An Bord Pleanála

Inspector's Report

ABP-317304-23

Development	Alterations to a 110kV overhead power line (application accompanied by an EIAR and NIS)
Location	Intel Leixlip Site, Collinstown, Blakestown, Kellystown, Collinstown Industrial Park, Leixlip, Co Kildare
Planning Authority	Kildare County Council
Planning Authority Reg. Ref.	22/1417
Applicant(s)	Intel Ireland Ltd.
Type of Application	Permission (s. 34)
Planning Authority Decision	Grant Permission with Conditions
Type of Appeal	Third Party (s. 37)
Appellant(s)	Killross Properties Ltd.
Observer(s)	Thomas Reid
Date of Site Inspection(s)	10th May 2024 21st June 2024
Inspector	Philip Maguire

Contents

1.0 Site Location and Description

1.1. The appeal site has a stated area of 8.36ha and forms part of the Intel Campus at Collinstown Industrial Park, Leixlip, Co. Kildare, which has an overall area of some 160ha. The industrial park is situated on the northern side of the R148, northwest of the town centre, and is linked to the M4 Motorway at Junction 6 via the R449. It is roughly bounded by the Dublin-Sligo railway line and Royal Canal to the east and Kellystown Lane (L1014) to the west. The northern boundary of the industrial park is elevated above the Rye Water which forms part of a designated European site.

1.2. Given its linear form, the appeal site also includes some agricultural lands to the north of the Rye Water and undeveloped land to the east, close to Leixlip (Louisa Bridge) rail station and a number of protected structures, including the former station house (B11-125), Louisa Bridge (B11-127), hexagonal well (B11-128) and bath (B11-129), aqueduct (B11-130) and collector's house (B06-15). Part of the site also traverses the eastern entrance to the Intel Campus, the R148 and the car park of an adjacent Lidl.

1.3. The appeal site currently consists of 4 no. double circuit steel lattice transmission towers (T29, T30, T31 and T32) and associated electrical conductors (OHL). Tower T29 is located within the Lidl supermarket car park. Towers T30 and T31 are located on the Intel Campus lands and tower T32 is located on an elevated ridge of agricultural land north of the Rye Water valley. The area in the vicinity of tower T32 is agricultural whereas retail and leisure are the predominant land uses in the vicinity of tower T29.

1.4. Building works are ongoing and nearing completion to the western side of the industrial park with the construction of FAB 34, the newest manufacturing facility on the Intel Campus. The route of the proposed towers and OHL is generally to the eastern, less developed, side of the campus where industrial, agricultural and recreational land uses coalesce. These boundaries are generally defined by mature trees and hedgerow with a natural enclosure formed by the elevated berm to the east of some water tanks.

2.0 Proposed Development

2.1. Planning permission is sought for the alteration and realignment of a c. 1.1km section of existing double circuit overhead electricity power line, which supports the existing Maynooth-Ryebrook and Dunfirth-Kinnegad-Rinnawade 110kV overhead line circuits.

2.2. The proposed development comprises of the:

(1) Diversion of a section of the existing 110kV double circuit overhead line to the north of the River Rye, along the eastern edge of Intel, linking back into the existing overhead line at the car park of the Lidl supermarket, directly south of the R148.

(2) Decommissioning and removal of 4 no. existing double circuit steel lattice towers and associated electrical conductors from the site.

(3) Installation of 7 no. new double circuit steel lattice towers – 2 no. of these will be replacement towers (towers T1 & T7). The towers will range in height from c. 20.75m to c. 39.75m above ground level and will support six electrical conductors.

(4) Ancillary site development, preparation and reinstatement works, including access, landscaping and connection to existing services and utilities etc.

2.3. The planning application consists of a variation to a previously permitted development on an activity for which a licence under Part IV of the Environmental Protection Agency Act 1992 (as amended by the Protection of the Environment Act, 2003) is required, and the site is a site to which the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) applies.

2.4. An Environmental Impact Assessment Report (EIAR), including Non-Technical Summary (NTS), prepared by EIS (November 2022) and a Natura Impact Statement (NIS) prepared by Scott Cawley (November 2022) accompany this application.

2.5. In addition to the EIAR and NIS, application documents include:

- Planning Report (AOS Planning, November 2022)
- Appropriate Assessment Screening Report (Scott Cawley, November 2022)
- Tree Survey Report (Independent Tree Surveys, July 2022)
- Site Specific Flood Risk Assessment (AWN Consulting, November 2022)
- Outline Construction Environmental Management Plan (EIS, November 2022)

2.6. The applicant's further information response included additional information to clarify and supplement information contained within the EIAR and NIS, including:

- Illustrations of the extent of tree cutting/removal along the SAC boundary
- Air Quality letter/technical note (AWN Consulting, February 2023)

- Bird diverter specifications
- Bird Monitoring Plan (Scott Cawley, March 2023)
- Uisce Éireann Confirmation of Feasibility letter
- Panoramic Photomontages
- Conservation Assessment (Kelly and Cogan Architects)
- Weston Airdrome letter

3.0 Planning Authority Decision

3.1. Decision

3.1.1. Permission was granted on 15th May 2024, subject to 20 no. conditions.

3.1.2. Standard planning conditions include:

Condition 2 – requires the implementation of all mitigation and ecological management measures included in the EIAR and NIS during construction and operational phases. I note that Condition 9 also requires the implementation of all mitigation measures detailed in the EIAR and NIS for both the construction and operation phase. It effectively duplicates Condition 2 and appears to have been included erroneously.

Condition 3 – requires all construction activities to comply with the CEMP, which shall be updated and agreed in writing with the planning authority prior to commencement.

Condition 4 – requires a Construction and Demolition RWMP.

Condition 5 – sets out the construction noise limits.

Condition 6 – set out the operational noise limits. For the reasons set out in Table NV1 and paragraph 9.8.75 and having regard to the nature of the proposed development, I do not consider it necessary to condition any operational noise limits.

Condition 10 – relates to archaeological monitoring.

Condition 13 – relates to surface water runoff.

3.1.3. Condition 7 requires the use of “Best Practicable Means” to prevent/minimise noise and dust emissions during construction and operational phases through proper

maintenance, use and operation etc. of machinery. This is generally addressed in Conditions 2 (EIAR/NIS) and 3 (CEMP) which relate to relevant mitigation measures.

3.1.4. Condition 8 requires the submission of a Construction Phase Surface Water Management Plan, in accordance with IFI guidance, for agreement prior to commencement. I note that this is also considered in the EIAR and Outline CEMP.

3.1.5. Condition 11 relates to construction access and refers to the Outline CEMP. This appears to be addressed in Condition 3, albeit referred to as 'the CEMP'. Also, in terms of construction traffic, Condition 12 prohibits access via Kellystown Lane, Condition 15 requires the appointment of a mobility manager and preparation etc. of a Construction Mobility Management Plan, Condition 16 requires swept path analysis in relation to construction traffic, and Condition 19, relating to a Construction Management Plan, requires details of *inter alia* haul routes to and from the site and excludes movement through Leixlip and Maynooth. These issues generally overlap and could be addressed under CEMP/CTMP, although I do not consider a mobility management plan particularly relevant given the nature of the proposed development.

3.1.6. I also note that Condition 14 requires details relating to the appointment of project supervisors for the design process (PSDP) and construction stage (PSCS) prior to commencement. This relates to a separate statutory code (i.e., the Safety Health and Welfare (Construction Regulations), 2013) and requires no further consideration here.

3.2. **Planning Authority Reports**

3.2.1. The Planning Officer's Report (30/01/23) can be summarised as follows:

Principle of Development

- Considers that the principle of development is established as it relates to the realignment of and an existing line and is not therefore a 'non-conforming' use.
- Considers the principle of development acceptable having regard to national, regional and local planning policy, subject to site specific assessment.

Appropriate Assessment

- Notes that the proposal involves works within the Rye Water Valley/Carton SAC and considers that further information as per the NPWS submission.

Environmental Impact Assessment

- Notes that the applicant submitted the EIAR on a 'precautionary basis' having regard to the characteristics, location and potential impacts.

Landscape, Visual and Built Heritage

- Notes that the Intel Campus is located within the Rye Water valley and is partly screened by the valley's gradient, which has mitigated landscape impacts of recent development to the west of the campus.
- Notes the recommendation of the Architectural Conservation Officer (ACO), but states that this must be considered against the positive presumption of the development with respect to the zoning and the importance of the Intel Campus in delivering employment and economic development.
- Notes the commentary in the EIAR in respect of built heritage impacts.
- Considers that regard must be had to the existing industrial backdrop and to the fact that the proposal will involve the removal and realignment of a 110kV OHL.
- Considers that the proposal does not materially contravene objectives AH O20, AH O21 or AH O32 (stated as 'Objective LR O32') but states that the extent to which it has a negative impact on the setting of the protected structures has not been fully demonstrated and considers that further information is required.

Impact on Residential/Rural Amenity

- Considers that the proposal is reasonable subject to the implementation of the EIAR mitigation and an agreed CEMP in respect of noise, dust and vibration.

Water Services and Surface Water Management

- Notes the Water Services and Irish Water responses, the latter seeking further information in relation to a 450mm wastewater sewer.

Flood Risk Assessment

- States that tower T6 is located in an area identified as Flood Zone A and B but notes that the Flood Risk Assessment concludes that the design of tower T6 has taken into account the potential flood water heights and that there will be no residual impacts. Notes the Water Services Section had no flood risk concerns.

Roads, Traffic and Mobility Management

- Notes that a CEMP was submitted to address the potential impact associated with construction traffic and also notes that the Roads Section had no objections.

Control of Major Accidents

- Notes that the Intel Campus is a designated Seveso site, and the HSA had not advised against granting permission.

Conclusion

- Concludes that the principle of the proposal is acceptable at this location but states that further information is required in relation to appropriate assessment (AA), landscape impacts and clarification regarding the content of the EIAR.

3.2.2. The Planning Officer's Report (15/05/23), incorporating EIA and AA, can be summarised as follows:

Outline and Response to Further Information

- Regarding concerns raised by the NPWS in relation to the impacts of the proposal on petrifying springs and the hydrological regime due to dewatering, it notes the clarifications provided, particularly regarding the naming conventions in the EIAR and NIS and accepts the response. It also states that the NPWS are satisfied with the response and have no further concerns subject to mitigation.
- In relation to concerns raised by the NPWS regarding tree removal, it notes that the applicant has indicated that there is minimal requirement for tree removal generally and highlighted the results of predicted nitrogen deposition following air dispersal modelling. It also states that the NPWS are satisfied with the response and have no further concerns subject to mitigation.
- Regarding concerns raised by the NPWS in relation to SCI bird species recorded at the subject site, it notes the applicant's position that the impact on these populations appears to be minimal. It also states that the NPWS are satisfied with the response and have no further concerns subject to mitigation.
- In relation to concerns raised by the NPWS regarding bird migration, it notes that the applicant is relying on devices to mitigate the risk of bird collision and considers these proposals acceptable.

- Regarding concerns raised by the NPWS in relation to badger setts, it notes that the applicant has indicated that the NRA guidelines (2005) for the treatment of badger setts prior to the construction of national roads schemes will be adhered to. It also notes that the NPWS has no further objection in this regard.
- In relation to concerns raised by the NPWS regarding bird collision, it notes that the applicant's proposed mitigation measures including bird diverters and site monitoring. It also notes that the NPWS has no further objection in this regard.
- Regarding concerns raised by the NPWS in relation to wintering birds, it notes that the applicant has stated that a single golden plover was recorded on the wider lands but not in the vicinity of the OHL, proposed or existing, and potential impacts are ruled out. It also notes that the NPWS has no further objection in this regard.
- In relation to concerns raised by Irish Water regarding the exact location of a 450mm wastewater sewer, it notes that Uisce Éireann has issued a Confirmation of Feasibility (CoF) and has no further objection subject to condition.
- Regarding concerns in relation to the assessment of alternative route options, particularly underground option 'U2' and overground options 'O2a' and 'O2b' or a hybrid approach along these lines, it notes that EirGrid's methodology for an energy transmission project has been used and this has taken local circumstances into account. It accepts that a sound rationale for discounting 'U2' is provided on this basis whereas it notes that the response in respect of other stated options is brief and relies on the information contained in the EIAR. In relation to the undergrounding option to the west of the Intel Campus it notes that this does not form part of the assessment due to the environmental risks and reasonableness of this option. It concludes that sufficient information and justification has been submitted in relation to route option selection.
- In relation to concerns regarding visual impacts and impacts on built heritage, it notes that the applicant submitted additional panoramic photomontages and considers that the full extent of the impact on views to and from sensitive receptors, including protected structures, is fully shown. It also notes the comments from the ACO in respect of the adverse impacts of towers T4 and T5 on the special setting of the Leixlip Spa and Hexagonal Pool, and the amenity value of lands associated with Louisa Bridge, Rye Water Aqueduct, the Station House and Collectors House.

- Finally, it notes a response in respect of each of the public submissions on file.

Environmental Impact Assessment

- Regarding Chapter 3, Assessment of Alternatives, it considers that the analysis is robust, and the further information response clarified the rationale behind the best performing outcome.
- In relation to Chapter 5, Population and Human Health, it considers that the EIAR has adequately addressed the potential impacts on population and human health. It notes that the Environment and Roads sections have no objections in this regard.
- Regarding Chapter 6, Biodiversity, it states that the EIAR has adequately considered the impact of the proposal on the receiving ecological environment and notes that mitigation and monitoring measures have been provided. It notes the NPWS have no further objection and the Heritage Officer recommended a grant of permission. It also notes that residual impacts, including loss of habitat, sections of broadleaf woodland, and those on mammals and birds, are limited to very minor.
- In relation to Chapter 7, Land, Soils, Geology and Hydrogeology, it states that the impact on geology and soils within the site and immediate environs is adequately assessed, and having regard to the mitigation measures, cumulative impacts and residual impacts identified, it considers that the proposal will not result in a significant adverse impact on the environment in terms of soils, geology or hydrogeology. It also notes that the Environment Section have no objections.
- Regarding Chapter 8, Water and Hydrology, it notes that the Environment Section and Irish Water have no objections subject to condition. It also notes that Inland Fisheries Ireland did not comment. It states that there is no objection subject to conditions and mitigation.
- In relation to Chapter 9, Air Quality and Climate, it considers that the EIAR has adequately addressed the potential impacts on air quality and notes that the Environment Section has not raised any concerns. It also notes that the NPWS have confirmed that it has no further objections subject to the mitigation measures.
- Regarding to Chapter 10, Noise and Vibration, it considers that the EIAR has adequately addressed the potential impacts on noise and vibration.

- In relation to Chapter 11, Landscape and Visual Impact, it notes that the proposal will be visible in the local area, forming a notable feature on the landscape with greater visual impact than the OHL it is replacing as it is closer to the aqueduct and Leixlip Spa. It considers this moderately negative visual impact to be acceptable given the industrial backdrop and topography within this valley area.
- Regarding Chapter 12, Material Assets, it notes that Uisce Éireann have no objection subject to condition.
- In relation to Chapter 13, Waste Management, it notes that the Environment Section have no objection subject to conditions and mitigation measures.
- Regarding Chapter 14, Built Heritage, notes the comments of the ACO, who recommended refusal, and considers this further under 'Planning Issues'.
- In relation to Chapter 15, Archaeology, it notes that the DAU have no objection to the development subject to condition.
- Regarding Chapter 16, Accident and Disaster Risks, it notes that the application was referred to the EPA and DAU for comment and neither raised any objections.
- It considers the information contained in Chapter 17, Interactions and Cumulative Effects, to be acceptable and states that there are no further objections to the proposal subject to mitigation and conditions.

Appropriate Assessment

- In terms of Stage 1 Screening, it considers there is potential likely significant effects from an unmitigated development on the Rye Water Valley/Carton SAC, North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay/River Tolka SPA.
- In terms of Stage 2 appropriate assessment, it notes the potential impacts outlined in the NIS including, habitat fragmentation and habitat degradation, and accepts that matters in relation to hydrogeological impacts generally, and on the petrifying springs specifically, were clarified under further information.
- It considers the mitigation measures outlined in the NIS including measures to protect both ground and surface water quality during construction, in addition to inspection, maintenance and monitoring controls will ensure that the receiving

environment is protected during construction and operation. It notes that a site-specific Outline CEMP has been provided in this regard.

- It notes the 'in combination' effects outlined in the NIS and concludes that the proposal, subject to the mitigation measures outlined in the NIS, will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects.

Planning Issues (other than those previously noted)

- Regarding principle of development, it notes that the proposal will not create additional employment itself but will facilitate the continued operation and growth of employment creating opportunities on the Intel Campus.
- In relation to landscape, visual impact and built heritage, it considers the further information response and notes that there is a view of the proposed development from the Leixlip Spa. It notes the concerns raised by the ACO and the comments of the built heritage consultant in the EIAR, and accepts that there will be a negative impact on the setting, however the Planning Officer does not accept that the severity of this impact will be such that it merits a refusal in this instance. It does not consider that the protected structures designation was intended to sterilise the adjacent industrial zoning and therefore considers that the proposal does not contravene objectives AH O21 and AH O32.
- In relation to wastewater management, it notes Uisce Éireann have no further objection subject to a condition in relation to the location of a 450mm sewer.
- In relation to the third-party submission, it states that the issues raised in relation to impacts on springs and on bird species have been considered in the EIA and AA and considers that the further information clarifies the detail required.

Recommendation and Conclusion

- It concludes that the proposal would be in accordance with proper planning and sustainable development, subject to conditions, including those in relation to mitigation (EIAR and NIS) and recommends that permission be granted.

3.2.3. Other Technical Reports

- Conservation (23/01/23): Refusal recommended.

- Environment (20/03/23): No objection subject to condition.
- Fire (31/03/23): No objection.
- Heritage (13/04/23): No objection.
- Roads (27/04/23): No objection subject to condition.
- Water Services (27/03/23): No objection subject to condition.

3.3. Prescribed Bodies

- DAU-NMS (10/01/23): No objection subject to condition.
- DAU-NPWS (11/05/23): No objection subject to condition.
- EPA (20/12/22): No objection.
- HSA (06/12/22): No objection.
- IAA (07/12/22): Further information suggested.
- NRDO (28/03/23): No objection.
- TII (24/03/23): No objection.
- Uisce Éireann (31/03/23): No objection.

3.4. Third Party Observations

3.4.1. A total of 4 no. observations received from 3 no. parties. The main issues are similar to the grounds of appeal and observations. They can be summarised as follows:

Killross Properties Ltd.

- States that plans and particulars submitted with the application do not comply with the Planning and Development Regulations 2001, as amended.
- Suggests that there is perceived bias in respect of the local authority's letter of consent in respect of making the planning application.
- Submits that there is failure to supply information on the alternative routes studied by the developer in respect of their obligations under the EIA Directive.

- Submits that there is a failure to carry out a proper appropriate assessment screening, particularly in respect of SCI bird species for a number of SPAs along the east coast.
- Submits that there is a failure to conduct a proper appropriate assessment, particularly with regard to the impacts on petrifying springs and molluscs.
- States that a full environmental impact assessment cannot be undertaken on the basis of the information submitted, with particular concerns relating to alternative route options, collision risks for birds and bats, extensive tree removal, noise impacts and cumulative impacts, including the solar farm on adjacent lands.
- Suggests that the proposal is contrary to Section 28 planning guidelines on flood risk management, with particular concerns over the location of proposed tower T6.
- Suggests that there is an accident risk, with particular concerns relating to a potential explosion given the proximity of high voltage lines and chemical storage, and accidental emissions impacting on human beings, habitat and species.
- Raises general concerns regarding the further information submission with specific concerns in relation to the hydrogeological impacts of dewatering on petrifying springs, impacts of tree removal on air pollution within the SAC, foraging ranges of SCI bird species from SPAs, impacts on badgers and wintering birds, consideration of the alternative routes, photomontages and the applicant's response to submission made, including that of Killross Properties Ltd.

Thomas Reid

- Objects to the proposed development.
- Notes that the site falls within the Rye Water/Carton SAC.
- Submits that the Habitats and Seveso Directives overlap and states that all environmental assessments associated with the application are null and void, and therefore suggests that the application is invalid.
- States that no consent was provided for the alternative western route across the Reid property and therefore questions the validity of the EIAR and all other assessments including the NIS and AA.
- States that the power line should remain *in situ.*

- Suggests that there is potential bias in respect of Kildare County Council.
- Raises concerns about previous legal proceedings before the High Court.
- States that the application does not comply with various EU directives or the Aarhus Convention.
- Submits that the application should be refused on the basis of on inadequate EIAR, potential conflicts of interest and on environmental justice grounds.

Peter Sweetman & Associates

- Notes that Kildare County Council has at least four distinct legal tasks to deal with.
- Firstly, assess the merits of the proposal in accordance the Planning Act and Regulations, ensuring it is in accordance with the proper planning and sustainable development of the area.
- Secondly, form and record a view as to the environmental impacts pursuant to the EIA Directive. Here it is suggested that the applicant is attempting to circumvent their obligations under the EIA Directive.
- Thirdly, it is stated that Kildare County Council is the competent authority having responsibilities under the Habitats Directive and sets out case law in this regard.
- Lastly, it states that the proposal must be assessed for compliance with the requirements of the Water Framework Directive. Here it suggests that the applicant has provided scant information in this regard.

4.0 **Planning History**

4.1. Relevant to appeal site boundary:

Maynooth-Rinawade 110kV OHL

4.1.1. PA refs. 01/205, 01/206, 01/207, 01/208, 01/209 and 01/210 – in May 2001, permission was granted for various alterations to the Maynooth-Rinawade OHL.

Maynooth-Ryebrook 110kV OHL

4.1.2. PA ref. 90/1275 – in January 1991, permission was granted for a 110kV line from the existing 110kV Maynooth-Fingal OHL to the proposed Ryebrook 110kV substation.

4.1.3. ABP ref. RL3080 – in April 2014, the Board declared that the renewing and altering of the existing Maynooth-Ryebrook 110kV OHL line is development and exempted development. Having regard to the relatively minor excavations involved in providing replacement towers at T31 and 32, with one being on an existing area of hardstanding and the other on grassland with both outside the Rye Water Valley/Carton cSAC, the Board concluded that there was no reason to suggest the minor works would have any significant effects on the cSAC in the light of its qualifying interests and that a Stage 2 AA would not be required. The same issues were determined by the Board under ref. RL3081, and these were considered in conjunction with that under ABP ref. RL3113.

4.1.4. PA ref. 16/523 – in December 2016, the Board upheld the decision of the planning authority and granted permission (ABP ref. PL09.247028) for the replacement of an existing triple circuit branch mast with 3 masts and all ancillary site works etc.

Fab 34 (northwest of Intel Campus)

4.1.5. PA ref. 19/91 – in November 2019, the Board upheld the decision of the planning authority and granted permission (ABP-304672-19) for an extended and revised manufacturing facility with a parapet height of 31m and incorporating roof stacks and plant equipment ranging from 6m to 25m above parapet level. This involved revisions to the previously permitted facility under ABP ref. PL09.248582 (PA ref. 16/1229) which itself amended the parent permission under ref. PL09.241071 (PA ref. 12/435). The revisions included 8 no. water tanks (c. Ø38m, 10m high) and pump house to the eastern boundary. This permission was amended in June 2023 (PA ref. 23/227).

Solar Farm (due north of Intel Campus)

4.1.6. PA ref. 16/848 – in April 2017, the planning authority granted permission for a solar PV panel array with an export capacity of 10MW comprising c. 38,600 PV panels within a site area of 16.91ha etc. An application to amend the design of the permitted development was granted in July 2022 under PA ref. 22/6. Condition 3(b) provides for a 10-year duration from the date of the parent permission i.e., it expires in April 2027.

Leixlip Amenities Centre (southwest of appeal site)

4.1.7. PA ref. 22/51 – in December 2022, the planning authority granted permission for a two-storey extension to the existing Leixlip Amenities Centre building with revisions to the car parking layout including entrance, circulation route and parking etc.

4.1.8. PA ref. 19/964 – in December 2019, the planning authority granted permission for a temporary car park with access of existing car park to the west of Leixlip Amenities Centre. Condition 2 limits the permission to a 5-year period from the date of grant.

FAB 24 (due west of appeal site)

4.1.9. PA ref. 05/296 – in November 2005, the Board upheld the decision of the planning authority and granted permission under ABP ref. PL 09.213161 for a factory extension. This proposal included the undergrounding of the OHL within the Intel Campus.

4.2. Adjacent sites:

DART+ West

4.2.1. ABP-314232-22 – in July 2024, the Board granted a Railway Order (DART+ West Electrified Heavy Rail Order) for the Dublin city to Maynooth and M3 Parkway lines.

Louisa Park

4.2.2. PA ref. 20/108 – in April 2022, the Board overturned a planning authority decision and permitted (ABP-309929-21) a 50-unit apartment scheme north of Louisa Manor.

4.3. Appendix 3 of the AOS Planning Report summarises the planning history at Intel and the wider landholding between March 1985 and August 2022. The following are noted:

Works to rear of FAB 14 (c. 700m northwest)

4.3.1. PA ref. 19/1054 – in June 2020, the planning authority granted permission for the removal of earthen mounds to the rear of the Intel Campus and construction of support buildings/structures and plant infrastructure in the vacated area. This permission was amended in August 2022 and again in July 2024 under PA refs. 22/491 and 24/177.

Kellystown 220kV Substation (c. 900m northwest)

4.3.2. ABP-304862-19 – in November 2019, the Board approved with conditions a 220kV Gas Insulated Switchgear (GIS) substation, 2 no. 220kV underground circuits forming a loop-in/loop-out to the existing Maynooth-Woodland 220kV overhead line and 6 no. 220kV underground circuits and associated low voltage and communication underground cabling connecting the proposed substation with electricity transformers within the Intel Campus, and all associated and ancillary site development works.

4.4. Appendix 4 of the AOS Planning Report summarises the planning history for the surrounding area between May 2013 and August 2022. The following is noted:

Leixlip Amenities Centre (generally southwest of appeal site)

4.4.1. PA ref. 18/1553 – in April 2019, the planning authority granted permission for a temporary primary school consisting of 2 no. prefab buildings enclosed within 2m high welded mesh fencing and access gates with associated site works including play area. Condition 2 restricts the school buildings from locating within 20m of the overhead power lines and 23m from the support pylon, referred to here as tower T29. Condition 3 limits the permission to a 5-year period from the date of final grant of permission.

5.0 Policy Context

5.1. Local Planning Policy

Kildare County Development Plan 2023-2029

5.1.1. The current Development Plan came into effect on 28th January 2023. The planning authority decision of 15th May 2023 was made under the provisions of this Plan. This appeal shall also be determined under the current Development Plan provisions.

5.1.2. The Development Plan does not include zoning objectives for Leixlip, these are set out in the Leixlip Local Area Plan (LAP) 2020-2023, as extended and amended.

5.1.3. The main Development Plan policies and objectives relevant to the proposed development are set out under chapters 2 (Core Strategy and Settlement Strategy), 4 (Resilient Economy and Job Creation), 6 (Infrastructure and Environmental Services), 7 (Energy and Communications), 11 (Built and Cultural Heritage), 12 (Biodiversity and Green Infrastructure), 13 (Landscape, Recreation and Amenity) and Chapter 15 (Development Management Standards).

5.1.4. The following sections are relevant to the appeal:

- 2.11 – Preferred Development Strategy
- 2.14 – Settlement Hierarchy
- 4.4 – Economic Development Hierarchy (4.4.3)
- 4.10 – Foreign Direct Investment (FDI)
- 4.14 – Prevention of Major Accidents
- 6.7 – Flood Risk Management

- 6.8 – Environmental Services Strategy
- 7.14 – Energy Supply and Infrastructure
- 11.15 – Protected Structures
- 11.16 – Country Houses and Demesnes
- 12.6 – Designated Sites for Nature Conservation
- 12.7 – Protected Habitats and Species outside Designated Areas
- 12.9 – Trees, Woodlands and Hedgerows
- 12.10 – Inland Waters: Lakes, Rivers, Streams and Groundwater
- 12.13 – Geology
- 12.14 – Green Infrastructure
- 13.3 – Landscape Character Assessment
- 13.4 – Areas of High Amenity (13.4.5 and 13.4.6)
- 13.5 – Scenic Routes and Protected Views (RC3, RC4, RC12 and RW03)
- 13.6 – Recreation and Amenities (13.6.3 and 13.6.4)

5.1.5. Summary of relevant policies and objectives:

RE O26 Seeks to support and develop the Self-Sustaining Growth Towns, including Leixlip, as an attractor but not limited to *inter alia* ICT, High-tech manufacturing and research employment.

RE O30 Seeks to co-ordinate the delivery of strategic infrastructure within Leixlip and between Leixlip and *inter alia* Intel etc. in a manner which supports future development and population growth.

RE O33 Seeks to promote and facilitate the development of the MASP Economic Cluster, including Leixlip, by supporting identified key sectoral opportunities, including the development of synergies between Maynooth University, employers in the area, key stakeholders and community leaders, along with the requisite targeted infrastructural investment, in accordance with the RSES.

RE O54 Seeks to support existing FDI large industrial companies in sustaining and expanding their businesses at appropriate locations.

RE P9 Requires compliance with SEVESO III Directive (2012/18/EU) etc. (I note that the Planning Officer's reports refers to policy ECD 21 from the previous Development Plan 2017-2023).

RE P10 Requires regard to be had to SEVESO III Directive (2012/18/EU), the consultation distances and any areas of sensitivity and the advice of the HSA, the potential effects on public health and safety, the need to maintain appropriate safe separation distances, the need to minimise risk to strategic infrastructure, and specialist Fire Authority advice. (I note that the Planning Officer's reports refers to policy ECD 22 from the previous Development Plan 2017-2023).

IN O34 Seeks to manage flood risk in the county in accordance with the sequential approach and requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities etc.

IN O36 Requires that development along urban watercourses comply with IFI Guidance, including the maintenance of a minimum riparian zone of 35m for river channels greater than 10m in width, and 20m for river channels less than 10m in width etc.

EC P19 Seeks to support the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid to provide for the future physical and economic development of Kildare etc.

EC O67 Requires that developments involving the siting of overhead cables shall minimise visual impact by avoiding areas of high landscape sensitivity, sites and areas important for biodiversity and/or archaeological, cultural or heritage interest.

EC O68 Requires that all electricity lines of 38kV and over, comply with all internationally recognised standards with regards to proximity to sensitive receptors including dwellings, schools and crèches etc.

EC O70 Seeks to facilitate the development of grid reinforcements etc.

