology	- Disruption to underground soils during excavation could impact the soil's physical, chemical and biological characteristics. - Imperceptible impact on geomorphology, superficial geology, bedrock geology, current and historic mining sites and contaminated land and ground gas. - Potential for moderate/ slight impact on soils due to excavation. - Potential for impacts on groundwater quality of public supply wells; groundwater flow and quality of private water supplies; and groundwater flow and quality of potential GWDTEs. Four potential GWDTEs will be intercepted. - Proposed development will not cause deterioration of WFD status of any groundwater body. - Changes to groundwater quality from the removal of vegetation and disturbance of ground have the potential to lead to increased suspended solid concentrations in the groundwater. - Open trenches required for the proposed cable route have the potential to create new pathways from the surface into shallow aquifer units impacting groundwater quality. However, suspended solids would not migrate to any substantial extent in poorly productive bedrock and would attenuate	- Implementation of good industry working practise and pollution prevention measures in the CEMP, with particular focus on controlling runoff and suspended solids, preventing accidental spillages, excavated material stockpiling management, and ensuring safe storage of materials and products. - Potential risk from ground gas, radon and contaminated land during construction mitigated through appropriate safe system of work. - Appropriate health and safety and waste management procedures for working with potentially contaminated soils (including asbestos) and water will be established. - Uisce Éireann will be consulted during detailed design regarding Dunboyne abstractions and CEMP. - GWDTEs will be protected by installing clay bunds to prevent drainage pathways being formed. - Use of biodegradable drilling fluids as part of the HDD to reduce risk to ground. - Water pumped out of the working area will be treated using settlement tanks prior to discharge back to the watercourse or to ground. - Should any unknown private supplies be identified in the vicinity of the proposed	- No significant residual impacts.

	relatively quickly in the locally important aquifers. - Contamination of groundwater through leaks and spillages. However, works generally not expected to occur below the water table. - Proposed cable route will intercept the Inner Protection Area of Dunboyne Public Water Supply – potential to lead to a small adverse magnitude of impact locally to the underlying aquifer. Also potential for impacts on unknown private water supplies. - Potential for contamination at construction and drilling compounds to reach underlying aquifer - processed as imperceptible; however, there is potential to lead to small adverse magnitude impacts locally to the underlying aquifer, and thus, adverse effects to the water quality in the Dunboyne source. - Dewatering required in the locale of Clonshagh and at a number cross smaller watercourses - at an aquifer scale any changes would be negligible. In general, proposed development will not cause deterioration of the WFD status of any groundwater body either quantitatively or qualitatively or jeopardise the ability of such groundwater bodies to achieve such status. - Potential losses in economic deposits of aggregate and crushed rock and sands and gravels across the study area are deemed to be low.	cable route, the supply will be monitored and, if required, an alternative supply will be provided.	

Hydrology	- Potential impact on surface water quality from sediment runoff, spillages, discharges or physical modification. - Excavation and works associated with the proposed development can pose a risk to surface water quality through the potential for contaminated surface water runoff. - Working adjacent to water bodies and along the bank top can induce sediment-laden runoff from erosion of banks and use of heavy plant and machinery. - Potential impact on drainage patterns from formation of impermeable surfaces and working in or near water bodies. - Potential for changes in water depth and channel cross-section. - Potential impact of working within water bodies and disturbing natural bed material and features. - Potential accidental release of potentially polluting substances such as cement and oils. - Changes to water body hydromorphology may potentially lead to changes in river processes and habitats upstream and downstream. - Temporary culverting to facilitate construction access has the potential to induce changes to the channel bed, banks substrate and flow patterns. - Temporary traffic management measures could increase traffic which would lead to increased pollutant loadings being washed to watercourses; however, these would be	- Surface Water Management Plan appended to CEMP details control and mitigation measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment. Includes requirements for environmental incident response plan, the control of runoff of fine sediments, the management of storage of materials / fuels, the management of the batching and use of concrete; and the management of vehicles and plant. - Site specific measures including detailed construction method statements to IFI for approval, the restriction of open cut crossings of watercourses to between July and September to avoid salmon and trout spawning, unless otherwise agreed with IFI, that fluming is preferred to over pumping, and the management and control of all works will be through Risk Assessment Method Statements and appropriate Health and Safety documents. - Silt control measures will include silt traps and silt fences. - All proposed TCCs and HDD Compounds will be secured with hoarding / fencing around the compound perimeters, as appropriate. - Temporary culverts will be designed with input from a fluvial geomorphologist during the detailed design phase. - Detailed design for the proposed culvert crossing on Dunboyne Stream_010	- No significant residual impacts.

	captured by the existing road drainage network. - There are 33 locations for the proposed cable route will cross an existing water body but impact on hydrology, surface water quality and hydromorphology is imperceptible. - Potential for flood risk (probability low).	considering positioning, length, riverbed level and slope, sediment retention, etc. - Permanent bridge crossing at Dunboyne Stream_010, if preferred, should consider abutment setbacks, maintenance of bank habitat and natural channel width, etc.	
Air Quality	- Dust risk from excavation of cable trench and laying of underground cable, formation of temporary construction compounds, and upgrades to the substations. - Low risk of dust impacts for earthwork and construction activities, and a medium risk for trackout at human receptors. - Changes in air pollutant concentrations at sensitive human and ecological receptors due to additional vehicle movements and emissions of pollutants to air from construction plant and machinery is considered to be negligible.	- Adoption of good practice dust management mitigation measures set out in the EIAR and the CEMP. - Development of stakeholder communication plan; recording of dust and air quality complaints; monitoring of compliance with CEMP; preparation and maintenance of site; operation of vehicles/ machinery and sustainable travel; carrying out of operations to suppress dust; waste management; and specific measures relating to trackout.	No significant residual impacts.
Climate	- Potential for greenhouse gas emissions - total estimated embodied carbon and material transport emissions during construction are equivalent to 27,390 tonnes of CO2e (7,826 CO2e per year), which represents a very small percentage of the 2030 Electricity Sectoral Emissions Ceiling.	- Implementation of good practise measures on reuse of construction materials, procurement of locally sourced materials, careful consideration of material quantities, and implementation of a plan to reduce energy consumption throughout construction. - Proposed development is designed to ensure that infrastructure can operate in varying climatic conditions.	- No significant residual impacts.

Noise and Vibration	- Potential noise impact to receptors (nearby dwellings) due to HDD works at the M2 and M3 Motorway crossings in excess of thresholds in guidelines. - Potential noise impact to receptors due to construction activities associated with Phase 0 (devegetation works), Phase 1 (installation of joint bays and passing bay structures), Phase 2 (excavation and installation of cable ducts), Phase 3 (installation and jointing of cables), and works to the proposed access roads (levels and duration). - Potential noise impact at the TCCs, the Woodland and Belcamp Substations, and works to the proposed access tracks (not likely to exceed the significance noise thresholds). - Potential vibratory compaction impact due to HDD (no buildings anticipated to experience cosmetic damage). - Potential noise impact due to additional traffic on some roads in the vicinity from traffic diversions.	- For HDD, use of temporary acoustic enclosures / barriers, community engagement, selecting appropriate plant, and following good construction practices, as outlined in the EIAR and the CEMP. - Road closures and diversion routes will be minimised and suitable advanced warning of road closures will be provided to residents within 25m of the affected diversion routes.	- Significant residual noise impacts from 4 diversion routes (expected to last less than one year). - No other significant residual impacts.
Operational Phase			
Land – Agronomy and Equine	- Permanent easement and land take directly affecting 18.7 hectares – farmers can still use land within easement for agricultural purposes apart from relatively small areas at joint bays and access tracks. - Removal of trees and hedgerow along temporary working area – not a significant impact on shelter.	- Mitigation applied during design, construction and operation to avoid or reduce operational impacts. - Loss of agricultural land will be a permanent loss that cannot be mitigated, except through compensation. - Advanced notification of routine maintenance.	- No significant residual impacts.

	- Underground cable and joint bays have the potential to impede activities such as land drainage or future forestry plantation and building. - Cable markers in field boundaries could potentially disturb hedgerow trimming/cutting operations. - Potential damage to field surfaces and disturbance to livestock from inspection vehicles. - Potential impact as a result of EMF is not significant.		
Soils, Geology and Hydrogeology	- Activities will be limited to maintenance with no further disturbance to ground. - Potential risk of gas build up within sub-surface enclosed spaces. - Shallow groundwater could be directed away from potential GWDTE causing a drying up of grassland it and dieback of vegetation. - Potential impacts on unknown private water supplies.	- All areas of vegetation removal and topsoil stripping will be reinstated. - Adoption of safe system of work when working in confined spaces. - Appropriate health and safety and waste management procedures for working with potentially contaminated soils (including asbestos) and water in the event groundworks are required during the operation phase.	- No significant residual impacts.
Hydrology	- Potential for changes in baseline hydromorphology due to permanent culvert crossing at Dunboyne_Stream_010. - Proposed development will not cause a deterioration in the WFD status of any water body and will not jeopardise the potential to achieve objectives under WFD.	- Post construction management and maintenance will include sediment and debris clearance, riparian vegetation management, and structure repair or maintenance as required.	- No significant residual impacts.
Air Quality	- Very few road movements.	- No mitigation necessary.	- No significant residual impacts.

Climate	- Potential risks associated with ground temperatures and ground movement. - Proposed development's role in providing a low carbon electricity grid will, over time, partially offset the direct emissions resulting from construction and operation. - Net impact over life cycle of proposed development will be consistent with national policy requirements and will support Ireland's national commitment to achieving net zero.	- Mitigation of impacts associated with climate change are embedded in the design and specification of the proposed development.	- No significant residual impacts.
Noise and Vibration	- Operation of additional electrical equipment to be installed at Belcamp Substation (and to a lesser extent Woodland Substation); however, noise levels not likely to exceed significance guidance threshold levels.	- Equipment at Belcamp will mainly be housed in a building, and therefore, noise levels at the closest dwellings to the substation are not likely to exceed significance guidance threshold levels.	- No significant residual impacts.
Do Nothing:			
- There would be no adverse impacts on agronomy and equine. - There would be no significant change in air quality impacts. - Climate conditions will be the same as the baseline. - There would be no resulting impacts on soils, geology and hydrogeology. - No change to baseline surface water conditions. - Impact would be neutral for noise and vibration.			
Decommissioning:			
It is not intended to decommission the proposed electricity infrastructure.			
Cumulative Effects:			
- Cumulative impact with Greater Dublin Drainage Scheme and the Belcamp 220kV extension due to land take – temporary land take will be reinstated, and permanent loss cannot be mitigated.			

- Overlap between the two developments in the 'Woodland Corridor' – coordination to reduce cumulative dust and particulate matter emissions. - Coordination of the construction programmes with the Kildare Meath Grid Upgrade will be required to ensure that, where possible, works to cross the Dunboyne Stream_010 are undertaken at the same time, and as such, minimising disruption.

Table 11.9.1 – Consideration of Impacts, Significance and Mitigation Measures for Land, Soil , Water, Air and Climate

The Assessment: Direct and Indirect Effects

11.9.15. I have examined, analysed, and evaluated Chapters 7, 8, 9, 11 and 12 of the EIAR, all of the Appendices to these Chapters and the associated CEMP. I am satisfied that the applicant has provided sufficient survey data to enable assessment of likely effects on land, soil, water, air and climate. Further, having regard to the detailed assessment carried out, the location of the development, the concurrent development in the area of the site and the proposed mitigation measures, which are standard good practice measures and which are proven to be effective in particular at preventing adverse effects on water flows, hydromorphology and water quality, I am satisfied that no significant, adverse direct, indirect, or cumulative effects on agronomy and equine; soils, geology and hydrogeology; hydrology; air quality; climate; and noise and vibration will arise as a consequence of the development.

11.9.16. The proposed cable route will intercept the Inner Protection Area of Dunboyne Public Water Supply and there is also potential for impacts on groundwater flow and quality at unknown private water supplies and Ground Water Dependent Terrestrial Ecosystems. Uisce Éireann will be consulted during detailed design regarding the Dunboyne abstractions and GWDTEs will be protected by preventing drainage pathways from being formed. Supply will be monitored if unknown private water supplies are identified.

11.9.17. There is potential for significant impacts to surface water quality from sediment runoff, spillages, discharges or physical modification. A Surface Water Management Plan details control and mitigation measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment during construction. Post construction management and maintenance will be carried out on the proposed permanent crossing of the Dunboyne Stream_010 and this will include sediment and debris clearance, riparian vegetation management, and structure repair or maintenance. In addition, the proposed development will not result in a change of any surface water WFD quality or prevent any surface or ground water bodies from reaching good status.

11.9.18. The effects on air quality on human health and amenity during construction will not be significant following the adoption of good practice dust management mitigation measures set out in the EIAR and the CEMP. Ambient pollutant concentrations will

be well below the relevant limit value, and no exceedances of relevant limit values are anticipated. Significant residual noise impacts will occur along four routes where traffic will be diverted. These impacts are expected to last for less than one year. Nearby dwellings will also experience adverse noise impacts from HDD works at the M2 and M3 Motorway crossings and appropriate mitigation will include the use of temporary enclosures / barriers.

11.9.19. Construction phase emissions occurring over a 42-month construction period represents a very small percentage (0.3%) of the 2030 Electricity Sectoral Emissions Ceiling. The proposed development will support a low carbon electricity grid, which will, over time, partially offset the direct emissions resulting from the construction phase.

11.9.20. Mitigation measures will be applied during construction to reduce impacts on farms adjoining the underground cabling works. The main potential impacts on farm operations are disturbance to land access for machinery and livestock, and disturbance to land drainage and land quality. Following the implementation of mitigation measures, there will be no significant residual impact on agronomy and equine during construction. Permanent easement during the operational phase will affect 18.7 hectares of land; however, this land can continue to be used for agricultural purposes.

Conclusion

11.9.21. Having regard to the foregoing, it is considered the main significant direct and indirect effects on land, soils, water, air and climate are as follows:

- Adverse impacts on two land parcels due to permanent land take and temporary disturbance and long-term damage to soil structure. The overall residual impact on the agronomy and equine study area is assessed as not significant.
- Potential for impacts on groundwater flow and quality at unknown private water supplies and at Ground Water Dependent Terrestrial Ecosystems. Risks to groundwater quality and associated receptors will be mitigated with the adoption of a CEMP.
- Potential for impacts to surface water quality from sediment runoff, spillages, discharges or physical modification. A Surface Water Management Plan details

control and mitigation measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment during construction.

- Residual noise impacts will occur along four routes where traffic will be diverted. These impacts are expected to last for less than one year. Nearby dwellings will also experience adverse noise impacts from HDD works at the M2 and M3 Motorway crossings and this will be appropriately mitigated by temporary enclosures / barriers.

11.10. Material Assets, Cultural Heritage and the Landscape

Issues Raised

11.10.1. The Transport Planning Section of Fingal County Council has no objection to the proposed development and the Environmental Section has no objection subject to the preparation of a Construction and Demolition Resource Waste Management Plan. The Parks and Green Infrastructure Division has no objection subject to conditions relating to tree and hedgerow removal and replacement.

