Inspector's Report

ABP-309146-21

Development	2 no. 110kV transmission lines and a 110kV gas insulated switchgear (GIS) substation.
Location	Grange Castle South Business Park, Dublin 22
Planning Authority	South Dublin County Council
Applicant(s)	Cyrus One Irish Data Centres Holdings Ltd.
Type of Application	Application under provisions of Section 182A of the Planning and Development Act, 2000 (as amended)
Observer(s)	1. South Dublin County Council 2. HSE South Dublin 3. Transport Infrastructure Ireland 4. Geological Survey Ireland
Date of Site Inspection	4th June 2021
Inspector	Donal Donnelly

Contents

1.0 Introduction

1.1. An application under the provisions of Section 182A of the Planning and Development Act, 2000 (as amended) has been received by the Board from Cyrus One Irish Data Centres Holdings Ltd. seeking approval for the development of 2 no. 110kV transmission lines and a 110kV GIS substation (Aungierstown Substation) at Grange Castle South Business Park, Dublin 22.

1.2. The applicant entered into pre-application discussions with the Board under Section 182E of the Act on 25th June 2020. The Board issued a Direction on 29th July 2020 that the proposed 110kV gas insulated switchgear (GIS) substation and associated works is strategic infrastructure development (SID), and that a planning application should be made directly to the Board.

1.3. The purpose of the proposed development is to support the power demand for the development of a data centre facility and associated 3-storey office block permitted under Reg. Reg: SD18A/0134 (ABP-302813-18).

2.0 Site Location and Description

2.1. The subject site is located in Grange Castle South Business Park off Baldonnel Road, Dublin 22. The site is within the townlands of Ballybane and Aungierstown and Ballybane in western Co. Dublin approximately 3.5km north-west of Newcastle and 3.8km west of Clondalkin.

2.2. Grange Castle South Business Park and the wider Grange Castle Business Park are situated on the periphery of Dublin between the N4 and the N7. Grange Castle Golf Club and the R136 form the eastern boundary of the business parks and this road connects the N4 and N7. Grange Castle South Business Park is accessed off Baldonnel Road to the west. Other features in the area include Casement Aerodrome to the south and the Grand Canal to the north.

2.3. The subject site forms part of the CyrusOne data centre site located to the south of the business park access road. The Google Data Centre to the east of the Cyrus One site and the Digital Reality Profile Park data centre is further east. Other occupants of Grange Castle Business Park to the north include Pfizer, Microsoft Ireland Data Centres and Microsoft Grange Castle, Grifols Worldwide Operations

Ltd., Takeda Ireland Ltd., EdgeConnex Data Centre, Interxion Ireland Data Centre, and Aryzta Food Solutions and Cuisine de France. The Equinix Data Centre is situated within Kilcarbery Park to the north of Nangor Road.

2.4. In terms of existing electricity infrastructure affecting the proposed development, the Castlebaggot 220kV and 110kV substations are located to the north-east of the current application site on the opposite side of the business park access road. The Corkagh 110kV substation is to the north of the Microsoft Complex on the northern site of Nangor Road. Other infrastructure includes the Barnakyle 110kV substation serving the Google Data Centre, the Kilmahud 110kV substation to the north of the Microsoft Data Centre to the east of Adamstown Road, the Grange Castle 110kV substation to the west of the Interxion Data Centre and the Nangor 110 kV substation within the Pfizer complex.

2.5. The subject site is located partly within an overall landholding of 9.2 hectares and comprises a 0.9163 hectare site that extends across the business park access road and up to the Castlebaggot 220kV and 110kV substations. The main part of the site to the south of the business park access road was predominately greenfield and now forms part of the Cyrus One construction site. There are construction works for other data centres taking place to the west and north of the Castlebaggot 220kV and 110kV substations. Milltown Stream continues along the south-eastern boundary of the subject site and is culverted under to the business park access road. The Milltown Stream is a tributary of the Griffeen River.

3.0 **Proposed Development**

3.1. Planning permission is sought for the development of 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation on lands to the north-east of the data centre development permitted under Reg. Ref: SD18A/0134 (ABP-302813-18). The proposed GIS substation will comprise of the following:

- 2-storey GIS substation building with gross floor area of 1,307.2 sq.m. to be known as Aungierstown Substation,
- Two transformers,
- Lighting and lightning masts,

- Car parking,
- Underground services and roads,
- 2.6m high fencing surrounding the compound.

3.2. The proposed 110kV Aungierstown substation will be connected to the existing 220 kV / 110kV Castlebaggot substation to the north-east by two underground single circuit 110kV transmission lines over distances of 120m and 140m respectively.

3.3. The proposed development includes changes to the landscaping permitted under Reg. Ref: SD18A/0134 (ABP-302813-18), together with all associated construction works and all ancillary works.

4.0 Planning History

South Dublin County Council Reg. Ref: SD18A/0134 (ABP-302813-18)

4.1. CyrusOne Irish Data Centres Holdings Ltd. was granted permission in April 2019 for demolition of the existing single storey house and the construction of a two-storey data centre and delivery bays with associated three storey office block and services that will have a gross floor area of 35,426 sq.m on an overall site of 9.2 hectares.

4.2. The development also includes a new substation with associated transformer yard and a single storey transformer building (125sq.m) to be located to the north-east of the site.