EC O73 Seeks compensatory planting where tree removal is unavoidable.

AH O20 Seeks to conserve and protect buildings, structures and sites contained on the Record of Protected Structures of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

AH O21 Seeks to protect the curtilage of protected structures or proposed protected structures and to refuse planning permission for inappropriate development that would adversely impact on the setting, curtilage, or attendant grounds of a protected structure, cause loss of or damage to the special character of the protected structure and/or any structures of architectural heritage value within its curtilage etc.

AH O27 Seeks to maintain the views to and from Carton House and protect the character of the historic designed landscape within Carton Demesne.

AH O32 Seeks to ensure that new development will not adversely impact on the setting of a protected structure or obscure established views of its principal elevations. (I note that the Planning Officer's reports refer to 'objective LR O32').

AH O51 Requires that planning applications take into consideration the impacts of the development on their landscapes and demonstrate that the development proposal has been designed to take account of the heritage resource of the landscape.

BI O1 Seeks the preparation of Ecological Impact Assessments that adequately assess the biodiversity resource within proposed development sites, to avoid habitat loss and fragmentation etc.

BI O9 Seeks to avoid development that would adversely affect the integrity of any Natura 2000 site and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive, to support the conservation and enhancement of Natura 2000 sites etc.

BI O16 Seeks to Ensure appropriate species and habitat avoidance and mitigation measures are incorporated into all new proposals.

BI O26 Seeks to prevent the removal of hedgerows to facilitate development in the first instance but where their removal is unavoidable this must be clearly and satisfactorily demonstrated.

BI O37 Seeks to ensure the protection of rivers, streams and other watercourses and, wherever possible, maintain them in an open state capable of providing suitable habitats for fauna and flora while discouraging culverting or realignment etc.

BI O60 Requires consultation with the GSI regarding any development proposals within or likely to have an impact on Sites of Geological Importance set out in Table 12.7 including Louisa Bridge Springs.

LR O1 Seeks to ensure that consideration of landscape sensitivity is an important factor in determining development uses etc.

LR O4 Seeks to ensure that local landscape features, including historic features and buildings etc., are retained, protected and enhanced, so as to preserve the local landscape and character of an area.

LR O9 Seeks to continue to support development that can utilise existing structures and infrastructure, whilst taking account of local absorption opportunities provided by the landscape, landform and vegetation.

LR O17 Seeks to control development that will adversely affect the visual integrity of Areas of High Amenity by restricting the development of incongruous structures that are out of scale with the landscape.

LR O18 Seeks to facilitate appropriate development in Areas of High Amenity that can utilise existing structures, settlement areas and infrastructure, taking account of the visual absorption opportunities provided by existing topography and vegetation.

LR O32 Seeks to avoid any development that could disrupt the vistas or have a disproportionate impact on the landscape character of the area, river views, canal views, views of historical or cultural significance (including buildings and townscapes), views of natural beauty (Tables 13.5 – 13.7).

LR O33 Seeks to ensure developments do not have a disproportionate visual impact or significantly interfere with or detract from scenic upland vistas when viewed from nearby areas, scenic routes, viewpoints and settlements.

5.1.6. The following development management sections are also relevant:

- 15.11 – Energy and Communications
- 15.12 – Seveso Sites
- 15.17 – Built and Natural Heritage

Leixlip Local Area Plan 2020-2023

5.1.7. The Leixlip LAP 2020-2023 came into effect on 16th December 2019. It was extended to 30th March 2026 and subsequently amended on 6th May 2024 (Amendment No. 1).

5.1.8. The linear appeal site crosses a number of land use zonings including 'Neighbourhood Centre', 'Strategic Open Space' and 'Agricultural', however the majority lies within 'Industry and Warehousing' with a zoning objective *'To provide for industry, manufacturing, distribution and warehousing.'*

5.1.9. Table 13-3 (Land Use Zoning Matrix) identifies that utility structures are 'open for consideration' within this zoning and indeed within the other zonings outlined above.

5.1.10. Table 13.2 (Zoning Matrix – Definition of Terms) notes that land uses shown as 'open for consideration' are uses that are not considered acceptable in principle in all parts of the relevant land use zone. However, such uses may be acceptable in circumstances where the Council is satisfied that the proposed use would not conflict with the general objectives for the zone and the permitted or existing uses as well as being in the interests of the proper planning and sustainable development of the area.

5.1.11. The following sections are relevant to the appeal:

6.2 – Leixlip Economic Development Strategy

9.4 – Energy Supply and Communications

5.1.12. Summary of the relevant policies and objectives:

Policy EDT1 Seeks to support the development of Leixlip as an enterprise and employment hub in the north-east Kildare employment cluster.

Objective EDT1.1 Seeks to promote enterprise and employment development at Collinstown, focusing on the high tech, bio tech, research and development, ICT and manufacturing sectors.

Objective EDT1.3 Seeks to facilitate the expansion of industries in Leixlip, taking full account of the obligations of the European Directives and the sensitivities of the receiving environment etc.

Objective EDT1.5 Seeks to have regard to the Major Accidents Directive (2012/18/EU), the potential effects on public health and safety, adequate separation distances and any areas of sensitivity and the advice of the HSA in assessing applications for developments (including extensions) in the vicinity of the Intel Seveso site.

Objective I4.1 Seeks to support the statutory providers of national grid infrastructure by safeguarding existing infrastructure and strategic corridors from encroachment by development that might compromise the operation etc. of energy networks.

5.2. Regional Planning Policy

Regional Spatial and Economic Strategy 2019-2031 (RSES)

5.2.1. The Eastern and Midland RSES (EMRA, 2019) is a strategic plan and investment framework designed to shape future growth and better manage regional planning and economic development throughout the region, including the Dublin Metropolitan Area.

5.2.2. Leixlip is located within the Dublin Metropolitan Area Strategic Plan (MASP) boundary.

5.2.3. The MASP is an integrated land use and transportation strategy for the Dublin Metropolitan Area that sets out a vision for future growth in the area including opportunities for large scale strategic residential, employment and regeneration.

5.2.4. Section 5.8 of the RSES notes that the MASP also supports employment generation at strategic locations within the metropolitan area, including Leixlip, to strengthen the local employment base and reduce pressure on the metropolitan transport network.

5.2.5. Table 5.2 of the RSES identifies ‘Leixlip employment lands’, as one such strategic employment location and the ‘Collinstown site’ specifically for employment potential.

5.2.6. In this regard, Regional Policy Objective (RPO) 5.6 provides that the development of future employment lands in the Dublin Metropolitan Area shall follow a sequential approach, with a focus on the re-intensification of employment lands within the M50 and at selected strategic development areas and provision of appropriate employment densities in tandem with the provision of high-quality public transport corridors.

5.3. National Planning Policy and Guidelines

National Planning Framework (NPF)

5.3.1. Acknowledging demographic trends, Project Ireland 2040, the National Planning Framework (DHLGH, 2018), seeks a 50:50 distribution of growth between the Eastern and Midland Region and other regions. In this regard, National Policy Objective (NPO) 1c seeks to accommodate around 320,000 additional people in employment in the Eastern and Midland region and NPO 2a sets out a target of 50% of future population and employment growth focussed on the existing cities and their respective suburbs.

5.3.2. Section 3.2 of the NPF relates specifically to the Eastern and Midland Region including the Dublin City and Metropolitan Area. It notes that Dublin's continued performance is critical to Ireland's competitiveness and improving the strategic infrastructure required to sustain growth is regarded as a key priority as part of the Dublin MASP.

5.3.3. Section 4.2 of the NPF acknowledges the role of employment within Ireland's urban structure. In this regard, NPO 7 advocates for a tailored approach to urban development with a particular focus on *inter alia* supporting a continuation of balanced population and employment growth in more self-contained urban settlements.

5.3.4. Section 4.4 relates specifically to urban employment growth. It notes that planning to accommodate strategic employment growth at regional, metropolitan and local level should include consideration of locations for expansion of existing enterprises.

5.3.5. I also note that National Strategic Outcome (NSO) 7 highlights the need for new energy systems and transmission grids for a more distributed, renewables focused, energy system, albeit in the context of a low carbon transition and climate resilience.

Flood Risk Guidelines

5.3.6. The Planning System and Flood Risk Management, Guidelines for Planning Authorities (DEHLG, November 2009)[1], seek to avoid inappropriate development in areas at risk of flooding, and new development increasing flood risk elsewhere, whilst also avoiding unnecessary restriction of national, regional or local economic growth.

5.3.7. Figure 3.2 of the guidelines illustrates the sequential approach to managing flood risk.

5.3.8. Section 3.5 of the guidelines notes that most types of development would be considered inappropriate in Flood Zone A i.e., where a high probability of flooding exists. Whilst development in this zone should be avoided, it may be considered in exceptional circumstances, such as in city and town centres, or in the case of essential infrastructure that cannot be located elsewhere, and subject to a Justification Test.

5.3.9. Table 3.1 of the guidelines notes that 'essential infrastructure' includes 'utilities distribution' and this is classified as 'highly vulnerable development'. Table 3.2 outlines that such 'highly vulnerable development' requires a Justification Test in Flood Zone A and Flood Zone B, and is appropriate development in Flood Zone C.

5.3.10. Box 5.1 of the guidelines sets out the Justification Test for development management.

Environmental Impact Assessment Guidelines

5.3.11. The Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DHPLG, August 2018) provide guidance for competent authorities on legal and procedural issues and other matters arising from the amended codified Directive (2011/92/EU) by virtue of Directive 2014/52/EU.

5.3.12. Section 4.13 of the guidelines note that a 'mini- EIA' is not required for each alternative studied and it is generally sufficient to provide a broad description of each one studied.

5.4. Other National Policy and Guidance Documents

Climate Action Plan 2024

5.4.1. *We're Taking Climate Action*, the Climate Action Plan 2024 (CAP24) (DECC, 2024), was approved by Government in May 2024. It builds upon CAP23 by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings. The Plan provides a roadmap for taking decisive action to halve

[1] These guidelines were amended/clarified under Circular PL 2/2014.

Ireland's emissions by 2030 and reach net zero by no later than 2050, as committed to in the Climate Action and Low Carbon Development (Amendment) Act 2021.

EIA Sub-threshold Development Guidance

5.4.2. Guidance for Consent Authorities regarding Sub-threshold Development (DEHLG, 2003) aims to provide practical guidance for the competent/consent authorities in deciding whether or not a subthreshold development is likely to have significant effects on the environment. Section 3.5 of the Guidance notes that the legislation addresses the possible need for EIA below the Annex II national thresholds i.e., sub-threshold.

5.5. Natural Heritage Designations

- Rye Water Valley/Carton SAC and pNHA (001398) – crosses appeal site
- Royal Canal pNHA (002103) – c. 10m south / 55m east
- South Dublin Bay and River Tolka Estuary SPA (004024) – c. 18.5km east
- South Dublin Bay SAC (000210) – c. 19.9km east, southeast
- North Dublin Bay SAC (000206) – c. 21.6km east
- North Bull Island SPA (004006) – c. 21.6km east
- North-West Irish Sea SPA (004236) – c. 24km east
- Ireland's Eye SPA (004117) – c. 30km east

6.0 The Appeal

6.1. Grounds of Appeal

6.1.1. A third-party appeal has been lodged by Killross Properties Ltd. The grounds reflect the observations made to the planning authority and can be summarised as follows.

6.1.2. In relation to legal and procedural matters, the appellant states/submits that:

- Plans and particulars displayed on the planning authority website are unclear and do not allow for proper public or statutory consultation i.e., figures and drawings in the AA Screening Report, NIS and EIAR etc. as well as site drawings are illegible.
- The application is contrary to Articles 22, 23 and 25 of the Planning Regulations in this regard and the application is invalid.

- The initial response from the NPWS highlights that some key parts of the EIAR / NIS are illegible on the planning authority website and suggests that they would have had difficulty placing the further information response in its proper context, or indeed understanding the limitations of the proposed mitigation measures.
- The photomontages are not sufficient to allow the public or the Board to determine the impacts of the development on its setting and do not consider the impacts of the overhead and undergrounding alternatives.
- The absence of proper photomontages was also highlighted by the Council's Architectural Conservation Officer who does not appear to have been invited to comment on any photomontages submitted as further information.

6.1.3. In relation to visual impact and built heritage, the appellant states/submits that:

- The Architectural Conservation Officer expressed serious concerns regarding the visual impact of the proposal on adjacent sites to the east containing Leixlip Spa, Hexagonal Pool (Spa Well) and Louisa Bridge and 'objected to the development'.
- There was a delay in uploading the Architectural Conservation Officer's report to the planning authority website until after the further information submission period which resulted in the refusal recommendation being overturned or set aside.
- They concur with the opinion of the Council's architect and believe that the overground option selected is not visually appropriate for its sensitive setting.

6.1.4. In relation to alternative options, the appellant states/submits that:

- The developer had underground options, including to the west of the powerline which would have no visual or environmental impact, but elected not to include the outcome of those studies in its EIAR or planning application.
- The EIA Directive must be interpreted as meaning that the developer must supply information in relation to the environmental impact of both the chosen option and all of the main alternatives, taking into account at least the environmental effects.
- No studies in relation to the impacts of underground routes along the 'western corridor' are presented within the EIAR, whereas information in relation to underground options to the east of the powerline and through the campus is.

- Contrary to the *Holohan* judgement (C-461/17), the rejection of underground options to the east of the powerline (U2, U3 and U4), did not arise from an assessment that took into account the environmental impact of these options.
- Underground options considered at an early stage that would avoid the Rye Water Valley/Carton SAC and which would eliminate bat and bird collision risks, were not included in the planning documents nor has there been an assessment of more environmentally beneficial construction methodologies i.e., directional drilling.
- The public notices do not indicate that the undergrounding option previously permitted to divert the overhead line under PA ref. 05/296 is not being pursued and invites the Board to examine sections 2.4.10 and 2.5.2.1 of the accompanying EIS.
- They have identified a number of alternative route options including undergrounding options related to the western corridor which would have considerably less environmental impact than the preferred route in the EIAR.
- Undergrounding the cable along the western corridor is the only option that would avoid both the Annex I 'petrifying springs with tufa formation' habitat in the Louisa Springs Complex and those identified outside the complex.
- The applicant's contention that it was precluded from providing information relating to the western corridor at further information stage, as it was not detailed in the EIAR, is contrary to Art. 5(3)(c) of the EIA Directive and this places the Board in a difficult position as it cannot lawfully conduct an EIA as per the Directive.
- Should the Board not seek further information in relation to the undergrounding options, the proposed development should be refused because it does not fall within the meaning of proper planning etc. and will have unacceptable environmental impacts.

6.1.5. In relation to appropriate assessment screening, the appellant states/submits that:

- No proper screening was carried out in the first instance i.e., most of the conservation interest bird species were screened out from further assessment for arbitrary reasons e.g., the cormorant and golden plover. Nor is it correct to screen out other birds including gulls because of the distance between the development and the nearest European site designated for their conservation.

- The migration path of birds has not been considered and the collision risk with the overhead cable and towers has not been assessed, particularly for waterbirds.
- Such concerns were raised by the NPWS and suggests that it is possible that birds from the screened-out SPAs could be present on-site during foraging or migration.
- The further information response implies that even if birds identified on the site during the short timeframe of the bird study were from the SPA, the death of these species by collision, or disturbance by removal, will not adversely impact their conservation as other birds remain with the SPA, and this raises scientific doubt.
- There is a risk to birds who have learned to avoid the existing structures and wires and no scientific collision risk assessment has been provided.
- Until there has been a proper screening there is no valid appropriate assessment and the planning authority has no justification to make a decision as per *Kelly v An Bord Pleanál*a.

6.1.6. In relation to appropriate assessment, the appellant states/submits that:

- The EPA published a submission on its website which raises scientific doubt about the application of conclusions made by the authors of some of the application documents in relation to the Intel site.
- Some of the application documents refer to surveys by mollusc experts but they do not appear to have been submitted and it is not possible for the Board to consider the relevance of these surveys to the planned route or alternatives.
- The applicant failed to address the further information request in relation to the hydrogeological impacts of dewatering on the petrifying springs having regard to the height of the water table, water flow and maintenance of hydrological regimes.
- It is unclear from the NPWS response to the further information how they came to disregard their own requirements for the hydrogeological information or satisfy the scientific doubt in relation to the conservation of the petrifying springs habitat where no new information was provided, and the Board must address this lacuna.
- The applicant has also failed to directly address the NPWS concerns in relation to tree removal and its impact on the bryophytes in the Annex I petrifying springs

habitats, and it is not clear from the EIAR whether their response, based on the dynamics of airflow, has been modelled.

6.1.7. In relation to environmental impact assessment, the appellant states/submits that:

- They reject the implied suggestion that the proposal falls outside the EIA Directive or that a voluntary EIAR should be considered outside the context of the Directive.
- The information included in the EIAR is scant and the comparison of alternative options is not to the standard required by the CJEU in *Holohan.*
- The EIAR shows that groundwater under the site is contaminated and the environmental impact on habitats and species associated with puncturing through pockets of contaminated groundwater and/or pumping contaminated groundwater during the construction of tower foundations has not been explored.
- The consequences of the soil quality, including evidence of contamination, on the petrifying springs during excavation and pumping has not been addressed.
- The collision risk impact for birds and bats has not been assessed and the selected route, which crosses the Rye Water, will be an obstacle in existing wildlife corridors.
- The extensive tree removal represents an unnecessary removal of important habitat and must be considered in comparison to the lesser impacts from better overhead and underground options.
- The likely noise impacts of the use of rock breaking equipment should have been considered.
- The cumulative impacts of the proposed development and the existing or any resultant expansion of the Intel campus, the adjacent solar farm project, or the DART+ West project have not been assessed.

6.1.8. In relation to flood risk, the appellant states/submits that:

- The location of Pylon 6 in a flood zone is contrary to the Section 28 Flood Risk Guidelines where essential infrastructure can only be located in Flood Zone A if it cannot be located elsewhere.
- The alternative route options must be assessed if the development in Flood Zone A and Flood Zone B is to be justified.

6.1.9. In relation to accident risk, the appellant states/submits that:

- The combined risk of accidents and explosions due to the proximity of this high voltage line to the chemical storage on the Intel campus and the impacts of accidental emissions to the environment on human beings, habitats and species has not been properly assessed and there is no information before the Board to enable it to conduct such an assessment.

6.1.10. The appellants have requested that the application be refused on this basis and submit that the size, nature and location of the proposal is such that it has inherent risks to the environment that could be avoided if an alternative overhead or underground route had been properly examined and assessed.

6.1.11. I also note that the appellant requested an oral hearing in respect of the issues raised.

6.1.12. This request was considered at a Board meeting held on 28th August 2023 where the Board decided that there was sufficient written evidence on file to enable an assessment of the issues raised, and therefore that an oral hearing should not be held.

6.2. **Applicant Response**

6.2.1. AOS Planning responded on behalf of the applicant, Intel Ireland Ltd. It can be summarised as follows.

6.2.2. In relation to legal and procedural matters, the applicant states/submits that:

- The drawings are legible and NPWS, who had previously raised queries regarding legibility, have confirmed that they are satisfied with the further information response.
- The further information response confirmed the adequacy of the images contained in Chapter 11 of the EIAR and photomontages as sought by the planning authority.
- Preparation of photomontages for alternative route options would not be reasonable or practical owing to the level of detailed design required to generate photomontages of each option and would be beyond the requirements of the Planning Regulations. Guidelines on the information to be contained in EIARs (EPA, 2022) and the *Holohan* judgement which states that alternatives do not need 'to be subject to an impact assessment equivalent to that of the approved project'.

- The submitted drawings were validated as per Articles 22, 23 and 25 of the Planning Regulations and as such comply with the statutory requirements.
- The drawings submitted as part of the application include all of the required details at the correct scale and, as such, comply with the Planning Regulations so as to adequately describe the proposed development.

6.2.3. In relation to visual impact and built heritage, the applicant states/submits that:

- Impacts on protected views are addressed in Chapter 11 of the EIAR and Section 5.1 of the Planning Report and demonstrate that it is not envisaged that the development will compromise the protected views listed in the Kildare County Development Plan.
- Protected structures are addressed in Chapter 14 of the EIAR, in addition to Chapter 11. Whilst Section 14.4, the heritage impact assessment, acknowledges a negative impact on Louisa Bridge, Hexagonal Well, Leixlip Spa and Rye Water Aqueduct, the proposal is not located within the attendant grounds or curtilage of these or any protected structures or proposed protected structures, therefore is not contrary to objectives AH O21 and AH O32 of the current Development Plan.

6.2.4. In relation to alternative options, the applicant states/submits that:

- Alternatives have been comprehensively addressed by the systematic consideration of ten alternative design options as detailed in Chapter 3 of the EIAR and further clarified in the further information responses.
- For clarity, the alternative location strategies outlined in section 3.2.1 of the EIAR preceded, and were provided as context to, the selection of the reasonable alternatives that were described and evaluated in sections 3.3 and 3.6.
- Figure 3.1, contrary to the appellants assertion, did not indicate if or where any specific underground or overground options would be considered, and an underground western route was considered as one of the alternatives, nonetheless.
- The further information response clarifies the appropriate level of appraisal, as set out in the relevant guidelines and case law.

- PA ref. 05/296 was generally considered, insofar as relevant, but was not deemed to be of any specific relevance to the current application including the requirements regarding the consideration of alternatives.

6.2.5. In relation to appropriate assessment screening, the applicant has specifically addressed concerns regarding the foraging ranges of the cormorant and other birds, including migratory birds, collision risks, Special Conservation Interests, and concerns regarding the golden plover.

- In relation to the foraging ranges of the cormorant and other birds, including migratory birds, the applicant states/submits that:
    - These matters have been addressed in the NIS and further information response.
    - Ireland's Eye SPA, a breeding colony for the cormorant, is c. 29km from the site, and foraging ranges are typically within an average 10km range.
    - The use of a 20-25km foraging range, as set out in section 5.3.2 of the NIS, represents the implementation of the precautionary principle with further detailed explanation of cormorant foraging ranges provided having regard to those SPAs with Site Specific Conservation Objectives, where a mean of 8.46km is listed, and in the absence of foraging ranges for Ireland's Eye.
    - Concerns in respect of cormorant migration pathways between wintering areas and natal colonies are not applicable as they are resident on at Ireland's Eye SPA and typically the foraging ranges set out in Woodward *et al.,* 2019 are applicable.
    - Measurable population level effects would not arise for any cormorant travelling through or adjacent to the appeal site by virtue of low numbers of this species recorded at the site, the distance to breeding sites in the SPA and industry standard mitigation measures etc.
- In relation to collision risks, the applicant states/submits that:
    - This has been adequately addressed in the further information response and the overall assessment considered the relocation of the towers and the suspended/strung wires.

- Birds can become habituated to changes in the landscape, particularly in built up areas and data from EirGrid would suggest few collision records with large species such as swans, geese and poor flyers such as pheasant most at risk.
- The surveys at the appeal site recorded little overflying and did not record significant numbers of SCI species or others that fly at similar heights to the proposed towers.
- Migration, as opposed to commuting, is limited to two short periods in the year and typically above the potential height of collision risk.
- Inclusion of bird diverters on the proposed wires spanning the Rye Water will provide indication of a potential collision hazard.
- There is no risk of collision or impediment to the flight path of golden plover or kingfisher given their typical flight patterns.
- No population effect on bird numbers is predicted by virtue of the lower number of species recorded during the surveys, distance to breeding sites in the SPA, the general lack of suitable habitat and industry standard mitigation measures.

- In relation to SCI species, the applicant states/submits that:
  - The further information response did consider the NPWS-identified reference and contended that an accepted approach in respect of international thresholds for SCI species, including use of published mean foraging ranges, was appropriate.
  - Notwithstanding the changes to the foraging distances to some SCI species and the extension of the maximum foraging range, the original assessment took a precautionary approach based on the published data.
  - The habitat impacted by the proposed towers and wire stringing do not provide suitable foraging habitat, nor do the towers or wires pose a population level collision risk or impediment to migration, by virtue of the low survey numbers, the absence of a flight path and industry standard mitigation.

- No population effects on bird numbers and hence no adverse impacts on the integrity of the SPA can be concluded.

- In relation to concerns regarding the golden plover, the applicant states/submits that:
    - This has been adequately addressed in the further information response.
    - The survey data recorded a single occurrence of golden plover across all survey dates due to the distance to the SPA, with considerable foraging habitat in between, and given that the bulk of habitat below the proposal is not a suitable corridor for foraging golden plover.
    - Section 5.3.2 of the NIS notes that golden plover have a core foraging range of 3km, with a maximum range of 11km.
    - The site is not an important site supporting SCI populations of golden plover and no population effects are predicted on SCI golden plover.

6.2.6. In relation to appropriate assessment, the applicant has specifically addressed concerns regarding the Denyer Report, the Mollusc Report, dewatering of the petrifying springs, the NPWS recommendation regarding the hydrogeological analysis and tree removal.

- In relation to the Denyer Report, the applicant states/submits that:
    - It provides a baseline scenario explaining the distribution, likely conditions for presence and the characterisation of the petrifying springs habitat but does not provide an impact assessment in respect of the proposal.
    - The hydrological and hydrogeological assessment used this baseline and confirmed that this project has no connection.
    - Concerns related to the alleged adverse effects of ammonia on petrifying springs are in respect of a different project.

- In relation to the Mollusc Report, the applicant states/submits that:
    - The referenced reports are historic reports in respect of monitoring baseline surveys and have been superseded by up-to-date surveys undertaken for the proposal that represent best scientific knowledge.

- In relation to dewatering of the petrifying springs (NPWS recommendation regarding the hydrogeological analysis), the applicant states/submits that:
    - There is no likely hydraulic continuity between towers 5 or 6 and the identified petrifying springs named as L03 and L04 in the Denyer Report i.e., all the towers are located outside the springs' potential zones of contribution.
    - With regard to spring L13, tower 6 is located outside its zones of contribution i.e., this spring is associated with a small stream for which the likely catchment is located to its north-northeast and tower 6 is c. 50m to the west.
    - The natural groundwater and surface water regime which supports the spring/seepage at the Louisa Spring complex will be unchanged by the proposal, as stated in section 7.3.20 of the EIAR, and no significant soil excavation, dewatering or disturbance of natural drainage is required.
    - The temporary impact during construction caused by dewatering will have no effect on the petrifying springs at the Louisa Spring complex, as it will not impact on the deep or shallow groundwater feeding these springs, as stated in section 7.4.1.1 of the EIAR.
    - The shallow groundwater at the proposed excavation and these springs are not in hydraulic connectivity and the groundwater flow directions differ.
    - The condition of groundwater or soil underlying the site has no bearing on the potential for the proposal to cause significant effects on these features.
    - NPWS have raised no further concerns based on the further information responses.
- In relation to tree removal, the applicant states/submits that:
    - The proposal will not generate any ammonium and notwithstanding, the potential effect of trees acting as absorbers of ammonia (NH_3) is addressed in the further information response.
    - The impact of cutting down trees would not materially change the assessment as they were not accounted for as a mitigating factor within the assessment carried out under PA ref. 19/91 (ABP-304672-19).

6.2.7. In relation to environmental impact assessment, the applicant has specifically addressed concerns regarding the EIA screening and compliance with the EIA Directive, groundwater, the impact on petrifying springs, collision risk impact, tree removal and consideration of alternatives, noise impacts, cumulative impacts, including concerns regarding the DART+ West project.

- In relation to EIA screening and compliance with the EIA Directive, the applicant states/submits that:
    - Whilst the EIAR has been done voluntarily, sections 2.1, 2.3 and 2.4 make it clear that it has been prepared so as to be compliant with the requirements of the Directive.
- In relation to groundwater, the applicant states/submits that:
    - Section 7.3.11 of the EIAR does not show in any case that the groundwater under the site is contaminated.
    - The recorded exceedances are not indicative of “pollution from sewage and industrial effluents”.
    - Dewatering is only anticipated to be required during the excavation of tower 6 and therefore groundwater associated with the location of borehole BH5 will not be pumped (EIAR Fig. 7.8).
    - As there is no hydrogeological or hydrological pathway nor potential to impact the zone of contribution that supports the spring vegetation, it follows that there can be no impact on habitats or species as a result of excavations or temporary groundwater pumping.
- In relation to the impact on petrifying springs, the applicant restates/reiterates that:
    - There is no hydrogeological or hydrological pathway nor potential to impact the hydrological/hydrogeological zone of contribution that supports the petrifying springs and therefore there can be no impact on the springs.
- In relation to collision risk impact, the applicant states/submits that:
    - In terms of bats, high levels of activity were recorded along the Rye Water and Royal Canal.

- With exception of the Leisler's bat, the majority of species fly relatively low and thus would avoid potential collision impacts and mortality.
- As bat species navigate largely by echolocation, static structures such as those proposed, present a low risk in terms of collision.

- In relation to tree removal, the applicant states/submits that:
  - The further information response clarifies that the extent of tree removal will only affect a small proportion of the trees in the area.
- In relation to noise impacts, the applicant states/submits that:
  - The predicted rock breaking construction noise values at all noise sensitive locations are within the criterion of 70 dB $L_{Aeq, 1hr}$ for weekdays and 65 dB $L_{Aeq, 1hr}$ for Saturdays.
  - The effect on the noise environment due to rock breaking will be transient in nature and implementation of good practice noise reduction measures outlined in section 10.5.1 of the EIAR will minimise the effect of rock breaking.
- In relation to cumulative impacts, including concerns regarding the DART+ West project, the applicant states/submits that:
  - Existing elements of the Intel Campus, which are considered as part of the baseline environment, elements at planning consent stage and elements that are permitted but not yet built (including the solar farm) insofar as relevant to the assessment of likely significant cumulative effects have been addressed in the EIAR and NIS.
  - With specific reference to the DART+ West project, there is no potential for significant cumulative or in-combination effects by way of hydrology and hydrogeology, no residual or cumulative phase noise, vibration or dust impacts (daytime / night-time construction phases), no adverse cumulative impacts by reason of other emissions, and no potential for adverse effects on the integrity of any European sites to arise as a result of the proposed realignment acting in combination with the DART+ West project.

6.2.8. In relation to flood risk, the applicant states/submits that:

- There is no alternative but to have an intermediate tower in the flood zone on account of EirGrid's span design guidelines.
- A Justification Test was carried out and found no obstacle to granting permission, having regard to the lack of likely effects of flood risk to the structure, nor to the passage of flood waters given the lattice structure concerned.

6.2.9. In relation to accident risk, the applicant states/submits that:

- Accidents have been addressed in the EIAR and further information response.