11.10.2. The Board is invited by Meath County Council (MCC) to consider the specific mitigation measures of the county council archaeologist. It is noted that there will be a significant impact on recorded monument (AY_47) following mitigation. Reference is also made to the cumulative residual impact on a single archaeology, architectural heritage and cultural heritage receptor due to two Glenveagh Homes developments and one Montague Ventures Ltd. development, (permanent access track and joint bays within this demesne). MCC highlight the landscape and visual impacts of the proposed development from permanent and temporary hedgerow and tree removal. Archaeological comments were also received from the Department of Housing, Local Government and Heritage recommending conditions and noting that no Archaeological Geophysical Survey or Archaeological Test Excavation has been carried out to inform the EIAR.

11.10.3. Meath County Council deem the traffic and transport effects at the M3 motorway on-off slips to be significant. MCC Transport Department has advised of several conditions for the Board to apply in the event of a grant of permission. It is noted that the proposed development is located along a route with high levels of traffic, particularly at peak times.

11.10.4. In terms of material assets, Meath County Council note that improvements to the electricity infrastructure of the region once the proposed development is operational will be positive, significant and long term. There will also be significant positive cumulative impacts on the regional electricity network once the North South Interconnector, Kildare Meath Upgrade, Mayne Stability Ltd. development, ESB Engineering & Major Projects development (Macetown/ Corduff underground cable), CP1213 EirGrid development, ESB development at Darndale and the CP1194 EirGrid Station redevelopment are operational.

11.10.5. The NTA welcomes the consideration given to the Swords to City Centre BusConnects core bus corridor (CBC) scheme where the proposed grid upgrade project would cross Cloghran Roundabout on the R132. Detailed design and pre-construction stages should nonetheless be co-ordinated, so that the delivery of the CBC scheme is not compromised. Transport Infrastructure Ireland requests that any permission granted by the Board should provide conditions in relation to motorway HDD crossings of the M1, M2 and M3. It is also noted that temporary traffic management arrangements in the vicinity of motorway junctions such as M3 J5 may result in queuing rapidly developing back onto the motorway. TTM should therefore be understood and mitigated, e.g., scheduling works at nighttime. A condition is also set out to be attached to any grant of permission relating to abnormal and exceptional abnormal loads.

Examination, Analysis and Evaluation

11.10.6. Chapters in the EIAR pertaining to materials assets, cultural heritage and the landscape include Chapter 13 – Archaeology, Architectural Heritage and Cultural Heritage; Chapter 14 – Traffic and Transport; Chapter 16 – Waste; Chapter 17 – Material Assets; and Chapter 18 – Landscape and Visual. Associated appendices include the following:

- Appendix A13.1 - Inventory of Archaeology, Architectural Heritage, and Cultural Heritage
- Appendix A13.2 - LiDAR Review of East Meath – North Dublin Grid Upgrade
- Appendix A13.3 - Archaeology, Architectural Heritage, and Cultural Heritage Impact Assessment

- Appendix A18.1 - Photomontages
- Appendix A19.1 – Hazard Identification Record
- Appendix A4.1 – Utility Crossings
- Appendix B or CEMP – Construction Traffic Management Plan

11.10.7. The study area for archaeology, architectural heritage and cultural heritage is defined as the planning application boundary plus a buffer of 50m. As well as desk top analysis and a site inspection and walkover survey undertaken from the 12th to 14th June 2023, LiDAR was captured on 14th February 2023. The review of the LiDAR data identified 65 previously unrecorded archaeological assets and provided additional information on 6 known assets. Consultations were also held with the National Monuments Service.

11.10.8. There are eight recorded monuments in the study area (AY_18, AY_23, AY_24, AY_25, AY_29, AY_41, AY_43 and AY_47), and six sites on the national database of the Archaeological Survey of Ireland as Sites and Monuments Records (AY_07, AY_08, AY_09, AY_11, AY_12, and AY_21). No National Monuments or sites with Preservation Orders were identified within the study area.

11.10.9. The study area contains evidence of the Neolithic Period (approximately 4,000 to 2,500 BC) at Barberstown and Dunboyne, the Bronze Age Period (approximately 2,500 to 600 BC) at Bennetstown, Dunboyne, Ward Upper and Woodland and the Iron Age (approximately 600 BC to AD 500) at Dunboyne. There is also an early monastic site in Dunboyne and early medieval settlements, including raths. Land use has remained largely agricultural, and field patterns depicted on historic Ordnance Survey mapping remain noticeable.

11.10.10. There are no Architectural Conservation Areas within the study area. Two protected structures, one National Inventory of Architectural Heritage structure, 10 Gardens and Designed Landscapes, 38 cultural heritage sites, and 98 townland boundaries are present within the study area. Among the recorded monuments in the study area are AY_47 (DU015-001), which is the site of an earthen mound with no visible above ground remains but with the potential to contribute to the understanding of this site type, through its physical remains. AY_24 is also a recorded monument comprising of a graveyard associated with St. Brigid's Church located adjacent to the R121.

These assets hold historical and archaeological interest because of their potential to contribute to the understanding of Christianity in Ireland.

11.10.11. In terms of architectural heritage, Priest Town House is a garden and designed landscape of architectural interest given its historic fabric, continued legibility and extant demesne features. Other cultural heritage assets identified from LiDAR data include LI_40, which is a circular or sub-circular area demarcated by a single enclosing element. CH_78 is a ring ditch at Stockhole, comprising a circular or near circular ditched feature with the possible remains of barrows or round houses. Other ring ditches, enclosures and curvi-liner features that may be impacted are located along the route (CH_62, CH_75 and CH_67). The footings of a small group of buildings were identified from LiDAR (LI_08).

11.10.12. A 500m study area was applied to either side of the cable route, substations and compounds for the purposes of landscape and visual impact assessment. In general, it is stated that the proposed development will be located within a robust, modified landscape that is partially contained in well-developed peri-urban areas, alongside low rolling pastoral fields. Topography increases towards more inland areas and watercourses generally drain to the east. There are no notable landscape related tourism or heritage amenities within the study area. The landscape character areas from west to east include Tara Skryne Hills, South East Lowlands, The Ward Lowlands, Rolling Hills with Tree Belts and Low Lying Agricultural. There are no protected/ preserved views or prospects located within the study area.

11.10.13. The baseline assessment in the EIAR for traffic and transport looks at construction access routes, traffic volumes, sensitive receptors, public transport, active travel, road safety, and trip generators/ attractors. The construction phase is likely to last from Q2 2026 until Q4 2029. The proposed cable route will pass under the M1, M2 & M3 motorways and the M3 Parkway rail line by way of HDD. A total of 19 sections of roadway and 34 bus routes will be affected by Temporary Traffic Management (TTM). Construction access routes are based on routing principles set out in the Construction Traffic Management Plan and on constraints such as weight restrictions, low bridges, and HGV restrictions. Traffic volumes were commissioned from 2023 ATC and JTC traffic surveys, and 2026 is chosen as the forecast year for the construction and operational phase assessments. Sensitive receptors include the road network and the people using it, pedestrians and cyclists, residents and

businesses. Key trip generators / attractors include travel between residential areas, retail centres, public transport stops / hubs, active travel routes, local services, education sites, health / medical care sites and local amenities.

11.10.14. The baseline environment for materials, waste and by-products management in Ireland notes that 9 million tonnes of construction and demolition waste were generated in 2021, a 10% increase on 2020. Most of the C&D waste (85%) was backfilled, with only 8% recycled and 7% sent for disposal in 2021. There are three operational EPA licensed landfills and two incinerators in Ireland, along with 16 soil recovery facilities licenced by the EPA. Capacity for C&D/ soils and stone waste is currently largely static and is forecast to reduce in the medium-term.

11.10.15. Existing material assets located within the planning application boundary include electricity lines, ducts and cabling and associated infrastructure; potable watermains and associated infrastructure; sewer lines and associated infrastructure; gas mains (high and medium pressure); telecommunications lines and associated infrastructure for multiple providers; and infrastructure associated with Dublin Airport including the Aviation Fuel Pipeline.

11.10.16. Table 11.10.1 below summarises the likely significant effects of the proposed development on Material Assets, Cultural Heritage and the Landscape as identified in the EIAR.

Potential Material Assets, Cultural Heritage and Landscape Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
Construction			
Material Assets (Utilities)	- Potential to require diversion or protection in place of any of the existing utility infrastructure where there may be a direct interface with aspects of the proposed development, e.g. service outages, - Utility usage by compounds and construction equipment.	- Avoidance of interaction with major utilities infrastructure as far as possible. - Interfaces with existing utility infrastructure will be protected in place or diverted as necessary based on minimum safety clearances and design standards. - Avoidance of unplanned disruptions to any infrastructure our services. - Localised surveys will be undertaken to verify the results of pre-construction assessments. - Consultation with major utilities. - Advanced notification of any service disruptions to surrounding properties.	No significant residual impacts.
Material Assets (Waste)	- Construction waste, including excavation waste, will be the main type of waste generated. Conservative estimated C&D waste is 255,727 tonnes (96.9%). - There will be small quantities of municipal type waste during construction and operational phases associated with maintenance. - Hazardous wastes likely to arise include coal tar in asphalt / bituminous waste from the excavation of road surfaces (5,019 tonnes).	- Sustainable waste and resource management principles have been included into the design and these principles will also be applied in line with the Circular Economy Model. - Unavoidable waste generation will be dealt with under the waste hierarchy as set out in the Waste Framework Directive.	

	- Quantities of imported construction materials represent a very small proportion of the Irish quantities manufactured per year.		
Traffic and Transport	- Temporary additional traffic volumes, associated with the construction activities (both staff and heavy goods vehicle movements), on the existing road network, and affecting users of that road network (including drivers, and those walking, wheeling, cycling, or travelling by public transport). Moderate significant impact at M3 motorway on/off slips in terms of pedestrian amenity. - Disruption to road users as a result of laying the proposed underground cable in the existing road network. Negative impact along 9.1km due to requirement for traffic diversions (21-22 minute diversion along R156, L1010 and Priestown Road, Co. Meath. - Maximum estimated increase in HGVs is a total of 191, on average, per day, where some construction activities overlap. This is equivalent to approximately 19 HGV movements per hour (averaged over an assumed 10-hour delivery period). - Maximum estimated increase in all traffic is a total of 369 vehicles, on average, per day. This is equivalent to approximately 37 vehicle movements per hour (averaged over an assumed 10-hour delivery period). - Percentage increase in total traffic flows as a result of the additional construction traffic	- Application of a Construction Traffic Management Plan. - Construction activity generated vehicles will travel on predefined construction access routes to and from the relevant working areas to reduce the effects on local traffic. - Wheel wash facility and road sweeper will be provided to minimise any mud and debris on the surrounding public road network. - Diversions will be signposted from the affected regional road to alternative roads of similar or better standard. - Local access arrangement for UM03 bus will be maintained and no stops will experience closure. Bus will likely take a more informal direct route rather than the full length of the recommended diversion route. Contractor will liaise with bus operators. - Advance warning of diversions and roadworks, as well as clear signage and physical barriers for walkers, cyclists, and horse riders to reduce risk of incursion within work zones or live traffic lanes. - Adequate car parking for permanent site personnel, visitors and deliveries will be provided within the TCCs.	- Moderate significant residual impact at four TTM sections due to road closures – predicted to last between 26 and 227 days, although not consecutively. - No other significant residual impacts.

	is below the 30% threshold value at all survey locations in the study area, with the exception of one in close proximity to Woodland Substation and TCC0. - Maximum number of total construction vehicles impacting a particular location is 369, and for a period of only two days. - UM03 (Streamline Coaches) – 22-minute diversion at TTM Section 1.02, where a road closure will be active for approximately 227 days.	- Rail track monitoring will involve the use of survey equipment and target sights before, during and immediately following HDD operations	
Cultural Heritage (Archaeology, Architectural Heritage, and Cultural Heritage)	Archaeology: - One recorded monument (AY_47) (a mound) will be removed, resulting in very significant impacts. - Potential for accidental damage to graveyard wall, which is also a Recorded Monument (AY_24), and would result in a very significant impact. - Construction may have a direct impact on previously unknown archaeological remains. - Potential for impacts on archaeological remains and artefacts that may survive in watercourses and in the land adjacent to them. Architectural Heritage: - Area of Crockanee Wood and approximately 120m of boundary associated with Priest Town GDL (DL_04) will be removed, resulting in a moderate impact. Cultural Heritage:	- Archaeological investigations will be implemented post consent and pre-construction in all off-road section to inform any mitigation measures required. - Archaeological geophysical survey, archaeological test excavation, palaeoenvironmental assessment, and underwater assessment at relevant locations to inform the design of archaeological excavation and further underwater surveys. - Mitigation carried out under supervision of a suitably qualified archaeologist under Licence (where required). - Mitigation undertaken post consent will include: - Topographical survey of the upstanding remains of LI_08; - Photographic and written record of Gardens & Designed Landscapes impacted by proposed development;	- Residual impact on recorded monument to be removed (AY_47). - No other significant residual impacts.

	- Majority of an enclosure (LI_40) and 3 ring ditches (CH_78) will be removed, resulting in direct very significant impacts. - Removal of footings of a small group of buildings (LI_08), three ring-ditches, and the partial removal of two ring-ditches (CH_62) will result in significant impacts. - Half of an enclosure (CH_75) and curvi-liner features forming part of CH_67 would be removed, resulting in direct significant impacts. - Removal of deposits associated with three palaeochannels and six sections of townland boundaries, resulting in direct moderate impacts.	- Townland boundary surveys comprising a detailed written and photographic survey, and test trenching; - Palaeoenvironmental assessment and analysis of LI_24, LI_36 and LI_58; - Archaeological excavation informed by archaeological geophysical survey and archaeological test excavation, where preservation in-situ is not feasible; - Underwater assessment comprising wade and metal detecting survey of Dunboyne Stream, Pinkeen River and 2 unnamed streams; - Archaeological metal detecting survey will be undertaken of the banks in certain watercourses. - During construction, the following mitigation will be implemented: - Archaeological monitoring of in-road construction works within the Zones of certain Notification of Recorded Monuments and assets; - AY_24, CH_15 and CH_63 will be clearly demarcated with temporary fencing.	
Landscape (Landscape and Visual)	- Short-term landscape impact as a result of the construction of the proposed underground cable in-road and off-road in private land. - Short-Term landscape impact as a result of the proposed upgrade works at the existing Woodland Substation and the new GIS hall and associated electrical infrastructure to be built at the extended Belcamp Substation.	- Avoidance or reduction of landscape and visual impacts through the design. Key embedded design measure is to place the underground cable within the existing road network to minimise the amount of vegetation loss. - Efforts to design out impact on trees, where possible. 1,174 trees to be felled	- No significant residual impacts.