South Dublin County Council Reg. Ref: SD20A/0244

4.3. Permission granted for a single storey client control building (285.5 sq.m.) associated with the planned future substation to be located to the north-east of the permitted data centre (ABP-302813-18). The development formed an amendment of permission granted for a single storey transformer building (125 sq.m.) granted under ABP-302813-18.

South Dublin County Council Reg. Ref: SD20A/0295

4.4. CyrusOne Irish Data Centres Holdings Ltd. was granted permission and retention permission in March 2021 for amendments and modifications to the permitted data centre development granted under Reg. Ref. SD18A/0134 (ABP Ref. ABP-302813-18), and the temporary substation permission granted under SD19A/0300 to include:

- Demolition of the two storey dwelling of Weston House; single storey dwelling and outbuildings/ stables of Weston Lodge; and the single storey dwelling and converted garage of Kent Cottage.
- Retention of sprinkler tank and pump house to the south-west of Building A Data Centre to replace 4 sprinkler tanks;
- Retention of 40kW(p) PV panels on the roof of Building A Data Centre;
- Retention of revised size of northern attenuation pond and loss of permitted landscaping to its south;
- Retention of ramped access to rear of temporary substation permitted under SD19A/0300;
- Retention of revised flue arrangement for Building A Data Centre from 2 associated flues per generator to 1 associated flue per generator (16 in total) and grouped into 8 towers of two flues each (each 20m high);
- Retention of revised position of security fence to north, west and south of Building A Data Centre; and retention and modifications of landscape berm along Baldonnel Road and to east of Weston House.

4.5. The development consisted of new works to include the following:

- Modifications of permitted vehicular entrance to the data centre to include a new single storey guard house (37sq.m) and two internal entrance gates;
- Modification to car parking so that the permitted entrance to the parking area from the east is closed off;
- Modifications of flue arrangement for Building B Data Centre from 2 associated flues per generator to 1 associated flue per generator (16 in total) and grouped into 8 towers of two flues each (each 20m high);
- Modifications to permitted landscape scheme to north and south of Building A Data Centre;
- Removal of roadside entrance to Erganagh House (demolished), Kent Cottage, and the former scaffolding yard; and removal of roadside entrance to Weston House and its replacement with a new agricultural gate and fence to be erected to facilitate access for maintenance and security purposes only

4.6. The proposed development/ development for retention related to a 9.7 hectare area located within lands in the Grange Castle South Business Park and the residential properties of Weston House, Kent Cottage and Weston Lodge, as well as the former scaffolding yard on land within the townlands of Aungierstown and Ballybane; Ballybane; and Milltown and bounding Baldonnel Road to the west and south and Grange Castle South access road to the north, Baldonnel, Dublin 22.

Other cases nearby

South Dublin County Council Reg. Ref: SD20A/0121

4.7. Ten year permission granted to UBC Properties LCC in July 2020 for development on a 16.5 hectare site to the north of the subject site comprising the demolition of a dwelling and construction of 3 no. 2-storey data centres with total gross floor area of 80,269 sq.m.

4.8. The development will be enclosed with landscaping to all frontages including a wetland to the west. The development will be accessed from the Grange Castle South Access Road to the south via the Baldonnel Road.

An Bord Pleanála Ref: ABP-308585-20

4.9. The Board approved permission on 28th April 2021 for the Clutterland 110kV GIS substation, including the provision of a 110kV transmission line over a distance of 180m to the existing Castlebaggot 220/ 110kV GIS substation, and a 1.1km 110kV transmission line to the existing Kilmahud-Corkagh circuit.

An Bord Pleanála Ref: 06S.VA0019

4.10. Permission granted in June 2016 for the Castlebaggot 220/ 110 kV GIS substation and associated works.

South Dublin County Council Reg. Ref: SD14A/0023

4.11. Google Ireland Ltd. was granted permission in April 2014 on a site to the east for construction of a 2-storey data storage facility (30,361sq.m.), a double height warehouse building (1,670 sq.m) and a HV substation area with two buildings; 1 no. 2 storey building (968sq.m.) and 1 no. single storey building (190 sq.m) and associated site development works.

4.12. Permission was granted for alterations to the single storey substation building (increase in additional floor area of 88sq.m.) under Reg. Ref: SD14A/0284.

5.0 Legislative and Policy Context

5.1. National Framework Plan, 2018

5.1.1. The National Planning Framework provides policies, actions and investment to deliver 10 National Strategic Outcomes (NSO) and priorities of the National Development Plan. A strong economy supported by enterprise, innovation and skills is the main NSO that pertains mostly to the proposed development. It is recognised that Ireland is very attractive in terms of international digital connectivity, climatic factors and current and future renewable energy sources for the development of international digital infrastructures, such as data centres. It is an objective under this NSO to seek the *"promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."*

5.2. Regional Spatial & Economic Strategy for the Eastern & Midland Region

5.2.1. This document is a 12-year strategic regional development framework that will facilitate the delivery of the NPF. It is a guiding principle of the Strategy for enterprise development to align to the national strategy and approach for data centres in terms of the right location for use and energy demand. Regional Policy Objective 8.25 relating to communications networks and digital infrastructure states that local authorities shall support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations.