6.3. Planning Authority Response

6.3.1. The planning authority's response can be summarised as follows:

- The NPF acknowledges that a balanced and sustainable pattern of development, with greater focus on addressing employment creation and local infrastructure needs must be prioritised in the Mid-East Region.
- It considers that NPO 1c, NPO 5 and NPO 52 are particularly relevant.
- It notes that Leixlip is located within the Dublin MASP boundary and highlights that Table 5.2 of the RSES identifies 'Leixlip employment lands' as a strategic employment development area with the Dublin Metropolitan Area.
- It submits that the proposal will facilitate the continued operation and growth of employment creating opportunities on the Intel Campus and is therefore consistent with Government policy as expressed in the NPF and regional and local policy (RSES, Kildare County Development Plan 2023-2029 and Leixlip LAP).
- It requests that the Board uphold the decision and grant permission subject to the conditions set out in the Notification of Decision.

6.4. Observations

6.4.1. An observation was received from Thomas Reid of Headsor, Leixlip, Co. Kildare. The observation generally reflects the observations made to the planning authority and can be summarised as follows:

- No landowner consent was provided for the indicative 'western route' as illustrated in section 3.2.1 of the EIAR.

- States that the author of the submitted NIS is the same author of the Natura Impact Report (NIR) for the Draft Leixlip LAP 2017-2023.
- Suggests that there is a degree of bias with regard to local authority officials with a specific allegation of 'objective – actual bias'.
- Raises concerns regarding a purported change to the boundary of the Rye Water Valley/Carton SAC.
- Raises concerns regarding the 'CEO of IDA Ireland'.
- Asks the Board to refuse permission and states that the power line should remain.
- States that the proposal does not comply with the 'Habitats Directive, Seveso Directive, Justice Directive' or any EU directives, or Aarhus Convention.
- Raises concerns regarding the concealment of documentation and states that the application 'has the look' of pre-determination.
- Notes that the Conservation Officer has recommended a refusal.

7.0 **Assessment**

7.1. There are three elements to my assessment: a planning assessment, an environmental impact assessment (EIA) and an appropriate assessment (AA).

7.2. In each assessment, where necessary, I refer to the issues raised by parties in the various submissions to the Board. There is an inevitable degree of overlap between the assessments, however I will endeavour to avoid undue repetition and will cross-reference where necessary.

8.0 **Planning Assessment**

8.1. Having examined the application details and all other documentation on the appeal file, including the appeal submissions and observations, and inspected the site, and having regard to relevant local, regional and national policies and guidance, I consider that the main issues in this appeal are those generally raised in the grounds of appeal.

8.2. The issues can be addressed under the following headings:

- Legal and Procedural
- Amenity Impacts
- Alternative Route Options
- Flood Risk
- Public Health
- Natural Heritage

8.3. **Legal and Procedural**

8.3.1. The appellant has suggested that the application failed to comply with the statutory requirements set out in the Planning and Development Regulations 2001, as amended, ('the Planning Regulations') and is therefore invalid. They specifically highlight the clarity, or lack thereof, of the plans and particulars displayed on the planning authority website. Concerns regarding the photomontages are also raised.

8.3.2. The applicant on the other hand submits that the application details comply with the statutory requirements and were validated in accordance with Articles 22, 23 and 25 of the Regulations. They specifically note that the NPWS response to the further information submission did not reiterate any initial concerns regarding legibility.

Conclusion on Legal and Procedural

8.3.3. In terms of the alleged irregularities regarding the application documentation, I note that the application was considered acceptable and made valid by the planning authority. I am satisfied that this did not prevent the concerned parties, or indeed any of the statutory consultees, from making representations and submissions to the planning authority. The assessment below represents my *de novo* consideration of all other planning issues material to the proposed development and subject appeal.

8.4. **Amenity Impacts**

8.4.1. The proposed development is detailed in section 2.0 above. In simple terms it involves the realignment of an existing overhead power line (OHL) that traverses the eastern half of the Intel Campus and is strung over four steel lattice towers, referred to as T29, T30, T31 and T32. Tower T29 is located in the car park of the Lidl supermarket to the

south of the R148, Leixlip-Maynooth road. Towers T30 and 31 are located within the Intel Campus, towards the front and rear of the campus respectively. I note that the topography to the rear of tower T31 falls sharply towards the Rye Water and from here the OHL crosses the river valley corridor towards tower T32 on an elevated ridge.

8.4.2. The proposal involves the decommissioning and removal of these towers and associated OHL and diversion of the line around the eastern boundary of the campus.

8.4.3. Proposed tower T1 is sited immediately adjacent to, and north of, tower T29 in the Lidl car park at c. 55.90mAOD. It is 27.750m high and covers a surface footprint of 7.10m by 7.10m. Towers T2 and T3 are located on a car parking area running parallel to the R148 at c. 58.60mAOD and 59.40mAOD respectively. Tower T2 is 23.750m high and covers a footprint of 6.069m by 6.069m. Tower T3 is 29.750m high and covers a footprint of 5.292m by 5.292m. Towers T4 and T5 are sited on enclosed scrubland along the eastern boundary of the Intel Campus and at c. 55.65mAOD and 48.80mAOD. Tower T4 is 31.350m high with a footprint of 11.820m by 11.820m. Tower T5 is 26.750m high with a footprint of 6.80m by 6.80m. Tower T6 is located in the river valley at c. 33.00mAOD. It is 39.750m high and covers a footprint of 7.292m by 7.292m. Tower T7 is sited immediately adjacent to, and north of, tower T32 on agricultural land at 54.90mAOD. It has a height of 20.750m and footprint of 5m by 5m.

8.4.4. The appellant notes that the local authority's Architectural Conservation Officer (ACO) expressed serious concerns regarding the visual impact of the proposal on adjacent sites to the east containing Leixlip Spa, Hexagonal Pool (Spa Well) and Louisa Bridge.

8.4.5. The appellant's concerns therefore involve two separate but interrelated issues in respect of visual amenity and built heritage. For clarity, I will deal with each issue separately although given the main impact on heritage structures is evidently one from a visual perspective, it is discussed hereunder. The reader should also note that visual amenity and built heritage impacts are also addressed in the EIA (see section 9.9).

8.4.6. It should also be noted that the planning authority raised similar concerns and sought revised photomontages and additional commentary in respect of the impact of the proposal on the context and setting of nearby protected structures at further information stage. Attachments G and H of the applicant's further information response addressed these specific concerns to the planning authority's satisfaction.

Visual Amenity

8.4.7. The appeal site lies within the 'Northern Lowlands' Landscape Character Area as set out in the Landscape Character Assessment (LCA) of the Development Plan (section 13.3 / Map V1-13.1). Table 13.1 indicates that the 'Northern Lowlands' is of 'Class 1 – Low Sensitivity'. Table 13.2 notes that such areas have capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area. Table 13.3 indicates that both 'industrial projects' and 'major powerlines' are of high compatibility in these areas however Table 13.4 notes that such projects are only compatible in certain circumstances when within 300m of 'major rivers and water bodies', 'canals', 'scenic views' and 'scenic routes'.

8.4.8. In addition to the Landscape Character Areas, section 13.4 of the Development Plan notes that there are certain special landscape areas within the county which are classified because of their outstanding natural beauty and/or unique interest value. These areas are defined as Areas of High Amenity and include Rye Water Valley/Carton SAC (section 13.4.5) and the Royal Canal Corridor (section 13.4.6).

8.4.9. In terms of visual amenity, the Development Plan also sets out a number of scenic routes and protected views (section 13.5). It specifically notes that river floodplains and canal banks are generally sensitive to development to varying degrees and the importance of future development not further interrupting the integrity of river and canal corridors – with the exception of specific areas that are zoned for development. The nearest scenic route relates to Carton Demesne (Table 13.5) and starts/finishes at the R148/Kellystown Lane (L1014) junction (Map V1-13.3), a significant distance from the site. Protected views in proximity to the appeal site include RC3 and RC12, relating to Louisa Bridge and Rye Water Aqueduct respectively (Table 13.7) whilst RC4 and RW03, relating to Deey Bridge and Sandford's Bridge, a significant distance away.

8.4.10. In relation to towers T1 and T7, I note that they are replacement towers outside the Intel Campus and sufficiently remote to the adjacent protected views and Areas of High Amenity. Whilst I accept that they will have some visual impact, albeit to a lesser extent in the case of tower 7, which is distant to the vast majority of public vantage points, their impact is evidently neutral given towers T29 and T32 are to be demolished. In this regard, I do not consider they will adversely impact on the visual amenities of the area, and I note that the EIAR does not raise any issues in this regard.

8.4.11. In relation to towers T2 and T3, which are to be located on zoned industrial lands within the Intel Campus and behind a strong belt of mature trees and vegetation along the R148, I also consider these towers sufficiently remote to the adjacent Area of High Amenity and protected views. Whilst I accept that they may have a greater visual impact than towers T1 and T7, given that they are wholly new structures that will be visible from public areas, I do not consider they will adversely impact on the visual amenities of the area, and I note that the EIAR does not raise any issues in this regard.

8.4.12. In relation to tower T4, which is also to be located on zoned industrial lands within the Intel Campus and behind a strong belt of mature trees and vegetation along the R148, I consider there is potential for amenity impacts given the proximity to the Royal Canal Corridor Area of High Amenity and protected views associated with Louisa Bridge and the Rye Water Aqueduct. Here the impact on visual amenity will be most pronounced.

8.4.13. These impacts are fully explored in the EIAR where significant and very significant effects have been identified in close and general proximity to tower T4. However, these effects are highly localised to an area where absorption opportunities are provided by the landscape/streetscape, landform and vegetation in addition to the transitional characteristics of the nearby area represented by the zoning interface. In this regard, I do not consider the proposal will adversely impact on visual amenity.

8.4.14. In relation to towers T5 and T6, which are to be located on zoned agricultural lands just northeast of the Intel Campus, I am satisfied that tower T6 is sufficiently remote to adjacent Area of High Amenity and protected views having regard to its siting in the river valley. Whilst I accept that tower T5 will have a greater visual impact than tower T6, given its proximity to the Royal Canal Area of High Amenity and protected views, from Rye Water Aqueduct in particular, as evidenced in the EIAR, I consider it has less impact than tower T4 and therefore will not adversely impact on visual amenity.

Built Heritage

8.4.15. As noted, there are a number of protected structures in close proximity to the appeal site, including Louisa Bridge, the Romanesque Bath and Hexagonal Well, and the Rye Water Aqueduct, as set out in the Development Plan (Appendix 6). The former Station House and Collector's House are also in reasonable proximity to the appeal site.

8.4.16. The most pronounced impacts are in the vicinity of towers T4 and T5, and these impacts are fully explored in the EIAR where direct and indirect negative impacts are

identified in the case of Louisa Bridge, the Romanesque Bath, the Rye Water Aqueduct, and the Collector's House. Whereas a minor negative impact, both directly and indirectly, is identified in the case of the Hexagonal Well and a negative impact on the setting of the former Station House is also identified, albeit without direct impact.

8.4.17. Whilst I note the concerns of the appellant, including those of the Council's ACO regarding the visual impact of the proposal on Louisa Bridge, the Romanesque Bath and the Hexagonal Well, I agree with the applicant, who has been informed by a conservation specialist, that no development will occur within the setting, curtilage or attendant grounds of a protected structure that could cause loss or damage to the special character of such structure, nor will it obscure views of principal elevations.

8.4.18. In this regard, I note that both the Romanesque Bath and the Hexagonal Well are generally subterranean structures without an obvious curtilage, or indeed principal elevation, and their setting is limited to their immediate environs given the appearance of the grassed amenity area in which they reside. The negative impact on their setting is, in my opinion, purely limited to a westerly view from the eastern side, and given the position of the Hexagonal Well, I agree that this negative impact is of a minor variety.

8.4.19. The impact on Louisa Bridge is more evident, particularly from a visual perspective, however within its setting there is also street furniture, utility poles and infrastructure associated with the train station, including a telecoms mast and these structures are also relevant when considering the setting and curtilage of the Station House, although the appellant has not raised any concerns in that regard. The EIAR also identifies direct and indirect negative impacts on the Rye Water Aqueduct and Collector's House, but this has not been raised by the appellant and I have no concerns. In this context, I do not consider the proposal will adversely impact on the setting of a protected structure or obscure established views of any principal elevations thereof.

8.4.20. The EIAR also identifies a significant negative impact in terms of setting and character on the Royal Canal, from Louisa Bridge to the easterly bend north of the Rye Water Aqueduct, although this is in the context of a non-protected heritage structure and these impacts are highly localised to an area where absorption opportunities are provided by the landscape/streetscape, landform and vegetation in addition to the transitional characteristics of the nearby area represented by the zoning interface.

Conclusion on Amenity Impacts

8.4.21. The proposed development, by virtue of tower height and stringing of OHLs, will clearly impact on the general amenity of the area, and in the vicinity of Louisa Bridge in particular. The EIAR has identified direct and indirect negative impacts and significant and very significant effects in terms of built heritage and visual amenity. These impacts and effects are highly localised however and will not, in my opinion, detract from the overall amenities, as informed by its unique landscape and built heritage.

8.4.22. The proposed development would therefore accord with the amenity-related policies and objectives of the Development Plan generally, and AH O21 and AH O32 in terms of impacts on protected structures and LR O18 in terms of the visual absorption opportunities provided by existing topography and vegetation, specifically. The Board may wish to consider conditioning the retention of all trees and hedgerows that occur on lands within the applicant's control (blue lands) other than required to be removed for the construction and operational phases, in addition to compensatory planting.

8.5. Alternative Route Options

8.5.1. Chief amongst the appellant's concerns is the applicant's purported failure to fully consider and environmentally assess all alternative route options, including underground options, where the OHL could have less environmental impact. These criticisms are squarely based on the content of the EIAR and whilst they are considered in the EIA they form a substantive appeal ground for consideration here.

8.5.2. It should also be noted that the planning authority raised similar concerns at further information stage and sought further discussion, explanation and assessment with regards underground option 'U2' and the overground options 'O2a and O2b' or a hybrid underground/overground options along these routes. The further information response addressed these specific concerns to the planning authority's satisfaction.

8.5.3. In this regard, the applicant submits that ten alternative design options have been systematically considered as detailed in Chapter 3 of the EIAR and further clarified in the further information response to the planning authority. The applicant therefore specifically rejects the appellant's concerns regarding a lack of study into the route options along the 'western corridor' and submit that the alternative strategies outlined in section 3.2.1 of the EIAR preceded, and provided context to, the selection of reasonable alternatives as described and evaluated in the EIAR (sections 3.3 and 3.6).

8.5.4. Moreover, I also note the observer's comments regarding the lack of landowner consent for the 'western route', drawing into question its feasibility in any event.

8.5.5. I have however reviewed Chapter 3 of the EIAR which identifies the principal strategic options, namely the 'western route' and 'eastern route' in addition to option 'U1' passing through the Intel Campus. The emerging best performing options (EBPO) are then examined in detailed, six of which are OHL options (O1, O2a, O2b, O2c, O2d and O2e) with the remaining four underground cable options (U1, U2, U3 and U4).

8.5.6. Section 3.4 of the EIAR states that a multi-criteria comparison (MCC) based on EirGrid's 'Framework for Grid Development' was carried out to evaluate the best performing option (BPO) i.e., planning performance; environmental performance; socio-economic performance; deliverability and technical performance[2]. This exercise is elaborated in detail in Appendix 3.1 of the EIAR where each option is fully assessed.

8.5.7. Section 3.6 of the EIAR considers each emerging option. In terms of option O1, which is the westernmost overground route examined, it states that this route would be overly challenging given the major crossings (R449, R148, rail line, Royal Canal and Rye Water) and is therefore high risk for implementation and deliverability. Option U4, which is the easternmost underground route, is also considered high risk for implementation and deliverability given the complexity of installation and constraints.

8.5.8. The EIAR notes that options O2a, O2b and O2c are similar overground routes within the campus, east of the existing OHL, and whilst they perform better than other options for planning, environmental and socio-economic criteria, they are constrained by the existing infrastructure and services. It suggests that they are therefore unlikely to be feasible from a construction perspective, high risk in terms of deliverability and not viable. Option O2e, the easternmost overground option, is located outside the campus to avoid these challenges but performs far worse on environmental and planning criteria due to increased proximity to sensitive receptors. In terms of underground options U1, U2 and U3, which are mostly within the campus, the EIAR states that they perform better than other options for planning, environmental and socio-economic criteria, but are constrained by infrastructure and services. It suggests that they are unlikely to be feasible and therefore high-risk in terms of deliverability and unviable.

[2] I have been unable to source this document, but I note that similar BPO criteria are outlined in *Powering Up Dublin,* Strategic Framework for Planning & Environment (EirGrid, August 2022, section 5.1.1).

8.5.9. Finally, in terms of option O2d, whilst the EIAR accepts that it has moderate to high risks for planning, environmental and socio-economic criteria, it states that it is more feasible in comparison to other options, because it equally minimises constraints due to technical, environmental and planning criteria by availing of the screening that is offered by being located within a natural enclosure between berm and hedgerow. For these reasons, EBPO option O2d was brought forward for development as BPO.

8.5.10. As noted, the planning authority sought further information regarding underground option U2 and the overground options O2a and O2b or a hybrid underground/overground option along any of these routes. The applicant's response effectively updates Chapter 3 and Appendix 3.1 of the EIAR. In this regard, I note that the applicant indicated that planning and environmental risks associated with option U2 were understated in Tables 3.4 and 3.5 of the EIAR. On review of Appendix 3.1 and Table 13 (U2 Assessment) in particular, I note that Tables 3.4 of 3.5 of the EIAR do not fully reflect the detailed evaluation of option U2 where the identified risks appear to be erroneously understated in the summary tables. Whilst similar errors have been repeated elsewhere, albeit to a lesser extent, it does not undermine the final result.

8.5.11. I also note a discrepancy in the description and route alignment of option U2 in the submitted documentation notwithstanding its reference as 'eastern route, on berm'. For example, in Figure 3.3 and Table 3.2 of Chapter 3 and Figures 4-2, 7-8 and 10-8 and Table 2 of Appendix 3.1, it is indicated as 'between water tanks and berm' whereas Tables 10 and 14 and Figures 7-10 and 10-10 of Appendix 3.1 indicate it to the 'west of the tanks'. Whilst the description in section 10.2.2 of Appendix 3.1 accords with the latter, I do not consider this significantly alters the evaluation of route option U2 which can be considered very high risk in terms of planning and environmental performance.

8.5.12. I note that the applicant's further information response also rejects overground options O2a and O2b for the risks identified, including those relating to construction and environmental issues, and suggests that all underground options are effectively hybrid.

8.5.13. In similar regard, the appellant has raised specific concerns in relation to a previously permitted underground option between Tower T30 and T31 under PA ref. 05/296 and invites the Board to examine sections 2.4.10 and 2.5.2.1 of the accompanying EIS. I have reviewed these sections of the EIS submitted under PA ref. 05/296 and there is no information therein to suggest that it was the BPO following an evaluation of all

reasonable alternatives. Moreover, it is presented as a *fait accompli*[3] and whilst I accept that it has not been put forward as a reasonable alternative in the EIAR before me, the applicant has stated that it was generally considered insofar as relevant but not deemed to be of specific relevance to the consideration of reasonable alternatives. In this regard, an underground cable on the same alignment as the existing OHL may present similar constraints to the *status quo* and similar risks to options U1 and U2.

8.5.14. The appellant also suggests that there was no assessment of more environmentally beneficial construction methodologies such as directional drilling. As noted, I have fully examined Chapter 3 and Appendix 3.1 of the EIAR where options U3 and U4 have given due consideration to horizontal directional drilling (HDD) and been rejected for a number of reasons including design complexity over the steepness valley incline.

Conclusion on Alternative Options

8.5.15. Whilst I note that the appellant suggests that the EIA Directive must be interpreted as meaning that information in relation to the environmental impact of both the chosen option and all of the 'main alternatives', this phrase pre-dates the transposition of Directive 2014/52/EU and the concept of 'reasonable alternatives' into national planning law, namely article 94 and Schedule 6 of the Planning and Development Regulations 2001, as amended. The reasonable alternatives are that, reasonable, and the environmental impacts of each have been adequately considered in the EIAR.

8.5.16. In this regard, I do not consider the *Holohan* judgement (C-461/17) reference to be particularly relevant given that it was also in the context of the pre-2014 Directive, but moreover the applicant has clearly provided a broad description of each the alternatives studied, and the key environmental issues associated with each. In this regard, I specifically note that a 'mini-EIA' is not required for each of the alternatives.

8.5.17. On balance, I am fully satisfied that the applicant has provided sufficient information in relation to all reasonable alternatives including an objective assessment of their performance against industry criteria before arriving at a BPO. Having regard to the EIA Directive and EIA Guidelines (DHPLG, 2018), I have no other information before me to accept the appellant's suggestion that alternatives have not been assessed.

[3] Section 2.7 of the EIS outlines the alternatives examined in terms of locations (international, Ireland, Intel lands), processes and spoil locations. It does not consider alternative routes for the OHL diversion.

8.5.18. For these reasons I reject the appellant's contention that the Board cannot lawfully conduct an EIA as per the Directive, and I am fully satisfied that the provisions of article 94 and Schedule 6 of the Planning Regulations have been met (see section 9.4).

8.6. **Flood Risk**

8.6.1. The appellant has also raised specific concerns about flood risk, albeit within the context alternative route options. They submit that locating tower T6 in a flood zone is contrary to the planning guidelines on flood risk management and state that it can only be located in Flood Zone A if it cannot be located elsewhere. In this regard, they suggest that the alternative routes must be assessed if the proposal is to be justified.

8.6.2. The applicant, on the other hand, submits that there are no alternatives but to have an intermediate tower within the flood zone given EirGrid's span design requirements and states that a Justification Test was carried out which highlights a lack of likely effects of flood risk to the structure or on the passage of flood waters given its lattice design.

8.6.3. As noted above, tower T6 is located in the river valley at c. 33.00mAOD. It is 39.750m high and covers a footprint of 7.292m by 7.292m. It is located within CFRAM Flood Zone A and Flood Zone B. I note that these flood zones are broadly reflected in the Leixlip LAP, and the other towers would be located outside these zones. I also note that the planning authority did not raise any concerns from a flood risk perspective.

8.6.4. The flood risk management guidelines provide that development in Flood Zone A should be avoided other than in exceptional circumstances or in the case of essential infrastructure, which includes 'utilities distribution', and is classified as 'highly vulnerable development'. Table 3.2 of the guidelines outlines that such 'highly vulnerable development' requires a Justification Test in Flood Zones A and B.

8.6.5. I have reviewed the submitted Site-Specific Flood Risk Assessment (SSFRA) and section 4.1 indicates that there are no previous flood events recorded for the appeal site or in the immediate vicinity. Section 4.2 confirms that tower T6 is located in Flood Zones A and B. Section 4.3 states that there was no sign of pluvial flooding at the appeal site. Section 4.4 states that the appeal site has a low risk of groundwater flooding. Section 4.5 concludes a Justification Test is required for proposed tower T6.

8.6.6. Section 5 of the SSFRA sets out the initial flood risk assessment. Table 5.1 details the modelled flood levels within Flood Zones A and B i.e., 33.71mAOD and

34.34mAOD respectively. The exact ground level at tower T6 is 32.91mAOD meaning that a water height of 0.80m and 1.43m is expected for the modelled conditions.

8.6.7. Section 5.2 notes that bedrock was encountered at 2mBGL in the locus of tower t6 and as there may be hydrogeological connection to the nearby Rye Water, it is stated that this has been accounted for in the structural design including that of the foundations in submerged conditions in order to account for the buoyancy effect. These mitigations are outlined in section 5.3, which also notes that there should be no risk to the steelwork or conductors as waters subside given the overall tower height.

8.6.8. Section 5.4 of the SSFRA concludes that there is no significant conflict between flood risk and the construction of tower T6, as its structural design has taken into account the possible buoyancy effect of the expected flood level, which equates to a water height of c. 0.80m and 1.43mAGL for 1% and 0.1% AEP respectively. It also notes that there are no potential residual risks, as other infrastructure will be unaffected.

Justification Test

8.6.9. I have reviewed the SSFRA against the criteria outlined in Box 5.1 of the flood risk management guidelines and I am satisfied that the proposal has been subject to an appropriate flood risk assessment that demonstrates the development generally, and tower T6 specifically, will not increase flood risk elsewhere, and includes measures, by design, to minimise flood risk to people, property, the economy and the environment as far as reasonably possible. I am also satisfied that the residual risks have been addressed. The only criticism I have relates to item 1 of Box 5.1 where the SSFRA is silent on the land use zoning, but this is addressed in other supporting documents.

Conclusion on Flood Risk

8.6.10. For the reasons outlined in section 8.5, I do not consider it necessary to have carried out a flood risk assessment for each of the reasonable alternatives, this is clearly not the intention of the EIA Directive nor the flood risk guidelines. Moreover, the applicant has fully discharged the requirements of these guidelines and enabled a Justification Test. The only concern is therefore whether the Justification Test is met. It clearly is.

8.7. **Public Health**

8.7.1. The appellant has also outlined some concerns in respect of impacts on public health arising from noise and as a result of accidents. They specifically note that the noise

impacts arising from the use of rock breaking equipment was not considered or assessed. They also suggest that the combined risk of accidents and explosions due to the proximity of the OHL to chemical storage on the campus and the impact of accidental emissions to the environment on public health has not been assessed.

8.7.2. For clarity, I will deal with each issue separately. The reader should also note that noise and vibration impacts in addition to accident risks have been addressed in the EIA in sections 9.8 and 9.11 specifically and in section 9.6 (human health) generally.

Noise and Vibration

8.7.3. As noted above, towers T1 and T7 are effectively replacement towers and their operational impact in terms of noise and vibration in their immediate and wider environs can only but be neutral. Similarly, given the nature of the proposed development, the impact of towers T2 to T6 is also considered to be neutral from a noise and vibration perspective. In this regard, I accept that the buzzing, humming or crackling phenomenon is less likely with new components and unlikely in this instance.

8.7.4. The main impacts therefore arise during the construction and decommissioning phases as a result of noise and vibration associated with construction plant items and indeed construction traffic. In this regard, the EIAR identifies four noise sensitive locations, namely NSL1 (c. 115m east of tower T4), NSL2 (c. 250m east of tower T5), NSL3 (c. 240m south of tower T1) and NSL4 (c. 640m northeast of tower T7).

8.7.5. Each NSL represents houses and apartments and the indicative construction noise levels for each phase of construction are indicated in Table 10.12, i.e., site clearance and preparation, tower foundations, sheeting piling (if required), tower assembly and OHL stringing, and decommissioning and reinstatement. Having visited the site and environs, I agree that these are the main receptors for construction noise and vibration.

8.7.6. I note that the potential requirement for rock breaking is indicated in the Outline CEMP and the appellant has raised specific concerns that it has not been assessed in the EIAR. However, the applicant's appeal submission effectively updates Table 10.12 of the EIAR and notes that rock breaking construction noise prediction values, at all representative NSLs, are within industry standards, i.e., 70 dB $L_{Aeq, 1hr}$ for weekdays and 65 dB $L_{Aeq, 1hr}$ for Saturdays. This is also the case for other plant and phases.

8.7.7. Having regard to the EIAR, as updated by the appeal submission and the evidence provided therein, I am satisfied that the projected noise and vibration impacts are well within the industry standard ranges and could be further controlled through condition.

Accident Risk

8.7.8. As noted, the appellant suggests that the combined risk of accidents and explosions due to the proximity of the OHL to chemical storage and the impact of accidental emissions to the environment on public health has not been properly assessed.

8.7.9. Given the nature of the proposal, the only emissions that it could give rise to would be fuel and chemical spills during the construction phase and I am satisfied that these would be adequately controlled by standard construction practices and measures.

8.7.10. The risks associated with the location of tower T6 within Flood Zones A and B has also been considered and I am satisfied that no such risks are likely to materialise. Likewise, having regard to ground conditions elsewhere, as detailed in Chapter 7 of the EIAR, I do not consider there is any reasonable likelihood of tower failure.

8.7.11. The primary risks therefore relate to accidents or explosions as a result of activities within the Intel Campus. In this regard the EIAR notes that activities at the campus are controlled by an Industrial Emissions (IE) licence which includes details of measures to prevent accidental emissions. Therefore, the link between impacts on public health deriving from the proposals vulnerability to accidents has not been made.

Conclusion on Public Health

8.7.12. Having regard to the above, I do not consider that the proposed development would adversely impact on public health by reason of noise or vibration, and whilst risk of accidents and explosions cannot be ruled out within the Intel Campus, they are governed by separate statutory codes including an Industrial Emissions licence, and are unlikely to occur as a result of, or be exacerbated by, the proposed development.

8.8. **Natural Heritage**

8.8.1. Lastly, the appellant has placed significant weight on the impacts of the proposal on the natural heritage of the area in their appeal submission. The grounds of appeal are extensive in this regard and overlap significantly with the obligations under the Habitats and Birds Directives, and indeed the EIA Directive in terms of likely significant

effects on the environment. For clarity, these issues are fully considered in the EIA and the AA, including the AA screening, as set out in sections 9 and 10 of this report.

8.8.2. The more general concerns raised in relation to the impact of the proposal on birds, bats, molluscs, trees and the petrifying springs habitats is considered hereunder.

Birds

8.8.3. The appellant raises concerns in relation to the collision risk associated with the new OHL given bird flight paths and foraging ranges. During my inspections I noted a number of birds, mostly common garden species, but I did spot a grey heron and a family of ducks in the Rye Water at Sandford's Bridge and a buzzard in the river valley. Bird call, including that of the common wood pigeon, was also audible thru the site.

8.8.4. This suggests that the presence of the existing OHL crossing the Rye Water valley does not have any significant adverse effects on bird activity in the surrounding area. Indeed, I walked under the existing OHL in the river valley to the north of the Rye Water (between towers T31 and T32) and there was no evidence of bird carcases etc.

8.8.5. In terms of collision risk, the applicant submits that the surveys recorded little overflying, with non-significant numbers of SCI species or other bird species that fly at similar heights to the proposed towers, at the appeal site. They also note that migration is limited to two short periods annually and typically above the height of collision risk, with no population effects predicted with mitigation i.e., bird diverters.

8.8.6. I have reviewed the baseline ornithological information in the EIAR and NIS, including the breeding and wintering bird surveys. The predicted effects on breeding and wintering birds are summarised in Table B1 below. Whilst the identified residual effects cause slight concern, I am satisfied that this largely relates to the local bird population and is effectively neutral given the marginal relocation over the river valley.