	- Short-Term visual impact on the assessment viewpoints and residential receptors in the landscape to whom views of the construction works may be possible.	represent 12% of the total trees in the study area. - Arboricultural Method Statement will be developed along with a Tree Protection Plan with pre-planned targeted tree protection measures. - Appointment of arboriculturalist.	
Operational Phase			
Material Assets (Utilities)	- Any maintenance impacts will brief.	- Any service disruptions will be kept to a minimum and prior notification will be given to all impacted properties.	- Once operational, the proposed development will have a positive residual impact on electricity infrastructure in the region. - No other significant residual impacts.
Material Assets (Waste)	- Operational wastes associated with maintenance activities will be small.	- No significant operational impacts and no additional mitigation or monitoring measures necessary.	- No significant residual impacts.
Traffic and Transport	- No potential for significant impacts on traffic and transport as the roads in which the proposed underground cable will be laid will be restored to their original condition. - Joint bays and associated link boxes and communication chambers will require periodic inspection.	- Adequate vehicle parking space is available on-site at Woodland and Belcamp Substations. - Localised, temporary traffic management will be devised for inspections in consultation with road authorities. - Sight lines will be maintained and the potential for obstruction and delay for other road users will be minimised.	- No significant residual impacts.
Cultural Heritage (Archaeology,	- No direct impacts on archaeological, architectural and cultural heritage as a result of permanent access tracks or joint bays.	- No mitigation for archaeological, architectural and cultural heritage during	- No significant residual impacts.

Architectural Heritage, and Cultural Heritage)	- No indirect impacts on archaeological and cultural heritage. - Slight indirect impacts on Priest Town House and Hollywoodrathe in the form of concrete caps and access tracks.	the operational phase as there is no potential for significant impacts.	
Landscape (Landscape and Visual)	- Imperceptible landscape impact. - Imperceptible visual impact on in the vicinity of Belcamp Substation, at the viewpoints at the local road in Clonshaugh (VP1) and the R139, Clonshaugh (VP2). - Imperceptible visual impact in the vicinity of Belcamp Substation at the viewpoints at the R139 (VP3) and at Craobh Chiaráin GAA pitches. - There will be permanent and temporary hedgerow and mature tree loss.	- Hedgerow removed for temporary works areas will be replanted with new species-rich hedgerow. - Other specific landscape and visual mitigation measures not considered necessary.	- No significant residual impacts.
Do Nothing:			
- There would be no changes to infrastructure or utilities. - Surplus materials would not be generated, and the required construction materials would not be consumed. - No impacts on any of the archaeology, architectural heritage and cultural heritage assets. - Associated changes to the landscape and visual environment would not arise. - Traffic volumes are expected to increase along existing roads due to natural traffic growth but additional impacts due to the proposed development would be avoided.			
Decommissioning:			
It is not intended to decommission the proposed electricity infrastructure.			
Cumulative Effects:			
- Cumulative impacts on designated landscape DL_05 due to the presence of other development (309833 / FW21A/0003 - Montague Ventures Limited development, 312271 – Glenveagh Homes Limited development, and FW21A/0042 - Glenveagh Homes Ltd development) and permanent access tracks and joint bays within the demesne - further reduces the legibility of this demesne which cannot be mitigated.			

- Positive impact on the regional electricity network once the proposed development and each one of the other developments (North South Interconnector, Kildare Meath Upgrade EirGrid development, Mayne Stability Limited development, and other ESB and EirGrid developments) are operational.

Table 11.10.1 – Consideration of Impacts, Significance and Mitigation Measures for Material Assets, Cultural Heritage and the Landscape

The Assessment: Direct and Indirect Effects

11.10.17. I have examined, analysed, and evaluated Chapters 13, 14, 16, 17 and 18 of the EIAR, all of the Appendices to these Chapters and the CEMP, including the Construction Traffic Management Plan appended to this plan. I am satisfied that the applicant has provided sufficient survey data to enable assessment of likely effects on archaeology, architectural heritage and cultural heritage; traffic and transport; waste; material assets; and landscape and visual. Further, having regard to the detailed assessment carried out, the location of the development, the concurrent development in the area of the site and the proposed mitigation measures, which are standard good practice measures and which are proven to be effective in particular at preventing adverse effects on archaeology and disruption to traffic/ transport and utilities, I am satisfied that no significant, adverse direct, indirect, or cumulative effects on the environmental factors will occur in the long term.

11.10.18. The potential for significant impacts on archaeology, architectural heritage and cultural heritage during construction for the most part will be mitigated by measures carried out under the supervision of a suitably qualified archaeologist under Licence (where required) granted by the Minister for Housing, Local Government and Heritage, and in accordance with the provisions of the National Monuments Acts 1930–2004 (as amended). Pre-construction mitigation measures will include archaeological excavation informed by archaeological geophysical survey and archaeological test excavation, where preservation in-situ is not feasible. Archaeological monitoring during construction will be carried out and if archaeological remains are identified, and preservation in-situ is not feasible, archaeological excavation will be undertaken under licence. A recorded monument of medium significance (AY_47) will be removed as part of the proposed development and the residual significance is assessed as moderate. A number of other architectural and cultural heritage assets will also be slightly impacted following mitigation. No significant impacts are anticipated for archaeology, architectural heritage and cultural heritage during the construction or operational phases.

11.10.19. The main impacts associated with traffic and transport concern the diversion lengths due to road closures, which in the case of the R156 Regional Road, L1010 Nuttstown Road, and Priestown Road in County Meath, will be between approximately 21 and 22-minutes. The impacts are predicted to last for between 26

and 227 days, although not consecutively, and diversions will be signposted from the affected regional road to alternative roads of similar or better standard.

11.10.20. At one of the 30 numbered temporary traffic management sections, there is potential for significant pre-mitigation impacts at the M3 Motorway Junction 5 – northern on / off slips in terms of pedestrian amenity and road safety. However, the traffic increase is unlikely to have a noticeable impact and there is also unlikely to be a high number of pedestrians in this area. Any effects at this location and other locations will be mitigated by the measures outlined in the CTMP.

11.10.21. Soils and fill material will make up 96.9% of the construction phase surplus material. The total construction and demolition waste will amount to 255,727 tonnes. Approximately 5,019 tonnes of potentially hazardous waste comprising of coal tar in asphalt/ bituminous waste will be disposed of at a suitably licensed facility. Materials required for construction are generally readily available and constitute less than 1% of the quantities produced per annum in Ireland. A Construction Resource and Waste Management Plan has been prepared, which outlines how waste is to be managed on-site and the procedures for removal of waste and materials off site.

11.10.22. No significant negative residual impacts on major infrastructure or utilities are predicted either during construction or operation. The proposed development has been designed to minimise impacts on major utility infrastructure. Ultimately, the proposed development will result in the improvement of the electricity infrastructure in the region once operational.

11.10.23. The greatest potential for landscape and visual impacts to occur is during the construction phase of the proposed development. The effects along the cable route will be brief and fully reversible through reinstatement. The proposed substation works will visually be identifiable at Belcamp and imperceptible at Woodland owing to the setback distance from public roads. A total of 1,174 trees will be felled, which represents 12% of the total trees in the study area. An arboriculturalist will be appointed to develop a site-specific Arboricultural Method Statement. A Tree Protection Plan will also be prepared. Hedgerows removed for the temporary works areas will be replanted with a new species-rich hedgerow.

Conclusion

11.10.24. Having regard to the foregoing, it is considered the main significant direct and indirect effects on material assets, cultural heritage and the landscape are as follows:

- Adverse impacts on archaeology due to removal of recorded monument AY_47. Archaeological excavation will be informed by archaeological geophysical survey and archaeological test excavation, where preservation in-situ is not feasible. The residual significance is assessed as moderate.
- Adverse impacts on traffic and transport from road closures and 21-22 minute diversion at the R156 Regional Road, L1010 Nuttstown Road, and Priestown Road in County Meath. Diversions will be signposted from the affected regional road to alternative roads of similar or better standard.
- Adverse impacts on traffic and transport at the M3 Motorway Junction 5 – northern on / off slips in terms of pedestrian amenity and road safety. Any effects at this location will be mitigated by the measures outlined in the Construction Traffic Management Plan.
- Positive impacts on material assets through the improvement of the electricity infrastructure in the region once the proposed development is operational.
- Adverse impact on landscape and visual through the removal of 1,174 trees, representing 12% of the total trees in the study area. An arboriculturalist will be appointed to develop a site-specific Arboricultural Method Statement and a Tree Protection Plan will also be prepared. Hedgerows removed for the temporary works areas will be replanted with new species-rich hedgerow.

11.11. Risks Associated with Major Accidents and/ or Disasters

11.11.1. The risks of major accidents and/ or disasters is assessed in Chapter 19 of the EIAR. The EIAR provides a register of all potential risks and the associated potential impacts for the construction and operational phases. The likelihood and consequences of an accident are considered to give a low, medium or high score, with a medium risk requiring mitigation and a high risk being unacceptable for the development to proceed.

11.11.2. A number of low and medium risks were identified for the construction phase of the proposed development. No high risks were identified. Low risks were not considered further, and mitigation is proposed for medium risks. The medium risks are as follows:

- Risk of gas explosion due to striking underground gas mains during excavation works;
- Risk of pollution occurring to a watercourse or groundwater, most notably associated with the release of fine sediments during construction works; and
- Risk of spread of non-native invasive species during construction works, particularly during site clearance.

11.11.3. The above risks will be mitigated by measures contained in the CEMP, which includes an Environmental Incident Response Plan, a Construction Resource and Waste Management Plan, a Construction Traffic Management Plan, a Non-Native Species Management Plan and a Surface Water Management Plan. The design of the proposed development has also evolved through comprehensive design iterations, avoiding the potential for environmental impacts. It is concluded that there will be no remaining risk level that would lead to significant impacts or environmental effects, once mitigation is applied.

11.11.4. No Seveso sites are located within 1km of the proposed development along its length and there are no maximum consultation zones for Seveso sites within this buffer. Therefore, the proposed development does not present a risk to any Seveso site.

11.11.5. Overall, I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low-medium probability of a major accident/ natural disaster, it is not likely that significant effects on the environment would arise in this regard. There are no cumulative impacts that would combine to result in significant residual environmental impacts.

11.12. Cumulative Impacts and Environmental Interactions

11.12.1. Cumulative impacts and environmental interactions are assessed in Chapter 20 of the EIAR. A staged approach was used to identify an initial long list of 57 other

developments with potential to overlap with the proposed development. This list was narrowed down to provide a short list of 29 developments where there is potential for significant cumulative impacts.

11.12.2. It was determined that, for most environmental topics, no additional measures are required to mitigate the potential cumulative impacts identified. The only other development for which additional mitigation is required is the EirGrid Kildare Meath Grid Upgrade. There is a spatial overlap along the 'woodland corridor' which will be shared by the proposed development and the Kildare Meath Grid Upgrade. This project and other electricity development will also combine to give rise to positive impacts on the regional electricity network.

11.12.3. Adverse cumulative impacts were identified for biodiversity and agronomy and equine, due to the combined removal of calcareous and natural grassland, and the permanent acquisition of agricultural land required under the proposed development in combination with the Belcamp 220kV Extension Project and the Greater Dublin Drainage Project. Cumulative impacts on a single Archaeology, Architectural Heritage and Cultural Heritage receptor (a Designed Landscape) will occur due to the presence of two Glenveagh Homes developments and one Montague Ventures Limited development, together with the proposed permanent access tracks and joint bays within this demesne.

11.12.4. Table 20.6 of the EIAR provides a matrix of interactions between environmental factors during the construction and operational stages of the proposed development. The key interactive impacts as outlined in the EIAR are as follows:

- Biodiversity and Hydrology – interactive impacts could potentially occur to the surface water environment. They could include potential impacts on aquatic species, requiring mitigation measures;
- Biodiversity and Landscape and Visual – interactive impacts could potentially occur as a result of loss of habitats (hedgerows, trees, grassland, etc.);
- Archaeology, Architectural Heritage, and Cultural Heritage and Landscape and Visual – interactive impacts could potentially occur in relation to the landscape character and setting of cultural heritage assets;

- Archaeology, Architectural Heritage, and Cultural Heritage and Soils, Geology and Hydrogeology – interactive impacts arising from dewatering could potentially impact on cultural heritage sites, such as historical wells; and,
- Material Assets, Agronomy, Air Quality, Noise and Vibration, Traffic and Transport, Population and Human Health – interactions in the human environment are typically complex as there is the potential for receptors to be impacted in a number of ways

11.12.5. I agree that the likely significance of these combined and interrelated impacts has been assessed, and mitigated where required, within the individual assessment chapters. Overall, I would be satisfied with the methodology provided within the EIAR for interactions and cumulative assessment. Construction stage interactions will mostly be short term and mitigation for one environmental factor can be applicable to other environmental factors. The subject development is assessed with all the other relevant plans and projects in the wider area in a staged approach. Overall, this provides for a robust and complete assessment of the proposed scheme by itself and any cumulative interactions with projects and activities in the area. I am therefore satisfied that sufficient information has been acquired to fully inform the cumulative assessment of the proposed development and other relevant projects and activities.

11.13. Reasoned Conclusion

11.13.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the developer, and the submissions from third parties and from prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Short-term adverse impacts arising from the construction phase on **Population and Human Health** in terms of residential amenity from traffic diversions on the public road, and on the operation of businesses and farm enterprises. Construction phase impacts will be mitigated by standard good construction practices. Diversions will be temporary in nature and appropriate traffic

management arrangements will be put in place. A community liaison officer will be engaged as a point of contact during construction.

- Adverse impacts on **Biodiversity** from permanent habitat loss of hedgerows and treelines until new species-rich hedgerows and treelines are established, and on mature trees that cannot be compensated with replacement planting due to the time taken for trees to reach maturation. An offsite compensation strategy for hedgerows, treelines and individual trees has been developed.
- Adverse impacts on two parcels of **Land** due to permanent land take and temporary disturbance and long-term damage to soil structure. The overall residual impact on the agronomy and equine study area is assessed as not significant.
- Potential for adverse impacts on **Water** in terms of groundwater flow and quality at unknown private water supplies and at Ground Water Dependent Terrestrial Ecosystems. Risks to groundwater quality and associated receptors will be mitigated with the adoption of a CEMP.
- Potential for impacts to surface water quality from sediment runoff, spillages, discharges or physical modification. A Surface Water Management Plan details control and mitigation measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment during construction.
- Adverse impact on **Air** in terms of residual noise impacts occurring along four routes where traffic will be diverted. These impacts are expected to last for less than one year. Nearby dwellings will also experience adverse noise impacts from HDD works at the M2 and M3 Motorway crossings and this will be appropriately mitigated by temporary enclosures / barriers.
- Adverse impacts on **Cultural Heritage** in terms of archaeology due to removal of recorded monument AY_47. Archaeological excavation will take place, informed by archaeological geophysical survey and archaeological test excavation, where preservation in-situ is not feasible. The residual significance is assessed as moderate.
- Adverse impacts on **Material Assets** in terms of traffic and transport from road closures and 21-22 minute diversion at the R156 Regional Road, L1010

Nuttstown Road, and Priestown Road in County Meath. Diversions will be signposted from the affected regional road to alternative roads of similar or better standard.

- Adverse impacts on traffic and transport at the M3 Motorway Junction 5 – northern on / off slips in terms of pedestrian amenity and road safety. Any effects at this location will be mitigated by the measures outlined in the Construction Traffic Management Plan.
- Positive impacts on material assets through the improvement of the electricity infrastructure in the region once the proposed development is operational.
- Adverse impact on the **Landscape** and visual through the removal of 1,174 trees, representing 12% of the total trees in the study area. An arboriculturalist will be appointed to develop a site-specific Arboricultural Method Statement and a Tree Protection Plan will also be prepared. Hedgerows removed for the temporary works areas will be replanted with a new species-rich hedgerow.