5.3. South Dublin County Council Development Plan, 2016-2022

5.3.1. The subject site is zoned 'EE' where the objective is *"to provide for enterprise and employment related uses."* Enterprise centres, industry and public services are among the uses permitted in principle under this zoning objective. Table 11.18 sets out key principles for access and movement, open space and landscape, built form and corporate identity for development within Enterprise and Employment Zones.

This includes the retention of important natural features and the provision of natural buffers, as well as building heights responding to the surrounding context.

5.3.2. Economic and Tourism (ET) Policy 3 Enterprise and Employment (EE) under Section 4.3.3 states that *"it is the policy of the Council to support and facilitate enterprise and employment uses (high-tech manufacturing, light industry, research and development, food science and associated uses) in business parks and industrial areas."* Objective 2 under this policy seeks *"to prioritise high tech manufacturing, research and development and associated uses in the established Business and Technology Cluster to the west of the County (Grange Castle and Citywest areas) to maximise the value of higher order infrastructure and services that are required to support large scale strategic investment."* Objective 5 seeks *"to ensure that all business parks and industrial areas are designed to the highest architectural and landscaping standards and that natural site features, such as watercourses, trees and hedgerows are retained and enhanced as an integral part of the scheme."*

5.3.3. Energy (E) Policy 11: Service Providers and Energy Facilities under Section 10.2.9 states that *"it is the policy of the Council to ensure that the provision of energy facilities is undertaken in association with the appropriate service providers and operators, including ESB Networks, Eirgrid and Gas Networks Ireland. The Council will facilitate the sustainable expansion of existing and future network requirements, in order to ensure satisfactory levels of supply and to minimise constraints for development."*

5.3.4. There is a 6-year roads objective for the construction of the New Nangor Road and Baldonnel Road extensions. These roads have now been completed in the vicinity of the site.

5.4. Natural Heritage Designations

5.4.1. The Grand Canal proposed Natural Heritage Area is located approximately 1.5km north of the subject site. The Liffey Valley proposed Natural Heritage Area is c. 4.3km to the north. The Rye Water Valley/ Carton SAC (Site code: 001398) is the nearest European Site located approximately 5.8km north-west of the subject site.

6.0 Submissions

6.1. Planning Authority

6.1.1. South Dublin County Council's Chief Executive's Report sets out the strategic view that the proposed strategic infrastructure application will be of positive benefit for the sustainable development and economic growth of the County having regard to the provision of increased power supply to permitted development on zoned lands. It is considered that the principle of the proposal is in accordance with the EE land use zoning, the current Development Plan and the proper planning and sustainable development of the area, and that technical / operational issues should be addressed by way of further information and / or conditions in relation to transportation, water and surface water services.

6.1.2. The main points of the submission are summarised as follows:

- 110kV substation would be located on enterprise and employment zoned lands which have undergone development in recent years – proposed development would provide for additional electricity capacity for served zoned lands with a permitted development. There is significant merit to the siting of the proposed development.

- SDCC Water Services advised no objection subject to conditions associated with flood risk.

- Further information requested from Irish Water to determine the feasibility of connection to the public water/ wastewater; storm infrastructure; impacts associated with the built over pipe, the loads imposed and confirmation of access; and details of measures to ensure there will be no negative impact to drinking water source during construction and operational phases.

- Parks and Landscape Department note that the proposal involves the removal of native hedgerow as well as a significant reduction in biodiversity value compared to the permitted landscape proposals. Cannot find the rationale for a 6m zone free of planting within supporting or EirGrid documentation, although planning report states the design requirements of EirGrid are that the periphery has to be free of planting and the landscape plan indicates this zone as 6m.

- Should permission be granted, Parks and Landscape Department recommend conditions relating to previous conditions of permitted development and amendment of landscaping proposals relating to screening trees, proposed grass verges and wildflower management.

- Proposed height of GIS substation is relatively low in comparison to permitted development in the immediate vicinity – approximately 5m lower than that permitted.

- Not considered that proposed additional buildings will substantially impact on the visual amenity of the wider area – proposed planting at northern and eastern ends of site will help to mitigate the visual impact.

- SDCC Roads has no objection subject to condition relating to road opening licencing, reinstatement and taking in charge, submission of a Construction Traffic Management Plan and a public lighting design, and submission of details on number of car parking spaces, staff, visitors, etc. and predicted traffic movements in and out of the site.

- Nearest European Site is the Rye Water Valley / Carlton SAC located 5.8km to the north-west – deemed that Appropriate Assessment is not required as proposed development will not have a significant effect on European Sites.

- Reduction in trees and vegetation is a concern for SDCC – will impact on ecology features of the site, including common bat. Ecological protection measures are therefore considered to be important. Adequate mitigation measures are required to be implemented to address biodiversity impact. Subject to these measures, environmental consequences will be limited, and the proposal is within the carry capacity of the site.

- Given the nature of the location of the proposal, it is considered that 'community gain' conditions are not necessary.

- No contributions levied on underground works or on the provision of the 110kV substation.

6.2. South Dublin County Council has established that further information or appropriate conditions are required on outstanding issues relating to roads/ transportation, water and foul water, flood risk/ surface water, noise/ dust/ working hours, lighting, design, waste management, parks and landscaping, and environmental health.