8.8.7. Specific issues raised by the parties regarding the foraging ranges of the cormorant and golden plover etc. and migratory concerns are noted in section 9.7 of the EIA and considered fully in the AA. On balance, I am satisfied that the proposal is unlikely to significantly impact on SCI bird numbers or adversely impact on the integrity of any SPA. I recommend that bird markers be conditioned in the event of a grant of permission in addition to the removal of Class 28 exemption under the Regulations.

Bats

8.8.8. Similarly, the appellant raises collision risk concerns in relation to bats, who are commonly regarded as poor flyers and rely on echolocation to navigate. My site inspections were during daytime hours, and therefore I did not observe any bat activity, but I do accept that the river valley location provides an ideal habitat for such activity.

8.8.9. The applicant notes that high levels of bat activity was recorded along the Rye Water and Royal Canal, the majority of which were noted as low flyers and thus would avoid potential collisions and mortality. They also state that static structures, such as those proposed, are low risk in terms of collisions and there is little impact from artificial light.

8.8.10. I have reviewed the baseline information in the EIAR/NIS including that in relation to the walked transect, tree inspection and static detector activity surveys. The predicted effects on bats are summarised in Table B1 below. On balance, I am satisfied that the proposal is unlikely to impact on bats with no significant increase of collision risk.

Molluscs

8.8.11. The appellant has raised concerns in relation to molluscs, albeit in the context of a lack of survey information in relation to the proposed route and alternative options.

8.8.12. The applicant submits that the referenced mollusc reports are historic reports in respect of baseline surveys and have been superseded by up-to-date surveys undertaken for the proposed development that represent best scientific knowledge.

8.8.13. I have reviewed the baseline mollusc information in the EIAR and NIS. The predicted effect on molluscs is summarised in Table B1 below and is limited to potential pollution events which could affect the supporting habitat due to a deterioration in water quality.

8.8.14. Whilst I do have a slight concern in relation to the habitat suitability survey for *Vertigo angustior* at Louisa Bridge, which appears to be incomplete in terms of 'result' and 'fail/pass' columns (see EIAR Table 6.5 v. Table 6.9 / NIS Table 4 v. Table 8), and I share the appellants concerns in this regard, I am satisfied that the relevant habitats have been identified and the proposed OHL and towers are sufficiently removed.

Trees

8.8.15. Some tree cutting/removal is proposed along the OHL corridor in order to facilitate the works. A Tree Survey Report, setting out the arboricultural impact of the proposal, in addition to an arboricultural method statement has been submitted in this regard.

8.8.16. The appellant suggests that this represents an unnecessary removal of important habitat and must be considered in comparison to the lesser impacts from better overhead and underground options. They also raised concerns regarding the impact of tree removal on air pollution effects in the SAC, reflecting a concern initially raised by the NPWS but apparently resolved following the further information submission.

8.8.17. In relation to tree removal, the applicant submits that the further information response clarifies that only affect a small proportion of the trees in the area will be affected. I have reviewed the further information response, it in turn refers to the technical information contained in Appendix 6.1 of the EIAR. This relates to the requirement to maintain safety clearances along the full route of the realignment of the power line.

8.8.18. In this regard I note the standard measures set out in the technical note (Table 2.1) indicate that all trees are to be cut back to a height of 3m underneath and within a lateral distance of 10m from outside the conductors. The impact of this on the trees within the OHL corridor is visually represented in Figures 3.1 to 3.12 and I accept that for the most part it represents minor lopping and topping. The main impact on trees will be between towers T1 and T2, along the R148, and where the OHL traverses a wooded area, between towers T6 and T7, with cutting from the treetop between 10m and 12m. I am however conscious that this is based on survey data from December 2021 and given the accompanying tree survey is based on inspections from February and June 2022, I recommend that a tree survey should be conditioned in addition to up-to-date protection measures and compensatory planting, in the event of a grant.

8.8.19. Concerns regarding the impact of tree removal on air pollution effects in the SAC are also considered separately in the EIA (section 9.8), where a neutral residual operational impact in relation to air quality is identified with a slight reduction in deposition because of tree cutting along the east boundary. In simple terms, I have no concerns regarding the level of vegetation removal on the air quality in the SAC.

Petrifying Springs

8.8.20. Finally in terms of natural heritage, the appellant raises concerns regarding the impact of the proposal on the Annex I petrifying springs habitat. Chief amongst their concerns is the effect of dewatering, particularly in the vicinity of tower T6, on such habitat. They have also suggested that the impact of soil contamination has not been considered.

8.8.21. In relation to dewatering, the applicant states that there is no likely hydraulic continuity between tower sites and the identified petrifying springs and therefore the ground and surface water regime, which supports the springs/seepages, will be unchanged. They also submit that the condition of groundwater or soil underlying the site has no bearing on the potential for the proposal to cause significant effects on the springs/seepages.

8.8.22. A technical assessment of these issues is comprehensively covered in the EIA (section 9.8) in respect of geology, hydrology and hydrogeology. Having regard to the information provided, I am satisfied, on balance, that there is no likely hydrogeological connectivity between the tower excavation sites and zones of influence, and that of tower T6 specifically, and the groundwater sources for the petrifying springs habitat.

8.8.23. The mitigation measures outlined in the EIAR and NIS, and measures set out in the CEMP are noted in this regard and should be conditioned in the event of a grant.

Conclusion on Natural Heritage

8.8.24. Having regard to the above, I do not consider that the proposed development would adversely impact on the natural heritage of the area or on other designated sites. I specifically note that much of the appellants concern regarding natural heritage impacts is tied up in the perceived lack of assessment of underground options. Having regard to my conclusion in section 8.5 above and considering the topography of the appeal site and underlying geology/hydrogeology, I am not persuaded that undergrounding the 110kV line close to the Rye Water would have less of an impact.

8.9. Conclusion on Planning Assessment

8.9.1. Having considered each of the substantive issues raised by the appellant and observer during the course of the appeal and having regard to the applicant's response, and comments from the planning authority, on balance, I cannot find any justification to recommend a refusal of permission on planning grounds. This concludes my *de novo* assessment of the proposed development, subject to the EIA and AA which follow.

8.9.2. I consider that the proposed development, which would divert an existing constraint to the periphery of major employment lands, accords with relevant planning policy.

9.0 Environmental Impact Assessment

9.1. Statutory Provision

9.1.1. The applicant has submitted an Environmental Impact Assessment Report (EIAR) prepared by Environmental Impact Services (November 2022). In this regard, I note that they have considered the likely significant effects of the project and pre-application advice from the planning authority in deciding to prepare an EIAR for the proposal.

9.1.2. They have also stated that the EIAR is to ensure compliance with the EIA Directive. This, in my opinion, renders their 'voluntary EIAR' position and the appellants associated concerns regarding the consideration of the EIAR moot in many respects.

9.1.3. Article 102 of the Planning Regulations states that where a planning application for sub-threshold development is accompanied by an EIAR, the application shall be dealt with as if the EIAR had been submitted in accordance with section 172(1) of the Act. This principle equally applies to the appeal before me and therefore the subsequent environmental impact assessment does not prejudice either party to this appeal.

9.2. EIA Structure

9.2.1. This section of the report therefore comprises the environmental impact assessment of the proposed development in accordance with the Planning Act and associated Planning Regulations, which incorporate the European directives on environmental impact assessment (Directive 2011/92/EU, as amended by 2014/52/EU). Section 172 of the Planning Act defines EIA as:

a. consisting of the preparation of an 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. includes 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 which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

9.2.2. Article 94 and Schedule 6 of the Planning Regulations set out requirements on the contents of an EIAR. This section of the report is therefore divided into two sections.

9.2.3. The first section provides an examination of the EIAR and assesses compliance with the requirements of Article 94 and Schedule 6 of the Planning Regulations.

9.2.4. 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 defined environmental parameters, having regard to the EIAR and relevant supplementary information. It also provides a reasoned conclusion and allows for integration of the reasoned conclusion into the Boards decision, should they agree with the recommendation made.

9.3. Issues Raised in Respect of EIA

9.3.1. The main issues raised in respect of EIA by the parties to this appeal are summarised in sections 6.1.7 and 6.2.7 above. There is however significant overlap with other issues raised, including procedural issues such as the legibility of the EIAR on the planning authority website, concerns regarding amenity impacts (visual and built heritage), alternative route options, natural heritage including matters relating to appropriate assessment, flood risk and public health. Whilst these other issues have already been considered and concluded upon under the main planning assessment section of this report, they are also considered in the context of the EIA where relevant.

9.3.2. For completeness and clarity therefore, the main EIA issues can be briefly stated as:

- Consideration of alternative route options
- Consideration of cumulative impacts
- Biodiversity (habitats and species)
- Groundwater and soil quality
- Visual amenity
- Built heritage
- Accident risk
- Flood risk
- Noise

9.4. Compliance with Article 94 and Schedule 6 of the Regulations 2001

Article 94 (a) Information to be contained in an EIAR (Schedule 6, paragraph 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).	A description of the proposed development is contained in Chapter 4 of the EIAR including details on the site, surroundings and context, design and layout of the development, and arrangements for construction and protection of the environment during operation as set out in detail in the accompanying outline CEMP. In each technical chapter, where relevant, the EIAR provides details on use of natural resources and the production of emissions and/or waste. It is noted that the proposal does involve demolition works of the existing towers and this is addressed in Chapter 13 with a project specific RWMP included in Appendix 13.1.
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 relevant technical chapters of the EIAR. 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).	The EIAR includes designed in mitigation measures and other measures to address potential adverse effects identified in technical studies. These, and arrangements for monitoring, are summarised in Appendix 1.1 (Compendium of Mitigation & Monitoring Measures) and the Outline CEMP. Mitigation measures comprise standard good practices and site-specific measures and are largely capable of offsetting significant adverse effects identified in the EIAR, except in respect of impact on local landscape and bird populations, for the reasons stated in the assessment below.
A description of the reasonable alternatives studied by the person or persons who prepared 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).	A description of the alternatives considered is contained in Chapter 3 and Appendix 3.1 of the EIAR. The alternatives considered include alternative locations east, west and through the Intel Campus, and alternative routes including overhead lines and underground cables. The main reasons for opting for the current proposal were based on a systematic evaluation of the alternatives against industry criteria in order to identify the best performing option (BPO). I am satisfied, therefore, that the applicant has studied reasonable alternatives in assessing the proposed development and has outlined the main reasons for opting for the current proposal before the Board and in doing so the applicant has taken into account the potential impacts on the environment. Whilst I acknowledge the concerns of the appellant, as considered in section 8.5 above, I am fully satisfied that the legislative requirements have been discharged.

Article 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Paragraph 2).	
A description of the baseline environment and likely evolution in the absence of the development.	In each technical chapter of the EIAR details are provided on the existing baseline environment. However, a description of how the baseline environment is likely to evolve in the absence of the development is not typically included. I therefore comment on the likely evolution of the baseline environment, where necessary, in the context of the 'do nothing' scenario.
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	The methodology employed in carrying out the EIAR, including the forecasting methods is set out, in each of the individual chapters assessing the environmental effects. The applicant has indicated in the relevant chapters where difficulties have been encountered (technical or otherwise) in compiling the information to carry out EIA. I comment on these, where necessary in the technical assessment below and for the reasons stated, I am satisfied that forecasting methods are adequate.
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.	This issue is specifically dealt with in Chapter 16 of the EIAR. Specific risks have been identified in relation to the project's vulnerability to flooding and major accident. These risks are reasonable and are assessed in my report.
Article 94 (c) A summary of the information in non-technical language.	This information has been submitted as a separate standalone document ('Non-Technical Summary'). I have read this document, and 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.
Article 94 (d) Sources used for the description and the assessments used in the report	The sources used to inform the description, and the assessment of the potential environmental impact are set out within the various introductory sections to each of the chapters and listed at the end of the EIAR. I consider the sources relied upon are generally appropriate and sufficient other than for example expired documents such as the Kildare County Development Plan 2017-2023, however I accept that this was extant when the application was lodged with the planning authority and references to the draft plan have been made, where relevant.
Article 94 (e) A list of the experts who contributed to the preparation of the report	A list of the various experts who contributed to the report are set out in Table 1.2 in Chapter 1 of the report.

Consultations

9.4.1. The planning application and further information was submitted in accordance with the requirements of the Planning Act and Regulations in respect of public notices.

9.4.2. Submissions were received from statutory bodies and third parties, including at further information stage, and are considered in this report, in advance of decision making.

9.4.3. I am satisfied, therefore, that appropriate consultations have been carried out and that third parties had the opportunity to comment on the proposal. As noted, the appellants concern regarding the legibility of the plans etc. submitted, including their reference to initial comments from the NPWS, did not prejudice them in making the subject appeal.

Compliance

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

9.5. Assessment of Likely Significant Effects

9.5.1. This section of the report sets out an assessment of the likely environmental effects of the proposal as detailed in the various chapters of the EIAR. These chapters are assessed under the following headings, as set out in Section 171A of the Act:

- Population and human health (section 9.6).
- Biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directives (section 9.7).
- Land, soil, water, air and climate (section 9.8).
- Material assets, cultural heritage and the landscape (section 9.9).
- The interaction between these factors (section 9.10).

9.5.2. In accordance with Section 171A of the Planning Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR and submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on these environmental parameters and the interaction of these. Each topic section is therefore structured around the following headings:

- Issues raised in submissions/appeal
- Examination, analysis and evaluation
- Direct and indirect significant effects

9.6. Population and Human Health

Issues Raised

9.6.1. Issues raised by the appellant that may impact on population and human health generally relate to amenities, both those from a visual and built heritage perspective.

9.6.2. Other issues raised under which human health could be directly or indirectly effected include noise, risk of accidents, soil and groundwater quality and flooding.

9.6.3. Irrespective, each of the issues raised under this topic can be more accurately addressed under the specific topic below i.e., visual impacts are expressly considered under 'landscape and visual impact'. There is also a degree of overlap i.e., flooding is considered under both 'water and hydrology' and 'accident and disaster risk'.

Examination, Analysis and Evaluation

9.6.4. Chapter 5 of the EIAR deals with population and human health. It considers the likely effects of the development on population and human health in the area and immediate hinterland having regard to population; employment; tourism, amenities and recreation; and the results of the assessments of likely effects on other environmental parameters (water, air, noise, waste and traffic) as outlined elsewhere in the EIAR.

Baseline

9.6.5. The existing environment is described in section 5.3 of the EIAR. It details the existing context, including Intel's role as a significant employer, both regionally and nationally. It also addresses the land use structure adjacent to the site and wider socio-economic factors, including population growth, and tourism, amenity and recreation facilities.

9.6.6. In terms of planning and development context, it states that Intel's Collinstown Campus is one of the largest single manufacturing facilities in the state and employs c. 4,500 people. This is approximately one-third of the stated inhabitants of Leixlip.

9.6.7. In terms of the land use structure adjacent to the site, the EIAR states that the surrounding land uses are largely reflected in the zoning categories for the area, all of which place significant emphasis on continuing manufacturing activity at the campus.

9.6.8. In terms of population growth, Table 5.1 indicates that the total population of the seven ED's in the immediate hinterland grew 7.4% in the intercensal period 2011-2016.

Whilst I note that there is more recent CSO census of population data available, I am satisfied that a similar trajectory is represented, indicating strong economic activity.

9.6.9. The EIAR also notes the significance of Carton House as a national and international tourism facility and the amenity and recreational opportunities provided by the adjacent Royal Canal and Leixlip Amenities Centre, to the east and south, respectively.

Potential Effects

9.6.10. Potential effects, as identified in the EIAR, are summarised in Table PHH1 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined in the EIAR. However, under 'do nothing scenario' it is anticipated that existing patterns and trends in population and human health in the area of the site are likely to continue.
Construction	• Population and Employment: States that the proposal will not generate additional employment but instead utilise the existing 'sustaining construction staff' at the Intel Campus (c. 300-500 workers). EIAR does not indicate magnitude of effect. • Tourism, Amenities and Recreation: Not examined for the construction phase. However, it is noted that the main effects will be limited to the stated construction period of c. 6-8 months. • Water: Addressed in Chapter 8 of the EIAR which concludes, with the implementation of environmental control measures, effects on the surface water environment will be short-term, imperceptible and neutral. • Air: Assessed in Chapter 9 of the EIAR and it is concluded that the development will have short-term, localised, negative and imperceptible effects during construction. • Noise and Vibration: Addressed in Chapter 10 of the EIAR and it concludes that construction noise will be neutral, imperceptible and short-term subject to good working practices as per the Outline CEMP and not exceeding the limits proposed within the EIAR. The applicant's appeal response concedes that rock breaking was not assessed in this chapter – see section 6.2.7 above. This does not significantly alter the potential effects. • Waste: Addressed in Chapter 13 of the EIAR and it concludes that the effects of the construction phase will be short-term, imperceptible and neutral subject to compliance with the site-specific Resource and Waste Management Plan. Operational effects will be long-term, neutral and not significant. • Traffic: States that the impact of traffic generated by the proposal will have no significant effect on the amenity of the area following the implementation of mitigation measures. Refers to Appendix 1 (Construction Traffic Management & Logistics Plan) of the Outline CEMP in this regard.
Operation	• Population and Employment: States that the proposal would contribute to the maintenance of the population within Leixlip, Maynooth and Celbridge ED's through continued enhancement, efficient operation and productivity of the Intel Campus. EIAR does not indicate magnitude of effect. • Tourism, Amenities and Recreation: Does not anticipate that there will be any significant impacts on tourism, heritage, amenities and recreation due

	to the location and well-screened nature of the site. This is not substantiated and requires specific examination under the relevant topics i.e., 'landscape and visual impact' and 'built heritage'. • Water: The predicted impact during operation, following implementation of mitigation measures, will be long-term, imperceptible and neutral. • Air: No significant impacts to air quality are predicted during the operational phase. As such an operational assessment has been scoped out. • Noise: No sources of vibration associated with the operation of the proposed development. The associated effects are therefore described as neutral, imperceptible and long-term. • Waste: No waste will be generated or stored at the proposed development during normal operations. An imperceptible amount of waste will be generated during routine inspection and maintenance works. • Traffic: Not examined for the operational phase. However, it is anticipated that it will be limited to routine inspection and maintenance works
Decommissioning	• Not examined in this chapter but it is anticipated that many of the potential effects on population and human health are readily reversible given the nature of the proposed development. • Decommissioning of the existing OHL and towers is addressed in the Outline CEMP which notes that the same environmental controls and measures will be taken for decommissioning works, albeit in the context of the SAC.
Cumulative	• Not expressly examined in this chapter but considered in section 17.4 of the EIAR. See also section 6.2.7 above where the potential cumulative effects with the DART+ West project are addressed by the applicant.

Table PHH1: Summary of Potential Effects

Mitigation

9.6.11. The EIAR states that no specific mitigation measures are required to ameliorate the impacts on human beings although it does reference the relevant chapters in relation to the potential human health impacts of air and noise, particularly during construction, in addition to specific measures with regards to soil, water and waste. It suggests that these measures relate only to the avoidance, reduction or remedy of an impact.

Residual Effects

9.6.12. The residual impacts are described as having a positive, long-term impact on the immediate hinterlands of Intel and on Kildare and the GDA region through continued efficient operation of Intel and the associated economic and social benefits.

Assessment of Direct and Indirect Significant Effects

9.6.13. I have examined Chapter 5 of the EIAR and the associated documentation. I am satisfied that the information presented and methodology for the assessment of likely

effects is adequate, and along with the submissions from the parties to this appeal and my inspection of the appeal site, allows for an assessment of the likely significant effects of the proposed development on population and human health.

9.6.14. The appeal site straddles the urban-rural divide as with many linear projects of this type. This is reflected in the underlying land use zonings which include 'Neighbourhood Centre', 'Strategic Open Space' and 'Agricultural', but the majority of the site lies within the Intel Campus which is zoned 'Industry and Warehousing'.

9.6.15. The proposed development, which in essence is a relatively minor alteration to the Maynooth-Ryebrook and Dunfirth-Kinnegad-Rinnawade 110kV circuits resulting in a net increase of c. 450m, will have a positive, long-term impact on the immediate hinterlands of Intel, including Leixlip, Maynooth and Celbridge ED's specifically, and County Kildare and the GDA region generally, as a result of diverting a major development constraint over zoned industrial lands occupied by one of the States largest manufacturing facilities and employers. This will lead to enhanced efficiencies and productivity at the Intel Campus and the associated economic and social benefits by way of direct and indirect jobs and increased expenditure on goods and services.

9.6.16. During construction, including decommissioning of the existing OHL, there are likely to be adverse effects from construction dust, noise and increase in traffic on the local roads, including the L1015. However, these will be short-term and can be managed to minimise effects to acceptable levels via the Traffic Management Plan and CEMP. The decommissioning of the proposed OHL, whilst not addressed in the EIAR, would have similar impacts and by subject identified environmental controls as proposed.

9.6.17. With regard to amenities, both from a visual and built heritage perspective, properties and facilities in the vicinity of the site and for the apartments looking towards the development, there will be a significant change to landscape character and the supporting towers will be very visible. Whilst the effect of these changes in landscape character and visual effects are subjective, it is possible that people living in proximity to the site will experience it as having a significant effect on their residential amenity however no such concerns were raised by third parties during the application process.

9.6.18. Effects on tourism are not explicitly considered elsewhere in the EIAR, however, as discussed below, I consider that the proposed development will be visible and have a very significant effect on the landscape and negative effect on built heritage, but these

effects and impacts are highly localised and it is my view that this would not significantly and adversely impact the tourism product/resource of the County Kildare which is inextricably linked to the exceptional quality of its canals and built heritage.

9.6.19. Subject to the operation of the proposed development in line with relevant health and safety legislation (outside of the scope of the planning system) and in accordance with proposed mitigation measures, the risk of major accidents or disasters is low.

Conclusion on Population and Human Health

9.6.20. I have considered the written submissions made in relation to the proposed development and I am satisfied that the potential impacts on population and human health will generally be positive and there will be no appreciable adverse impact in terms of tourism, amenity or heritage. Some temporary adverse effects in terms of annoyance, nuisance and disruption may arise during the construction phase however these will be temporary in nature and will not give rise to long-term adverse impacts.

9.7. Biodiversity

Issues Raised

9.7.1. As noted above, the appellant has raised general concerns in respect of natural heritage and biodiversity and whilst this is primarily in the context of the Habitats and Birds Directives, their concerns overlap with the EIA Directive in terms of likely significant effects on the environment. As noted, these issues have been fully considered in the AA, including the AA screening, as set out in section 10 of this report.

9.7.2. I also note that the Department for Housing, Local Government and Heritage (DHLGH) commented during the course of the planning application and had initially raised concerns in relation to the impacts on the hydrological regime due to dewatering and the effects of this on the petrifying springs, a Qualifying Interest (QI) of the Rye Water Valley/Carton SAC. They also raised concerns regarding the impact of tree removal on air pollution effects in the SAC, foraging ranges of SPA SCI bird species, badgers, bird collision and wintering birds, along with general comment on document legibility.

9.7.3. These concerns appear to have been satisfactorily addressed at further information stage where the DHLGH have indicated that any grant of permission should be subject to the mitigation measures in the EIAR and NIS, as updated by further information.

Examination, Analysis and Evaluation

9.7.4. Chapter 6 of the EIAR deals with biodiversity. It examines the potential impacts on biodiversity that may arise as a result of the proposed development. It is supported by:

- Figures 6.1 to 6.17,
- Tables 6.1 and 6.15,
- Appendix 6.1 (Timber Cutting Requirements – Technical Note)
- Appendix 6.2 (Tree Survey Report)
- Appendix 6.3 (Guidelines for Ecological Impact Assessment, 'EcIA')
- Appendix 6.4 (Tree Impact / Protection Plan)
- Appendix 6.5 (Protected Sites for Nature Conservation in the Vicinity)
- Appendix 6.6 (Hydrogeology of Tufa Habitat, 'Johnston Report')
- Appendix 6.7 (Petrifying Springs Survey, 'Denyer Report')
- the further information response (Attachment A – Extent of Tree Removal),
- the further information response (Attachment B – Air Quality Technical Note),
- the further information response (Attachment C – Bird Diverter Specifications), and
- the further information response (Attachment D – Bird Monitoring Plan).

9.7.5. I have examined this chapter and the supporting documents. The assessment is undertaken having regard to the requirements for the protection of habitats, species and biodiversity, as set out in international, European and national legislation and national and local policy, and government and industry guidelines for EIA and EcIA.

9.7.6. Assessment methodology includes site surveys and desk top survey on the ecological baseline of the proposed landholding and surrounding area (Table 6.1). Data sources included the National Biodiversity Data Centre (NBDC). Site surveys include:

- Habitat and Flora (General) between May 2021 and September 2021 with additional survey at the location of towers T4 and T5 in September 2022.
- Habitat and Flora (petrifying springs survey) between August and December 2001.
- Habitat and Flora (bryophyte survey) between May and September 2021.
- Breeding birds between May and June 2001.

- Wintering birds between October 2021 and March 2022.
- Bats (Tree inspections) between July and October 2021.
- Bats (static detector activity) between July and August 2021.
- Bats (walked transect) between June and September 2021.
- Mammals between July and October 2021.
- Molluscs between August and September 2021.

9.7.7. Survey limitations are considered in section 6.1.1.6 of the EIAR with the only limitation identified being the tree inspections for potential roosting features (PRFs) where it is noted that the inspections were outside the optimal survey period and there is likely to be more trees with PRFs than recorded. This is not considered to impact on the assessment given the mitigation measures include pre-trimming vegetation surveys.

9.7.8. I note that the initial bat transect survey was not completed due to weather conditions and access issues, but this is not considered to pose any limitations as the subsequent surveys were completed in full. I also note that the mammal surveys were outside the optimal survey period, but this is not considered to pose a serious limitation as it is stated that mammal surveys and badger sett monitoring is actively carried out at Intel.

9.7.9. Whilst these limitations are noted, I would accept that they are unlikely to have been a significant impediment to the assessment of likely significant effects on biodiversity.

9.7.10. I have also examined the further information response which effectively updates this chapter of the EIAR by providing the requested commentary in respect of badger setts, bird collision and wintering populations of golden plover found at North Bull Island SPA. The DHLGH had requested this information specifically in the context of the EIAR, however they requested other information that falls within this environmental topic in the context of the submitted NIS. This included information in relation to the impact of dewatering on the petrifying springs, the impact of tree removal on air pollution in the SAC, and information on foraging ranges and migration of SCI birds.

9.7.11. In this regard, I note a large portion of the appeal reflects the initial DHLGH comments.

Baseline

9.7.12. The baseline ecological environment is described in section 6.3 of the EIAR. Given the linear nature of the proposal, the development site varies and is described as artificial surfaces (BL3) at tower T1 consisting of the Lidl car park, a mixture of artificial

surfaces (BL3) and bare ground (ED2) associated with the car park in the Intel Campus at towers T2 and T3, a mosaic of dry calcareous and neutral grassland (GS1) and scrub (WS1) at tower T4 and calcareous and neutral grassland (GS1) at tower T5. At the location of tower T6, the EIAR notes that it is located to the north of the Rye Water on recolonising bare ground (ED3) and bare ground (ED2), adjacent to an area of dry meadows and grassy verges (GS2). Tower T7 is located on third party farmland.

9.7.13. A variety of other habitats lie within the appeal site boundary and under the proposed OHL. They include locally important (higher value) mixed broadleaf meadow woodland (WD1), county important oak-ash-hazel woodland (WN2) and mixed broadleaf/conifer woodland (WD2) and internationally important depositing lowland rivers (FW2), rich fen and rush (PF1) and wet willow-alter-ash woodland (WN6).

9.7.14. The EIAR notes that whilst none of the proposed towers are located within a European site, the site boundary / OHL infrastructure crosses through the Rye Water Valley/Carton SAC. It also notes other sites including those hydrologically connected via the River Liffey and Dublin Bay, c. 20km downstream (Figure 6.9) and nationally designated sites (Figure 6.10). Designations relevant to this appeal are listed above.

9.7.15. The EIAR summarises all ecological receptors (Table 6.15) and identifies the key ecological receptors (KERs) that are subject to impact assessment. They include:

- National and European sites, traversing, within the vicinity, and hydrologically connected to the appeal site. Many of the national sites share boundaries and conservation interests with the European sites. As noted, the effect of the development on these sites is considered in the applicant's NIS and the AA section of this report. I note that the Royal Canal pNHA is a national site that is not a European site, and whilst it lies in close proximity to the site boundary, effects can be ruled out on the basis of lack of connectivity and separation distance to works.
- Various habitats of local, county and international importance including mixed broadleaf meadow woodland (WD1), oak-ash-hazel woodland (WN2), mixed broadleaf/conifer woodland (WD2), depositing lowland rivers (FW2), rich fen and rush (PF1) and wet willow-alter-ash woodland (WN6) as noted above.
- Up to six of Ireland's nine bat species, all protected under national and European legislation, and deemed to be of county importance due to the presence of Nathusius' pipistrelle and the low numbers of this species recorded in Co. Kildare.

- Badgers, given the known active badger sett within the hedgerow running north-south between the development site and the Royal Canal. I note that the local badger population is deemed to be local importance (higher value) due to the known presence of resident populations within the wider study area.
- Otter, known to forage along the Rye Water, of county importance but unlikely to be associated with the QI otter populations of any SAC.
- Other mammals protected under national legislation and whilst not recorded, are likely to be present and widespread e.g., Irish stoat, hedgehog and pygmy shrew.
- Breeding birds, where a total of 46 no. (5 no. Red list, 11 no. amber list and 30 no. Green list) species, including 4 no. listed as Special Conservation Interest (SCI) species for SPAs, were recorded during the breeding bird surveys of the wider Intel lands. In relation to the 4 no. SCI birds, the EIAR notes that the nearest European site for grey heron is c. 97.5km south of the study area (Wexford Harbour and Slobs SPA), the nearest site for mallard is Dundalk Bay SPA, c. 56km north, the nearest site for kingfisher, which is also an Annex I (Birds Directive) species, is the River Boyne and River Blackwater SPA, c. 29km away, and the nearest site for herring gull is Ireland's Eye SPA, c. 30km away. Each of the breeding bird species is deemed to be of national importance due to the presence of the kingfisher.
- Wintering birds, where a total of 55 no. (7 no. Red list, 14 no. amber list and 34 no. Green list) species, including 9 no. listed as SCI species for SPAs, were recorded within the study area, 4 no. during the breeding bird survey, as noted above. In relation to the additional 5 no. SCI birds, the EIAR notes that the nearest European site for black-headed gull is c. 18.5km away (South Dublin Bay and River Tolka Estuary SPA), the nearest site for common gull is Dundalk Bay SPA, c. 56km away, the nearest site for cormorant is Ireland's Eye SPA, c. 29km away, the nearest site for golden plover, which is also an Annex I species, is North Bull Island SPA, c. 21.6km away, and the nearest site for lesser black-headed gull is Lambay Island SPA, c. 33.8km away. Each of the wintering birds is of national importance due to the presence of Annex I species, including the little egret.
- White-clawed crayfish, remains of which were recorded at two locations along the Rye Water during the mammal surveys. The EIAR states that this section of the Rye Water is within favourable reference ranges and given the protection afforded to it under national legislation, the species is deemed to be of county importance.