12.0 Appropriate Assessment

12.1. The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- Geographical Scope and Main Characteristics
- Screening the need for Appropriate Assessment
- The Natura Impact Statement and associated documents
- Appropriate Assessment of implications of the proposed development on each European site

12.2. **Compliance with Articles 6(3) of the EU Habitats Directive:** The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent

authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

12.3. The proposed development comprising the development of the East Meath – North Dublin Grid Upgrade Project is not directly connected with or necessary to the management of any European site and is therefore subject to the provisions of Article 6(3).

12.4. **Geographical Scope and Main Characteristics**

12.4.1. The proposed development comprises the laying of an underground cable circuit within a 1.5m wide and 1.3m deep trench over a distance of 26km in the public road, and to a depth of 1.8m over a 11.5km distance in private lands. The proposal also includes upgrades to the 400kV Woodland Substation and 220kV Belcamp Substation. Associated joint bays and passing bays will be provided, along with temporary construction compounds and horizontal directional drilling compounds.

12.4.2. Most of the proposed development will be located in public roads (BL3) and adjacent to agricultural fields (BC1, BC2, BC3 and GA1). The adjoining agricultural lands have the potential to support protected birds. Treelines (WL2), hedgerows (WL1), depositing lowland rivers (FW2) and drainage ditches (FW4) are also abundant in the study area. A small area of the Annex I habitat, Alluvial woodland [91E0] was identified along the Ward River within 2km of the proposed development boundary. A desk-based search of the National Biodiversity extending to 2km returned several invasive floral species and a site walkover survey recorded four Third Schedule (EU 2011) invasive species within 150m of the proposed development.

12.4.3. WFD waterbodies in the vicinity of the proposed development from west to east as the cable route encounters them are the Tolka_020, Dunboyne Stream_010, Pinkeen_010, Ward_020, Ward_010, Ward_030, Sluice_010, and the Mayne_010. Two crossings are proposed at the Tolka_020 and the route passes adjacent to the river at another point. Two crossings of the Dunboyne Stream_010 and one crossing of the Pinkeen_010 are proposed and there will be one adjacent source to the Pinkeen_010. The Ward_010 will have one tributary source adjacent to the cable and there will also be three crossings of this watercourse. The Ward_010 will also have three crossings and the Ward_030 will have seven tributary sources

adjacent to the cable, as well as three crossings. Finally, the Sluice_010 and the Mayne_010 will have one crossing. The Zone of Influence (ZoI) was identified in the NIS by applying the source-pathway-receptor model and the main source of impact was identified as those that could travel along a watercourse or the sea to the receptor.

12.4.4. The likely crossing technique for the watercourses in the study area is open cut trenching. The watercourses are dammed and diverted whilst the cable is installed beneath the bed of the watercourse, and following installation and reinstatement, the water is allowed to resume its natural course.

12.5. Screening the Need for Appropriate Assessment

12.5.1. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site. This is considered stage 1 of the appropriate assessment process i.e., *screening.* The screening stage is intended to be a preliminary examination. If the possibility of significant effects cannot be excluded on the basis of objective information, without extensive investigation or the application of mitigation, a plan or project should be considered to have a likely significant effect and Appropriate Assessment carried out.

12.5.2. Having regard to the information and submissions available, the 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, the European sites set out in Table 1 below are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects. A total of 19 European sites are included (4 SACs & 15 SPAs) for initial screening.

12.5.3. European sites considered for Stage 1 screening:

European site (SAC/SPA)	Site code	Distance to Proposed Development	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Malahide Estuary SAC	000205	3.6km	Possible connections	Y

European site (SAC/SPA)	Site code	Distance to Proposed Development	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Baldoyle Bay SAC	000199	4km	Possible connections	Y
Rockabill to Dalkey Islands SAC	003000	8.8km	No potential connections	N
Lambay Island SAC	000204	13.4km	No potential connections	N
Malahide Estuary SPA	004025	3.6km	Possible connections	Y
Baldoyle Bay SPA	004016	4km	Possible connections	Y
North-West Irish Sea SPA	004236	4.5km	Possible connections	Y
North Bull Island SPA	004006	4.6km	Possible connections	Y
South Dublin Bay and River Tolka Estuary SPA	004024	5.5km	Possible connections	Y
Rogerstown Estuary SPA	004015	7.8km	Possible connections	Y
Ireland's Eye SPA	004117	8.6km	Possible connections	Y
Lambay Island SPA	004069	13.4km	Possible connections	Y
Skerries Islands SPA	004122	18.5km	Possible connections	Y
River Nanny Estuary and Shore SPA	004158	26km	Possible connections	Y
Boyne Estuary SPA	004080	33km	Possible connections	Y
Dundalk Bay SPA	004026	50km	Possible connections	Y
Howth Head Coast SPA	004113	10km	No potential connections	N
Dalkey Islands SPA	004172	17.5km	No potential connections	N

European site (SAC/SPA)	Site code	Distance to Proposed Development	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Rockabill SPA	004014	19km	No potential connections	N

Table 1 – Summary Table of European sites considered in Screening for Appropriate Assessment

12.5.4. The applicant's AA Screening Report concluded that there is potential for effects on the qualifying interests of the Malahide Estuary SAC, Baldoyle Bay SAC, Malahide Estuary SPA, Baldoyle Bay SPA, North-West Irish Sea SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Rogerstown Estuary SPA, Ireland's Eye SPA, Lambay Island SPA, Skerries Islands SPA, River Nanny Estuary and Shore SPA, Boyne Estuary SPA, and Dundalk Bay SPA.

12.5.5. Having reviewed the documents, submissions and correspondence from the NPWS, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites. Based on my examination of the AA Screening Report and other supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distances and functional relationships between the proposed scheme and the European sites, their conservation objectives, and taken in conjunction with my assessment of the subject site and the surrounding area, I conclude that a Stage 2 Appropriate Assessment is required for the following European sites in view of the conservation objectives of these sites:

- Malahide Estuary SAC
- Baldoyle Bay SAC
- Malahide Estuary SPA
- Baldoyle Bay SPA
- North-West Irish Sea SPA
- North Bull Island SPA

- South Dublin Bay and River Tolka Estuary SPA
- Rogerstown Estuary SPA
- Ireland's Eye SPA
- Lambay Island SPA
- Skerries Islands SPA
- River Nanny Estuary and Shoreline SPA
- Boyne Estuary SPA
- Dundalk Bay SPA

12.5.6. Table 2 below provides a screening summary matrix where there is a possibility of significant effects from the proposed development, or where the possibility of significant effects cannot be excluded without further detailed assessment.

Site name **Qualifying Interest feature**	**Is there a possibility of significant effects in view of the conservation objectives of the site?** **General impact categories presented**		
	Habitat loss/ modification	Water quality and water dependent habitats (pollution)	Disturbance/ displacement barrier effects
Malahide Estuary SAC *Qualifying Interests* Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]		Potential sedimentation and pollution incidents entering the watercourses hydrologically linked to this site could cause habitat degradation for QI habitats as the hydrological link via the three crossings of the Ward_030 is approximately 8.7km or less in length.	
Baldoyle Bay SAC *Qualifying Interests*		Potential sedimentation and pollution incidents entering the watercourses hydrologically linked to this site could cause	

Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410]		habitat degradation for QI habitats as the hydrological link via the Sluice_010 is approximately 9.7 km in length while the hydrological link via the Mayne_010 is approximately 4.8km in length.	
Malahide Estuary SPA *Qualifying Interests:* Great Crested Grebe (Podiceps cristatus) [A005] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Pintail (Anas acuta) [A054] Goldeneye (Bucephala clangula) [A067] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat. Potential for mortality given the works have potential to pollute functionally linked habitat and the SPA itself via a potential pollution incident which travels downstream into the SPA.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds

Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]			
Baldoyle Bay SPA *Qualifying Interests:* Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Bar-tailed Godwit (Limosa lapponica) [A157] Wetland and Waterbirds [A999]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat. Potential for mortality given the works have potential to pollute functionally linked habitat and the SPA itself via a potential pollution incident which travels downstream into the SPA.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.
North-West Irish Sea SPA Common Scoter (Melanitta nigra) [A065] Red-throated Diver (Gavia stellata) [A001]		Potential for habitat degradation via a pollution event entering watercourses which are hydrologically linked to this SPA via North Bull Island SPA,	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for some QI birds.

Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Shag (Phalacrocorax aristotelis) [A018] Cormorant (Phalacrocorax carbo) [A017] Little Gull (Larus minutus) [A177] Kittiwake (Rissa tridactyla) [A188] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Great Black-backed Gull (Larus marinus) [A187] Little Tern (Sterna albifrons) [A195] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Puffin (Fratercula arctica) [A204]		Malahide SPA and Baldoyle SPA. Potential for mortality given the works have potential to pollute functionally linked/supporting habitat.	

Razorbill (Alca torda) [A200] Guillemot (Uria aalge) [A199]			
North Bull Island SPA *Qualifying Interests:* Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.

Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Black-headed Gull (Chroicocephalus ridibundus) [A179] Wetland and Waterbirds [A999]			
South Dublin Bay and River Tolka Estuary SPA *Qualifying Interests:* Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.

Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999]			
Rogerstown Estuary SPA *Qualifying Interests:* Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Shoveler (Anas clypeata) [A056] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.

Ireland's Eye SPA *Qualifying Interests:* Cormorant (Phalacrocorax carbo) [A017] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.
Lambay Island SPA *Qualifying Interests:* Fulmar (Fulmarus glacialis) [A009] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Greylag Goose (Anser anser) [A043] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.

Skerries Islands SPA *Qualifying Interests:* Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Purple Sandpiper (Calidris maritima) [A148] Turnstone (Arenaria interpres) [A169] Herring Gull (Larus argentatus) [A184]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event entering functionally linked habitats and watercourses which are hydrologically linked to supporting habitats. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.
River Nanny Estuary and Shore SPA *Qualifying Interests* Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Herring Gull (Larus argentatus) [A184] Wetland and Waterbirds [A999]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event from run-off into functionally linked habitat for QI birds. Also potential for pollution event entering watercourses which are hydrologically linked to supporting habitats. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.
Boyne Estuary SPA	Short term loss of functional habitat for QI	Potential for habitat degradation via a pollution event from run-off	Potential for disturbance as works will take place within or

Qualifying Interests Shelduck (Tadorna tadorna) [A048] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Black-tailed Godwit (Limosa limosa) [A156] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Little Tern (Sterna albifrons) [A195] Wetland and Waterbirds [A999]	species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	into functionally linked habitat for QI birds. Also potential for pollution event entering watercourses which are hydrologically linked to supporting habitats. Potential for mortality given the works have potential to pollute functionally linked and supporting habitat.	adjacent to functionally linked habitat for QI birds.
Dundalk Bay SPA *Qualifying Interests* Great Crested Grebe (Podiceps cristatus) [A005] Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046]	Short term loss of functional habitat for QI species which forage on agricultural fields could take place. Habitats will be replaced after the completion of the works, restoring any lost habitat.	Potential for habitat degradation via a pollution event from run-off into functionally linked habitat for QI birds. Also potential for pollution event entering watercourses which are hydrologically linked to supporting habitats. Potential for mortality given the works have potential to pollute	Potential for disturbance as works will take place within or adjacent to functionally linked habitat for QI birds.

Shelduck (Tadorna tadorna) [A048] Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Pintail (Anas acuta) [A054] Common Scoter (Melanitta nigra) [A065] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162]		functionally linked and supporting habitat.	

Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Herring Gull (Larus argentatus) [A184] Wetland and Waterbirds [A999]			

Table 2 Screening summary matrix: European sites for which there is a possibility of significant effects (or where the possibility of significant effects cannot be excluded without further detailed assessment)

12.5.7. The remaining sites can be screened out from further assessment because of the scale of the proposed works, the nature of the Conservation Objectives, Qualifying and Special Conservation Interests, the separation distances and the lack of a substantive ecological linkage, hydrologically or otherwise, between the proposed works and the European sites.

12.5.8. The proposed underground cable and substations do not overlap with any European site and there is no potential to cause direct habitat loss, fragmentation or disturbance in any of the Special Areas of Conservation screened out within the study area due to the location of the works outside of any such European sites. Indirect terrestrial or aquatic habitat loss or degradation will not occur in all sites screened out due to the absence of hydrological connectivity and/ or the separation distance between construction works, or any operational stage work.

12.5.9. There is also no potential for indirect/ ex-situ disturbance or displacement of species designated as the qualifying interests for the Rockabill to Dalkey Island SAC and Lambay Island SAC. Although there is a hydrological link, the potential for significant impacts on habitat and species is *de minimus* due to the intervening distance and the dilution rates. There is also an abundance of supporting habitat closer to these European sites, such that there is no potential for significant effects from habitat degradation. There is potential for hydrological impacts on other SACs (Malahide Estuary SAC and Baldoyle Bay SAC) through sedimentation and pollution incidents entering the watercourses hydrologically linked to these sites. This could cause habitat degradation for QI habitats.

12.5.10. There is also potential for habitat degradation via a pollution event entering watercourses hydrologically linked to the Malahide Estuary SPA, Baldoyle SPA, North-West Irish Sea SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Rogerstown Estuary SPA, Ireland's Eye SPA, Lambay Island SPA, Skerries Islands SPA, River Nanny Estuary and Shore SPA, Boyne Estuary SPA and Dundalk Bay SPA, and their supporting habitat. A pollution event from run-off into a functionally linked/ terrestrial/ supporting habitat for QI birds may also give rise to the potential for habitat degradation. The proposed development may result in mortality of QI species associated with the SPA due to pollution impacts.

12.5.11. QI bird species are known to use agricultural and amenity land to forage and roost in. In the absence of mitigation, disturbance from noise and visuals from the proposed development could cause a stress response or act as a deterrent to adjacent functionally linked (ex-situ) habitat, impacting QI species known to travel inland to forage and roost. These European sites have therefore been screened in.

12.5.12. The other SPAs that have been screened out are the Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA. No likely significant effects are predicted on the QI species for these European sites as the hydrological distances are *de minimus* due to the intervening distances and the dilution rates of the rivers, estuaries, and the Irish Sea. A pollution event is therefore unlikely to reach the European sites to cause significant impacts. There is no pathway from the proposed development to suitable supporting or functionally linked habitat for certain QI species.

12.5.13. It is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on Rockabill to Dalkey Islands SAC (003000), Lambey Island SAC (00204), Howth Head Coast SPA (004113), Dalkey Islands SPA (004172) and Rockabill SPA (004014) in view of the sites' conservation objectives and a Stage 2 Appropriate Assessment for these sites is not required. I am therefore satisfied that no additional sites other than those assessed in the NIS need to be brought forward for Appropriate Assessment.

12.5.14. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually, or in combination with other plans or projects, could have a significant effect on European site No's. 000205, 000199, 004025, 004016, 004236, 004006, 004024, 004015, 004117, 004169, 004122, 004158, 004080 and 004026 in view of the sites' Conservation Objectives, and Appropriate Assessment is therefore required.