6.3. Notwithstanding these issues, it is the Council's overriding view that the proposed development will be of positive benefit for the sustainable development and economic growth of the county having regard to the provision of increased power supply to permitted development. It is noted that the proposed development retains and enhances natural features by use of highest architectural and landscaping design standards. In the event that the Board decides to grant permission, the Planning Authority sets out conditions that it considers should be attached to the decision.

6.4. **Other submissions**

Heath Services Executive

- EHS are satisfied that there will be no likely significant effects on land, soils and geology environments and any risks can be mitigated by measures outlined in the EIAR.
- EHS satisfied that the risk to surface water will be low and that any risks to water identified in the EIAR can be mitigated by measures outlined in the EIAR.
- EHS satisfied that the predicted increases in noise levels at the nearest noise sensitive locations will be imperceptible at all locations for both night-time and daytime periods. Once developer implements mitigation measures in full, any risk to the surrounding environment will be low.
- EHS is satisfied that where there are risks to air, mainly during the construction phase, implementation of mitigation measures will ensure that any such effects are negligible and imperceptible.

Geological Survey Ireland

- No specific comments or observations to make.

Transport Infrastructure Ireland

- No specific observations.

7.0 Assessment

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

8.0 Planning Assessment

8.1. In my opinion, the main issues to be addressed under this assessment are as follows:

- Development principle,
- Impact on local ecology,
- Design, layout and visual impacts,
- Drainage impacts,
- Other issues.

8.2. Development Principle

8.2.1. The subject site is zoned 'EE' where the objective is *"to provide for enterprise and employment related uses."* Enterprise centres, industry and public services are among the uses permitted in principle under this zoning objective.

8.2.2. The purpose of the proposed development is to replace a permitted AIS substation at this location and to support the power demand of the data centre development permitted under Reg. Ref: SD18A/0134 (ABP-302813-18) in April 2019. The principle of the permitted development including the AIS substation has already been accepted by the Board and the proposed development seeks the replacement of this ancillary element to the main data centre. In addition, the permitted and proposed

developments would fall under the uses that are permitted in principle under the enterprise and employment zoning for the site.

8.2.3. The proposed development is also in accordance with Development Plan Energy (E) Policy 12 which seeks to facilitate the sustainable expansion of existing and future network requirements, in order to ensure satisfactory levels of supply and to minimise constraints for development. Enterprise and employment uses (high-tech manufacturing, light industry, research and development, food science and associated uses) are supported in business park and industrial areas under Policy 3 Enterprise and Employment. These policies support the development of electricity infrastructure to serve business park uses, as is the case with the proposed and permitted developments.

8.2.4. It is an objective within the National Planning Framework to seek the *"promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities."* Furthermore, it is a regional policy objective as set out in the Regional Spatial and Economic Strategy to support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations. The proposed substation and grid connection will facilitate the permitted data centre development in a cluster of existing data centres in the Grange Castle Business Park where the necessary electricity infrastructure can be put in place to support the power demands of these developments.

8.2.5. Finally, South Dublin County Council consider that the proposed development will be of positive benefit for the sustainable development and economic growth of the County having regard to the provision of increased power supply to permitted developments. Significant precedent exists for the establishment of this use on EE zoned lands in the surrounding area, and overall, I would be in agreement that the proposed development is generally in accordance with the policies and objectives of local, regional and national land use planning policy.

8.3. Impact on Local Ecology

8.3.1. The planning application is accompanied by an Environmental Impact Assessment Report and an Appropriate Assessment Screening Report. Ecological matters

pertaining to Appropriate Assessment are covered under Section 10 and the biodiversity section of the EIA is included in Section 9.6 of this report. This section addresses local ecology issues raised in submissions to the Board. References to the EIA and relevant sections of the Appropriate Assessment Screening are included where necessary.

8.3.2. The proposed development site extends in an irregular shape over an area of 0.9163 hectare. The main part of the site to the south of the business park access road comprises former agricultural lands and now forms part of the construction site for the adjoining data centre development. The proposed grid connection will continue under the business park access road and up to the Castlebaggot 110kV/ 220kV substation. The ground on this part of the site is described as improved agricultural grassland and spoil and bare ground.

8.3.3. The Milltown Stream runs along the eastern boundary of the site and is culverted below the business park access road before it converges with the Griffeen River approximately 520m downstream. The Griffeen River then converges with the River Liffey approximately 5.5km downstream. The proposed grid connection will require excavation under the culvert and there will be no surface water interaction with the Milltown Stream. Surface water from the proposed development will enter the downstream receiving environment via the existing surface water drainage network.

8.3.4. The submission by South Dublin County Council notes that the proposed development involves the removal of native hedgerow as well as a significant reduction in biodiversity value compared to the permitted landscape proposals. The reduction in trees and vegetation from those permitted is a concern for the Council, as it will impact on the ecology features of the site, including common bat.

8.3.5. The proposed changes to the landscaping permitted under Reg. Ref: SD18A/0134 (ABP-302813-18) result from design requirements of EirGrid that the periphery of the substation shall remain free from planting. The line of trees along the eastern boundary of the site is being maintained; however, the front boundary will now comprise of a grass verge rather than a double line of trees.