- Molluscs, notwithstanding the findings of the habitat suitability surveys along *inter alia* the northern and southern banks of the Rye Water which noted that vegetation along the river's edge did not have the degree of wetness and stable hydrogeological/hydrological conditions to support Desmoulin's whorl snail *Vertigo moulinsiana* or the narrow-mouthed whorl snail *Vertigo angustior.* The EIAR does note however that Desmoulin's whorl snail is known to occur in the marsh/fen at Louisa Bridge, east of the appeal site, although the narrow-mouthed whorl snail was not recorded at Louisa Bridge since 1997. Molluscs are therefore valued as of international importance as they are QIs of the Rye Water Valley/Carton SAC.

9.7.16. Other mammals, which were evident (fox, deer and rabbit) and assumed to be present (wood mouse, house mouse and brown rat), and deemed to be of local importance (lower value), were excluded as they are not protected under national legislation.

Potential Effects

9.7.17. Potential effects, as identified in the EIAR, are summarised in Table B1 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined. However, it would be reasonable to expect no change in biodiversity in the absence of the proposed development.
Construction	• European sites: Potential for direct effects on conservation objectives due to ground and surface water pollution and in the absence of mitigation (see section 10.0 – Appropriate Assessment). • National sites: Potential for direct effects on habitats and species due to ground and surface water pollution and in the absence of mitigation (see Appropriate Assessment). • Habitat loss: Permanent but minor loss of dry calcareous and neutral grassland, scrub, recolonising bare ground etc. associated with the tower foundations. Lands will be reinstated and is not likely to result in a significant negative effect. Some loss of mixed broadleaf woodland, oak-ash-hazel woodland etc., although this involves topping, pruning etc., as opposed to complete removal. The loss will be permanent and has the potential to result in a likely significant negative effect without mitigation. • Habitat degradation: Potential for a pollution event to affect the receiving ground and surface waters and downstream marine environment that could result in adverse effects on habitats especially those associated with the Rye Water Valley/Carton SAC, including Annex I petrifying springs, and those associated with other European sites in Dublin Bay. In the absence of mitigation, potential surface and ground water quality impacts could temporarily result in a likely significant effect on habitats. • Retained vegetation: Potential for damage to treelines, scrub and woodland not earmarked for removal and this could result in death of individual trees etc. This impact would be significant and long-term. • Badgers: Habitat loss is not significant, as the reduction in foraging resource is not likely to negatively affect local badger populations.

	Significant disturbance/displacement from foraging areas is unlikely given the short-term nature of the works and their nocturnal habits. There is however potential badger death/injury within setts as well as sett destruction as a result of heavy machinery and this is a likely significant negative effect. • Otter: No works proposed within any watercourses and there will be no loss of aquatic or suitable riparian/terrestrial foraging habitat, therefore no significant negative habitat loss effects are anticipated. Towers T5 and T6 are located within the disturbance range (200-250m) of an otter couch but the existing woodland and treelines will shield effects and given the lack of footfall from construction workers and the otters crepuscular nature, there is no possibility of significant disturbance/displacement. However, in the absence of mitigation, there is potential to affect water quality in the Rye Water and further downstream and is this likely to result in a significant negative effect. • Other small mammals: Site clearance is unlikely to result in a level of mortality that would affect species of conservation status, such as hedgehog and pygmy shrew, and result in a significant negative effect. Increased human presence and/or noise and vibration from works has the potential to displace mammals from breeding/roosting places and foraging habitat, however this will be short-term and therefore disturbance/ displacement is unlikely to result in a significant negative effect. • Bats: No suitable roosting features identified and therefore no significant negative effect arising from direct mortality or loss of roosting habitat. The loss of woodland and treeline habitat will result in a permanent loss of foraging habitat however this is relatively small scale and therefore its loss is unlikely to affect the conservation status of the local bat population and will not result in a likely significant negative effect. Artificial lighting levels are not anticipated to increase significantly and not required in the long-term. Any temporary lighting will be confined to specific areas and the most common species recorded are amongst the least sensitive to light spill. Disturbance/displacement impacts will not be significant. • Breeding and wintering birds: Vegetation clearance will result in permanent loss of foraging/nesting habitat, albeit relatively small-scale with reduction as opposed to removal, with the availability of suitable alternatives likely to be sufficient to maintain local populations in the long-term. It is therefore unlikely to affect the conservation status of local bird populations and result in a likely significant effect. Direct mortality of breeding birds, should site clearance be undertaken during the breeding season, has the potential to result in a likely significant negative effect. Given the short-term nature of the works, disturbance/displacement effects will also be short-term and not likely to affect the conservation status of local bird populations. Finally, in the absence of mitigation measures, impacts of the proposal on water quality could affect species such as the kingfisher that depend on the aquatic environment for food, and potentially result in long-term effects on bird populations downstream, resulting in a likely significant negative effect. • Molluscs: A pollution event has the potential to affect water quality in the Rye Water and adjacent Rye Water Valley/Carton SAC which could have long-term effects on the fen and marsh habitats which support its QI's and result in a likely significant effect. • White-clawed crayfish: No loss of aquatic / suitable habitat and therefore no significant negative effects regarding habitat loss are anticipated. A pollution event has the potential to affect water quality in the Rye Water and further downstream and this could have long-term effects on the

	quality of the receiving rivers systems and population levels, resulting in a likely significant effect.
Operation	• Designated sites: No impacts predicted on any European or nationally designated site (see section 10.0 – Appropriate Assessment). • Habitat loss: Ongoing trimming/maintenance will be required to ensure flashovers during windy conditions and falling trees are avoided, potentially resulting in long-term effects on habitats and resulting in a likely significant negative effect. • Retained vegetation: Potential for damage during trimming and risk to habitats through vehicle movement/storage within RPAs which could result in damage/death of individual trees and therefore a significant long-term effect. • Badgers: Potential for operational clearance works and machinery use to result in injury/death of badgers and sett damage, resulting in a likely significant negative effect. • Otter: No operational phase impacts predicted. • Other small mammals: No operational phase impacts predicted. • Bats: Direct mortality through collision or electrocution is unlikely to result in a significant negative effect. There is however potential for roosting bats to be injured/killed during on-going maintenance. • Breeding and wintering birds: Direct mortality through collision or electrocution is unlikely to result in a significant negative effect. However, it is likely that nesting sites holding eggs and birds killed if trimming/maintenance is carried out during the breeding season. This is likely to have a short-term effect on local populations and likely to result in a significant negative effect. • Molluscs: No operational phase impacts predicted. • White-clawed crayfish: No operational phase impacts predicted.
Decommissioning	• Not assessed but anticipated to be similar to construction albeit reduced in magnitude as extensive excavation and wet concrete handling not required. The potential environmental effects of vehicle movement/storage and pollution/contamination will remain during decommissioning.
Cumulative	• Given the nature and relatively short period of the works, the predicted impacts, the mitigation measures, and the protective land use policies/objectives, significant cumulative negative effects are not predicted.

Table B1: Summary of Potential Effects

Mitigation

9.7.18. Mitigation measures for the KERs, where a potential significant effect has been identified, are set out in section 6.5 of the EIAR. Construction phase measures are extensive and focus primarily on the protection of water quality through the control of soil excavation, fuel and chemical handling and the control of water. These measures are incorporated into the Outline CEMP which will be updated prior to commencement. They are also embedded in subsequent chapters of the EIAR i.e., soils, water etc.

9.7.19. Other construction phase measures relate to the protection of habitats, breeding birds, badger, otter, molluscs and crayfish. The following are of note:

- Fencing off of trees to be retained with no parking or storage within the RPAs and the provision of a 5m buffer zone to ensure RPAs are not damaged,
- No removal of vegetation between 1st March and 31st August to avoid direct impacts on nesting birds, and
- Badger setts to be clearly marked with restrictions of heavy machinery and lighter machinery within specified distances to setts during certain months, including the breeding season.

9.7.20. No operational phase impacts are predicted with regard to surface and ground water, designated sites, badger, otter, other small mammals, molluscs or crayfish and therefore no operational mitigation is proposed. Operational phase measures in relation to the protection of habitats, badger, bats and birds include:

- Appointment of an ecologist to review trimming requirements, and
- Suitably qualified bat ecologist to undertake pre-trimming checks.

9.7.21. I also note that a Project Ecologist, employed in an Ecological Clerk of Works (ECoW) role, will be appointed to record completion of the measures and carry out post-construction monitoring including surveys of bird flight activity along the OHLs.

Residual Effects

9.7.22. With the implementation of mitigation measures (including monitoring), no significant residual impacts are predicted on the receiving aquatic environment/designated sites.

9.7.23. I note that areas of habitat loss will be minor, and lands will be reinstated with topsoil and vegetation which will minimise the impact over the short to medium-term. I also note that the EIAR refers to the Tree Survey Report which indicates that vegetation clearance involves topping, pruning etc. as opposed to complete removal and will not, therefore, result in a likely significant negative residual effect, as it is not long-term.

9.7.24. Operational mitigation measures will minimise the impact of direct mortality from collisions on local bird populations however the proposal is likely to result in long-term effects on breeding and wintering populations resulting in a likely significant negative residual effect at a local to national scale, depending upon the species impacted.

9.7.25. With the implementation of mitigation measures (including monitoring), no residual impacts are predicted on the badger, otter, bat, molluscs or crayfish populations.

Assessment of Direct and Indirect Significant Effects

9.7.26. I have examined, analysed and evaluated Chapter 6 of the EIAR, all of the associated documentation and submissions on file in respect of biodiversity. I am satisfied that the applicant's understanding of the baseline environment, by way of desk and site surveys, is comprehensive and that the key impacts in respect of likely effects on biodiversity, including avifauna, as a consequence of the development are identified.

9.7.27. The key residual effects of the development will be the negative long-term impact on breeding and wintering bird populations, notwithstanding the proposed mitigation measures, including the use of bird diverters. However, I note that referenced industry studies suggest that collisions with OHLs are considered to be relatively rare events and mortality from collisions is unlikely to affect bird populations except where rare/protected species occur. In this regard, I note a number of SCI birds, including Annex I species, were identified during the breeding and wintering bird surveys.

9.7.28. However, in the absence of specific collision risk modelling, it is difficult to fully anticipate the magnitude and spatial extent of the final predicted effect/impact after mitigation, notwithstanding the residual evaluation in the EIAR. This prediction is made more complex given the foraging ranges and migration pathways of certain SCI bird species, which don't normally occur, including those identified by the appellant.

9.7.29. However, and notwithstanding the fact that the appeal site traverses the Rye Water Valley/Carton SAC, it is relatively remote to the nearest SPAs (breeding sites) and by virtue of the lower number of SCI species recorded during the surveys (see section 9.7.15), and the general lack of suitable habitat, I consider that these species are unlikely to form part of an SPA colony. I do not, therefore, consider that a collision risk assessment is required, and I am satisfied that I have sufficient information to determine the consequential likely significant effects on wintering and breeding birds.

9.7.30. In these circumstances, I am persuaded that there will be no population effects on SCI bird numbers and thus no adverse impacts on the integrity of any of the SPAs will arise. This is also considered in section 10 (Appropriate Assessment) below, and whilst there will be likely significant negative residual effects, it predominantly relates to species that habituate the area, with no apparent loss of Annex I or SCI species.

9.7.31. Concerns raised by the appellant in relation to the impact of the proposal on the Annex I petrifying springs habitat, due to dewatering at the tower excavation sites and soil contamination, are fully considered in section 9.8 below, and for the reasons outlined, I am fully satisfied that no residual effects will arise subject to the stated mitigation.

Conclusion on Biodiversity

9.7.32. I have considered all of the written submissions made in relation to biodiversity, including ornithology, and the contents of the EIAR and associated documentation. For the reasons stated in my assessment, above, I am satisfied that the applicant has satisfactorily demonstrated the absence of significant effects on SCI bird numbers, including the cormorant and golden plover. The residual impact on birds is acceptable and effectively neutral given the marginal OHL relocation across the Rye Water valley.

9.8. Land, Soil, Water, Air and Climate

9.8.1. This section relates to chapters 7, 8, 9 and 10 of the EIAR.

Land, Soils, Geology and Hydrogeology

Issues Raised

9.8.2. The appellant has not raised any direct concerns in relation to land, soils, geology or hydrogeology but does raise indirect concerns in relation to the hydrogeological impacts of dewatering on the petrifying springs having regard to the height of the water table, water flow and maintenance of hydrological regimes. This issue is also addressed under 'biodiversity', as noted above, and is equally considered in the AA (section 10). There is also an overlap with 'water and hydrology', as discussed below.

9.8.3. The appellant also suggests that the impact on habitats and species associated with puncturing through pockets of contaminated groundwater and/or pumping contaminated groundwater during the construction phase has not been explored. In this regard, they suggest that the results of the soil quality, including contamination, on the petrifying springs during excavation and pumping has not been considered.

9.8.4. For completeness, and as noted above, the DHLGH had raised similar concerns in relation to the impacts on the petrifying springs due to dewatering, albeit later resolved.

9.8.5. The local authority's Environment Section had no objection subject to conditions.

Examination, Analysis and Evaluation

9.8.6. Chapter 7 of the EIAR deals with land, soils, geology and hydrogeology. It examines the potential impact of the proposal on land, soil, geological and hydrogeological aspects of the site and surrounding area. There is significant overlap with Chapter 6 in terms of biodiversity and Chapter 8 in terms of surface water and hydrological issues. This chapter is supported by:

- Tables 7.1 and 7.5,
- Figures 7.1 to 7.16, and
- Appendix 7.1 (Impact Rating and Criteria Assessment)

9.8.7. I have examined this chapter and the supporting documents. It focuses mainly on the geological and hydrogeological attributes at the site and in close proximity to the subject lands, including aquifers, springs and the groundwater regime, and upon any impacts, positive or negative, that the proposal may have on such attributes.

9.8.8. The assessment methodology includes geotechnical site investigations, including monitoring, in addition to a review of desk-based geological information and historical monitoring data for the area. Figures 7.3 to 7.7 provide a baseline for historical and existing land uses and in this regard, I note the presence of stream, or open channel, traversing the Intel Campus on a south-north alignment/flow. This stream now appears to be culverted and is considered further under 'water and hydrology'. Figure 7.8 illustrates the site investigation points which coincide with the locations of towers T2, T3, T4, T5 and T6. In this regard, I observed borehole caps within the vicinity of towers T4, T5 and T6 and slit trench locations were apparent in the vicinity of towers T2 and T3. Figures 7.9 to 7.11 illustrate the underlying soils, subsoils and bedrock geology, respectively. Figures 7.12 and 7.13 illustrate the underlying aquifer classification and groundwater vulnerability, respectively. Table 7.3 sets out the groundwater quality results from samples recovered from three borehole locations near T1, T2 and T4. Table 7.5 sets out the soil quality results for samples recovered from each location. Figures 7.15 and 7.16 provide cross-sections of the linear site.

9.8.9. Section 7.4 details the potential effects of the proposal on land, soils, geology and the hydrogeological environment but notes that the impacts are equally applicable to surface water (hydrology) and biodiversity due to the inter-relationship between topics.

9.8.10. I have also examined the further information response and whilst it does not update this chapter of the EIAR, it does refer specifically to sections 7.3.20.2, 7.3.20.3, 7.3.20.5 and 7.4.1.1 in respect of the concerns raised by the DHLGH and notes that the statements contained therein are made by a competent expert and supported by information on the existing hydrogeological conditions including geotechnical data.

Baseline

9.8.11. Section 7.3 of the EIAR sets out the receiving environment in terms of land, soils, geology, hydrogeology and site history including potential for existing and historical contamination. It notes that the OHL diversion project is located within an environmentally sensitive area, crossing the Rye Water between towers T6 and T7 and therefore traversing, and running adjacent to, the Rye Water Valley/Carton SAC which encompasses part of Leixlip Spa, a wetland area. Referring to historical monitoring data, it indicates that the spa lies over five distinct terraces and is fed by groundwater from two sources, as previously stated. The main source being a deeper, older and warmer source discharging at the Spa Well at the top of the first terrace, with a more recent shallow source discharging in the vicinity of the 'filtering ponds'.

9.8.12. The EIAR indicates that geotechnical site investigations were conducted during May and June 2022 and included inspection pits, cable percussion boring, rotary core drillholes, slit trenches, groundwater and gas monitoring, and general surveying. In this regard I note that no cable percussion boring was conducted at tower T6 given the shallow depth to bedrock which was proven in nearby slit trenches (c. 1.70mBGL).

9.8.13. Section 7.3.8 summarises the site-specific soil conditions and lithology encountered in the footprint of the proposed towers. I note that the depth at which weathered rock was encountered varies greatly beneath each tower location with the shallowest being in the vicinity of T6, as highlighted above, and around T4 (c. 5.0mBGL). The deepest bedrock was recorded in the vicinity of tower T5 (c. 16.0mBGL). The overlying subsoil also varies between cohesive and granular deposits. For example, in the vicinity of T5, granular deposits composed of clayey sand gravel and associated to alluvial deposits were encountered from 13.2mBGL to bedrock and overlain with sandy gravelly clay. Similarly, in the vicinity of T4, granular deposits composed of clayey sand gravel were encountered from 1.2mBGL to bedrock and overlain with sandy gravelly clay. Whereas cohesive deposits only, of sandy gravelly clay, were found

near tower T6. Topsoil, composed of sandy silt/clay, and c. 0.2-0.4m thick was encountered near T4, T5 and T6, and adjacent to the Rye Water Valley/Carton SAC.

9.8.14. The EIAR then considers aquifer vulnerability having regard to regional hydrogeology and groundwater levels and quality. It notes that the site is underlain by a locally important (LI) bedrock aquifer which is 'moderately productive only in local zones.' In this regard, no significant groundwater strikes were observed during the excavation of site investigation points although groundwater entry was observed at the base of three trenches in the vicinity of tower T6 which indicates that there may be some connectivity between this groundwater regime and the level of the nearby Rye Water. Borehole strikes were logged in the vicinity of towers T2 and T4. Standing water level (SWL) monitoring in each drillhole confirmed elevated water levels near towers T4 and T6. Therefore, and notwithstanding the GSI classification, the actual groundwater vulnerability for towers T2, T3 and T5 is low-moderate, T4 is high and T6 is extreme.

9.8.15. Section 7.3.19 identifies the water environment receptors as groundwater in the underlying bedrock aquifer beneath the site, the Rye Water Valley/Carton SAC, the Louisa Springs Complex adjacent to tower T5 and the Royal Canal further to the east.

9.8.16. Section 7.3.20 of the EIAR notes that a Conceptual Site Model (CSM) was developed in order to identify any likely Source-Pathway-Receptor (SPR) linkages between the site and the main water environment receptors. In terms of towers T1, T2 and T3, the EIAR considers that there is no likely hydraulic continuity with the Rye Water Valley/Carton SAC and the Louisa Springs Complex and therefore no likely influence during construction based on the hydraulic characteristics of the limestone and the groundwater flow direction. Similarly, a likely influence during the construction of towers T4 and T5 is also ruled out given the unlikely hydraulic continuity with the SAC and springs based on the hydraulic characteristics of the limestone and the groundwater flow direction, and notwithstanding the 'high' vulnerability of T4, as noted.

9.8.17. Whilst the EIAR classifies the vulnerability of tower T6 as 'extreme' given the shallow depth of bedrock, it notes that it is overlain by low permeability cohesive deposits. It also notes that some dewatering can be expected during the excavation works which are projected to 2.8mBGL, given bedrock was encountered at c. 2.0mBGL, however based on the hydraulic characteristics of the limestone and the groundwater flow

direction, it states that there is no likely influence during works on this tower and the springs. It also notes that there is negligible connectivity in the location of tower T7.

Potential Effects

9.8.18. Potential effects, as identified in the EIAR, are summarised in Table GH1 below.

Project Phase	**Potential Effects**
Do Nothing	• There would be no excavation or erection of towers at these sites and therefore there would be a neutral effect on the geological and hydrogeological environment.
Construction	• Dewatering: There will be a temporary local impact around the excavation area of tower T6 due to required dewatering, however given the size of the excavations and the presence of cohesive deposits over bedrock, no impact on water levels or flow in the river is expected from dewatering. No significant dewatering is expected in the other tower locations, with the exception of tower T4 which overlies granular deposits. Any water in this excavation will be pumped into tanks/vacuum truck and removed off site prior to any concrete pours. The temporary impact during construction will have no effect on the Louisa Springs Complex, as it will not impact on the deep or shallow groundwater given the lack of hydraulic continuity and groundwater flow directions. In the absence of mitigation, the effect on the local and regional environment is likely to be temporary, slight and negative. • Soil and bedrock removal: The risk of contaminated soils being present is low, nonetheless material, if not correctly managed or handled, could negatively impact on human beings as well as water and soil environments. Some 1,320cu.m of soil is to be stockpiled with c. 740cu.m for each tower taken off site. The maximum excavation level would be c. 4mBGL and therefore it is very unlikely that bedrock could be exposed with the exception of tower T6 where foundation depth is 2.8mBGL. In the absence of mitigation, the effect on the local and regional environment is likely to be temporary, slight and negative. • Accidental spills and leaks: There is a risk of accidental pollution from suspended solids, cement, hydrocarbons and wastewater which may result in localised contamination of soils and groundwater should contaminants migrate through the subsoil. Any soil stripping will further reduce the thickness and natural protection it provides. In the absence of mitigation, the effect on the local and regional environment is likely to be short-term, slight and negative.
Operation	• There will be a minimal decrease in recharge areas associated with the foundations however this will not affect the regional water table within the bedrock or the hydrological/hydrogeological regime of the water environmental receptors i.e., the Rye Water Valley/Carton SAC or Louisa Springs Complex. In the absence of mitigation, the effect on the geological and hydrogeological environment is likely to be long-term, imperceptible and negative.
Decommissioning	• Not assessed but anticipated to be similar to construction albeit reduced in magnitude as extensive excavation and wet concrete handling not required. The potential environmental effects of soil storage and stockpiling and contamination will remain during decommissioning.
Cumulative	• During the construction phase, contractors will be required to operate in compliance with the Outline CEMP which includes the mitigation measures

	outlined in the EIAR. Other developments will have to adopt similar measures and therefore there will be no cumulative impact on the ground waterbody status. There will be minimal cumulative potential for change in soil quality or the groundwater regime and therefore the cumulative impact is considered to be temporary, neutral and imperceptible. • There are no other large projects within this aquifer so no cumulative impact on aquifer recharge is identified. All developments are required to manage groundwater discharges and as such there will be no cumulative impact on groundwater quality or the ground waterbody status. The cumulative effect of operation is long-term and imperceptible with a neutral impact on soil and water quality.

Table GH1: Summary of Potential Effects

Mitigation

9.8.19. The EIAR states that environmental control measures have been incorporated in the design to mitigate the potential effects on the surrounding soils, geology and hydrogeology. These measures address the main activities of potential impact including the control of soil excavation/infill and export from the site, fuel and chemical handling, transport and storage and control of water during construction, and will be governed by a CEMP, as outlined, and which includes the requirement for a RWMP.

9.8.20. Some of the EIAR mitigation/Outline CEMP measures include silt barriers and coffer damming to create dry working areas in order to minimise suspension and mobilisation of sediment downstream, management of soil stockpiles away from the SAC/flood zones/open channels and backfilling one tower leg at a time, dust suppression, fuel storage bunds, removal of contaminated soils and wastewater from the site and other such measures that accord with best practice guidelines including IFI, TII and CIRIA. I also note that regular monitoring/auditing of mitigation measures will be carried out.

Residual Effects

9.8.21. With the implementation of mitigation measures, the EIAR considers that the residual impact during the construction phase will be temporary, imperceptible and neutral and the magnitude of the impact is considered negligible. A similar magnitude is found for the operational phase with long-term, imperceptible and neutral residual impacts.

Assessment of Direct and Indirect Significant Effects

9.8.22. I have examined, analysed and evaluated Chapter 7 of the EIAR, all of the associated documentation and submissions on file in respect of land, soil, geology and hydrogeology. The primary concern relates to the impact on the hydrogeological environment as a result of dewatering. This is localised to tower T4 and tower T6, but

I am satisfied that there is sufficient evidence contained within this chapter to demonstrate that the proposal is unlikely to result in significant environmental effects.

9.8.23. In terms of groundwater quality, I note that Table 7.3 of the EIAR has identified a number of exceedances for Groundwater Threshold Values (GTV) and Interim Guideline Values (IGV) in the vicinity of towers T2, T3, T4, T5 and T6. The appellant suggests that elevated chloride at these locations is an indicator of pollution from sewage and industrial effluent. They also note that ammonia NH_3 exceedances were detected in three of the boreholes. The applicant, on the other hand, refutes the suggestion that this is indicative of pollution from sewage and industrial effluent, and I have no information before me to prove the point in either way. What I do have, however, is evidence that the transmissibility of such pollutants through groundwater is low given the lack of fissures identified in the bedrock and low permeability in the subsoils. This is proven by the groundwater yields from wells in the area and must be considered in the context of the EPA ground waterbody WFD status which is 'good'. I do not agree with the appellant that there is a lacuna to be addressed in this regard.

9.8.24. In terms of soil quality, I note that Table 7.5 of the EIAR has identified a single exceedance in the vicinity of tower T2 for General Assessment Criteria (GAC) derived from UK values i.e., Suitable 4 Use Level (S4UL) for residential threshold. In this regard, the EIAR notes that there are no legislated threshold values for soils and the main basis of assessment remains the CSM and consideration of pollutant linkages through S-P-R. Whilst I note that the appellant has raised concerns regarding soil quality generally and the hazardous quantities of Total Organic Carbon (TOC) in borehole BH02 specifically, there is no evidence to suggest that there will be migration of these soils to more sensitive locations. Moreover, the applicant has identified this potential hazard in terms of appropriate waste management as noted in the CEMP.

Conclusion on Land, Soils, Geology and Hydrogeology

9.8.25. Having regard to the foregoing, I do not consider that the proposed development is likely to give rise to significant effects on the land, soils, geological or hydrogeological environments subject to the mitigation measures set out in the EIAR and replicated in the outline CEMP, including a RWMP with specific measures to address contaminants.

Water and Hydrology

Issues Raised

9.8.26. As noted above, the appellant has raised concerns in relation to dewatering and groundwater contamination which could impact on water flow and the maintenance of hydrological regimes. This is generally a hydrogeological issue and has been fully addressed but there is an obvious inter-relationship with the water and hydrology topic.

9.8.27. The local authority's Environment and Water section had no objections.

Examination, Analysis and Evaluation

9.8.28. Chapter 8 of the EIAR deals with water and hydrology. It examines the potential impact of the hydrological aspects of the site and surrounding area. There is significant overlap with Chapter 6 in terms of biodiversity and Chapter 7 in terms of groundwater and hydrogeological issues. This chapter is supported by:

- Figures 8.1 and 8.2,
- Tables 8.1 and 8.2, and
- Appendix 8.1 (Impact Rating and Criteria Assessment)

9.8.29. I have examined this chapter and the supporting documents. It focuses mainly on the hydrological attributes in close proximity to the subject lands, including river and stream water quality, watercourses, localised flooding and surface water features, and upon any impacts, positive or negative, that the proposal may have on such attributes.

9.8.30. The assessment methodology includes geotechnical site investigations in addition to a review of desk-based hydrological information and historical monitoring data for the adjoining area. Figure 8.2 illustrates the nearest EPA water quality monitoring station. Table 8.2 illustrates the biological water quality (Q-value) rating for the Rye Water.

9.8.31. Section 8.4 details the potential effects of the proposal on the water and hydrological environment but notes that the impacts are equally applicable to groundwater (hydrogeology) and biodiversity due to the inter-relationship between these topics.

Baseline

9.8.32. Section 8.3 of the EIAR sets out the receiving environment in terms of hydrology, surface water quality and flooding. It notes that the nearest surface water receptor is the Rye Water, located within 90m and 70m of towers T5 and T6, which hosts the Rye

Water Valley/Carton SAC and pNHA and encompasses the Leixlip Spa, a wetland area. The separate groundwater sources for the Leixlip Spa/Louisa Springs Complex are also detailed, as set out above, in addition to the proximity to the Royal Canal pNHA, although there is no hydrological linkage between the towers and the canal.

9.8.33. In addition, this chapter specifically notes the presence of two small tributaries in the vicinity of the appeal site. These are identified as the Collinstown Stream, discharging to the north side of the Rye Water and flowing east of towers T6 and T7, and an unnamed stream / open ditch[4] discharging to the south side of the Rye Water and west of tower T5. As noted in para. 9.8.7, this stream appears to have been culverted at some point having regard to the historical mapping of the area. No other watercourses are identified but the EIAR does note a dry ditch to the east of towers T4 and T5.

9.8.34. In terms of surface water quality, the EIAR notes that the Rye Water river waterbody WFD status for 2013-2018 was 'poor' and this status is related to data from the nearest EPA monitoring station c. 1.7km downstream of the proposed development. It also states that the most recent Q-value indicates that the Rye Water is 'slightly polluted', meaning an improvement from poor to moderate status compared to previous data. This accords with the most recent river waterbody WFD status for the Rye Water (review period 2016-2021) which also indicates an improvement to 'moderate' status.

9.8.35. In terms of flood risk, the EIAR notes the SSFRA which I have considered and come to a conclusion on in section 8.6 above. As such, the EIAR states that there are no potential residual risks as other infrastructure will be unaffected during extreme events.