12.6. **The Natura Impact Statement and Associated Documents**

12.6.1. The application was accompanied by an Appropriate Assessment Screening Report and Natura Impact Statement dated and received by the Board in March 2024. The

NIS examines the effects of the proposed East Meath – North Dublin Grid Upgrade alone, and in-combination with other projects and activities, on the integrity of European sites in respect of their conservation objectives and their structure and function. The NIS Appendices include (A) Photographs, (B) WFD Waterbodies in Vicinity of the Proposed Development, (C) Figures, (D) Qualifying Interest Foraging/ Roosting Distances, and (E) Conservation Status of Qualifying Interests Exposed to Risk for Each of the European Sites Screened in for Appropriate Assessment.

12.6.2. In general, I am satisfied that the Appropriate Assessment Screening Report and Natura Impact Statement submitted with the planning application adequately describes the proposed scheme, the project site and the surrounding area. The Stage 1 Screening Assessment concluded that a Stage 2 Appropriate Assessment (NIS) was required. The Appropriate Assessment Screening Report and NIS outlined the methodology used for assessing potential impacts on the habitats and species within the European sites that have the potential to be affected by the proposed development. It predicted the potential impacts for the site and its conservation objectives, suggested mitigation measures, assessed in-combination effects and identified any residual effects on the European site and its conservation objectives.

12.6.3. The Appropriate Assessment Screening Report and NIS were informed by the following studies, surveys and consultations:

- Desk Review:
  - Aerial imagery;
  - EPA Rivers and water quality data, Water Framework Directive (WFD) status online at https://gis.epa.ie/EPAMaps/ (EPA 2024);
  - Protected and invasive species data from the National Biodiversity Data Centre (NBDC) online from http://www.biodiversityireland.ie/ (NBDC 2024);
  - Natura 2000 sites data as held by the NPWS online from www.npws.ie including: Mapping of European site boundaries, the Natura 2000 network Data Form; Site Synopsis; Generic Conservation Objective data (NPWS 2024);

    - The Status of EU Protected Habitats and Species in Ireland. Volume 1-3: Edited by: Deirdre Lynn and Fionnuala O'Neill from https://www.npws.ie/publications/article-17-reports/article-17-reports-2019;
- Ecological Surveys:
    - Site walkovers, breeding bird and wintering bird surveys undertaken between October 2022 and August 2023;
- Consultation:
    - Meath County Council consultation: 10 November 2022, 30 March 2023, 19 July 2023, 26 October 2023 and 15 November 2023;
    - Fingal County Council consultation: 10 January 2023, 29 March 2023, 20 June 2023, 26 October 2023 and 16 November 2023;
    - NPWS consultation: 9 January 2024;
    - Inland Fisheries Ireland (IFI) consultation: data issued 12 November 2023, consultation date 9 January 2024;
    - An Bord Pleanála pre-application consultation: 8 September 2023 and 28 November 2023;
- Guidance Documents:
    - Appropriate Assessment Screening for Development Management. Office of the Planning Regulator (OPR) Practice Note PN01 (OPR 2021);
    - Appropriate Assessment of Plans and Proposed Schemes in Ireland. Guidance for Planning Authorities (Department of Environment, Heritage and Local Government (DoEHLG) 2010);
    - Assessment of Plans and Projects in Relation to Natura 2000 Sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission (EC) 2021a);
    - Communication from the Commission on the Precautionary Principle (EC 2000);
    - Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the concepts of: Alternative Solutions, Imperative Reasons of

Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission (EC 2007);

- Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC 2018);
- Guidance document on the strict protection of animal species of Community interest under the Habitats Directive (EC 2021b);
- Guidance on the strict protection of certain animal and plant species under the Habitats Directive in Ireland (Department of Housing, Local Government and Heritage (DHLGH) 2021);
- Commission Notice: Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021/C 437/01);
- A Guide to Habitats in Ireland. The Heritage Council (Fossitt 2000);
- Article 17 reports (NPWS 2019a; NPWS 2019b; NPWS 2019c);
- Good Practice Guidance for Habitats and Species (Chartered Institute of Ecology and Environmental Management (CIEEM) 2021);
- Guidelines for Preliminary Ecological Appraisal. Second Edition (CIEEM 2017);
- Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM 2018);
- National Roads Authority (NRA) Guidelines on The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads (NRA 2010);
- Transport Infrastructure Ireland (TII) The Management of Invasive Alien Plant Species on National Roads, Standard (TII 2020a).

12.6.4. The NIS concluded that, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the proposed scheme and the effective implementation of the mitigation measures proposed, that the proposed scheme will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.

12.6.5. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided, and they are summarised in the NIS. I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the relevant European sites alone, or in combination with other plans and projects:

12.7. Appropriate Assessment of Implications of the Proposed Development on Each European Site

12.7.1. The following is an assessment of the implications of the project on the relevant conservation objectives of the European sites using the best available scientific knowledge in the field. All aspects of the project which could result in significant effects are identified and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed.

12.7.2. I have relied on the following guidance:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service;
- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC;
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC;
- EC (2011) Guidelines on the implementation of the Birds and Habitats Directives in Estuaries and coastal zones.

12.7.3. **Relevant European sites:** The following sites are subject to appropriate assessment:

- Malahide Estuary SAC,
- Baldoyle Bay SAC,

- Malahide Estuary SPA,
- Baldoyle SPA,
- North-West Irish Sea SPA,
- North Bull Island SPA,
- South Dublin Bay and River Tolka Estuary SPA,
- Rogerstown Estuary SPA,
- Ireland's Eye SPA,
- Lambay Island SPA,
- Skerries Islands SPA,
- River Nanny Estuary and Shore SPA,
- Boyne Estuary SPA, and
- Dundalk Bay SPA

12.7.4. A description of these site and their Conservation Objectives and Qualifying Interests, including any relevant attributes and targets for the sites, are set out in the NIS and outlined in Table 3-21 below. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for these sites available through the NPWS website (www.npws.ie).

12.7.5. **Aspects of the proposed development:** The main aspects of the proposed development that could adversely affect the conservation objectives of European sites include:

- Habitat degradation via a pollution event and from runoff entering watercourses which are hydrologically linked to the SPA and supporting habitat.
- Mortality given the works have potential to pollute functionally linked habitat and the SPA itself via a potential pollution incident which travels downstream into the SPA.
- Disturbance and displacement impacts on SCI bird species known to forage and/ or roost at inland sites, such as agricultural lands.

12.7.6. **Tables 3 to 21** summarise the appropriate assessment and site integrity test. The conservation objectives, targets and attributes as relevant to the identified potential significant effects are examined and assessed in relation to the aspects of the proposal (alone and in combination with other plans and projects). Mitigation measures are examined, and clear, precise and definitive conclusions reached in terms of adverse effects on the integrity of European sites.

12.8. **Table 3 – Malahide Estuary SAC**

Table 3

Malahide Estuary SAC (Site code: 000205)

Key Issues:

- Habitat degradation/ effects as a result of hydrological impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000205.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Mudflats and sandflats not covered by seawater at low tide [1140]	Stable or increasing habitat area; and conservation of: Fine sand dominated by Angulus tenuis community complex; and Estuarine sandy mud with Pygospio elegans and Tubificoides benedii community	Potential for likely significant effects from habitat degradation from a pollution incident during open cut trenching and construction activities via the Ward River	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites.	Yes With the effective implementation of mitigation measures, the proposed development will not have any adverse

	complex all in a natural condition.	(three tributaries of the Ward_030); pollution could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon this QI habitat.	and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials	- Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.
Salicornia and other annuals colonising mud and sand [1310]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of coastal habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain presence of listed species poor communities; and no significant expansion of common cordgrass.	Potential for likely significant effects from habitat degradation from a pollution incident during open cut trenching and construction activities via the Ward River (three tributaries of the Ward_030); pollution could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon this QI habitat. Sediment laden water could also enter watercourses that are hydrologically linked to this site, and this could impact the physical structure of this habitat.			

Mediterranean salt meadows (Juncetalia maritimi) [1410]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of saltmarsh habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain range of sub-communities with characteristic species; and no significant expansion of common cordgrass.	Potential for likely significant effects from habitat degradation from a pollution incident during open cut trenching and construction activities via the Ward River (three tributaries of the Ward_030); pollution could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon this QI habitat. Sediment laden water could also enter watercourses that are hydrologically linked to this site, and this could impact the physical structure of this habitat.	and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses).		
To restore the favourable conservation condition of the following:					
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of coastal habitat and structural	Potential for likely significant effects from habitat degradation from a pollution incident during open cut trenching and construction activities via the Ward River	As above.	As above	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect

	variation within sward; maintain >90% of areas outside creeks vegetated; maintain range of sub-communities with typical species; and no significant expansion of common cordgrass.	(three tributaries of the Ward_030); pollution could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon this QI habitat. Sediment laden water could also enter watercourses that are hydrologically linked to this site, and this could impact the physical structure of this habitat.			on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.
Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain range of coastal habitat; 95% of marram grass and/ or lyme-grass should be healthy; and negative indicator species to represent less than 5% cover.	No likely significant effects			
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain range of coastal habitat; bare ground should not exceed 10% of fixed dune habitat; maintain structural variation within sward; maintain range of sub-communities with	No likely significant effects			

	typical species; negative indicator species to represent less than 5% cover; and no more than 5% shrub/ tree cover or under control.				

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Malahide Estuary SAC and that no effects of any significance will occur.

Malahide Estuary SAC is located directly 3.6km northeast, and 8.7km hydrologically downstream of the proposed development via the Ward River. Conservation objective targets for the qualifying interest habitats could be undermined through habitat degradation from a pollution incident via the Ward River during construction.

No habitat loss within the European designated sites will occur and adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Ward River (three tributaries of the Ward_030), which drains to Malahide Estuary. These mitigation measures will include the appointment of an Ecological Clerk of Works; preparation of method statements, open trenching risk assessments and environmental management plans for open cut trenching; silt fencing; measures to prevent accidental pollution; and measures for reinstatement of land and vegetation to protect watercourses.

Based on the information submitted, surveys carried out analysis provided, I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Malahide Estuary SAC and adverse effects on site integrity can be excluded.

12.9. Table 4 – Baldoyle Bay SAC

Table 4

Baldoyle Bay SAC (Site code: 000199)

Key Issues: • Habitat degradation as a result of hydrological impacts. **Conservation Objectives:** https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000199.pdf					
		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Mudflats and sandflats not covered by seawater at low tide [1140]	Stable or increasing habitat area; maintenance of extent/ conservation of high quality of *Zostera*-dominated community and the *Mytilus edulis*-dominated community complex; and conservation of: Fine sand with oligochaetes, amphipods, bivalves and polychaetes community complex; Estuarine sandy mud with Chironomidae and *Hediste diversicolor* community complex; and Sand to muddy sand with *Peringia ulvae, Tubificoides benedii* and *Cerastoderma edule* community	Potential for likely significant effects from habitat degradation from a pollution incident during open cut trenching and construction activities into the Mayne River (one tributary of the Mayne_010) and the Sluice River (one tributary of the Sluice_010); pollution could enter watercourses that are hydrologically linked to	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not

	complex all in a natural condition.	this site and lead to a reduction in water quality, thus impacting upon this QI habitat.	habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and	necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination with any other major project to have an adverse effect on the integrity of any European site.	therefore affect its integrity.
Salicornia and other annuals colonising mud and sand [1310]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of coastal habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain presence of listed species poor communities; and no significant expansion of common cordgrass.	Potential for likely significant effects from habitat degradation from a pollution incident during open cut trenching and construction activities into the Mayne River (one tributary of the Mayne_010) and the Sluice River (one tributary of the Sluice_010); pollution could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon this QI habitat. Sediment laden water could also enter watercourses that are hydrologically linked to this site, and this could impact the physical structure of this habitat.			
Mediterranean salt meadows (Juncetalia maritimi) [1410]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic	Potential for likely significant effects from habitat degradation from a pollution			

	matter; maintain creek and pan structure and natural tidal regime; maintain range of saltmarsh habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain range of sub-communities with typical species; and no significant expansion of common cordgrass.	incident during open cut trenching and construction activities into the Mayne River (one tributary of the Mayne_010) and the Sluice River (one tributary of the Sluice_010); pollution could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon this QI habitat. Sediment laden water could also enter watercourses that are hydrologically linked to this site, and this could impact the physical structure of this habitat.	plant, concrete pouring, and reinstatement of land and vegetation to protect water courses).		
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of coastal habitat and structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain range of sub-communities with typical species; and no significant	Potential for likely significant effects from habitat degradation from a pollution incident during open cut trenching and construction activities into the Mayne River (one tributary of the Mayne_010) and the Sluice River (one tributary of the Sluice_010); pollution			

	expansion of common cordgrass.	could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon this QI habitat. Sediment laden water could also enter watercourses that are hydrologically linked to this site, and this could impact the physical structure of this habitat.			

Overall Conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Baldoyle Bay SAC and that no effects of any significance will occur.

Baldoyle Bay SAC is located directly 4km east, and 4.8km hydrologically downstream of the proposed development via the River Mayne and the River Sluice. Conservation objective targets for the qualifying interest habitats could be undermined through habitat degradation from a pollution incident via these watercourses during construction.

No habitat loss within the European designated sites will occur and adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Mayne River (one tributary of the Mayne_010) and the Sluice River (one tributary of the Sluice_010), which drain to Baldoyle Bay. These mitigation measures will include the appointment of an Ecological Clerk of Works; preparation of method statements, open trenching risk assessments and environmental management plans for open cut trenching; silt fencing; measures to prevent accidental pollution; and measures for reinstatement of land and vegetation to protect watercourses.

Based on the information submitted, surveys carried out analysis provided, I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Baldoyle Bay SAC and adverse effects on site integrity can be excluded.

12.10. **Table 5 – Malahide Estuary SPA**

Table 5

Malahide Estuary SPA (Site code: 004025)

Key Issues:

- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004025.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				

[A005] Great Crested Grebe *Podiceps cristatus* [A054] Pintail *Anas acuta* [A067] Goldeneye *Bucephala clangula* [A069] Red-breasted *Merganser Mergus serrator* [A143] Knot *Calidris canutus* [A149] Dunlin *Calidris alpina alpina* [A156] Black-tailed Godwit *Limosa limosa* [A162] Redshank *Tringa totanus*	Long term population trend stable or increasing; and no significant decrease in the range, timing or intensity of use of areas by all listed species other than occurring from natural patterns of variation.	Potential (in situ only) for habitat degradation leading to QI species mortality from a pollution / sedimentation incident during construction activities, which could enter watercourses hydrologically linked to this site and supporting habitat and lead to a reduction in water quality, thus impacting the long-term population trend by causing a reduction in foraging habitat quality and quantity and reducing species fitness. Could also lead to a reduction in water quality, thus deterring QI species from SPA habitat changing their natural distributions.	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS).	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
[A046] Brent Goose *Branta bernicla hrota* [A048] Shelduck *Tadorna tadorna* [A130] Oystercatcher *Haematopus ostralegus*	Long term population trend stable or increasing; and no significant decrease in the range, timing or intensity of use of areas by all listed species other than occurring from natural patterns of variation.	Potential (in situ and ex-situ) for habitat degradation leading to QI species mortality occurring as a result of a pollution / sedimentation incident during construction activities; pollution / sediments could enter			

[A140] Golden Plover *Pluvialis apricaria* [A141] Grey Plover *Pluvialis squatarola* [A157] Bar-tailed Godwit *Limosa lapponica*		watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting the long-term population trend by causing a reduction in foraging habitat quality and quantity and reducing species fitness. Also potential for sedimented or polluted run-off to impact the long-term population trend of these species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. Additionally, disturbance in functionally linked habitat causes long term population impacts by increasing stress responses in bird which reduces species fitness. Could also lead to a reduction in water quality in hydraulically linked watercourses, thus deterring QI species from SPA	- Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		

		habitat changing their natural distributions. - Disturbance during construction may affect their natural distribution by deterring these species from functionally linked habitats during construction phase from associated noise and vibrations.			
Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765 hectare.	Potential for habitat degradation from pollution / sedimentation incident during construction activities; pollution / sediments could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting upon the area and quality of wetland habitat.			