8.3.6. It should be noted that most of the site currently consists of buildings and artificial surfaces and therefore holds no ecological value. It was discovered in earlier surveys that the proposed development site was being used by a small population of

bat species for commuting and foraging purposes only; however, more recent surveys found that the suitability of the site had declined with the removal of the treeline associated with the permitted development. Construction phase lighting will be designed to be sensitive to the presence of commuting and foraging bats along the eastern boundary of the substation.

8.3.7. Overall, I consider that the impact of the proposed development *per se* will not be significant in the context of local ecology. I would also be satisfied that adequate mitigation measures are presented in the Biodiversity Section of the EIAR. Measures to enhance biodiversity for the entire site include a significant provision of woodland, hedgerow, wetland and grassland habitat. Other mitigation measures for biodiversity are included for the construction stage of the permitted and proposed developments.

8.3.8. It is recommended by South Dublin County Council that a single line of trees should be provided along the northern boundary of the site to include native and pollinator friendly species, as proposed along the eastern boundary. It is also recommended that the grass verge should be planted with a suitable native pollinator friendly wildflower mix of local provenance. In my opinion, these are reasonable measures that will help to improve local ecology the visual impact of the proposed development. I note, however, that the line of trees along the eastern boundary are approximately 23m to the south-east of the GIS substation building and the grass verge is between 14m and 19m to the north-east. Tree planting may not therefore be possible in such proximity to the substation, and I note the presence of other utilities along the north-eastern boundary. I recommend that the grass verge should be planted with wildflower in accordance with a wildflower management plan to be submitted to South Dublin County Council.

8.4. Design, Layout and Visual Impacts

8.4.1. Objective 5 under Policy 3 Enterprise and Employment of the Development Plan seeks *"to ensure that all business parks and industrial areas are designed to the highest architectural and landscaping standards and that natural site features, such as watercourses, trees and hedgerows are retained and enhanced as an integral part of the scheme."*

8.4.2. As noted above, most of the site now comprises buildings and artificial surfaces, with the previous agricultural lands now being used as part of the construction site for the adjoining data centre development. Any natural features on site have therefore been cleared.

8.4.3. In visual terms, the proposed development will be dominated by the proposed 2-storey substation building. This structure will be 48m long and 14m deep and will be aligned parallel to the business park road. The height of the substation will be approximately 15m above ground level and external finishes will consist of dark grey architectural wall panelling. The substation building will conceal transformers, 20m high poles and the switch room building to its rear.

8.4.4. Notwithstanding the scale and appearance of the proposed substation building, I consider that it will be easily integrated with its surroundings. Adjacent buildings will be of larger scale and there is already substantial electricity infrastructure in the immediate vicinity. Tree planting along the northern boundary of the site would be preferable from a visual perspective and a double line of native trees formed part of the permitted development; however, as noted above, these trees have been removed due to EirGrid requirements. The replacement grass verge should compensate to some degree for the loss of existing planting in visual terms once it establishes. In general, these amendments to planting are minor in the context of the wider scheme. It should also be noted that the substation building will front onto a business park access road rather than the more heavily traffic surrounding road network.

8.4.5. I note the Planning Authority's view in relation to the decision to be made by the Board is that the proposal would provide for additional electrical capacity for serviced zoned lands and permitted development and there is significant merit to the siting of the proposed development. It is also considered that the proposed development retains and enhances natural features by use of highest architectural and landscaping design standards.

8.5. Water and Drainage Impacts

8.5.1. A submission was received by the Planning Authority from Irish Water recommending that further information be submitted on a number of items. The

applicant is required to engage with Irish Water through the submission of pre-connection enquiries and confirmation of feasibility must be submitted to the Planning Authority in relation to certain issues. In my opinion, these matters can be addressed by condition if the Board is minded to granted permission for the proposed development.

8.5.2. It is also noted that Irish Water may not have water/ wastewater infrastructure within the public road to the front of the site and a mains extension may therefore be required. In addition, further information is recommended on designs submitted to the Planning Authority; development in proximity to, or proposals to build over an Irish Water asset; presence of public water/ wastewater infrastructure in close proximity to an existing unauthorised structure/ development; and impact on drinking water sources. Again, I consider that these are issues that can be addressed by condition and in consultation with the Planning Authority.

8.5.3. Overall, I consider that all issues relating to impacts of the proposed development on water environments have been adequately addressed or can be dealt with by way of condition. It should be noted that South Dublin County Council Water Services had no objection subject to conditions.

8.6. Other Issues

8.6.1. ***Traffic:*** The impact of traffic and transport during the construction and operational phases of the proposed development is addressed under the Material Assets section of the EIA. It is concluded that the proposed development will not generate traffic levels during construction and operational phases that will give rise to a significant impact.

8.6.2. A number of conditions are recommended by the Council relating to notice of traffic control measures, reinstatement, public lighting, and construction and demolition and construction traffic management. I agree that a condition can be attached to any grant of permission to reflect the requirements of the Roads Section in this regard.

8.6.3. ***Residential Amenity:*** The impact of the proposed development on residential amenity is assessed under the relevant sections of the EIA. It should be noted, however, that many of the residential properties in the area are no longer in residential use. The nearest occupied residences are located approximately 200m

to the south-west. There may be some minor disturbance to the occupants of these dwellings associated with the construction phase of the proposed development. I do not consider this to be a significant issue given the short-term duration of the construction period and the separation distances involved.