Potential Effects

9.8.36. Potential effects, as identified in the EIAR, are summarised in Table GH2 below.

Project Phase	**Potential Effects**
Do Nothing	• There would be no excavation or erection of towers at these sites and therefore there would be a neutral effect on the hydrological environment.
Construction	• Dewatering: As per Table GH1 – in the absence of mitigation, the effect on the local and regional environment is likely to be temporary, slight and negative. • Increased sediment loading: Surface water may contain increased silt levels or become polluted which can cause damage to receiving watercourses. The risk of contaminated soils being present is low, nonetheless material, if not correctly managed or handled, could negatively impact on human beings as well as water and soil environments. In the

[4] Also referred to as the 'East Stream (south)' in other supporting documentation including the EIAR and NIS.

	absence of mitigation, the effect on the local and regional environment is likely to be temporary, slight and negative. • Accidental spills and leaks: As per Table GH1 – in the absence of mitigation, the effect on the local and regional environment is likely to be short-term, slight and negative.
Operation	• As per Table GH1 – in the absence of mitigation, the effect on the hydrological environment is likely to be long-term, imperceptible and negative.
Decommissioning	• Not assessed but anticipated to be similar to construction albeit reduced in magnitude as extensive excavation and wet concrete handling not required. The potential environmental effects of soil storage and stockpiling and contamination will remain during decommissioning.
Cumulative	• As per Table GH1 – there will be minimal cumulative potential for change in the hydrological regime and therefore the cumulative impact is considered to be temporary, neutral and imperceptible. • As per Table GH1 – all developments are required to manage surface water discharges and as such there will be no cumulative impact on surface water quality or the surface waterbody status. The cumulative effect of operation is long-term and imperceptible with a neutral impact on surface water quality.

Table GH2: Summary of Potential Effects

Mitigation

9.8.37. The mitigation measures set out in this chapter of the EIAR generally reflect those relating to hydrogeology as noted above. These measures address the main activities of potential impact including surface water run-off and fuel and chemical handling, and will be governed by a CEMP, as outlined, which includes the requirement for a RWMP.

Residual Effects

9.8.38. With the implementation of mitigation measures, the EIAR considers that the residual impact during the construction phase will be temporary, imperceptible and neutral and the magnitude of the impact is considered negligible. A similar magnitude is found for the operational phase with long-term, imperceptible and neutral residual impacts.

Assessment of Direct and Indirect Significant Effects

9.8.39. I have examined, analysed and evaluated Chapter 8 of the EIAR, all of the associated documentation and submissions on file in respect of water and hydrogeology. The main concern relates to the impact on the surface water as a result of dewatering and contaminated runoff. This is localised to T4, T5 and T6 and I am satisfied that there is sufficient evidence to demonstrate that significant environmental effects are unlikely.

Conclusion on Water and Hydrology

9.8.40. Having regard to the foregoing, I do not consider that the proposed development is likely to give rise to significant effects on the water or hydrogeological environments subject to the mitigation measures set out in the EIAR and replicated in the outline CEMP, including a RWMP with specific measures to address likely contaminants.

Air Quality and Climate

Issues Raised

9.8.41. The appellant has not raised any direct concerns in relation to air quality and climate but does raise general concerns in relation to tree removal and its impact on the petrifying springs habitats. In this regard, they query whether the dynamics of airflow in the EIAR has been modelled. This issue therefore overlaps with 'biodiversity' and AA but is fully considered here and therefore the conclusions below apply elsewhere.

9.8.42. The local authority's Environment Section had no objection subject to conditions.

Examination, Analysis and Evaluation

9.8.43. Chapter 9 of the EIAR assess the likely air quality and climate impacts associated with the proposed development. There is some overlap with Chapter 5 in terms of human health, as noted in Table PHH1. This chapter is supported by:

- Tables 9.1 and 9.10,
- Figure 9.1,
- Appendix 9.1 (Dust Management Plan), and
- the further information response (Attachment B – Air Quality Technical Note).

9.8.44. The assessment methodology includes an overview of industry guidance and criteria for rating impacts including those relating to air quality standards, dust deposition guidelines and climate agreements. Table 9.1 sets out the Ambient Air Quality Standards Regulations which include limit values for NO_2, PM_{10} and $PM_{2.5}$. In terms of construction phase air quality, it applies the UK's Institute of Air Quality Management (IAQM) guidance in the absence of applicable Irish guidance. Similarly, in terms of construction traffic, the EIAR notes that the use of the UK's Design Manual for Roads and Bridges (DMRB) is advised by TII in the absence of Irish guidance. Figure 9.1 details the prevailing wind direction and speed at Casement Aerodrome,

the nearest Met Station c. 8km southeast of the appeal site. Tables 9.2 and 9.3 set out the background NO_2 and PM_{10} concentrations for Zone C, one of four national air quality zones defined by the EPA i.e., towns with a population of greater than 15,000.

9.8.45. Tables 9.4 to 9.6 set out the sensitivity of the area to dust soiling effects on people and property, human health impacts and ecological impacts respectively, based on IAQM criteria. Tables 9.7 to 9.9 detail the risk of dust impacts derived from earthworks, construction and the movement of heavy vehicle ('trackout'), respectively. Table 9.10 summarises the dust impact risk used to define the site-specific mitigation measures.

9.8.46. Section 9.4 details the potential effects of the proposal on air quality during the demolition/construction phase. This focuses on impacts arising from demolition, earthworks, construction and trackout. It also considers the impacts on climate and human health during the construction phase and in this regard, there is an inter-relationship with 'population and human health'. The EIAR also considers the operational impacts of the proposal, albeit stated as neutral for air quality and climate.

9.8.47. I have also examined the further information response which effectively updates this chapter of the EIAR by providing a cover letter and Technical Note regarding the impact of tree cutting/removal on air pollution, and particularly in the context of the SAC. It states that the likely residual effect, if any, will be a slight reduction in deposition because the tree cutting will increase the velocity of movement which suspends airborne particles. It therefore suggests that the proposed tree cutting/removal is likely to have no, or a very slight positive, air pollution effect within the SAC. I note that the applicant has clarified that the modelling techniques were discussed in the EIAR under PA ref. 19/91 (ABP-304672-19) and therefore the cover letter numbering relates to that EIAR. The key point is that the referenced modelling was run with "depletion" turned off i.e., without the mitigation effects of the trees. Therefore, the impact of tree removal would not materially change the assessment.

Baseline

9.8.48. Section 9.3 of the EIAR sets out the receiving environment in terms of meteorological data, baseline air quality data, climate baseline and sensitivity. Having regard to the meteorological data obtained from Casement Aerodrome and the EPA air quality monitoring data, it estimates the current background NO_2 concentration as 14µg/cu.m, the current background PM_{10} concentration as 15µg/cu.m and the current $PM_{2.5}$

concentration is estimated as 12 µg/cu.m based on a ratio of 0.8. The EIAR also notes *Ireland's Greenhouse Gas Emissions Projections* report for 2021-2040 (EPA, 2022) and the requirement for Ireland to meet the 51% emissions reduction target.

9.8.49. In terms of the sensitivity of the receiving environment, the EIAR notes that there are c. 10 residential receptors within 100m of the proposed works in addition to the Intel Campus. Based on the IAQM criteria, the worst-case sensitivity of the area to dust soiling and human health impacts is considered low. Whilst it also notes the proposals proximity to the Rye Water Valley/Carton SAC and pNHA, it states that only certain points are within 20m of the ecological area. Notwithstanding, it deems the overall sensitivity to be high as the OHL crosses the Rye Water between towers T6 and T7.

Potential Effects

9.8.50. Potential effects, as identified in the EIAR, are summarised in Table AQ1 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined. However, it would be reasonable to expect no change in air quality or climate in the absence of the proposed development.
Construction	• Demolition: Dismantling of the 4 no. towers will not result in any dust emissions. • Earthworks: Negligible risk of dust soiling and human health impacts and a low risk of ecological impacts. • Construction: Negligible risk of dust soiling and human health impacts and a low risk of ecological impacts. • Trackout: Negligible risk of dust soiling and human health impacts and a medium risk of ecological impacts. • Air quality: Overall, in the absence of mitigation, dust soiling impacts from demolition and construction works are predicted to be short-term, localised, negative and slight. Construction stage traffic will have an imperceptible, neutral and not significant short-term impact on air quality. • Climate: Potential for GHG emissions but site traffic is unlikely to make a significant impact on climate. Potential impact on climate is imperceptible, neutral, not significant and short-term. • Human health: Dust emissions have the potential to impact on human health through release of PM_{10} and $PM_{2.5}$ but the risk is negligible at most. In the absence of mitigation, there is potential for imperceptible, negative, short-term, non-significant impacts on human health.
Operation	• No impacts predicted during the operational phase as there will be no emissions to the atmosphere. The operational phase will therefore be neutral in relation to both air quality and climate with no, or a very slight positive, air quality effect within the SAC given the reduction in deposition as noted in the further information response.
Decommissioning	• Not assessed but anticipated to be similar to construction albeit reduced in magnitude as extensive excavation and wet concrete handling not required. The potential environmental effects of soil storage, stockpiling

	and fugitive dust from rock/concrete breaking will remain during decommissioning.
Cumulative	• Potential for cumulative impacts to nearby sensitive receptors should the construction phase coincide with the demolition/construction of any other permitted developments within 350m of the site, including works at the Intel Campus. See also section 6.2.7 above where the potential cumulative effects with the DART+ West project are addressed by the applicant. • Dust mitigation measures will prevent significant dust emissions from occurring and therefore significant cumulative impacts are not predicted. Cumulative impacts during the construction phase are likely to be short-term, negative, non-significant and imperceptible. • No cumulative impacts are predicted during the operational phase.

Table AQ1: Summary of Potential Effects

Mitigation

9.8.51. A Dust Management Plan is set out in Appendix 9.1 of the EIAR, the dust minimisation measures of which will be incorporated in the overall CEMP. These measures include road sweeping and dampening down, wheel washing, speed restrictions, material handling and stockpiling systems, regular inspections etc. with additional measures in the event of dust nuisance occurring outside the site boundary and monitoring of deposition along the SAC using the Bergerhoff method. Whilst construction impacts to climate are imperceptible, the EIAR notes that good practice measures can be incorporated i.e., prevention of vehicle idling and machinery inspections. No operational monitoring as neutral impacts on air quality and climate are predicted.

Residual Effects

9.8.52. The residual construction phase air quality impacts in terms of dust soiling will be short-term, negative, localised, non-significant and imperceptible at nearby receptors. The residual construction phase climate impact in terms of site traffic, plant and machinery is short-term, non-significant, neutral and imperceptible. Residual construction phase human health impacts are negative, short-term, non-significant and imperceptible. Residual operational phase is neutral in relation to both air quality and climate with a slight reduction in deposition because of tree cutting/removal along the east boundary.

Assessment of Direct and Indirect Significant Effects

9.8.53. I have examined, analysed and evaluated Chapter 9 of the EIAR, all of the associated documentation and submissions on file in respect of air quality and climate. Having regard to the nature and location of the proposed development, I am satisfied that the direct and indirect effects of the development on air quality are short-term,

imperceptible and not significant, arising during construction and decommissioning. In the longer term, during operation, it will be neutral in relation to both air quality and climate as there will be no emissions to the atmosphere, with no, or a very slight positive, air quality effect within the SAC given the reduction in deposition. In this regard, I am satisfied that mitigation properties of the subject trees are accounted for.

9.8.54. With the implementation of proposed mitigation measures, which are established good construction practices for controlling dust, I am satisfied that construction effects will not be significant, and I fully accept that there will be no operational emissions.

Conclusion on Air Quality and Climate

9.8.55. Having regard to the foregoing, and for the reasons stated, I am satisfied the proposed development is acceptable in terms of likely emissions to air and will provide in the longer term a neutral impact, with a slight positive impact on air quality within the SAC.

Noise and Vibration

Issues Raised

9.8.56. The appellant raised issues regarding the noise impacts arising from the use of rock breaking equipment. These impacts are also considered under 'public health' in the Planning Assessment and more generally under 'population and human health' above.

9.8.57. The local authority's Environment Section had no objection subject to conditions.

Examination, Analysis and Evaluation

9.8.58. Chapter 10 of the EIAR deals with noise and vibration. It examines the noise and vibration effects associated with the proposed development. It is supported by:

- Figures 10.1 to 10.4,
- Tables 10.1 to 10.12, and
- Appendix 10.1.

9.8.59. I have examined this chapter and the associated figures and tables. It focuses on potential noise and vibration effects of the proposal on its surrounding environment, during both the short-term construction phase and the long-term operational phase.

9.8.60. The assessment methodology includes a review of measured prevailing noise levels in the vicinity of the appeal site, a review of the most applicable standards and

guidelines in order to set a range of acceptable noise and vibration criteria for both phases of the project, predictive calculations at the nearest sensitive locations for the construction phase and a review of potential effects during the operational phase.

9.8.61. The EIAR notes that there is no national guidance relating to the maximum permissible noise levels of a construction project. In the absence of such limits, the EIAR defers to other industry guidelines and standards. In this regard, Table 10.1 sets out the permissible noise levels at dwellings during construction based on TII guidance. Table 10.2 includes guidance as to the likely magnitude of effect associated with construction activities relative to the construction noise threshold (CNT) based on UK guidance. Table 10.3 details the likely effects associated with a change in traffic noise during construction. Tables 10.4 and 10.5 relate to vibration impacts on buildings and people.

9.8.62. Table 10.6 describes the eight noise monitoring locations, and their locations are illustrated in Figure 10.3. Figure 10.4 illustrates the locations of the nearest residential noise-sensitive locations (NSLs). Section 10.4 of the EIAR details the main effects with indicative construction noise levels at the nearest NSL listed in Table 10.12.

9.8.63. I have also examined the further information response which includes some commentary in respect of the noise concerns raised by third parties. I also note that the applicant's appeal submission accepts that rock breaking was not specifically assessed in the EIAR as they considered there was no likelihood of significant effects occurring because of rock breaking. The appeal submission does however acknowledge potential for rock breaking activity and effectively updates Table 10.12, with Figure 10.4 presenting the calculated noise from rock breaking at each NSL.

9.8.64. In this regard, the applicant submits that predicted rock breaking construction noise values at all NSLs are within the criterion of 70 dB $L_{Aeq, 1hr}$ for weekdays and 65 dB $L_{Aeq, 1hr}$ for Saturdays and suggests that the effect on the noise environment will be transient subject to the implementation of good practice noise reduction measures.

Baseline

9.8.65. The EIAR states that noise monitoring is completed annually at NSLs surrounding the Intel site. The monitoring undertaken in 2018 was selected as representative of the prevailing noise environment given the ongoing construction activities in the intervening years. The monitoring was carried out at eight sites, NM-1 to NM-8, in various urban and rural locations around the appeal site (Table 10.6 / Figure 10.3).

9.8.66. Prevailing background noise levels for daytime and night-time are given in Tables 10.7 and 10.8. They indicate a relatively quiet noise environment, but not a low noise environment, typically dictated by road traffic for the five locations to the north of the Intel Campus. At locations NM-5 and NM-6, which are within the campus, the noise environment is marginally elevated with traffic noise from the adjacent R148.

9.8.67. For context, the EIAR also notes that construction has been ongoing at the Intel Campus over an extended period of time, and therefore it contributes to the make-up of the existing noise environment. Results of a 2021 survey are therefore also presented using the same monitoring locations (Tables 10.9 and 10.10). Construction noise is noted as having a noticeable contribution to noise levels at NM-1 and NM-5.

Potential Effects

9.8.68. Potential effects, as identified in the EIAR, are summarised in Table NV1 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined. However, it would be reasonable to expect no change in the noise environment.
Construction	• Construction noise: A variety of plant items will be in use such as excavators (with and without a rock breaker), lifting equipment, dumper trucks, compressors and generators as set out in the outline CEMP. Due to the nature of daytime activities, there is potential for the generation of significant levels of noise. • Construction traffic: Additional traffic introduced onto the local road network due to the construction phase will not result in sufficient changes in traffic volume to cause a significant noise effect. • Vibration: Little likelihood of structural or even cosmetic damage to neighbouring dwellings as a result of vibration due to the proximity of sensitive locations to the site works. • Predicted effects: For construction noise (Table 10.12, as updated by Figure 10.4 of the appeal submission) and traffic noise, effects are predicted to be well within industry guidelines (CNT) and effects overall are predicted to be neutral, imperceptible and short-term.
Operation	• Noise: Typically, OHLs will not emit any noise that would be perceptible at nearby NSLs. The buzzing, humming or crackling phenomenon, known as 'Corona Noise', is less likely with new components and unlikely in this instance. • Vibration: There is no source of vibration associated with the operation of the proposed development. • Operational noise and vibration impacts are predicted to be neutral, imperceptible and long term.
Decommissioning	• Effects similar to construction but for shorter duration.

Cumulative	• Not expressly examined in this chapter but considered in section 17.4 of the EIAR. See also section 6.2.7 above where the potential cumulative effects with the DART+ West project are addressed by the applicant.

Table NV1: Summary of Potential Effects

Mitigation

9.8.69. As no significant construction or decommissioning noise effects have been identified, no specific noise or vibration mitigation measures are required or proposed. The applicant does however refer to general guidance (CEMP) for controlling construction noise and vibrations in order to ensure that potential noise effects are minimised.

9.8.70. No significant operational noise or vibration effects identified.

Residual Effects

9.8.71. Residual construction noise is identified as negative, not significant and short-term. Noise associated with construction vehicle movements will be negative, imperceptible and short-term. Operational noise phase will be neutral, imperceptible and long-term.

9.8.72. Residual vibration effects are expected to be neutral, imperceptible and short-term during both the construction and operational phases of the proposed development.

Assessment of Direct and Indirect Significant Effects

9.8.73. I have examined, analysed and evaluated Chapter 10 of the EIAR, all of the associated documentation and submissions on file in respect of noise. Having regard to the nature of the proposed development, and its location, it will introduce short-term construction activity to a transitional urban-rural environment. Further, the long-term effects of the OHL will not increase background noise in the area of the appeal site.

9.8.74. Notwithstanding the appeal grounds, having regard to my inspection of the site and environs, the distance of the existing towers to be decommissioned and the proposed towers and OHL from sensitive receptors, my examination of the EIAR and the conservative approach adopted towards the likely effects of the development on the noise environment, I am satisfied that the proposal will not give rise to any significant adverse direct, indirect or cumulative effects and is acceptable in this regard.

Conclusion on Noise and Vibration

9.8.75. Having regard to the foregoing, and for the reasons stated, I am satisfied the proposed

development is acceptable in terms of likely noise and vibration impacts and will provide in the longer term a neutral and imperceptible impact in the surrounding area.

Conclusion on Land, Soil, Water, Air and Climate

9.8.76. I have considered all of the written submissions made in relation to land, soil, water, air and climate, and the contents of the EIAR and associated documentation. For the reasons stated I am satisfied that the proposed development, subject to the satisfactory implementation of proposed mitigation measures, in addition to the measures in the CEMP, would not have any unacceptable direct, indirect or cumulative impacts on land, soil, water, both ground and surface regimes, air or climate.

9.9. Material Assets, Cultural Heritage and the Landscape

9.9.1. This section relates to chapters 11, 12, 13, 14 and 15 of the EIAR.

Material Assets

Issues Raised

9.9.2. The appellant did not raise any issues in relation to material assets during the course of the planning application or in their appeal submission. There is however some overlap regarding this topic and 'water and hydrology' and 'waste management'.

9.9.3. As noted, Irish Water, now Uisce Éireann, raised some initial concerns in relation to the location of a 450mm wastewater sewer adjacent to proposed tower T4. Whilst the exact location was not verified, they stated that it was a critical asset that caters for the main wastewater flow from Maynooth towards the Leixlip WWTP. The applicant's further information response addressed these concerns to the satisfaction of Uisce Éireann who have issued a Confirmation of Feasibility letter in that regard.

9.9.4. I also note that the local authority's Environment Section had no objection to the proposed development subject to conditions including agreement of a Construction and Demolition Resource Waste Management Plan (RWMP) prior to commencement.

Examination, Analysis and Evaluation

9.9.5. Chapter 12 of the EIAR deals with material assets. It notes that the impacts on the various material assets, including water and waste, are addressed elsewhere in the EIAR. It therefore considers water in a more limited context and notes that a minor

connection will be made to the existing Intel supply for temporary site offices etc. It also reiterates that there will be no connections during the operational phase.

9.9.6. In terms of energy demand, it states that the use of fuel and electricity will be low during the construction phase given the nature of the project which itself is an energy project that will divert/decommission existing infrastructure, without disrupting supply.

Potential Effects

9.9.7. Regarding potential effects, the EIAR indicates that a review of utilities mapping and slit trenching was carried out to identify any existing services that may be impacted.

9.9.8. As a result, an existing watermain was identified in the vicinity of tower T2 and this will be diverted prior to the excavation of the tower foundations. I note that Uisce Éireann have no concerns regarding the diversion of this 300mm watermain provided that the applicant ensures that this asset is protected during the construction and operational phases, that adequate separation distances are provided between such assets and proposed tower T2, and that any development near such assets is carried out in compliance with that Uisce Éireann's Standard Details and Codes of Practice.

9.9.9. As noted, their concerns regarding the effect of tower T4 have also been resolved.

9.9.10. The EIAR also notes that an existing MV cable was identified in the vicinity of tower T3 and this will be diverted in advance of the tower foundation installation works.

Assessment of Direct and Indirect Significant Effects

9.9.11. I have examined, analysed and evaluated Chapter 12 of the EIAR, all of the associated documentation and submissions on file in respect of material assets. Having regard to the nature and location of the proposal, I am satisfied that it will not give rise to any significant adverse direct, indirect or cumulative effects and is therefore acceptable.

9.9.12. Whilst the works are likely to give rise to a planned electricity outage, notwithstanding the commentary provided in the EIAR and NTS, this is likely to be temporary in nature.

Conclusion on Material Assets

9.9.13. Having regard to the foregoing, and for the reasons stated, I am satisfied that the applicant, through the EIAR and associated documents submitted, has demonstrated an absence of significant effects arising from the development on material assets.

Built Heritage

Issues Raised

9.9.14. The appellant raised issues regarding the impact of the proposal on adjacent heritage structures, including Leixlip Spa, Hexagonal Pool (Spa Well) and Louisa Bridge from a visual perspective. These impacts are also considered under 'built heritage' in the Planning Assessment and more generally under 'landscape and visual impact' above.

Examination, Analysis and Evaluation

9.9.15. Chapter 14 of the EIAR deals with built heritage impacts. It examines the potential impact of the proposal on the architectural and cultural heritage of the area, both in close proximity to the site and, in the case of architectural or cultural sites of great significance, well beyond the site location. It is supported by:

- Figures 14.1 to 14.10,
- Tables 14.1 and 14.8, and
- the further information response (Attachment H – Conservation Assessment).

9.9.16. I have examined this chapter and the associated figures and tables. It focuses mainly upon the presence of protected structures in close proximity to the subject lands and upon any impacts, positive or negative, that the proposal may have on such structures.

9.9.17. The assessment methodology includes inspection and survey of the surrounding context and architectural and historical research with reference to relevant documents including historical maps and writings, in addition to planning policy and legislation. Figures 14.1 to 14.6 provide an historical baseline for significance and sensitivity. Figures 14.7 to 14.10 and Tables 14.1 to 14.4 set out the relevant protected and proposed protected structure, in addition to non-protected structures deemed to be of heritage importance and structures listed in the NIAH. Section 14.4 details the main heritage impacts and a summary of these impacts are listed in Tables 14.5 to 14.8.

9.9.18. I have also examined the further information response, it effectively updates this chapter of the EIAR by providing the requested conservation comments, having regard to the panoramic views (View P1 to P6) from the environs of the adjacent protected structures, namely Louisa Bridge, the Station House, the Roman Baths and Hexagonal Well, the Rye Water Aqueduct and Toll House. I have reviewed the comments and

they do not alter the heritage impact assessment. They do, however, confirm that no development will occur within the setting, curtilage or attendant grounds of a protected, or proposed protected structure that could cause loss or damage to the special character of such structure, nor will it obscure established views of principal elevations.

Baseline

9.9.19. The receiving environment is described in section 14.3 of the EIAR. It details the character of the area and surrounding landscape. It notes the immediate industrial setting, the surrounding industrial, commercial and agricultural uses, the adjoining built-up area of Leixlip as well as significant heritage assets at Carton and Castletown in addition to immediate built and natural heritage assets and protected designations. It also provides an historical context and identifies the structures that may be impacted.

Potential Effects

9.9.20. Potential effects, as identified in the EIAR, are summarised in Table CH1 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined in the EIAR. However, I note there would reasonably be expected to be no foreseeable significant change in the existing environment.
Construction	• Not examined. However, having regard to the Outline CEMP, as referenced in the EIAR, temporary/short-term, not significant construction stage effects on built heritage assets are anticipated by virtue of distance from the appeal site, nature of the closest structures (e.g., a bridge and aqueduct), the intensity and nature of the construction activities (max. 15-20 workers and heavy machinery e.g., mobile crane), stockpiling of materials away from the structures etc. Overall, construction-stage built heritage effects, direct and indirect, are considered to be of low magnitude.
Operation	• Direct impacts: The EIAR considers that direct impacts will occur to protected structures and other structures of architectural merit including Louisa Bridge, the Hexagonal Well and Romanesque Bath, the Rye Water Aqueduct, the Collectors House, which I note are listed in the current Record of Protected Structures (RPS). It also states that part of the Royal Canal between Louisa Bridge and Confey will be similarly affected, although this is not listed in the RPS or NIAH. While Deey Bridge and Lock, Nelson's Cottage and Blakestown House are within very close proximity to the works there will be little or no perceptible direct impacts arising from the works. The demesnes, buildings and other structures at, and associated with Carton House and Castletown House, including Prospect (Tyrconnell) Tower, Conolly Folly and the Wonderful Barn are sufficiently removed from the appeal site. • Indirect impacts: The EIAR considers that the works will have an appreciable indirect impact on the views, prospects or settings of the structures considered, including Louisa Bridge, the Hexagonal Well and Romanesque Bath, the Rye Water Aqueduct, the Collectors House and that part of the Royal Canal between Louisa Bridge and Confey.

Decommissioning	• Not examined. However, some temporary effects, similar to construction, are anticipated. In the long-term, built heritage effects, direct and indirect, will be reversible with limited evidence of its existence on the site. Decommissioning stage effects are not considered to be significant, and indeed would have a positive impact as evidenced by the relocation of the OHL further east and away from a number of protected structures including Hedsor House, Carton House and the wider Carton Demesne.
Cumulative	• Not examined but it is anticipated that cumulative impact will be low-moderate and having particular regard to the DART+ West project planned for the adjacent rail line and solar farm permitted to the northwest.

Table CH1: Summary of Potential Effects

Mitigation

9.9.21. The heritage impact assessment outlined in section 14.4 of the EIAR indicates that no mitigation is proposed for any of the identified direct impacts and impacts on setting.

Residual Effects

9.9.22. As no mitigation is proposed, no residual effects are identified in the EIAR.

Assessment of Direct and Indirect Significant Effects

9.9.23. I have examined, analysed and evaluated Chapter 14 of the EIAR, all of the associated documentation and submissions on file in respect of built heritage and the visual impact of the proposal thereon. I have inspected the appeal site and surrounding area, including the most sensitive structures highlighted in the heritage impact assessment (section 14.4) which were also noted in the assessment of visual impact (section 11.4). I have also had regard to the current RPS and policy framework as set out in the Kildare County Development Plan 2023-2029 and the sensitive receptors identified.

9.9.24. The applicant, through the EIAR, has identified that the closest protected structures will be negatively impacted by the proposal, both directly and also indirectly in terms of their setting. Such impacts are identified for Louisa Bridge, the Romanesque Bath, the Rye Water Aqueduct, and the Collector's House. A minor negative impact, both directly and indirectly, is identified for the Hexagonal Well and a negative impact on the setting of the former Station House is also identified, albeit without a direct impact.

9.9.25. The recurring issue identified relates to the visibility of the proposed development from the various protected structures, albeit partially interrupted by the built and natural environment in most cases. These issues are broadly illustrated in the submitted photomontages (Appendix 11.2) and generally confirmed by the further information response. In this regard, I agree that no development will occur within the setting,

curtilage or attendant grounds of these protected structures that could cause loss or damage to the special character of such structure, nor will it obscure established views of principal elevations where they occur i.e., the Station House and Collector's House.

9.9.26. The EIAR does however state that a section of the Royal Canal, from Louisa Bridge to the easterly bend north of the Rye Water Aqueduct, which is considered a non-protected structure of heritage importance, will be significantly negatively impacted upon, both in setting and character. This, in my opinion, is an overestimation of the impact having regard to the significant vegetation which flanks the western side of the Royal Canal Way and limits visibility of the proposal to fleeting, intermittent views.

Conclusion on Built Heritage

9.9.27. Having regard to the foregoing, I am satisfied that the EIAR adequately identifies and describes the likely impacts of the proposed development on built heritage, and I consider that whilst negative impacts will arise in respect of certain protected structures, it will not significantly impact on these structures or adversely detract from the cultural heritage or amenities of the area. This assessment assisted this Inspector in forming a substantive conclusion on amenity impacts in section 8.4 of this report.

Archaeology

Issues Raised

9.9.28. The appellant did not raise any issues relating to archaeology during the course of the application or in their appeal submission. There is however some overlap regarding their concerns in respect of the Hexagonal Well which is also the site of a 'holy well' (KD011-007---) as identified in Appendix 5 (RMP) of the Development Plan.

9.9.29. I also note that the DHLGH commented during the course of the application and broadly concurred with the recommended mitigation and monitoring measures detailed in the EIAR. They therefore recommended that an archaeological monitoring, with appropriate site-specific additions/adaptations based on the particular characteristics of this development and the findings of the EIAR, be conditioned.

Examination, Analysis and Evaluation

Chapter 15 of the EIAR deals with archaeological impacts and seeks to ensure that where a potential impact has been identified that it can be mitigated against. It is supported by:

- Figures 15.1 to 15.6,
- Table 15.1,
- Plates 15.1 and 15.2, and
- Appendix 15.1, including Plates 1 to 8.

9.9.30. I have examined this chapter and the associated figures, plates and appendices. It assesses the impact of the proposed development on the surrounding archaeological landscape and is based on a desktop review of the available archaeological data within, and adjacent to the study area as well as an inspection of the development site.

9.9.31. The assessment methodology therefore includes desk-based research, including a review of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP), GIS mapping and the results of field assessments to identify areas of archaeological potential which are likely to be impacted by the proposed development.