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are hydrologically connected or are remote from the proposed development site and that no effects of any significance will occur.

Malahide Estuary SPA is directly 3.6km northeast, and 8.7km hydrologically downstream of the proposed development. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through habitat degradation from a pollution incident via watercourses, pollution of functionally linked habitats, and disturbance from functionally linked habitats.

No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release could cause a reduction in foraging habitat quality and quantity, reducing species fitness, deterring these QI species from SPA habitat, or causing species mortality. There is also a potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.11. **Table 6 – Baldoyle Bay SPA**

Table 6

Baldoyle Bay SPA (Site code: 004016)

Key Issues:

- Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts.
- Habitat degradation at ex situ feeding sites.

• Disturbance and displacement impacts. **Conservation Objectives:** https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004016.pdf					
		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	- Potential for (in-situ and ex-situ) habitat degradation from a pollution / sedimentation incident during construction activities; pollution / sediments could enter watercourses and supporting habitats that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting the long-term population trend by causing a reduction in foraging habitat quality and	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Shelduck *Tadorna tadorna* [A048]	As above				
Golden Plover *Pluvialis apricaria* [A140]	As above				
[A141] Grey Plover *Pluvialis squatarola*	As above				
[A157] Bar-tailed Godwit *Limosa lapponica*	As above				

		quantity and reducing species fitness. - Potential for sedimented or polluted run-off to impact the long-term population trend of these species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for, disturbance in functionally linked habitat causing long term population impacts by increasing stress responses in bird which reduces species fitness. - Potential for habitat degradation from a pollution / sedimentation incident during construction activities; pollution / sediments entering watercourses and supporting habitats that are hydrologically linked to this site and lead to a reduction in water quality, thus deterring these QI species from SPA habitat changing their natural distributions. - Disturbance during construction may affect	habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing	determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	

		their natural distribution by deterring these species from functionally linked habitats due to from associated noise and vibrations.	activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Ringed Plover *Charadrius hiaticula* [A137]	As above	- Potential for (in-situ only) habitat degradation as a result of a pollution / sedimentation incident during construction activities; pollution / sediments could enter watercourses that are hydrologically linked to this site and lead to a reduction in water quality, thus impacting the long-term population trend by causing a reduction in foraging habitat quality and quantity and reducing species fitness. - Also potential for reduction in water quality in hydrologically linked watercourses, thus deterring this QI species from SPA habitat changing their natural distributions.			
Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable	Potential for habitat degradation from a pollution / sedimentation			

	and not significantly less than the area of 263 hectare.	incident during construction activities; pollution / sediments entering watercourses that are hydrologically linked to this site and leading to a reduction in water quality, thus impacting upon the area and quality of wetland habitat.			

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are hydrologically connected or are remote from the proposed development site and that no effects of any significance will occur.

Baldoyle Bay SPA is located directly 4km east, and 4.8km hydrologically downstream of the proposed development. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through habitat degradation from a pollution incident via watercourses, pollution of functionally linked habitats, and disturbance from functionally linked habitats.

No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release could cause a reduction in foraging habitat quality and quantity, reducing species fitness, deterring these QI species from SPA habitat, or causing species mortality. There is also a potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in bird which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.12. **Table 7 – North West Irish Sea SPA**

Table 7

North-West Irish Sea SPA (Site code: 004236)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004236.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				

Little Gull (Larus minutus) [A177] Black-headed Gull *Chroicocephalus ridibundus* [A179] Great Black-backed Gull (Larus marinus) [A187] Common Gull (Larus canus) [A182]	No significant decline, stable or increasing population trends, sufficient number of locations, area and availability of suitable habitat to support the population, sufficient number of locations, area of suitable habitat and available forage biomass to support population target, intensity, frequency, timing and duration of disturbance, barriers not significantly impacting populations access to the SPA or other ecologically important sites outside the SPA.	- Potential for habitat degradation from pollution / sedimentation incident during construction activities; pollution / sediments / sedimented or polluted run-off could enter watercourses that are hydrologically linked to functionally connected habitat. - Long term trend for the wintering population of these species may be impacted through a reduction in foraging habitat quality and quantity. - Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds which reduces species fitness.	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents.	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

Lesser Black-backed Gull (Larus fuscus) [A183]		- Potential for sedimented or polluted run-off to impact the long term population trend of this species by impacting functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds which reduces species fitness.	- Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen		

			barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Common Scoter (Melanitta nigra) [A065] Red-throated Diver (Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Manx Shearwater (Puffinus puffinus) [A013] Little Tern *Sterna albifrons* [A195] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Razorbill (Alca torda) [A200] Guillemot (Uria aalge) [A199]	No significant decline; sufficient number of locations, area and availability of suitable habitat to support the population; sufficient number of locations, area of suitable habitat and available forage biomass to support population target; intensity, frequency, timing and duration of disturbance does not significantly impact on population size and distribution; barriers not significantly impacting populations access to the SPA or other ecologically important sites outside the SPA.	No likely significant effects			
To restore the favourable conservation					

condition of the following:					
Herring Gull (Larus argentatus) [A184]	Long term SPA population trend stable or increasing; sufficient number of locations, area and availability of suitable habitat to support the population; sufficient number of locations, area of suitable habitat and available forage biomass to support population target; intensity, frequency, timing and duration of disturbance not significantly impacting on achievement of targets for population size and spatial distribution; barriers not significantly impacting populations access to the SPA or other ecologically important sites outside the SPA.	- Potential for sedimented or polluted run-off to impact the long term population trend of this species by impacting functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds which reduces species fitness. -	Mitigation measures as above	As above	Yes
Fulmar (Fulmarus glacialis) [A009]		No likely significant effects			
Shag (Phalacrocorax aristotelis) [A018]					
Cormorant (Phalacrocorax carbo) [A017]					
Kittiwake (Rissa tridactyla) [A188]					
Puffin (Fratercula arctica) [A204]					
Overall Conclusion: Integrity test					

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

The North-west Irish Sea SPA is located directly 4.5km east, and 6.8km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.13. Table 8 - North Bull Island SPA

Table 8

North Bull Island SPA (Site code: 004006)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004006.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	- Potential for habitat degradation from sedimented or polluted run-off, impacting he long term population trend of these species by polluting supporting/ functionally linked habitats causing a reduction in foraging	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA
Shelduck *Tadorna tadorna* [A048]	As above				
Teal *Anas crecca* [A052]	As above				
Pintail *Anas acuta* [A054]	As above				
Shoveler *Anas clypeata* [A056]	As above				

Oystercatcher *Haematopus ostralegus* [A130]	As above	habitat quality and quantity. - Disturbance in functionally linked habitat has the potential to cause long term population impacts by increasing stress responses in bird which reduces species fitness.	Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery,	the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	and will not therefore affect its integrity.
Golden Plover *Pluvialis apricaria* [A140]	As above				
Grey Plover *Pluvialis squatarol* [A141]	As above				
Knot *Calidris canutus* [A143]	As above	- Disturbance during construction may affect natural distribution by deterring these species from functionally linked habitats during construction phase from associated noise and vibrations.			
Sanderling *Calidris alba* [A144]	As above				
Dunlin *Calidris alpina* alpin [A149]	As above				
Black-tailed Godwit *Limosa limosa* [A157]	As above				
Curlew *Numenius arquata* [A160]	As above				
Redshank *Tringa tetanus* [A162]	As above				
Turnstone *Arenaria interpres* [A169]	As above				
Black-headed Gull *Chroicocephalus ridibundus* [A179]	As above				

			hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Wetlands [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713 hectare.	No likely significant effects.			

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

North Bull Island SPA is located directly 4.6km southeast, and 23km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.14. **Table 9 – South Dublin Bay and River Tolka SPA**

Table 9

South Dublin Bay and River Tolka Estuary SPA (Site code: 004024)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004024.pdf

		Summary of Appropriate Assessment	

Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	- Potential for sedimented or polluted run-off to impact on the long-term population trend of these species by polluting supporting/ functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress responses in birds which reduces species fitness. - Disturbance during construction may affect natural distribution by	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS).	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Oystercatcher *Haematopus ostralegus* [A130]	As above				
Ringed Plover *Charadrius hiaticula* [A137]	As above				
Knot *Calidris canutus* [A143]					
Dunlin *Calidris alpina* alpin [A149]	As above				
Bar-tailed Godwit *Limosa limosa* [A157]	As above				
Redshank *Tringa tetanus* [A162]	As above				
Black-headed Gull *Chroicocephalus ridibundus* [A179]	As above				

		deterring these species from functionally linked habitats during construction phase from associated noise and vibrations.	- No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during	- Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	

			construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Grey Plover *Pluvialis squatarol* [A141]	Proposed for removal				
Sanderling *Calidris alba* [A144]	Long-term population stable or increasing; and no significant decrease in range, timing or intensity of use of area.	No likely significant effects.			
Roseate Tern *Sterna dougallii* [A192]	No significant decline of breeding population, productivity rate, passage population, breeding colonies, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely breeding and numbers among the post-breeding aggregation.				
Common Tern *Sterna hirundo* [A193]	No significant decline of breeding population, productivity rate, passage population, breeding colonies, roosting areas, available prey biomass and barrier to connectivity; and human activities should occur at levels that do not adversely breeding and numbers among the post-breeding aggregation.				
Arctic Tern *Sterna paradisaea* [A194]	No significant decline of passage population, roosting areas, available prey biomass				

	and barrier to connectivity; and human activities should occur at levels that do not adversely affect numbers among the post-breeding aggregation.				
Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192 hectare.				

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

South Dublin Bay and River Tolka Estuary SPA is located directly 5.5km south, and 22.5km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds, which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.15. **Table 10 – Rogerstown Estuary SPA**

Table 10

Rogerstown Estuary SPA (Site code: 004015)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004015.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Greylag Goose (Anser anser) [A043]	Long-term population stable or increasing; and no significant	- Potential for sedimented or polluted	- Appointment of on-site Ecological Clerk of Works	No in combination effect:	Yes

	decrease in range, timing or intensity of use of area.	run-off to impact the long-term population trend of these species by polluting supporting/ functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress responses in bird which reduces species fitness. - Disturbance during construction may affect the natural distribution by deterring these species from functionally linked habitats during constriction phase from associated noise and vibrations.	(EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on	- Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	As above				
Shelduck *Tadorna tadorna* [A048]	As above				
Shoveler *Anas clypeata* [A056]	As above				
Oystercatcher *Haematopus ostralegus* [A130]	As above				
Ringed Plover *Charadrius hiaticula* [A137]	As above				
Grey Plover *Pluvialis squatarol* [A141]	As above				
Knot *Calidris canutus* [A143]	As above				
Dunlin *Calidris alpina* alpin [A149]	As above				
Black-tailed Godwit *Limosa limosa* [A157]	As above				
Redshank *Tringa tetanus* [A162]	As above				

			prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Wetlands and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 646 hectare.	No likely significant effects.	-	-	
Overall Conclusion: Integrity test					

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

Rogerstown Estuary SPA is located directly 7.5km north, but there was no hydrological connection with the proposed development. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in bird which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.16. **Table 11 – Ireland's Eye SPA**

Table 11

Ireland's Eye SPA (Site code: 004117)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004117.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Cormorant *Phalacrocorax carbo* [A017]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations, area of suitable habitat and available forage biomas; disturbance occurs at levels that do not significantly impact on birds at breeding site or breeding population; and barriers do not significantly impact the population's access	No likely significant effects.			

	to the SPA or other ecologically important sites outside the SPA.				
Herring Gull *Larus argentatus* [A184]	As above	- Potential for sedimented or polluted run-off to impact the long-term population trend of this species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential disturbance in functionally linked habitat causing long term population impacts by increasing stress responses in bird which reduces species fitness. - Disturbance during construction may affect natural distribution by deterring this species from functionally linked habitats during construction phase from associated noise and vibrations. - Stressors induced by pollution and disturbance from the proposed development at functionally linked habitats may reduce the productivity rate of breeding populations. - Potential for sedimented or polluted run-off to	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS)	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

		impact prey biomass available by polluting functionally linked habitats causing a reduction in quality and quantity of prey.	and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific	the integrity of any European sites.	

			measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Kittiwake *Rissa tridactyla* [A188]	As above	No likely significant effects.			
To maintain the favourable conservation condition of the following:					
Guillemot *Uria aalge* [A199]	As above	No likely significant effects.			
Razorbill *Alca torda* [A200]	As above	No likely significant effects.			