9.0 Environmental Impact Assessment

9.1. Introduction

9.1.1. The proposed 110kV GIS substation, underground single circuit 110kV transmission lines from the proposed substation to the existing 220kV / 110 kV Castlebaggot substation, extending over an area of 0.9163 hectare is required to provide a permanent power supply and will be located partly within the site of a permitted data storage facility, which has a site area of 9.2 hectares.

9.1.2. Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) sets out development for the purposes of Part 10 and includes *"industrial estate development projects, where the area would exceed 15 hectares."* Having regard to the cumulative nature of the permitted and proposed developments within an industrial estate setting, and pursuant to the criteria set out under Schedule 5 of the Planning and Development Regulations, 2001 (as amended), an Environmental Impact Assessment Report has been prepared for the proposed 110kV GIS substation and transmission lines. This report assesses the cumulative impact of the proposed development with the data storage facility permitted under Reg. Ref: SD18A/0134 (ABP-302813-18), and with other developments in the vicinity.

9.1.3. Directive 2014/52/EU amending the 2011 EIA Directive was transposed into Irish legislation on 1st September 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018. The EIAR was submitted on to the Board on 13th January 2021 and is therefore assessed under the provisions of the new Directive.

9.1.4. An examination has been carried out of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application for approval. A summary of the results of the submissions by the Planning Authority,

and prescribed bodies are set out at Section 6 of this report. The main issues raised specific to EIA can be summarised as follows:

- Impacts both positive and negative on population and human health;
- Impacts on biodiversity;
- Impacts on land in terms of change of use;
- Impacts on soils and water bodies;
- Impacts on air quality; and
- Cultural heritage and landscape impacts.

9.1.5. These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation including conditions.

9.1.6. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2000, as amended.

9.2. EIAR Content and Structure

9.2.1. The EIAR is presented in three volumes comprising the non-technical summary, the main report and appendices. In general, I consider that the content and scope of the EIAR is acceptable and in compliance with the EIAR Directive and the Planning and Development Regulations, 2001 (as amended).

9.2.2. The non-technical summary gives a concise synopsis of the EIAR and is written in language that can be easily understood. I am satisfied that the EIAR adequately describes the proposed development to include information on the site, its design and its size. The applicant has also carried out an assessment of reasonable alternatives relevant to the proposed development and its specific characteristics. A baseline scenario with and without the proposed development is assessed and a description of the factors likely to be significantly affected by the proposed development are set out, together with any direct, indirect, secondary, cumulative,

transboundary, and short-long term effects of the proposed development. A description of forecasting methods including any difficulties encountered and the main uncertainties, as well as measures envisaged to avoid, prevent, reduce or off-set significant adverse effects and any monitoring arrangements are included for both construction and operational phases. The vulnerability to risk of major accidents is also described, along with any measures to prevent or mitigate the significant adverse effects on the environment. Details of consultations are included and there is an adequate list of experts who contributed to the EIAR.

9.2.3. Overall, I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment.

9.3. Reasonable Alternatives

9.3.1. The EIAR must include a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, as well as an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.

9.3.2. Chapter 4 of the EIAR sets out the alternatives considered for the proposed development that resulted in the selection of the site, its design/ layout and the processes and technologies involved. Alternative mitigation is also considered, along with the 'do nothing' alternative, which would result in the permitted data centre being left without a permanent power supply. The land would therefore remain undeveloped. The permitted Air Insulated Switch-Gear (AIS) substation on site was deemed as not acceptable by ESB Networks and Eirgrid.

9.3.3. Alternative project locations were assessed for the GIS substation and the 110kV transmission line routes. The location of the proposed substation under the permitted development and the proposed development has remained unchanged. Alternative sites for the substation were considered under the permitted development; however, it was decided to locate the offices towards the business park entrance rather than the substation from a visual perspective. It was not therefore necessary to consider an alternative location for the proposed substation.

9.3.4. Five route options were considered for the proposed 2 no. 110kV transmission lines from the Castlebaggot 220kV/ 110kV substation to the proposed substation. The variation between routes is minimal due to the short distances involved. All routes extend from the western side of the Castlebaggot 220kV/ 110kV substation over various alignments under the business park road to the north-eastern or south-western sides of the proposed substation building.

9.3.5. The preferred route was chosen based on certainty of delivery and its shorter length resulting in reduced wastes and construction period. The preferred route also avoids conflicts with existing power lines and a culverted stream. All works will be located within lands within the control of the applicant, the Council or a wayleave of the Council, thus enabling the applicant to move forward with certainty.

9.3.6. In terms of design / layout, the flexibility to select alternatives was not available to the applicant given the requirements stipulated by ESB Networks to provide an efficient and safe service. Overhead lines were considered but would require corridors free of all other development. The chosen 110kV underground lines allows more power to be transmitted using less land and minimising ecological and visual impacts.

9.3.7. The flexibility for selecting alternative processes for integration into the national grid is not available to the applicant. The underground cable installations must meet EirGrid's specifications, and the design of the substation is centred around the equipment requirements of EirGrid.

9.3.8. With respect to mitigation, a comparison of environmental effects was made, and the established strategies of avoidance, prevention, reduction and off-setting have been considered. Mitigation measures have also been considered on the basis of quality, duration of impact, probability and significance of effects.