9.9.32. Figure 15.2 details the proximity of the nearest national monument to the appeal site, namely Conolly's Folly (also referred to 'Obelisk') at Barrogstown West. Table 15.1 and Figure 15.3 sets out all the recorded monuments within 1km of the appeal site. Figure 15.4 illustrates the nearest recorded monument to the appeal site, namely the 'holy well' (RMP ref. KD011-007---), and its zone of archaeological notification. Plates 15.1 and 15.2 provide views of the 'holy well' from south-easterly and north-westerly directions, with screening noted in the case of the latter. Figures 15.5 and 15.6 overlay 1st and 2nd edition OS mapping with the appeal site boundary. The location of the 'spa well' is noted along with a referenced 'chalybeate', denoting a natural mineral spring.

Baseline

9.9.33. The receiving environment is described in section 15.3 of the EIAR. It states that no national monuments are located on or in close proximity to the site with the nearest being Conolly's Folly (ref. 681) which is located c. 3km to the west, southwest. In terms of recorded monuments, it notes the 'holy well', is c. 56m east of the appeal site, c. 68m from the proposed OHL. It also notes two other recorded monuments within 200m and the remaining five that lie within 1km of the site being over 350m away.

9.9.34. In terms of the 'holy well', it states that it is not associated with any specific saint but is believed locally to be near the site of a monastery and associated with a cure of sore eyes. I note that the well was visited as part of the walk-over survey of the area

and no new potential above-ground monuments were noted during this inspection. A photographic record of the survey route is outlined in Appendix 15.1 (Plates 1 to 8). The EIAR also notes that whilst the 'spa well' was depicted on the 1st (1837-1842) and 2nd (1888-1913) edition maps, they do not depict any items of archaeological potential.

Potential Effects

9.9.35. Potential effects, as identified in the EIAR, are summarised in Table CH2 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined in the EIAR. However, I note there would reasonably be expected to be no foreseeable significant change in the existing environment.
Construction	• Direct effects: No direct effects identified on any national or recorded monuments nor on new above-ground archaeological sites. Potential effect with uncovering previously unknown subsurface archaeology within the footprint of the proposed towers, however the likelihood is low to negligible in the case of towers T1, T2 and T3 as they are sited on developed lands. Towers T4, T5, T6 and T7 are sited on greenfield lands with greater potential for previously unknown subsurface archaeology and such effects would be permanent and negative and therefore mitigation is required. • Indirect effects: None identified, and none are anticipated given the temporary/short-term construction period.
Operation	• Direct effects: None identified, and none are anticipated. • Indirect effects: No indirect effects identified on the setting of any national monuments as none are located on or in close proximity to the appeal site. Tower T4 will be c. 102m southeast and tower T5 will be c. 166m northwest of the nearest recorded monument, the 'holy well' and the OHL will be c. 58m away. The immediate setting will not be impacted on but a change in the wider setting is acknowledged. The significance of effects on setting is regarded as slight.
Decommissioning	• Not examined. However, some effects, similar to the construction stage, are anticipated. In the long-term indirect archaeological effects, will be reversible with limited evidence of its existence on the site. Decommissioning stage effects are not considered to be significant, and indeed would have a slight positive impact on setting.
Cumulative	• Given the largely altered landscape within which the well is located, when considered cumulatively with other developments no increase to the indirect effects on the recorded monument are identified.

Table CH2: Summary of Potential Effects

Mitigation

9.9.36. The EIAR notes there is potential for unknown subsurface archaeological features or sites within the footprints of the proposed towers in previously undisturbed areas. It states that archaeological monitoring, under licence from the NMS, should be undertaken to ameliorate the potential direct effects of groundworks on such features.

Residual Effects

9.9.37. The EIAR states that the potential effects on subsurface finds would be permanent, significant and irreversible without the stated mitigation measures, however once the mitigation measures are implemented, the residual impacts will be imperceptible.

Assessment of Direct and Indirect Significant Effects

9.9.38. I have examined, analysed and evaluated Chapter 15 of the EIAR, all of the associated documentation and submissions on file in respect of archaeological impact of the proposal thereon. I have inspected the appeal site and surrounding area, including the most sensitive archaeological receptor by proximity, namely the 'holy well', which is also the site of a protected structure, and I am satisfied that there will be no direct impacts on any national or recorded monuments, or known archaeological features.

9.9.39. There is however potential for permanent and negative effects on sites of unknown subsurface archaeology and particularly within the footprint of undisturbed ground in the vicinity of towers T4, T5, T6 and T7. Having regard to the proposed mitigation measures and comments from the DHLGH, I am satisfied that no significant effects are likely to arise subject the recommended programme of archaeological monitoring.

9.9.40. There is also an acknowledgement that the proposal could have an indirect impact on the setting of the 'holy well' given its relative proximity to towers T4 and T5 and the OHL. Whilst this impact is similar to that of the impact on the Hexagonal Well, it is not the same, and I agree with that the significant of effect can be regarded as slight and this is sufficiently illustrated in Plate 15.2 (View towards proposed OHL) in the EIAR.

Conclusion on Archaeology

9.9.41. I have considered all of the written submissions made in relation to archaeology and the relevant contents of the file including the EIAR. Subject to the satisfactory implementation of proposed mitigation measures (archaeological monitoring), I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on this aspect of the cultural heritage of the area.

Landscape and Visual Impact

Issues Raised

9.9.42. Issues raised by the appellant primarily relate to the visual impact of the proposal on adjacent heritage structures to the east, including Leixlip Spa, Hexagonal Pool (Spa

Well) and Louisa Bridge. These impacts are also considered under 'built heritage' and are considered more generally under 'amenity impacts' in the Planning Assessment.

Examination, Analysis and Evaluation

9.9.43. Chapter 11 of the EIAR deals with landscape and visual impacts. It examines the potential impact of the proposal on the appearance and character of the area, both locally and in the wider context, and is supported by:

- Tables 11.1 and 11.2,
- Figures 11.1 to 11.57,
- Appendix 11.1 (Detailed Methodology),
- Appendix 11.2 (Full Sized Photomontages), and
- the Further Information Response (Attachment G – Panoramic Photomontages).

9.9.44. I have examined this chapter and the associated tables, figures and appendices. It focuses on the likely effects of the development on the character of the landscape and amenity areas, including those adjoining historic structures, as experienced by people.

9.9.45. The assessment methodology has regard to EPA and industry guidelines and is based on field and desk survey in addition to previous planning experience. Table 11.1 summarises each viewpoint location together with a reason for selection[5]. These include a number of 'worst case' views. All viewpoints are elaborated upon in Figures 11.6 to 11.31 which provide of baseline for significance and sensitivity. A description and photomontage of the effect of each view is provided in Figures 11.32 to 11.55. A summary of visibility and significance of effect for viewpoints is provided in Table 11.2.

9.9.46. Cumulative impact assessment is principally focused on further intensification of development and urbanisation of the metropolitan fringe between the greater Dublin environs and the rural environs of north Kildare. In a local context it does however consider impacts on heritage, amenities, residents and the local road network.

9.9.47. I have also examined the further information response, it effectively updates this chapter of the EIAR by providing the requested panoramic views (View P1 to P6) from the environs of the adjacent protected structures, namely Louisa Bridge, the Station

[5] A total of 26 viewpoints were selected.

House, the Roman Baths and Hexagonal Well, the Rye Water Aqueduct and Toll House. The applicant also acknowledges the limitations of these particular images. I have reviewed the images and they do not alter the assessment of visual impacts.

Baseline

9.9.48. The receiving environment is described in section 11.3 of the EIAR. It details the character of the area as well as landscape sensitivity and significance. It also provides a description of the existing views from the selected viewpoints i.e., Figs 11.6 to 11.31.

9.9.49. In terms of character at a regional level, it notes that the site lies in a transitional zone between the built-up areas of Dublin's outer edges and the open countryside that characterises most of Kildare. At a local level, it notes the proximity of Maynooth and Leixlip, in addition to historic landscapes such as those at Carton and Castletown.

9.9.50. In terms of character, the EIAR also refers to the Kildare County Development Plan 2017-2023 which classified this part of the county as 'Northern Lowlands' and a 'Class 1 Landscape Character Area' of low sensitivity. Although it also notes that the site is part of a river corridor (Rye Water) as well as a canal corridor (Royal Canal). The river corridors are described as particularly important character areas, and the canal corridors and banks are classified as being generally vulnerable to sensitive. As noted in section 8.4 above, the current Development Plan details the LCA for the county.

9.9.51. In terms of general sensitivities, it states that the 'Northern Lowland' landscapes are generally classified as robust to normal whereas river and canal corridors and banks are generally classified as vulnerable/sensitive with views from demesne landscapes another sensitivity. In terms of local sensitivities, it notes the Royal Canal Way, a national way-marked trail, and also highlights Leixlip Spa and Waterfall, the R148, as a well trafficked road, the elevated canal and railway line and the Rye Water Valley itself when viewed from the aqueduct and Sandford's Bridge along Kellystown Lane.

9.9.52. In terms of local resilience, the EIAR states that the Rye Water Valley, between the eastern boundaries of Carton and the aqueduct at Louisa Bridge, has a high level of visual resilience, and is noted as a 'box-like' landscape. It also notes that the surroundings contain many mature trees which means that the Intel site is 'enclosed' to heights of around 80-90mAOD and visibility of Intel has remained very localised. It specifically highlights the 'local enclosure' between the elevated berms and canal.

9.9.53. In terms of significance, the EIAR states that views from Louisa Bridge are included in the schedule of views and vistas in the Development Plan (2017-2023) and also notes the potential for effects on historic/protected structures and their environs. As noted above, the current Development Plan details the protected views and structures.

Potential Effects

9.9.54. Potential effects, as identified in the EIAR, are summarised in Table LV1 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined in the EIAR. However, it is anticipated that landscape and visual effects are likely to remain in the same or similar condition (no significant developments proposed).
Construction	• Landscape: Not explicitly examined. However, having regard to the Outline CEMP as referenced in the EIAR, modest physical impact on landscape within the site is anticipated due to the small tower footprints and temporary works and stringing areas; limited land disturbance/vegetation clearance; excavations tying into existing ground levels (removal of excavations for towers to be decommissioned); location of works access routes to avoid ground disturbance and environmental constraints; OHL stringing (reverse stringing of towers to be decommissioned); heavily screened surrounding terrain; temporary/short-term duration of works (6-8 months). Temporary/short-term, not significant construction stage effects on landscape character generated by the intensity of construction activities (max. 15-20 workers and heavy machinery e.g., mobile crane), bare ground, stockpiling of materials, temporary security fencing, safety signage etc. Overall, construction stage landscape effects are considered to be of medium magnitude.
Operation	• Landscape: EIAR states that the proposed development will give rise to effects that will be seen in the context of an established industrial estate. It replaces impacts that already occur (net increase of 3 towers and c. 450m of 110kV OHL) but notes that it will move them closer to sensitive receptors i.e., the upper portion of one or more towers will be significantly visible from the context and setting of the Hexagonal Well, Romanesque Bath, Royal Canal Aqueduct and Toll House. It will also significantly alter or affect views from amenities in the area, such as the canal, but states that these will be intermittent and highly localised due to the screening afforded by existing vegetation and topography. The EIAR notes that it will also alter views from some adjacent apartments, but this will be in the highly developed context of the station and rail line. Views from the R148, between Louisa Bridge and Easton Roundabout, will also be altered. I note that the decommissioning of towers T29 to 32 (reverse stringing, dismantling of towers, removal of foundations and land reinstatement) is a positive effect on the landscape, albeit less conspicuous. • Visual Effects: The EIAR refers to the visual impact assessment at each of the 26 selected representative viewpoints (Appendix 11.2) and provides a summary of the visual impact of the development at these viewpoints (Table 11.2). Effects range from No Impact to Very Significant, Adverse, with greatest effects at A3a, A3b and A5a (Significant, Local Adverse) and at 2a, 2b, 3b, A4a and A6b (Very Significant, Adverse).
Decommissioning	• Landscape: Not examined. However, some temporary effects, similar to construction, are anticipated. Reverse stringing, similar to that proposed between towers T29 and T32, and movement of dismantled towers away

	from site, minor loss of vegetation (to be reinstated). In the long-term landscape impacts will be reversible with limited evidence of its existence on the site. Decommissioning stage effects are not considered to be significant, as evidenced by that proposed for towers T29 and T32.
Cumulative	• Landscape: The EIAR states that proposal will further extend the intensification of development and urbanisation of the metropolitan fringe between the greater Dublin environs and the rural environs of north Kildare. In a local context it does however consider impacts on heritage, amenities, residents and the local road network, as noted above. Cumulative impact is considered to be low-moderate in this regard.

Table LV1: Summary of Potential Effects

Mitigation

9.9.55. The EIAR states that route selection, following consideration of alternative routings, including both overground and underground options, is the principal mitigation method.

Residual Effects

9.9.56. The residual impacts are described as a localised intensification and spatial expansion of pre-existing effects that accord with the zoning and established use of the lands. This will manifest as increased effects on nearby amenities around the Royal Canal.

Assessment of Direct and Indirect Significant Effects

9.9.57. I have examined, analysed and evaluated Chapter 11 of the EIAR, all of the associated documentation and submissions on file in respect of landscape and visual effects. I have inspected the appeal site and surrounding area, including the most sensitive viewpoints highlighted in the assessment of visual impact (section 11.4) and had regard to landscape character and sensitivity as set out in the policy framework in the Kildare County Development Plan 2023-2029 and the sensitive receptors identified.

9.9.58. The applicant, through the EIAR, has identified a number of significant[6] and very significant[7], adverse effects on the appearance and character of the area from a number of specified viewpoints. There is, in my opinion, an overestimation of the effect of the proposed development in some specific instances but overall, the predicted impacts and associated photomontages are sufficiently representative of the likely significant effects on the environment from a landscape and visual impact perspective.

[6] 'Significant Effects' are defined in Table 3.4 of the *Guidelines on the information to be contained in EIARs* (EPA, May 2022) as 'an effect which, by its character, magnitude, duration or intensity, alters a sensitive aspect of the environment.'

[7] 'Very Significant' is defined in the EPA Guidelines as 'an effect which, by its character, magnitude, duration or intensity, significantly alters most of a sensitive aspect of the environment.'

9.9.59. An angled mast, or tower T4, is described as 'prominently visible' with a very significant adverse effect when viewed in a north-westerly direction from Louisa Bridge, which is a protected structure (Views 2a and 2b). I wholly agree with this assessment, and I consider these viewpoints to be the most sensitive of those identified. Having regard to the 'redline' image, tower T4 is also identified as 'prominently visible through a gap in the vegetation' and of very significant adverse effect when viewed from the path along the Royal Canal Way (View 3b). This is a slight overestimation of the actual significance of effect, notwithstanding the potential for greater effect from late autumn.

9.9.60. Very significant, adverse effects are also identified from the elevated public walkway leading to Louisa Bridge Train Station (View A4a) where an intermediate tower (tower T3), angled mast (tower T4) and conductors are described as 'prominently visible' when looking west. Similarly, the upper portions of three structures, which I have identified from the 'redline' image as towers T5, T6 and T7, and the associated conductors are considered to be 'prominently visible' when looking northwest from the vicinity of the public amenity area containing the Romanesque Bath and Hexagonal Well (View A6c)[8], giving rise to a very significant, adverse effect. I also note that significant, local adverse effects are identified from the train station car park at Oaklawn, where towers T2, T3 and T4 are described as 'prominently visible' (Views A3a and A3b) and from within the public access to the train station, where an angled mast (tower T4) and conductors are described as 'prominently visible' (View A5a).

9.9.61. As both significant and very significant effects have been identified, I accept that aspects of the proposed development will, by virtue of their character, magnitude, duration and intensity, alter a sensitive aspect of the environment and in some cases significantly alter most of a sensitive aspect of the environment. These alterations however, in my opinion, are highly localised to the public spaces east of proposed towers T4 and T5, along the zoned industrial and amenity lands and where absorption opportunities are provided by the landscape/streetscape, landform and vegetation.

9.9.62. In this regard, critical views whilst walking south along the Royal Canal Way, a facility which appears to be well utilised, are generally screened and intermittent until a point within general immediacy of tower T4, and in close proximity to Louisa Bridge. This is where the impact is most pronounced and whilst I note that views from Louisa Bridge

[8] I note that this view is listed as "A6b" in Table 11.2, but it is evidently "View A6c" in Appendix 11.2.

are protected in the Development Plan (ref. RC3), I am satisfied that these views track along the canal, with the towers and OHL falling within an area of peripheral vision.

9.9.63. Moreover, the foreground views from Louisa Bridge are dominated by street furniture, lower voltage utility poles and significant infrastructure associated with the adjacent train station, including a high telecoms mast and elevated public walkway. When viewed from the latter, tower T4 is highly prominent but has an industrial backdrop and this equally applies when viewed from the vicinity of the protected structures.

9.9.64. I therefore agree with the EIAR that the changes to the local appearance will be discernible from one viewing point but will not alter the appearance or character of the wider landscape, and this evidently includes the Royal Canal Corridor Area of High Amenity and the relevant protected views and structures close to the appeal site.

Conclusion on Landscape and Visual Impact

9.9.65. Having regard to the foregoing, I am satisfied that the EIAR adequately identifies and describes the likely landscape and visual effects of the proposed development and I consider that whilst significant and very significant direct effects will arise in respect of certain limited views, it will not adversely impact on the character of the wider landscape or visual amenities of the area. This assessment has assisted in the forming of a substantive conclusion on amenity impacts in section 8.4 of this report.

9.9.66. The measures outlined in Appendix 1.1 of the EIAR are also noted in this regard.

Waste Management

Issues Raised

9.9.67. The appellant did not raise any issues relating to waste management during the course of the application or in their appeal submission. There is however some overlap with this topic and 'human health' although the appellant's concerns in that regard primarily relate to noise, vibration and risk of accidents and disasters.

9.9.68. The local authority Environment Section had no objection subject to *inter alia* a RWMP.

Examination, Analysis and Evaluation

9.9.69. Chapter 13 of the EIAR comprises an assessment of the likely impact of waste generated by the proposed development and identifies mitigation measures to minimise such impacts. It is supported by:

- Figures 13.1 and 13.2,
- Table 13.1,
- Appendix 13.1.

9.9.70. I have examined this chapter and the associated figures, table and appendices. It assesses the impact of the generation of waste materials arising during the construction and operational phases of the proposed development.

9.9.71. The assessment methodology includes a desktop review of applicable policy and legislation, including that relating to the circular economy. The waste materials that will be generated during construction and operation are also identified in addition to the predicted on and off-site re-use, recycle and disposal rates for such waste material.

9.9.72. Of particular note is the waste generated from the demolition/dismantling of tower T29 to T32 as well as the excavation of their foundations. Table 13.1 indicates that such metals are highly recyclable (95%). The EIAR also indicates that site works are estimated to generate 1,320cu.m of soil, stone, gravel, clay and made ground with 740cu.m to be removed off site for reuse/recovery with the rest reused as backfill. I note that section 7.4.1.2 of the EIAR indicates that 740cu.m is the volume per tower and section 7.5.1.2 states that the volume of excavated soil will be c. 2,060cu.m. There is an obvious discrepancy in this regard, but I do not consider it significant.

Baseline

9.9.73. In terms of receiving environment, section 13.3 of the EIAR notes that it is largely defined by Kildare County Council as the local authority responsible for setting and administering waste management activities in the area, and whilst it no longer operates any municipal waste landfill in the area, there are a number of permitted and licensed waste facilities, including soil recovery and inert C&D facilities, in the region.

Potential Effects

9.9.74. Potential effects, as identified in the EIAR, are summarised in Table CH1 below.

Project Phase	**Potential Effects**
Do Nothing	• The EIAR states that if the project was not to go ahead there would be no demolition, excavation, construction etc. and therefore there would be a neutral effect on the environment in terms of waste.

Construction	• If waste material is not managed and stored correctly etc. (in the absence of mitigation), the effect on the local environment is likely to be short-term, significant and negative. • If non-permitted waste contractors or unauthorised waste facilities are used etc. (in the absence of mitigation), the effect on the local and regional environment is likely to be long-term, significant and negative. • The majority of construction materials are either recyclable or recoverable, however in the absence of mitigation, the effect on the local and regional environment is likely to be short-term, significant and negative. • If excavated waste material is not correctly classified and segregated to ensure any potentially contaminated materials are identified etc. (in the absence of mitigation), the effect on the local and regional environment is likely to be short-term, significant and negative.
Operation	• The EIAR states that no waste will be generated or stored during normal operations and all waste will be removed by staff and contractors once operational and therefore no potential impacts arise.
Decommissioning	• Not explicitly examined. However, some temporary effects, similar to construction, are anticipated.
Cumulative	• The EIAR states that cumulative developments that are already built and in operation contribute to the baseline environment and as such, any further environmental impacts have been assessed. • Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will mitigate against any potential cumulative effects associated with waste generation and waste management and as such the effect will be short-term, imperceptible and neutral. • No waste will be generated during operation and therefore there will be no cumulative impact.

Table WM1: Summary of Potential Effects

Mitigation

9.9.75. Section 13.5.1 of the EIAR notes that a project specific RWMP (Appendix 13.1) has been prepared in accordance with industry standards and the mitigation measures outlined therein will be implemented in full and form part of the mitigation strategy.

9.9.76. Section 13.5.1 also includes additional mitigation measures including those relating to hazardous wastes. These are replicated in section 5.7 of the Outline CEMP.

9.9.77. The EIAR states that no waste will be generated during normal operation, potential impacts are imperceptible and thus no operational mitigation measures are required.

Residual Effects

9.9.78. Following the waste management approach set out in section 13.5 and adherence to the RWMP, which also includes mitigation (Appendix 13.1) during the construction phase, the EIAR states that predicted effect will be short-term, imperceptible and

neutral. As no operational mitigation is proposed, there are no residual effects. On this basis, no likely significant effects are predicted to occur during either phase.

Assessment of Direct and Indirect Significant Effects

9.9.79. I have examined, analysed and evaluated Chapter 13 of the EIAR, all of the associated documentation and submissions on file in respect of waste management issues. Having regard to the nature and location of the development in a transitional urban-rural area, somewhat removed from centres of population, and to the technical information on file, I am fully satisfied that the proposal will not give rise to any significant adverse direct, indirect or cumulative effects and is acceptable in this regard subject to the mitigation measures outlined in Appendix 13.1 of the EIAR.

Conclusion on Waste Management

9.9.80. Having regard to the foregoing, and for the reasons stated, I am satisfied that the applicant, through the EIAR and associated documents submitted, has satisfactorily demonstrated the absence of significant effects arising from the development as a consequence of waste during either the construction or operational phases.

Conclusion on Material Assets, Cultural Heritage and the Landscape

9.9.81. I have considered all of the written submissions made in relation to material assets, cultural heritage and landscape, and the contents of the EIAR and associated documentation. For the reasons stated I am satisfied that the proposed development, subject to the satisfactory implementation of the mitigation and CEMP measures, would not have any unacceptable direct, indirect or cumulative impacts on the material assets, including water or waste, cultural heritage or the landscape of the wider area.

9.10. Interactions

Issues Raised

9.10.1. The appellant has raised general concerns about the efficacy of the EIAR.

Examination, Analysis and Evaluation

9.10.2. Chapter 17 of the EIAR deals with interactions. I have examined this chapter in the context of my technical assessment, above. Table 17.1 presents an outline of

potential interactions for the construction and operational phases of the development, and it is stated that these have been addressed in individual topic sections of the EIAR.

Potential Effects

9.10.3. Whilst strong interaction is identified between a number of the environmental topics, as noted throughout the technical assessment, including for example between biodiversity, hydrology and hydrogeology through an accidental pollution event, the EIAR identifies no potential for significant environmental effects arising from the interaction of impacts, which have not already been addressed in the EIAR. This is subject to the implementation of the mitigation in the EIAR and measures in the CEMP.

Assessment of Direct and Indirect Significant Effects

9.10.4. I have examined, analysed and evaluated Chapter 17 of the EIAR, all of the associated documentation and submissions on file in respect of interactions. I am satisfied that the applicant has identified the key interactions between environmental factors, and indeed in some cases has overestimated the significance of effect as noted above.

9.11. Accident and Disaster Risks

Issues Raised

9.11.1. The appellant raised issues regarding the risk of accidents and explosions due to the proximity of the OHL to chemical storage and the impact of accidental emissions to the environment on humans. These impacts are also considered under 'public health' in the Planning Assessment and generally under 'population and human health' above.

9.11.2. I also note that the Health and Safety Authority (HSA) commented during the course of the application and did not recommend against granting permission. They did note that future development around COMAH sites can potentially impact on expansion.

9.11.3. The EPA were also consulted and did not raise any particular concerns.

Examination, Analysis and Evaluation

9.11.4. Chapter 16 of the EIAR deals with accident and disaster risks. It considers the potential for accident scenarios that are outside the scope of the COMAH Regulations.

9.11.5. The assessment methodology notes that the principal attributes (and impacts) to be assessed include potential hazards arising from risk of major accident and flooding.

Baseline

9.11.6. Section 16.3 of the EIAR details the receiving environment which includes a description of the site and risk issues relating to flooding and seismic activity. Pertinent to this assessment, it notes that the Intel plant is operated in accordance with an Industrial Emissions (IE) licence, as outlined in the development description, and states that section 9.1 of the IE licence relates to accident prevention measures, including details of measures to prevent accidental emissions. It is also evident from development description that the site is a site to which the COMAH Regulations apply.

9.11.7. In terms of flood risk, section 16.3 refers to the SSFRA submitted with the application and the conclusions set out therein and considered fully above. In this regard, I note that there are no potential residual risks as tower T6 which lies with Flood Zones A and B will not affect any other existing infrastructure should an extreme event occur.

9.11.8. In terms of seismic activity, the EIAR notes that in general Ireland suffers from few landslides but acknowledges they have occurred in recent years in upland peat areas. Geohazards (landslides and earthquakes) are also noted in section 7.3.18 of the EIAR.

Potential Effects

9.11.9. Potential effects, as identified in the EIAR, are summarised in Table ADR1 below.

Project Phase	**Potential Effects**
Do Nothing	• Not examined but the same accident and disaster risks are presented by the existing OHL, and perhaps to an even greater extent.
Construction/Operation and Decommissioning	• Risk of major accidents: No potential for the proposed development to give rise to significant adverse effects on the environment due to accidents or disasters due to the comprehensive controls and design standards including the measures contained in the Outline CEMP. • Flooding: The EIAR refers to the SSFRA which indicates that there are no historical flooding events in the area. Development, including tower T6 which is located in Flood Zones A and B, will not exacerbate flooding given its structural design, which has taken buoyancy into account, and there are no residual risks should an extreme event occur. With the proposed implementation of mitigation measures to manage surface water on site, including those related to fuel and chemical handling, no significant risks from flooding is identified. • Seismic activity: Published data indicates that risk of seismic activity is relatively low. Risk of significant environmental effects from such an event or as a result of a landslide are therefore considered to be limited.

Table ADR1: Summary of Potential Effects

Mitigation

9.11.10. No specific mitigation or monitoring measures are required or proposed.

Residual Effects

9.11.11. The residual impact is considered to be imperceptible and neutral.

Assessment of Direct and Indirect Significant Effects

9.11.12. I have examined, analysed and evaluated Chapter 16 of the EIAR, all of the associated documentation and submissions on file in respect of risk of major accidents and/or disasters. Having regard to the nature and location of the development in a transitional urban-rural area, somewhat removed from centres of population, and to the technical information on file, I am generally satisfied that there are no significant adverse effects on the environment deriving from its vulnerability to major accidents or disasters.

9.12. Reasoned Conclusion

9.12.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the applicant, and the reports and decision of the planning authority, submissions by prescribed bodies and third parties in the course of the application, I consider that the main significant direct and indirect effects of the proposed development on the environment are:

- Population and human health: Significant indirect effects on people living in the area arising from significant direct effects of the development on the landscape, although this is highly localised and would not adversely impact on amenities.
- Biodiversity (including ornithology): Significant direct effects on wintering and breeding bird populations that habituate the area, although this is effectively neutral given the marginal relocation of the electrical conductors (OHL), the primary source of collision/mortality risk, and will largely be mitigated by bird warning markers.
- Material Assets, Cultural Heritage and the Landscape: Significant direct effects on the landscape through the alteration of the appearance and character of the area from a number of specified viewpoints, although these alterations are highly localised to the public spaces east of proposed towers T4 and T5, and will largely be mitigated by the absorption opportunities provided by the existing landscape/streetscape, landform and vegetation along the Royal Canal.

9.12.2. Notwithstanding the conclusion reached in respect of the inability of the proposed measures to fully mitigate the impact of the proposal on the local landscape and bird populations, it is considered that the environmental effects would not justify a refusal of planning permission having regard to overall benefits of the proposed development.

9.12.3. Having regard to the foregoing, I consider that the EIAR has provided a sufficient level of information in relation to the assessment of impacts on population and human health, biodiversity, the landscape and interactions between these factors.

10.0 Appropriate Assessment

10.1. Introduction

10.1.1. The grounds of appeal queried whether the requirements of the Habitats Directive had been fully discharged. An Appropriate Assessment (AA) Screening Report and a Natura Impact Statement (NIS) were submitted in the application documentation and updated by the further information submission. The screening report concluded that:

"…there is the possibility for significant effects on the following European sites, either arising from the project alone or in combination with other plans and projects, as a result of habitat degradation as a result of hydrological and hydrogeological impacts: Rye Water Valley/Carton SAC, North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA."

10.2. Stage 1 – Screening

10.2.1. Having reviewed the documents and submissions, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the proposed development, alone, or in combination with other plans and projects on any of the designated European sites. I have carried out a full screening determination for the development and it is attached to this report (Appendix 1).

10.2.2. In accordance with Section 177U(4) of the Planning Act and on the basis of objective information I conclude that the proposal would have a likely significant effect on the Conservation Objectives of the Rye Water Valley/Carton SAC, North Dublin Bay SAC, South Dublin Bay/River Tolka Estuary SPA and North Bull Island SPA from effects linked to the uncontrolled discharge of pollutants to surface and ground waters.

10.2.3. An appropriate assessment is required on the basis of the effects of the project alone and therefore Appropriate Assessment (Stage 2) under Section 177V of the Planning and Development Act 2000, is required in respect of the proposed development.

10.3. Stage 2 – Appropriate Assessment

10.3.1. The following is an objective assessment of the implications of the proposal on the relevant Conservation Objectives of the Rye Water Valley/Carton SAC based on the scientific information provided by the applicant and taking into account expert opinion and submissions on nature conservation. It is based on an examination of all relevant documentation and submissions, analysis and evaluation of potential impacts, findings and conclusions. A final determination will be made by the Board.