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

The Ireland's Eye SPA is located directly 8.6km east, and 10.5km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds, which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.17. **Table 12 – Lambay Island SPA**

Table 12

Lambay Island SPA (Site code: 004069)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004069.pdf

		Summary of Appropriate Assessment	

Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Fulmar *Fulmarus glacialis* [A009]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations, area of suitable habitat and available forage biomas; disturbance occurs at levels that do not significantly impact on birds at breeding site or breeding population; and barriers do not significantly impact the population's access to the SPA or other ecologically important sites outside the SPA.	No likely significant effects			
Cormorant *Phalacrocorax carbo* [A017]	As above	No likely significant effects			
Shag *Phalacrocorax aristotelis* [A018]	As above	No likely significant effects			
Greylag Goose *Anser anser* [A043]	Long-term winter population stable or increasing; winter spatial distribution of suitable	- Potential for sedimented or polluted run-off to impact on the long-term	- Appointment of on-site Ecological Clerk of Works (EcoW) to	No in combination effect:	Yes

	habitat to support population target; disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution; barriers do not significantly impact the winter population's access to the SPA or other ecologically important sites outside the SPA; sufficient number of locations, area of suitable habitat and available forage biomass to support the population target; and sufficient area of utilisable habitat available in ecologically important sites outside the SPA.	population trend of this species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress responses in bird which reduces species fitness. - Disturbance during construction may affect the natural distribution by deterring this species from functionally linked habitats during construction phase from associated noise and vibrations.	implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences,	- Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.
Herring Gull *Larus argentatus* [A184]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; long-term winter population stable or increasing; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations, area of suitable habitat and available forage biomas; disturbance occurs at levels that do not significantly impact on birds at breeding or wintering sites, or the breeding population;	- Potential for sedimented or polluted run-off to impact on the long-term population trend of this species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress			

	sufficient number of locations, area and availability of suitable roosting habitat to support the population target; sufficient area of utilisable habitat available in ecologically important sites outside the SPA; and barriers do not significantly impact the population's access to the SPA or other ecologically important sites outside the SPA.	responses in bird which reduces species fitness. - Disturbance during construction may affect the natural distribution by deterring this species from functionally linked habitats during construction phase from associated noise and vibrations. - Stressors induced by pollution and disturbance from the proposed development at functionally linked habitat may reduce the productivity rate of breeding populations. - Potential for sedimented or polluted run-off to impact prey biomass available by polluting functionally linked habitats causing a reduction in quality and quantity of prey.	(specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration		

			management and replanting).		
Kittiwake *Rissa tridactyla* [A188]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations, area of suitable habitat and available forage biomas; disturbance occurs at levels that do not significantly impact on birds at breeding site or breeding population; and barriers do not significantly impact the population's access to the SPA or other ecologically important sites outside the SPA.	No likely significant effects			
Puffin *Fratercula arctica* [A204]	As above	No likely significant effects			
To maintain the favourable conservation condition of the following:					
Lesser Black-backed Gull *Larus fuscus* [A183]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations, area of suitable habitat and available forage biomas;	- Potential for sedimented or polluted run-off to impact on the long-term population trend of this species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity.	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special

	disturbance occurs at levels that do not significantly impact on birds at breeding site or breeding population; and barriers do not significantly impact the population's access to the SPA or other ecologically important sites outside the SPA.	- Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress responses in bird which reduces species fitness. - Disturbance during construction may affect the natural distribution by deterring this species from functionally linked habitats during construction phase from associated noise and vibrations. - Stressors induced by pollution and disturbance from the proposed development may reduce the productivity rate of breeding populations. - Potential for sedimented or polluted run-off to impact prey biomass available by polluting functionally linked habitats causing a reduction in quality and quantity of prey.	sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the	- Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	Conservation Interests of the SPA and will not therefore affect its integrity.

			approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Guillemot *Uria aalge* [A199]	As above	No likely significant effects			

Razorbill *Alca torda* [A200]	As above	No likely significant effects			

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

Lambay Island SPA is located 13.4km directly northeast, and 22.1km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds, which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.18. Table 13 – Skerries Island SPA

Table 13

Skerries Islands SPA (Site code: 004122)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004122.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Cormorant *Phalacrocorax carbo* [A017]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; long term winter population trend stable or increasing; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations,	No likely significant effects			

	area of suitable habitat and available forage biomas; disturbance occurs at levels that do not significantly impact the achievement of targets or on the breeding population; sufficient number of locations, area and availability of suitable roosting habitat to support the population target; sufficient area of utilisable habitat available in ecologically important sites outside the SPA; and barriers do not significantly impact the population's access to the SPA or other ecologically important sites outside the SPA.				
Shag *Phalacrocorax aristotelis* [A018]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations, area of suitable habitat and available forage biomas; disturbance occurs at levels that do not significantly impact on birds at breeding site or breeding population;	No likely significant effects			

	and barriers do not significantly impact the population's access to the SPA or other ecologically important sites outside the SPA.				
Herring Gull (Larus argentatus) [A184]	Long-term population stable or increasing; productivity rate sufficient to maintain stable or increasing population; long-term winter population stable or increasing; sufficient availability of suitable nesting sites throughout the SPA; sufficient number of locations, area of suitable habitat and available forage biomas; disturbance occurs at levels that do not significantly impact on birds at breeding or wintering sites, or the breeding population; sufficient number of locations, area and availability of suitable roosting habitat to support the population target; sufficient area of utilisable habitat available in ecologically important sites outside the SPA; and barriers do not significantly impact the population's access to the SPA or other ecologically	- Potential for sedimented or polluted run-off to impact the long-term population trend of these species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Disturbance in functionally linked habitat causing long term population impacts by increasing stress responses in bird which reduces species fitness. - Disturbance during construction may affect natural distribution by deterring these species from functionally linked habitats during	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS).	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

	important sites outside the SPA.	construction phase from associated noise and vibrations. - Stressors induced by pollution and disturbance from the proposed development at functionally linked habitats may reduce the productivity rate of breeding populations. - Potential for sedimented or polluted run-off to impact prey biomass available by polluting functionally linked habitats causing a reduction in quality and quantity of prey.	- No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses).	- Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	
To maintain the favourable conservation condition of the following:					
Light-bellied Brent Goose *Branta bernicla hrota* [A046]	Long-term winter population stable or increasing; sufficient number of locations, area, and availability of suitable habitat to support the population target; disturbance	- Potential for sedimented or polluted run-off to impact the long-term population trend of species by polluting			

	occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution; barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA; sufficient number of locations, area of suitable habitat and available forage biomass to support the population target; sufficient number of locations, area and availability of suitable roosting habitat to support the population target; and sufficient area of utilisable habitat available in ecologically important sites outside the SPA.	supporting/ functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress responses in birds which reduces species fitness. - Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during construction phase from associated noise and vibrations.	- Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Purple Sandpiper (Calidris maritima) [A148]	Long-term winter population stable or increasing; sufficient number of locations, area, and availability of suitable habitat to support the population target; disturbance occurs at levels that do not	No likely significant effects			

	significantly impact the achievement of targets for population trend and spatial distribution; barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA; sufficient number of locations, area of suitable habitat and available forage biomass to support the population target; and sufficient number of locations, area and availability of suitable roosting habitat to support the population target.				
Turnstone (Arenaria interpres) [A169]	**As above**	No likely significant effects			

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

Skerries Islands SPA is located directly 18.5km south, and 29km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation

objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds, which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.19. **Table 14 – River Nanny Estuary and Shore SPA**

Table 14

River Nanny Estuary and Shore SPA (Site code: 004158)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004158.pdf					
		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Knot (Calidris canutus) [A143] Herring Gull (Larus argentatus) [A184]	Long term population trend stable or increasing; no significant decrease in range, timing or intensity of use of areas by species other than that occuring from natural patterns of variation.	- Potential for sedimented or polluted run-off to impact the long-term population trend of these species by polluting supporting/ functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

		responses in bird which reduces species fitness. - Disturbance during construction may affect natural distribution by deterring these species from functionally linked habitats during construction phase from associated noise and vibrations.	and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of	to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	

			spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		
Sanderling (Calidris alba) [A144]	As above	No likely significant effects			
Wetland and Waterbirds [A999]	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 230ha, other than that occurring from natural patterns of variation.	No likely significant effects			

Overall Conclusion: Integrity test The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives. Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur. River Nanny Estuary and Shore SPA is located directly 26km south, and 43km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats. There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites. Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds, which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting. Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains. **The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.**					

12.20. **Table 15 – Boyne Estuary SPA**

Table 15 **Boyne Estuary SPA (Site code: 004080)** Key Issues: • Habitat degradation at ex situ feeding sites. • Disturbance and displacement impacts. **Conservation Objectives:** https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004080.pdf					
		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To maintain the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Shelduck (Tadorna tadorna) [A048]	Long term population trend stable or increasing; no significant decrease in the range, timing or intensity of	- Potential for sedimented or polluted run-off to impact the long-term	- Appointment of on-site Ecological Clerk of Works (EcoW) to	No in combination effect:	Yes With the effective implementation of

Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Black-tailed Godwit (Limosa limosa) [A156] Redshank (Tringa totanus) [A162]	use of areas by species, other than that occurring from natural patterns of variation.	population trend of this species by polluting supporting/ functionally linked habitats causing a reduction in foraging habitat quality and quantity. - Potential for disturbance in functionally linked habitat to cause long term population impacts by increasing stress responses in bird which reduces species fitness. - Disturbance during construction may affect their natural distribution by deterring these species from functionally linked habitats during construction phase from associated noise and vibrations.	implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to	- Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites. - Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity	mitigation measures, the proposed scheme will not have any adverse effect on the Special Conservation Interests of the SPA and will not therefore affect its integrity.

			watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise,	of any European sites.	

			temporary lighting, noise and vibration management and replanting).		
Sanderling (Calidris alba) [A144] Turnstone (Arenaria interpres) [A169]		No likely significant effects.			
Little Tern (Sterna albifrons) [A195]	No significant decline in breeding population abundance, productivity rate, distribution, prey biomass available, and barriers to connectivity; human activities should occur at levels that do not adversely affect the breeding little tern population.	No likely significant effects.			
Wetland and Waterbirds [A999]	Permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 594ha, other than that occurring from natural patterns of variation.	No likely significant effects.			
Overall Conclusion: Integrity test The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.					

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

Boyne Estuary SPA is located directly 33km south, and 52km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds, which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.21. **Table 16 – Dundalk Bay SPA**

Table 16

Dundalk Bay SPA (Site code: 004026)

Key Issues:

- Habitat degradation at ex situ feeding sites.
- Disturbance and displacement impacts.

Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004026.pdf

		Summary of Appropriate Assessment			
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	Mitigation Measures	In-combination effects of Plans & Programmes/ Major Projects	Can adverse effects on site integrity be excluded?
To restore the favourable conservation condition of the following:	**The favourable conservation status of a species is achieved when:**				
Great Crested Grebe (Podiceps cristatus) [A005] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048]	Long term population trend stable or increasing; N no significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation.	- Potential for sedimented or polluted run-off to impact the long-term population trend of species by polluting supporting/ functionally linked habitats causing a reduction in foraging	- Appointment of on-site Ecological Clerk of Works (EcoW) to implement mitigation measures. - EcoW will give toolbox talks to all site personnel to highlight any environmental sensitivities and the	No in combination effect: - Plans subject to AA prior to adoption and contain policies and objectives to ensure protection of European sites.	Yes With the effective implementation of mitigation measures, the proposed scheme will not have any adverse effect on the Special

Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Pintail (Anas acuta) [A054] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149]		habitat quality and quantity. - Disturbance in functionally linked habitat causes long term population impacts by increasing stress responses in bird which reduces species fitness. - Disturbance during construction may affect their natural distribution by deterring these species from functionally linked habitats during construction phase from associated noise and vibrations.	boundaries of sensitive habitats. - Mitigation for Open Cut Trenching of the Ward_030, Sluice_010 and Mayne_010 rivers focused on preventing pollution to protected habitats downstream and maintaining normal flow levels. - Works to be carried out in a dry works area with an impermeable barrier laid in the trench to allow construction, (specific measures set out in NIS). - No works on watercourses will be allowed without the relevant Risk Assessment Method Statements (RAMS) and pertinent Health and Safety documents. - Mitigation for working adjacent to watercourses to include silt fences, (specific measures set out in NIS). - Mitigation for accidental pollution focused on prevention	- Proposed major projects and proposed developments along the route, will be subject to planning consent, including AA screening and NIS as required, and it will be necessary to determine that the projects will not result in adverse effects on European sites. - Lack of physical overlap with most major projects. - Proposed scheme alone will not adversely affect the integrity of any European sites, and therefore will not act in combination any other major project to have an adverse effect on the integrity of any European sites.	Conservation Interests of the SPA and will not therefore affect its integrity.

Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Common Gull (Larus canus) [A182] Herring Gull (Larus argentatus) [A184]			and safeguarding the approach to the storage and handling of materials and managing construction vehicles, (specific measures set out in NIS for storage of materials, prevention of spills, fuel delivery, hazardous substances, delivery and dispensing activities, fuel and oil leaks from vehicles and plant, concrete pouring, and reinstatement of land and vegetation to protect water courses). - Mitigation to ensure that there will be no disturbance to QI species within functionally linked habitat during construction (specific measures set out in NIS on noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting).		

Greylag Goose (Anser anser) [A043] Common Scoter (Melanitta nigra) [A065] Black-headed Gull (Chroicocephalus ridibundus) [A179]	As above	No likely significant effects			
Wetland and Waterbirds [A999]	The permanent area occupied by the wetland habitat is stable and not significantly less than the areas of 8136, 4374 and 649 hectares respectively for subtidal, intertidal, and supratidal habitats, other than that occurring from natural patterns of variation.	No likely significant effects			

Overall Conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site in view of its conservation objectives.

Based on the information provided, I am satisfied that adverse effects can be excluded for SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

Dundalk Bay SPA is located directly 50km south, and 78km hydrologically downstream of the proposed development. Due to the intervening distance and the assimilative capacity of the Irish Sea, there is no potential for significant effects from pollution directly into this SPA. Conservation objective

targets for the qualifying interest species and habitats could be undermined during construction through pollution of functionally linked habitats, and disturbance from functionally linked habitats.

There is potential for sedimented or polluted run-off to impact on the long-term population trend of species by polluting functionally linked habitats causing a reduction in foraging habitat quality and quantity. These effects can be effectively prevented by mitigation measures ensuring the protection of watercourses draining to downstream European Sites.

Disturbance in functionally linked habitat could cause long term population impacts by increasing stress responses in birds, which reduces species fitness. Disturbance during construction may affect natural distribution by deterring species from functionally linked habitats during the construction phase from associated noise and vibrations. These effects can be effectively mitigated by measures to ensure that there will be no disturbance to QI species within functionally linked habitat during construction, e.g., noise screen barrier, plant noise, temporary lighting, noise and vibration management and replanting.

Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of this SPA site.

12.22. Appropriate Assessment Conclusions

12.22.1. Having carried out screening for appropriate assessment of the proposed East Meath – North Dublin Grid Upgrade, it was concluded that it may result in significant effects on Malahide Estuary SAC, Baldoyle Bay SAC, Malahide Estuary SPA, Baldoyle SPA, North-West Irish Sea SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Rogerstown Estuary SPA, Ireland's Eye SPA, Lambay Island SPA, Skerries Islands SPA, River Nanny Estuary and Shore SPA, Boyne Estuary SPA, and Dundalk Bay SPA. Consequently, an appropriate assessment was required of the implications of the project on the qualifying features of these sites in light of their conservation objectives.

12.22.2. Following an appropriate assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of these European sites, or any other European site, in view of the sites' Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects.

12.22.3. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of Malahide Estuary SAC, Baldoyle Bay SAC, Malahide Estuary SPA, Baldoyle SPA, North-West Irish Sea SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Rogerstown Estuary SPA, Ireland's Eye SPA, Lambay Island SPA, Skerries Islands SPA, River Nanny Estuary and Shore SPA, Boyne Estuary SPA, and Dundalk Bay SPA.
- Detailed assessment of all aspects of the proposed development that could result in significant effects on European sites within a zone of influence of the proposed scheme.
- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.

- No reasonable scientific doubt as to the absence of adverse effects on the integrity of Malahide Estuary SAC, Baldoyle Bay SAC, Malahide Estuary SPA, Baldoyle SPA, North-West Irish Sea SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Rogerstown Estuary SPA, Ireland's Eye SPA, Lambay Island SPA, Skerries Islands SPA, River Nanny Estuary and Shore SPA, Boyne Estuary SPA, and Dundalk Bay SPA.