9.3.9. In general, all reasonable alternatives that are relevant to the project and its specific characteristics are clearly presented in the EIAR. The main reasons for the chosen option and the development of the design process are set out, together with the background for the chosen layout. I would be satisfied that this section of the EIAR is sufficient to comply with the provisions of Paragraph 1(d) of Schedule 6 of the Planning and Development Regulations, 2001 (as amended) and Article 5(1) and Annex IV of Directive 2014/52/EU.

9.4. Likely Significant Effects on the Environment

9.4.1. This section of the EIA **identifies, describes and assesses** the potential direct and indirect effects of the project under each of the individual factors of the environment (population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage and the landscape; and the interactions between these factors). Baseline characteristics, cumulative information and an evaluation of impacts on each sensitive aspect are set out, together with mitigation measures and residual impacts.

9.5. Population and Human Health

9.5.1. Chapter 5 of the EIAR describes the general characteristics of human activity and health status in the study area. The impact of the proposed development on land use, and recent trends in population, employment and economic performance and the community are assessed, together with mitigation measures. Impact on population and human health is also considered in other sections of the EIA, e.g. noise and vibration, air quality and climate, landscape and visual and material assets.

9.5.2. A desktop survey of the county council area and the local area of available facilities was undertaken. This included a review of background studies, maps and aerial photography and Census of Population data. The subject site comprising an area of 0.9163 hectares was mostly greenfield and located within the Grange Castle South Business Park. The nearest occupied dwellings are c. 200m to the south-west of the site and c. 250m from the proposed 110kV substation.

9.5.3. The study area comprises the Electoral Division of Clondalkin-Village, which recorded a population of 9,152 in the 2016 Census, representing a 7.8% increase from the 2011 Census. The population in the Small Area within which the site is located was 257, declining from 270 in the 2011 Census. The small population increase in the Electoral Division and the decline in the Small Area is indicative of fact that much of the ED consists of employment zoning.

9.5.4. The Census indicated a decrease in unemployment within the ED; however, the long-term implications on employment from the Covid-19 pandemic are unclear. Much of the agricultural land in the surrounding area has been lost in recent decades

due to the employment zonings and related development. Grange Castle has emerged as an important area for the creation of high-end clusters based around foreign direct investment, manufacturing and support industries in a business park setting with large plots, infrastructure and landscaped setting.

Characteristics of the Proposed Development

9.5.5. The proposed development comprises the construction of a 110kV GIS substation, and underground 110kV transmission lines to the existing Castlebaggot substation to the north-east on the opposite side of the business park access road. The purpose of the proposed development is to support the power demand for the development of an adjoining permitted data centre and office buildings. The proposed development will replace elements of the permitted development that included an air insulated switch gear substation with associated transformer yard and client control building. The client control building was constructed to reflect the current substation layout and was subject to a recent retention application.

9.5.6. The construction period is expected to take from Q3 2021 to Q4 2022 and peak staff levels during civil works will be approximately 30 workers. Normal working hours will be 07:00 to 19:00 hours Monday to Friday and 09:00 to 13:00 hours on Saturdays. Construction of the portion of the 110kV transmission line that crosses under the business park road will require temporary closure of one traffic lane for a short period. Works on this section will be undertaken from 10am to 4pm.

9.5.7. Construction works for the 110kV substation will involve site preparation works, foundations and structural works requiring moderate excavations, levelling/ cut and fill including reuse of spoil in landscaped areas; building envelopes and finishes; roads, services and landscaping; material sourcing, transportation and storage materials; and waste management. When operational, weekly inspection of the GIS substation will take a maximum of 8 hours in a single day by up to two staff. Annual maintenance works will involve up to four staff over a maximum of 15 days.

Potential Impact of the Proposed Development

9.5.8. The potential impacts of the proposed development on population and human health are summarised as follows:

- Short-term, imperceptible and positive effect on local businesses during construction phases through presence of a small number of construction staff.
- Potential cross factor effects to human health reported from topic chapters relating to air quality, noise and vibration, local amenities and tourism, additional traffic and unplanned events / health and safety:
    - Dust generation as a result of construction activities.
    - Potential for emissions from maintenance vehicles.
    - Potential for noise emissions from construction plant and machinery – expected to be less than the prevailing ambient noise levels and the nearest sensitive locations.
    - Vibration impacts expected to be negligible due to the distance the site and the nearest sensitive locations.
    - No potential impact on local parks or larger amenity areas, or on local tourism or shopping amenities.
    - Potential for impact on population and human health from additional traffic during construction – any significant construction works will take place outside of the main commuter hours and at worst case, a single lane carriageway will remain operational where road works are required.
    - Potential for impact on health and safety of workers particularly during construction.

Mitigation Measures

9.5.9. Potential impacts on population and human health are mitigated by the measures outlined below under air quality & climate, noise & vibration and traffic & transportation.

Residual Impacts

9.5.10. The residual impacts on local population during the construction phase are considered to be short-term, positive and imperceptible.

Conclusions on Population and Human Health

9.5.11. Impacts on population and human health will be short-term and not significant during the construction phase, and long-term, imperceptible and neutral during the operational phase. I am satisfied that any impacts identified would be avoided, managed or mitigated by measures forming part of the proposed development, proposed mitigation measures and measures within suitable conditions, and that no significant direct, indirect or cumulative adverse effects on population and human health are likely to arise. The proposed development will provide a permanent power supply to the permitted development and will support the potential for future growth outside the site, which in turn can generate employment.