10.3.2. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects on site integrity are examined and evaluated for effectiveness. Possible in-combination effects were also considered. A description of the potential impacts from the construction and operational phases are set out in Section 7 and summarised in Table 12 of the NIS. Table 12 also lists the Attributes, Measures and Targets for each of the QI's.

Relevant European Sites

10.3.3. In the absence of mitigation, potential for significant effects could not be excluded for:

- Rye Water Valley/Carton SAC (Site Code: 001398)
- North Dublin Bay SAC (Site Code: 000206)
- South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024)
- North Bull Island SPA (Site Code: 004006)

10.3.4. A description of the sites, their Conservation Objectives and QI's or SCI's, including relevant attributes and targets, are set out in the NIS. I have also reviewed the Conservation Objectives listed for the site on the NPWS website (www.npws.ie). Tables AA1 to AA4 below summarises the information considered for the Appropriate Assessment and the site integrity test. This information has been compiled from the information contained in the NIS as well as information from the NPWS.

Table AA1: Summary Matrix for Rye Water Valley/Carton SAC (Site Code: 001398)			
		Summary of Appropriate Assessment	
QI / SCI	**Conservation Objectives**	**Potential Adverse Effects**	**Mitigation Measures**
Petrifying springs with tufa formation (*Cratoneurion*) [7220] *Vertigo angustior* (Narrow-mouthed Whorl Snail) [1014] *Vertigo moulinsiana* (Desmoulin's Whorl Snail) [1016]	To restore the favourable conservation condition To restore the favourable conservation condition To maintain the favourable conservation condition	Deterioration of water quality from pollution of surface and ground water during the construction and operational phases has the potential to affect the vegetation composition and habitat distribution of petrifying springs in the SAC. Any reduction in surface water quality in the Rye Water has the potential to affect the petrifying spring habitat within the SAC downstream at Louisa Bridge. A pollution event of significant magnitude could affect either molluscs species through direct contact, and the quality and extent of the suitable wetland habitats in the SAC that support *Vertigo angustior* and *Vertigo moulinsiana* populations, potentially affecting the species presence, abundance and distribution.	Mitigation measures are listed in section 7.1.4 of the NIS and in the Outline CEMP which accompanied the application. These relate to the protection of both surface and ground waters. Detailed pollution control measures are outlined in the NIS (pgs. 50-54). The measures are designed to protect water quality during the construction and operational phases. They include standard measures such as good construction practice in accordance with relevant guidelines and site-specific measures including the control of soil excavation, fuel and chemical handling and the control of water. No residual impacts are identified following implementation of these measures.

Overall Conclusion – Integrity Test

The applicant determined that following the implementation of mitigation measures, the construction and operation of the proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site. In-combination effects were considered in the NIS (section 8) by reviewing recent planning applications at Intel and in the wider area. Outside of the 'Fab 34' permission (ABP-304672-19), recent developments are generally minor in nature and the NIS determined that 'there is no potential for in combination effects to arise either collectively or cumulatively with the proposed development'. Whilst the DART+ West project (ABP-314232-22), which was recently granted, and an adjacent permitted solar farm have been raised by the appellant, albeit in the context of EIA and the requirement to consider cumulative impacts, I note that both, in addition to a 50-unit apartment scheme at Louisa Park (ABP-309929-21), have been subject to AA where it is not anticipated that there would be adverse effects on the integrity of European sites in combination with other plans and projects. I am therefore satisfied that there is no potential for in combination effects with the proposed development.

I have reviewed the mitigation measures proposed for the subject development and I am satisfied that impacts from the development in terms of pollution from surface water runoff or groundwater containing silt, sediment, hydrocarbons or other pollutants would be unlikely following the implementation of the mitigation measures proposed.

Table AA2: Summary Matrix for North Dublin Bay SAC (Site Code: 000206)

		Summary of Appropriate Assessment	
QI / SCI	**Conservation Objectives**	**Potential Adverse Effects**	**Mitigation Measures**
Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210]	To maintain the favourable conservation condition To restore the favourable conservation condition	A pollution event of sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats and the fauna communities they support.	Mitigation measures described in section 7.1.4 of the NIS to protect water quality in the receiving environment will ensure that surface water quality in the Rye Water and further downstream in the River Liffey and Dublin Bay is protected during construction.

Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] *Petalophyllum ralfsii* (Petalwort) [1395]	To restore the favourable conservation condition To maintain the favourable conservation condition To maintain the favourable conservation condition To restore the favourable conservation condition To restore the favourable conservation condition To restore the favourable conservation condition To restore the favourable conservation condition To maintain the favourable conservation condition		No residual impacts are identified following implementation of these measures.

Overall Conclusion – Integrity Test

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

I have reviewed the mitigation measures proposed for the subject development and I am satisfied that impacts from the development in terms of pollution from surface water runoff or groundwater containing silt, sediment, hydrocarbons or other pollutants would be unlikely following the implementation of the mitigation measures proposed. In-combination effects were considered in the NIS (section 8), and I am satisfied that there is no potential for such effects.

Table AA3: Summary Matrix for South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024)

		Summary of Appropriate Assessment	
QI / SCI	**Conservation Objectives**	**Potential Adverse Effects**	**Mitigation Measures**
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137] Grey Plover (*Pluvialis squatarola*) [A141]	To maintain the favourable conservation condition To maintain the favourable conservation condition To maintain the favourable conservation condition The Grey Plover is proposed for removal from the list of SCIs for the site and therefore	A pollution event of sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality of intertidal/coastal habitats, the abundance of prey fish species and the quality and suitability of roosting sites that support the SCI bird species of the SPA. This could potentially have long-term effects on the SPAs breeding population.	Mitigation measures described in section 7.1.4 of the NIS to protect water quality in the receiving environment will ensure that surface water quality in the Rye Water and further downstream in the River Liffey and Dublin Bay is protected during construction. No residual impacts are identified following implementation of these measures.

	no site-specific CO has been set for this species		
Knot (*Calidris canutus*) [A143]	To maintain the favourable conservation condition		
Sanderling (*Calidris alba*) [A144]	To maintain the favourable conservation condition		
Dunlin (*Calidris alpina*) [A149]	To maintain the favourable conservation condition		
Bar-tailed Godwit (*Limosa lapponica*) [A157]	To maintain the favourable conservation condition		
Redshank (*Tringa totanus*) [A162]	To maintain the favourable conservation condition		
Black-headed Gull (*Chroicocephalus ridibundus*) [A179]	To maintain the favourable conservation condition		
Roseate Tern (*Sterna dougallii*) [A192]	To maintain the favourable conservation condition		
Common Tern (*Sterna hirun*do) [A193]	To maintain the favourable conservation condition		

Arctic Tern (*Sterna paradisaea*) [A194] Wetland and Waterbirds [A999]	To maintain the favourable conservation condition To maintain the favourable conservation condition		

Overall Conclusion – Integrity Test

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

I have reviewed the mitigation measures proposed for the subject development and I am satisfied that impacts from the development in terms of pollution from surface water runoff or groundwater containing silt, sediment, hydrocarbons or other pollutants would be unlikely following the implementation of the mitigation measures proposed. In-combination effects were considered in the NIS (section 8), and I am satisfied that there is no potential for such effects.

Table AA4: Summary Matrix for North Bull Island SPA (Site Code: 004006)

		Summary of Appropriate Assessment	
QI / SCI	**Conservation Objectives**	**Potential Adverse Effects**	**Mitigation Measures**
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Teal (*Anas crecca*) [A052]	To maintain the favourable conservation condition To maintain the favourable conservation condition To maintain the favourable conservation condition	A pollution event of sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality of intertidal/coastal habitats, the abundance of prey fish species and the quality and suitability of roosting sites that support the SCI bird species of the SPA. This could potentially have long-	Mitigation measures described in section 7.1.4 of the NIS to protect water quality in the receiving environment will ensure that surface water quality in the Rye Water and further downstream in the River Liffey and Dublin Bay is protected during construction. No residual impacts are identified following implementation of these measures.

Pintail (*Anas acuta*) [A054]	To maintain the favourable conservation condition	term effects on the SPAs breeding population.	
Shoveler (*Anas clypeata*) [A056]	To maintain the favourable conservation condition		
Oystercatcher (*Haematopus ostralegus*) [A130]	To maintain the favourable conservation condition		
Golden Plover (*Pluvialis apricaria*) [A140]	To maintain the favourable conservation condition		
Grey Plover (*Pluvialis squatarola*) [A141]	To maintain the favourable conservation condition		
Knot (*Calidris canutus*) [A143]	To maintain the favourable conservation condition		
Sanderling (*Calidris alba*) [A144]	To maintain the favourable conservation condition		
Dunlin (*Calidris alpina*) [A149]	To maintain the favourable conservation condition		
Black-tailed Godwit (*Limosa limosa*) [A156]	To maintain the favourable conservation condition		

Bar-tailed Godwit (*Limosa lapponica*) [A157]	To maintain the favourable conservation condition		
Curlew (*Numenius arquata*) [A160]	To maintain the favourable conservation condition		
Redshank (*Tringa totanus*) [A162]	To maintain the favourable conservation condition		
Turnstone (*Arenaria interpres*) [A169]	To maintain the favourable conservation condition		
Black-headed Gull (*Chroicocephalus ridibundus*) [A179]	To maintain the favourable conservation condition		
Wetland and Waterbirds [A999]	To maintain the favourable conservation condition		

Overall Conclusion – Integrity Test

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

I have reviewed the mitigation measures proposed for the subject development and I am satisfied that impacts from the development in terms of pollution from surface water runoff or groundwater containing silt, sediment, hydrocarbons or other pollutants would be unlikely following the implementation of the mitigation measures proposed. In-combination effects were considered in the NIS (section 8), and I am satisfied that there is no potential for such effects.

Appropriate Assessment Conclusion

10.3.13. In screening the need for appropriate assessment, it was determined that the proposed development had the potential to result in significant effects on the Rye Water Valley/Carton SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA and that appropriate assessment was required in view of the Conservation Objectives of those European sites.

10.3.14. Following a detailed examination and evaluation of the NIS, all associated material submitted with the planning application and appeal as relevant to the appropriate assessment process, and taking into account submissions of third parties, I am satisfied that the design of the proposed development, combined with the proposed mitigation measures to address impacts from surface water runoff and groundwater pollution during the construction and operational phase would prevent adverse effects on the integrity of Rye Water Valley/Carton SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA.

10.3.15. This conclusion is based on:

- Detailed assessment of all aspects of the proposed development that could result in significant effects or adverse effects on European sites within a zone of influence of the appeal site.
- Consideration of the Conservation Objectives and conservation status of Qualifying Interest / Special Conservation Interest habitats and species.
- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.
- Consideration and assessment of in-combination effects with other plans and projects, including those specifically referred to by the appellant.

10.3.16. I therefore conclude that the proposed development, by itself or in combination with other plans or projects, would not adversely affect integrity of any European sites, in view of those site's Conservation Objectives.

11.0 Recommendation

11.1. I recommend that permission be **granted** for the reasons and considerations below.

12.0 Reasons and Considerations

Proper Planning and Sustainable Development

12.1. Having regard to:

- the nature of the proposed development, which in essence is a relatively minor alteration to the Maynooth-Ryebrook and Dunfirth-Kinnegad-Rinnawade 110kV circuits resulting in a net increase of c. 450 linear metres and 3 no. lattice towers,
- the location of the proposed development primarily on zoned industrial lands under the provisions of the Leixlip LAP 2020-2023, which seeks to *inter alia* support Leixlip as an employment hub generally and promote enterprise and employment development at Collinstown specifically,
- the provisions of the Kildare County Development Plan 2023-2029, which identifies Leixlip as a Self-Sustaining Growth Town and attractor to high-tech manufacturing and research employment, and seeks to support existing FDI large industrial companies in sustaining and expanding their businesses at appropriate locations,
- the provisions of the Regional Spatial and Economic Strategy 2019-2031, which identifies Leixlip within the MASP and its employment lands as a strategic location, with the Collinstown site specifically noted for its employment potential,
- the provisions of the National Planning Framework, which notes that strategic employment growth at regional, metropolitan and local level should include consideration of locations for expansion of existing enterprises,

it is considered that, subject to compliance with the conditions set out below, the proposed development, which would divert an existing constraint over strategic employment lands to the periphery, would not seriously injure amenities, give rise to, or increase the risk of flooding, adversely impact on public health, or adversely impact on the natural heritage of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Environmental Impact Assessment

12.2. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the applicant, and the reports and decision of the planning authority, submissions by prescribed bodies and third parties in the course of the application, I consider that the main significant direct and indirect effects of the proposed development on the environment are:

- Population and human health: Significant indirect effects on people living in the area arising from significant direct effects of the development on the landscape, although this is highly localised and would not adversely impact on amenities.
- Biodiversity (including ornithology): Significant direct effects on wintering and breeding bird populations that habituate the area, although this is effectively neutral given the marginal relocation of the electrical conductors (OHL), the primary source of collision/mortality risk, and will largely be mitigated by bird warning markers.
- Material Assets, Cultural Heritage and the Landscape: Significant direct effects on the landscape through the alteration of the appearance and character of the area from a number of specified viewpoints, although these alterations are highly localised to the public spaces east of proposed towers T4 and T5, and will largely be mitigated by the absorption opportunities provided by the existing landscape/streetscape, landform and vegetation along the Royal Canal.

12.3. Notwithstanding the conclusion reached in respect of the inability of the proposed measures to fully mitigate the impact of the proposal on the local landscape and bird populations, it is considered that the environmental effects would not justify a refusal of planning permission having regard to overall benefits of the proposed development.

Appropriate Assessment

12.4. Following a detailed examination and evaluation of the NIS, all associated material submitted with the planning application and appeal as relevant to the appropriate assessment process, and taking into account submissions of third parties, I conclude that the proposed development, by itself 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, subject to the mitigation measures contained within the NIS.

13.0 **Conditions**

1. The development shall be carried out in accordance with the plans and particulars submitted with the planning application, as modified by further information submitted on the 6th day of March 2023 and in accordance with the mitigation and monitoring measures and the timescale for their implementation contained in the submitted Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS), as modified, except as may otherwise be required by the following conditions. The developer shall appoint a project manager with appropriate experience to ensure the implementation of the mitigation and monitoring measures within the timescales listed.

   Reason: To clarify the plans and particulars for which permission is granted and to ensure that the mitigation and monitoring measures contained in the EIAR are implemented in a timely manner and those contained in the NIS are implemented to avoid any likelihood of significant effects on any European site, having regard to the qualifying interests and conservation interests for any such site.

2. The route of the permitted transmission line shall not be altered, notwithstanding the provisions of Class 28 of Part 1 of Schedule 2 to the Planning and Development Regulations, 2001, or any statutory provision amending or replacing them, unless authorised by a separate grant of permission.

   Reason: To protect sensitive environmental receptors in the vicinity and in the interests of visual amenity.

3. Bird warning markers shall be provided, in accordance with details to be submitted to, and agreed in writing with, the planning authority.

   Reason: To protect wild birds whose flight paths cross the route of the transmission line.

4. A Construction and Environmental Management Plan (CEMP) shall be submitted to and agreed in writing with the planning authority prior to the commencement of development. The CEMP shall include but not be limited to construction phase controls for dust, noise and vibration, waste management, protection of soils, groundwaters, and surface waters, site housekeeping, emergency response planning, site environmental policy, and project roles and responsibilities.

Reason: In the interest of residential amenities, public health and safety and environmental protection.

5. Prior to commencement of development, a Resource Waste Management Plan (RWMP) as set out in the EPA's Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for Construction and Demolition Projects (2021) shall be prepared and submitted to the planning authority for written agreement. The RWMP shall include specific proposals as to how the RWMP will be measured and monitored for effectiveness. All records (including for waste and all resources) pursuant to the agreed RWMP shall be made available for inspection at the site office at all times.

   Reason: In the interest of reducing waste and encouraging recycling.

6. Noise from the construction phase of the proposed development shall not give rise to sound pressure levels (Leq 15 minutes) measured at noise sensitive locations which exceed 70 dB(A) (LAeq 1 hour) between 0800 hours and 1800 hours Monday to Friday inclusive (excluding bank holidays) and between 0800 and 1300 hours on Saturdays when measured at any noise sensitive location in the vicinity of the site. Sound levels from the development site works shall not exceed 45 dB(A) (LAeq 1 hour) at any other time.

   Reason: In the interest of public health.

7. (a) The developer shall engage a suitably qualified archaeologist to monitor (licensed under the National Monuments Acts) all site clearance works, topsoil stripping and groundworks associated with the development. The use of appropriate machinery to ensure the preservation and recording of any surviving archaeological remains shall be necessary. No ground disturbance shall take place in the absence of the archaeologist without his/her express consent.

   (b) Should archaeological remains be identified during the course of archaeological monitoring, all works shall cease in the area of archaeological interest pending a decision of the planning authority, in consultation with the Department of Housing, Local Government and Heritage, regarding appropriate mitigation (preservation *in situ*/excavation).

(c) The developer shall facilitate the archaeologist in recording any remains identified. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the Department of Housing, Local Government and Heritage, shall be complied with by the developer.

(d) Following the completion of all archaeological work on site and any necessary post excavation specialist analysis, the planning authority and the Department of Housing, Local Government and Heritage shall be furnished with a final archaeological report describing the results of the monitoring and any subsequent required archaeological investigative work/excavation required. 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.

8. Prior to the commencement of any works associated with the development hereby permitted, the developer shall submit a Construction Traffic Management Plan (CTMP) for the construction phase of the development for the written agreement of the planning authority. The CTMP shall incorporate details of the road network to be used by construction traffic including oversized loads, detailed proposals for sightlines and the protection of bridges, culverts and other structures to be traversed, as may be required. The agreed CTMP shall be implemented in full during the course of construction of the development.

Reason: In the interest of traffic safety and convenience.

9. Details of road signage, warning the public of the entrance and of proposals for traffic management at the site entrance, shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

Reason: In the interest of traffic safety.

10. The disposal of surface water shall comply with the requirements of the planning authority for such works and services. Prior to the commencement of development, the developer shall submit details for the disposal of surface water from the site for the written agreement of the planning authority, following consultation with Inland Fisheries Ireland.

Reason: To prevent flooding and in the interests of sustainable drainage.

11. (a) An accurate tree survey of the site, which shall be carried out by an arborist or landscape architect, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. The survey shall show the location of each tree on the site, together with the species, height, girth, crown spread and condition of each tree, distinguishing between those which it is proposed to be topped / lopped / coppiced and those which it is proposed to be fully retained. Any trees to be felled shall also be clearly identified and all works shall be subject to an updated arboricultural method statement.

    (b) Measures for the protection of those trees which it is proposed to be retained shall be submitted to, and agreed in writing with, the planning authority before any trees are topped / lopped / coppiced / felled.

    (c) New compensatory planting should be compatible with long-term management under the route of the permitted transmission line, details of which shall be submitted to, and agreed in writing with, the planning authority prior to the commencement of development.

    Reason: To facilitate the identification and subsequent protection of trees to be retained on the site, in the interest of visual amenity.

12. No works shall commence until a diversion agreement is in place with Uisce Éireann. All works shall be carried out in compliance with Uisce Éireann codes and practices.

    Reason: To ensure the protection of existing wastewater infrastructure.

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.

Philip Maguire
Planning Inspector
31st July 2024

Appendix 1

Screening the need for Appropriate Assessment
Finding of likely significant effects

Appropriate Assessment: Screening Determination
(Stage 1, Article 6(3) of Habitats Directive)

I have considered the proposed development in light of the requirements of S177U of the Planning and Development Act 2000, as amended. A Screening Report has been prepared by Scott Cawley (November 2022) on behalf of the applicant and the objective information presented in that report informs this screening determination.

Description of the Proposed Development

It is proposed to divert an overhead power line that currently traverses the Intel Campus along a route around the eastern and southeastern side of the campus.

I have provided a detailed description of the development in my report (section 2.0) and detailed specifications of the proposal are provided in the AA screening report and other planning documents provided by the applicant.

In summary the proposal involves the removal of 4 no. steel lattice towers (T29 to T32) and associated electrical conductors (OHL) and the construction of 7 no. steel lattice towers (T1 to T7), ranging in height from 20.75m to 39.75m, and stringing of c. 1.1km of OHL.

Consultations and Submissions

I note that the planning authority consulted with relevant nature conservation bodies.

The Development Applications Unit (DAU) submitted observations on behalf of the Department of Housing, Local Government and Heritage (DHLGH).

Issues raised in the initial submission include the following related to the appropriate assessment process:

- Impacts on petrifying springs, a Qualifying Interest (QI) species of the Rye Water Valley/Carton SAC and Priority Habitat under Annex I of the Habitats Directive. Specific concerns related to the impact due to dewatering at tower locations T4 and T6 on the springs and seepages at Louisa Bridge and evidence of the lack of hydrogeological impact was recommended in this regard.
- Impacts of tree removal on air pollution effects within the SAC due to the partial loss of the tree buffer to the western boundary of the SAC during construction and operational phases.
- Impacts on 9 no. SCI bird species for which European sites are designated, having regard to their foraging ranges and the results of the wintering and breeding bird surveys. Additional concerns in relation to bird migration, and specifically the potential *ex situ* impact on SPAs by relevant bird populations colliding with the proposed OHL whilst on migration, were also raised.

The applicant's further information response addressed these issues to the satisfaction of the DHLGH and they recommended that all mitigation measures outlined in the EIAR, NIS and contained within the further information response be conditioned in the event of a grant of permission.

I note that the appellant's concerns generally reflect those initially raised by the DHLGH.

European Sites

Five European sites were identified (see table below) as being located within a potential zone of influence (ZoI) of the proposed development. The proposed OHL crosses the Rye Water between towers T5 and T6 which is protected by the Rye Water Valley/Carton SAC (001398), and the boundaries of which adjoin the eastern boundary of the Intel Campus, adjacent to the proposed OHL between towers T4 and T5. Streams in close proximity to towers T5 and T6 discharge to the Rye Water.

Other sites identified in the screening report include South Dublin Bay SAC (000210), North Dublin Bay SAC (000206), South Dublin Bay and River Tolka Estuary SPA (004024) and North Bull Island SPA (004006), which it states are hydrologically connected to the site via the River Liffey and Dublin Bay, c. 18-20km downstream.

European Site	**QI / SCI**	**Distance**	**Connections**
Rye Water Valley/Carton SAC (001398)	Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016] https://www.npws.ie/protected-sites/sac/001398	Crosses and bounds appeal site	Yes, proximity and via surface and ground water
South Dublin Bay SAC (000210)	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310]	c. 19.9km east, southeast	Yes, via surface water

	Embryonic shifting dunes [2110] https://www.npws.ie/protected-sites/sac/000210		
North Dublin Bay SAC (000206)	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Petalophyllum ralfsii (Petalwort) [1395] https://www.npws.ie/protected-sites/sac/000206	c. 21.6km east	Yes, via surface water
South Dublin Bay and River Tolka Estuary SPA (004024)	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130]	c. 18.5km east	Yes, via surface water

	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] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999] https://www.npws.ie/protected-sites/spa/004024		
North Bull Island SPA (004006)	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056]	c. 21.6km east	Yes, via surface water

	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] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Black-headed Gull (Chroicocephalus ridibundus) [A179] Wetland and Waterbirds [A999] https://www.npws.ie/protected-sites/spa/004006		

I note that the applicant included a greater number of European sites in their initial overview of sites within the vicinity of the proposed development (Figure 7 / Appendix 1). There is no ecological justification for such a wide consideration of sites, and I have only included those sites with any possible ecological connection or pathway in this screening determination. These coincide with those refined by the applicant.

In this regard, I am mindful of the initial comments from the DHLGH, who stated that 'foraging ranges used to rule out impacts in the assessment should be supported by best scientific knowledge' and referenced Woodward *et al.* (2019)[9], who give the maximum foraging radius for the cormorant as 35km from the breeding colony. As noted, they also raised the issue of *ex situ* impacts on SPAs by relevant SCI populations colliding with the proposed OHL during migration periods. The inference being that additional SPAs, even further removed, should be also considered.

Whilst these concerns were satisfactorily addressed at further information stage, the appellant has raised similar concerns in their appeal submission (see section 6.1.5).

The applicant has therefore restated/clarified their further information response (see section 6.2.5). I specifically note their contention that an accepted approach in respect of international thresholds for SCI species, including use of published mean foraging ranges, was not disputed by the DHLGH at further information stage.

SCI Birds

Notwithstanding recent changes to the foraging distances for some SCI species, including the cormorant, I am satisfied that the screening report (section 3.2.6) took a precautionary approach based on the published data available i.e., most foraging trips for cormorant are confined to within 10km of a breeding colony and the maximum range for golden plover is considered to be 11km. I am also inclined to agree with the applicant that the habitat impacted by the proposed towers and OHL does not provide suitable foraging habitat, nor do the towers or wires pose a population level collision risk or impediment to migration. This is clearly evident in the survey information, which recorded little overflying and did not record significant numbers of SCI species or others that fly at similar heights to the proposed towers.

By way of analogy, I observed a grey heron at Sandford's Bridge during the course of my site inspection, with the nearest European site for such species, as noted in the EIAR/NIS, being Wexford Harbour and Slobs SPA, c. 98km away. It is therefore highly unlikely that this grey heron or indeed the species highlighted by the appellant form part of a SPA colony nor has the appellant offered any evidence in this regard which would persuade me to deviate from the final recommendation of the DHLGH.

I also accept that migration, as opposed to commuting, is limited to two relatively short periods annually, and typically above the potential height of collision risk. If there was such risk, this would be evident from the existing OHL crossing point. In these circumstances, I am therefore satisfied that no population effects on SCI bird numbers and hence no adverse impacts on the integrity of the Ireland's Eye SPA, or indeed the more recently designated North-west Irish Sea SPA, can be concluded.

QI Habitats / Species

Ecological surveys undertaken by the applicant at appropriate season and frequency, using best practice survey methods have identified a number of base-rich

[9] Woodward, I., Thaxter, C. B., Owen, E., & Cook, A. S. C. P. (2019). Desk-based revision of seabird foraging ranges used for HRA screening. BTO Research Report No. 724.

springs/streams/seepages in proximity to the appeal site, all of which are examples of Annex I priority habitat petrifying springs, bar that associated with a drainage outfall identified as 'KCC 148' (L12), and discharge towards the Rye Water. The screening report also notes that the Rye Water supports populations of Annex II Atlantic salmon, otter, white-clawed crayfish and lamprey with evidence of otter and crayfish recorded during the surveys, however it states that the only relevant records are those relating to local populations of narrow-mouthed whorl snail and Desmoulin's whorl snail, both of which are QI species for the SAC. No other habitats of relevance to the Rye Water Valley/Carton SAC are recorded near the appeal site.

Likely impacts of the Project

None of the proposed towers are located within the SAC and therefore the development will not result in any direct effects on the SAC as it relates to the Rye Water. However, due to the proximity of the proposal to the Rye Water, impacts generated during the construction phase, including dewatering in the vicinity of the foundations, at towers T4 and T6 in particular, require further consideration.

The applicant has applied the source-pathway-receptor model in determining possible impacts and effects of the proposed OHL diversion.

Sources of impact include:

- Suspended solids (muddy water with increased turbidity) – arising from excavation and ground disturbance,
- Cement/concrete (increased turbidity and pH levels) – arising from construction materials,
- Hydrocarbons (ecotoxic) – accidental spillages from construction plant or onsite,
- Wastwater (nutrient and microbial rich) – arising from accidental discharge from on-site toilets and washrooms.

For the reasons set out in section 9.8 of the EIA, I have no concerns regarding the impact of the proposal on the air quality in the Rye Water Valley/Carton SAC, as initially raised by the DHLGH, nor do I consider there to be any likely impact on any SCI birds having regard to their foraging ranges or migratory pathways, affecting the integrity of SPAs, for the reasons set out in section 9.7 of the EIA and restated above.

Likely significant effects on European sites in view of Conservation Objectives

With limited physical footprint, the primary pathway to the Rye Water Valley/Carton SAC is via ground and surface water discharges into the Rye Water. Given the close proximity of the Rye Water, and to tower T6 in particular (c. 68m), there is little distance for the process of dilution of any pollutants or settlement of sediment to occur before reaching the river and therefore this is considered a direct pathway, particularly given the location of T6 within identified flood zones (Zones A and B).

As the SAC is designated for Annex I petrifying springs habitat, which support the other QI molluscs species, pollution of the Rye Water, as a result of an accidental spillage or contaminated run-off, could erode tufa deposits and affect bryophyte assemblages present within the SAC, impacting on both habitat and species. The screening report states that in a worst-case scenario, these impacts could extend

further downstream to European sites in Dublin Bay and give rise to an overall reduction in flora and fauna diversity. Whilst this is unlikely due to dilution and settling out over such a distance (c. 18-20km), it is possible depending on the scale of event. However, South Dublin Bay SAC is not considered to be sufficiently connected to the development as the Great South Wall as far as Poolbeg Lighthouse forms an effective barrier against any potential effects on the integrity of this site.

Similarly, accidental groundwater pollution, could affect the vegetation and habitat distribution of any downgradient petrifying spring habitat, including the erosion of tufa deposits and affect bryophyte assemblages. There is also the potential for localised contamination of soils and groundwater as a result of migration through the subsoils.

As noted, the river also supports Annex II freshwater species including white-clawed crayfish, that require high water quality. These sensitive receptors are therefore at possible risk via the pathways identified, particularly during the construction phase.

The likelihood of significant effects during the operational phase cannot be ruled out given the potential for accidental spillages (e.g., hydrocarbons) during routine maintenance, although the likelihood is significantly less than during construction.

Based on the information provided in the screening report, my site inspection, review of the Conservation Objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result in the following impacts:

- Habitat degradation as a result of hydrological impacts, i.e., effects could extend to habitats and species downstream of the proposed development site and the associated surface water discharge points.
- Habitat degradation as a result of hydrogeological impacts, i.e., effects could extend to groundwater dependent habitats, and the species those habitats support, in the local area that lie downgradient of the development site.

I concur with the applicants' findings that such impacts could be significant in terms of the stated Conservation Objectives of the Rye Water Valley/Carton SAC and other European sites located within Dublin Bay, bar South Dublin Bay SAC, when considered on their own and in combination with other projects and plans in relation to pollution related pressures and disturbance on QI/SCI habitats and species.

Overall Conclusion
Screening determination

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the applicant, I conclude that the proposed development could result in significant effects on the Rye Water Valley/Carton SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA in view of those site's Conservation Objectives. It is therefore determined that Appropriate Assessment (Stage 2) [under Section 177V of the Planning Act] of the proposed development is required.