13.0 **Overall Conclusion**

13.1. There is a consistent message throughout all levels of policy that there must be a transition to a low carbon and climate resilient society. This requires an increase in renewable energy generation and associated infrastructure, including wind and solar farms, grid reinforcement, storage development and interconnection. National Policy Objective 55 of the National Planning Framework seeks to *"promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050."* Regional Policy Objectives RPO 10.19 to RPO 10.24 of the Regional Spatial & Economic Strategy for the Eastern and Midlands Region seek to ensure the development of the energy networks in a safe and secure way to meet projected demand levels, to meet Government Policy, to ensure a long-term, sustainable and competitive energy future for Ireland, and to enable energy service providers to deliver their statutory function. At a local level, Fingal Development Plan's Policy IUP32 supports *"…the development of the East Meath-North Dublin Grid Upgrade to strengthen the electricity supply network in anticipation of the future development of renewable energy, onshore and offshore."* Objective INF OBJ 50 of the Meath County Development Plan seeks *"…the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner."*

13.2. This is a direct application to the Board for approval of the East Meath – North Dublin Grid Upgrade comprising the laying of 400kV underground cable between Woodland and Belcamp substations over a distance of 37.5km. The purpose of the proposed development is to strengthen the electricity transmission network in Counties Meath, Fingal and Dublin, to provide capacity to connect new demands for electricity to support economic growth in the area, and to assist in meeting the Government target

that up to 80% of Ireland's electricity will be generated from renewable sources by 2030.

13.3. The proposed grid upgrade is assessed both individually and cumulatively within the EIA and Appropriate Assessment with all other relevant plans and projects. The main issues with the proposed development relate mainly to the construction phase, where traffic diversions will be in place and there is potential for adverse impacts on water quality and biodiversity. Adverse noise impacts will also occur at the location of construction and drilling compounds. Construction phase impacts will be mitigated mostly by the measures set out within the CEMP. Hedgerow and tree removal was one of the main concerns of the local authorities. Mature trees cannot be compensated with replacement planting due to the time taken for trees to reach maturation; however, an offsite compensation strategy for hedgerows, treelines and individual trees has been developed. Grasslands will be lost and there are no compensatory options available to offset this impact. Another residual impact relates to the removal of a recorded monument (DU015-001). Archaeological mitigation will be implemented post consent and it should be noted this earthen mound is not visible at ground level.

13.4. In terms of appropriate assessment, the main aspects of the proposed development that could adversely affect the conservation objectives of European sites include habitat degradation via pollution from run-off entering watercourses which are hydrologically linked to the SPA and supporting habitat; species mortality given the works have potential to pollute functionally linked habitat and the SPA itself; and disturbance and displacement impacts on SCI bird species known to forage and/ or roost at inland sites, such as agricultural lands. However, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of any European sites in view of the sites' Conservation Objectives.

13.5. Overall, I consider that the EIAR and NIS provides the Board with adequate information to fully assess the cumulative impacts and in-combination effects of the proposed grid upgrade and any other relevant plans or projects. I am satisfied that these works are acceptable in principle and that the proposal complies with local, regional and national policy with respect to renewable energy and climate resilience. I have assessed the impacts of the proposed development on properties aligning the

route and my conclusion is that impacts associated with lake take or on zoned land can be satisfactorily resolved between the applicant and stakeholders at detailed design stage or by way of condition. On balance, the proposed development will give rise to some adverse impacts, particularly during construction, but these impacts are outweighed by the positive impact the proposal will have on electricity infrastructure in the region, as a critical and necessary piece of infrastructure.

14.0 **Recommendation**

14.1. On the basis of the above assessment, I recommend that the Board should approve the proposed development for the reasons and considerations set out below.

15.0 **Reasons and Considerations**

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

- the nature, scale and extent of the proposed development;
- Policies set out in the Meath County Development Plan, 2021-2027 and the Final County Development Plan, 2023-2029;
- The European Green Deal, 2020;
- RED III (European Renewable Energy Directive (EU/2023/2413));
- EU Action Plan on Grids, November, 2023;
- The National Planning Framework, 2018;
- The National Development Plan, 2021-2030;
- Climate Action and Low Carbon Development (Amendment) Act, 2021;
- Climate Action Plan, 2024 (CAP24), which the proposed development is consistent with;
- National Adaptation Framework, 2018;
- National Energy and Climate Plan for Ireland, 2021–2030;
- Government Policy Statement on Security of Electricity Supply, November 2021;
- Regional Spatial & Economic Strategy for the Eastern & Midlands Region, 2019;

- Documentation submitted with the planning application including the Environmental Impact Assessment Report, the Appropriate Assessment Screening and the Natural Impact Statement;
- The submissions made in connection with the application;
- Mitigation measures proposed for the construction and operational phases;
- The pattern of development in the area;
- The separation distances between the proposed development and existing dwellings or other sensitive receptors;
- The likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development, and the absence of likely significant effects of the proposed development on European sites;
- The report of the Inspector.

Appropriate Assessment: Stage 1

The Board agreed with and adopted the screening assessment and conclusions carried out in the Inspector's report that the only European sites in respect of which the proposed development has the potential to have a significant effect are the Malahide Estuary SAC (Site Code: 000205), Baldoyle Bay SAC (Site Code: 000199), Malahide Estuary SPA (Site Code: 004025), Baldoyle SPA (Site Code: 004016), North-West Irish Sea SPA (Site Code: 004236), North Bull Island SPA (Site Code: 004006), South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024), Rogerstown Estuary SPA (Site Code: 004015), Ireland's Eye SPA (Site Code: 004117), Lambay Island SPA (Site Code: 004069), Skerries Islands SPA (Site Code: 004122), River Nanny Estuary and Shore SPA (Site Code: 004158), Boyne Estuary SPA (Site Code: 004080), and Dundalk Bay SPA (Site Code: 004026).

Appropriate Assessment: Stage 2

The Board considered the Natura Impact Statement, and other associated documentation submitted with the application and appeal, the mitigation measures contained therein, the submissions and observations on file and the Inspector's assessment. The Board completed an appropriate assessment of the implications of

the proposed development on the aforementioned European sites 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 appropriate assessment, the Board considered, in particular, the following:

(a) the likely direct and indirect impacts arising from the development and the proposed development, both individually, when taken together and in combination with other plans or projects,

(b) the mitigation measures, which are included as part of the current proposal, and

(c) the Conservation Objectives for the European sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European sites, having regard to the sites' 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 Sites, in view of the sites' Conservation Objectives.

Environmental Impact Assessment:

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

(a) the nature, scale and extent of the proposed development,

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

(c) the screening for appropriate assessment and associated documentation submitted in support of the application,

(d) the submissions from the planning authorities, the observers and prescribed bodies in the course of the application, and

(e) the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives

to the proposed development, and identifies and describes adequately the direct, indirect, residual and cumulative effects of the proposed development on the environment. The Board agreed with the examination, as 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.

Reasoned Conclusion and Significant Effects

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:

- Short-term adverse impacts arising from the construction phase on **Population and Human Health** in terms of residential amenity from traffic diversions on the public road, and on the operation of businesses and farm enterprises. Construction phase impacts will be mitigated by standard good construction practices. Diversions will be temporary in nature and appropriate traffic management arrangements will be put in place. A community liaison officer will be engaged as a point of contact during construction.
- Adverse impacts on **Biodiversity** from permanent habitat loss of hedgerows and treelines until new species-rich hedgerows and treelines are established, and on mature trees that cannot be compensated with replacement planting due to the time taken for trees to reach maturation. An offsite compensation strategy for hedgerows, treelines and individual trees has been developed.
- Adverse impacts on two parcels of **Land** due to permanent land take and temporary disturbance and long-term damage to soil structure. The overall residual impact on the agronomy and equine study area is assessed as not significant.
- Potential for adverse impacts on **Water** in terms of groundwater flow and quality at unknown private water supplies and at Ground Water Dependent Terrestrial Ecosystems. Risks to groundwater quality and associated receptors will be mitigated with the adoption of a CEMP.
- Potential for impacts to surface water quality from sediment runoff, spillages, discharges or physical modification. A Surface Water Management Plan details

control and mitigation measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment during construction.

- Adverse impact on **Air** in terms of residual noise impacts occurring along four routes where traffic will be diverted. These impacts are expected to last for less than one year. Nearby dwellings will also experience adverse noise impacts from HDD works at the M2 and M3 Motorway crossings and this will be appropriately mitigated by temporary enclosures / barriers.
- Adverse impacts on **Cultural Heritage** in terms of archaeology due to removal of recorded monument AY_47. Archaeological excavation will take place, informed by archaeological geophysical survey and archaeological test excavation, where preservation in-situ is not feasible. The residual significance is assessed as moderate.
- Adverse impacts on **Material Assets** in terms of traffic and transport from road closures and 21-22 minute diversion at the R156 Regional Road, L1010 Nuttstown Road, and Priestown Road in County Meath. Diversions will be signposted from the affected regional road to alternative roads of similar or better standard.
- Adverse impacts on traffic and transport at the M3 Motorway Junction 5 – northern on / off slips in terms of pedestrian amenity and road safety. Any effects at this location will be mitigated by the measures outlined in the Construction Traffic Management Plan.
- Positive impacts on material assets through the improvement of the electricity infrastructure in the region once the proposed development is operational.
- Adverse impact on the **Landscape** and visual through the removal of 1,174 trees, representing 12% of the total trees in the study area. An arboriculturalist will be appointed to develop a site-specific Arboricultural Method Statement and a Tree Protection Plan will also be prepared. Hedgerows removed for the temporary works areas will be replanted with a new species-rich hedgerow.

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, both 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.

Proper Planning and Sustainable Development:

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with European, National, Regional and Local planning and related policy, would be consistent with the provision of the Climate Action Plan 2024 and would make a positive contribution towards Ireland's renewable energy and security of energy supply requirements. Furthermore, the proposed development would not seriously injure the visual and residential amenities of the area, nor have an unacceptable impact on the character of the landscape or archaeological heritage, would not have a significant impact on ecology, and would be acceptable in terms of traffic safety. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Conditions

1.	The development shall be carried out 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 interests of clarity.
2.	The horizontal and vertical alignment of the proposed electricity infrastructure shall be agreed and co-ordinated with statutory undertakers/ landowners to avoid conflicts prior to commencement of development. The final route of the proposed cable shall be notified to the planning authorities for written agreement prior to commencement of any construction works on site.

	Reason: In the interests of clarity.
3.	All of the environmental, construction and ecological mitigation measures set out in the Environmental Impact Statement and Natura Impact Statement accompanying the application to the Planning Authority and other particulars submitted with the application and the appeal to the Board shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this order. **Reason:** In the interest of clarity and the protection of the environment during the construction and operation phases of the development.
4.	Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authorities for such works in respect of both the construction and operation phases of the proposed development. **Reason**: In the interest of environmental protection and public health.
5.	The developer shall comply with the transportation requirements of the planning authorities and other relevant bodies for such works and services as appropriate. Such requirements shall require provision of a detailed Traffic Management Plan and shall include the following details: a. Consultation with TII and all private and public companies and road authorities. b. Details of haulage routes, control measures for abnormally sized vehicles and an Abnormal Load Assessment. c. A road condition survey of roads and bridges along the haul route to be carried out at the developer's expense and to the satisfaction of the planning authority. d. Detailed arrangements for construction damage to be made good by the developer to the satisfaction of the planning authority. e. Detailed arrangements for temporary traffic management/controls, and protocols to keep residents informed,

	f. Construction Route Signage, g. Road Opening Licences that will be required, h. Arrangements for the phasing of the development, i. Detailed design of the site entrances with provision of sightlines to the satisfaction of the planning authority and recessed entrance gate. **Reason**: In the interest of traffic and pedestrian safety.
6.	All road surfaces, culverts, watercourses, verges, and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authorities at the developer's expense. Prior to commencement of development, a road condition survey shall be carried out to provide a basis for reinstatement works. Details in this regard shall be submitted to, and agreed in writing with, the planning authorities prior to commencement of development. **Reason**: In order to protect the road network.
7.	Details of all external finishes including materials, colours and textures of the proposed 400kV GIS hall at Belcamp Substation shall be submitted prior to commencement of development, for the written agreement of the planning authority. **Reason:** In the interests of visual amenity and quality of design.
8.	The applicant shall appoint a suitably qualified ecologist to monitor and ensure that all avoidance/mitigation measures relating to the protection of flora and fauna are carried out in accordance with best ecological practice and to liaise with consultants, the site contractor, the NPWS and Inland Fisheries Ireland. The ecologist shall advise the applicant in relation to habitat management and protection and oversee the works on site associated with hedgerow removal, drain diversion and the provision of new planting, including hedgerow. Planting locations, species, timescale, replacement planting shall be detailed, together with options for agreeing measures which accord with the Local Biodiversity Action Plans for Meath

	and Fingal Local Authorities and the All-Ireland Pollinator Plan. A report on the implementation of these measures shall be submitted to the planning authorities and retained on file as a matter of public record. **Reason:** To protect the environmental and natural heritage of the area.
9.	Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and agreed in writing with the planning authority, generally in accordance with the Outline Construction Methodology submitted with the application. The CEMP shall incorporate the following: (a) a detailed plan for the construction phase incorporating, inter alia, construction programme, supervisory measures, noise, dust and surface water management measures including appointment of a site noise liaison officer, construction hours and the management, transport and disposal of construction waste. (b) a comprehensive programme for the implementation of all monitoring commitments made in the application and supporting documentation during the construction period; (c) an Invasive Species Eradication and Management Strategy for the site, to include monitoring post completion of works; (d) an emergency response plan; and (e) proposals in relation to public information and communication. A record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan shall be kept for inspection by the planning authority, **Reason:** In the interest of environmental protection and orderly development.
10.	The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out pre-development

	archaeological testing in areas of proposed ground disturbance and to submit an archaeological impact assessment report for the written agreement of the planning authorities, following consultation with the National Monuments Service, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/ site clearance/dredging/underwater works and/or construction works. The report shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record [archaeological excavation] and/or monitoring may be required. Any further archaeological mitigation requirements specified by the planning authorities, following consultation with the National Monuments Service, shall be complied with by the developer. No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the planning authorities. The planning authorities and the National Monuments Service shall be furnished with a final archaeological report describing the results of any subsequent archaeological investigative works and/or monitoring following the completion of all archaeological work on site and the completion of any necessary post-excavation work. All resulting and associated archaeological costs shall be borne by the developer. **Reason:** To ensure the continued preservation, either in situ or by record, of places, caves, sites, features or other objects of archaeological interest.
11.	The Construction Environmental Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as appropriate following consultation with NMS. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity. **Reason:** To ensure the continued preservation, either in situ or by record, of places, caves, sites, features or other objects of archaeological interest.

12.	All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 13 of EIAR included in application documents shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this permission. The planning authorities and the National Monuments Service shall be furnished with a final archaeological report describing the results of any archaeological investigative work/ excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer. **Reason:** To ensure the continued preservation, either in situ or by record, of places, caves, sites, features or other objects of archaeological interest.
13.	Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1300 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority. **Reason**: In order to safeguard the amenities of property in the vicinity.
14.	Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site upon cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination. **Reason:** To ensure satisfactory reinstatement of the site.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has

influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Donal Donnelly

Senior Planning Inspector

12th December 2024