9.6. Biodiversity

9.6.1. Chapter 6 of the EIAR sets out the methodology for evaluating effects on biodiversity, including identification of biodiversity receptors that could potentially be affected by the proposed development. Baseline data was collected through a desk study and field surveys were conducted on 14th July 2020. Tracks, markings, feeding signs, droppings and direct observations of fauna were recorded and habitat was classified using the Guide to Habitats in Ireland (Fossitt, A., 2000). Bat surveys were undertaken on 21st June, 1st July and 10th July 2018 and static bat detectors were left in place from 21st June to 28th June 2018. Site suitability assessments for bats and breeding birds and ad-hoc bird observations were noted during a site survey in July 2020. Suitability of the site for terrestrial fauna was recorded during a site visit in July 2020. At the time of the July 2020 surveys, the site was being used as a construction compound for the adjoining data centre to the west.

9.6.2. The nearest European Site is the Rye Water Valley Carton SAC located c. 5.8km to the north-west and the nearest proposed Natural Heritage Area is approximately 1.5km north (Grand Canal pNHA). The site is located upstream of designated sites in Dublin Bay and in the River Liffey.

9.6.3. Habitat types on the proposed development site comprise of improved agricultural grassland (GA1), amenity grassland (improved) (GA2), spoil and bare ground (ED2) and buildings and artificial surfaces (BL3). Most of the site consists of buildings and artificial surfaces and therefore holds no ecological value. The areas of improved

agricultural grasslands and amenity grasslands are relatively species poor and a culverted stream on site also holds no ecological value. There was no evidence of badger or otter on site.

9.6.4. The proposed development site was being used by a small population of bat species for commuting and foraging purposes only. The July 2020 surveys found that the suitability of the site had declined with the removal of the treeline associated with the permitted development.

9.6.5. No bird activity was recorded on site and the site is therefore considered to be of local importance (low value) for birds.

Characteristics of the Proposed Development

9.6.6. The proposed development comprises an amendment to the permitted development (SD18A/0134/ ABP-302813-18) to replace the previously permitted air insulated substation with a 110kV GIS substation and 2 no. 110kV transmission lines to the Castlebaggot substation.

9.6.7. Trenches for the transmission lines will be required under the culvert below the business park access road to a depth of 3m. At the south-western corner of Castlebaggot substation, 1.5m deep trenches will be excavated using an excavator and hand digging. Hand digging will be required beneath the culvert with appropriate support and measures in places as per the CEMP. However, there is no direct hydraulic link to the nearby Griffeen River.

9.6.8. Storm water from the proposed 110kV substation roof will be directed into an on-site reticulation system with outflow discharging to an attenuation system. Stormwater from hardstandings will drain to the attenuation tank and through petrol interceptors. Post attenuation, surface water will drain to the mains network. Foul water will also discharge to the sewer located along the business park access road, which ultimately drains to the Grange Castle Business Park pumping station, c. 1.9km to the north.

Potential Impact of the Proposed Development

9.6.9. The potential impacts of the proposed development on key ecological receptors are summarised as follows:

Designated Sites

- No possibility of direct habitat loss or loss of habitat that supports QI/ SCI populations of European Sites as a result of the proposed development.
- Proposed development will not have a measurable effect on water quality in Dublin Bay or the Irish Sea.
- Proposed development will not interact directly with the underlying groundwater body and lies down gradient of the Rye Water Valley / Carton SAC.
- There is no risk of invasive species spreading to European Sites as a result of the proposed development.
- No European Sites within the disturbance zone of influence of the proposed development.
- No significant impact on any nationally designated sites for the same reasons outlined above – no source-pathway-receptor links to Grand Canal pNHA and there is significant distance between proposed development site and other pNHAs.

Construction phase

- Proposed development will require the removal of the majority of habitats which have been classified as being of local importance (lower value) – habitats are common and their removal is not regarded to be a significant ecological impact.
- Temporary lighting during construction could illuminate previously unlit feeding areas or commuting flight paths making them unsuitable to bats.
- Potential for significant impact on breeding bird populations at a local scale if site clearance (vegetation removal) is carried out during the bird breeding season.
- Noise, vibration and increased human presence during construction is likely to result in disturbance to local breeding bird populations – birds will be somewhat habituated to a degree of human and vehicle disturbance.
- Risk of mortality / injury to common frogs, which may arise during site clearance. Not considered significant at any geographic level.

- Potential impacts during the operational phase could arise from artificial lighting, or disturbance impacts from increased human presence.
- Under a “do nothing” scenario, the existing management of the amenity grassland, improved agricultural habitats and treelines is expected to maintain existing habitat types close to their current form.

Mitigation Measures

9.6.10. Operational phase mitigation measures include the use of oil inceptors and forebays to remove detritus from surface water drainage and controlled release from attenuation areas into the surface water system. Operational lighting will be designed to be sensitive to the presence of bats.

9.6.11. The following biodiversity mitigation measures are outlined for the construction phase of the proposed development:

- Implementation of CEMP by all contractors on site to ensure that stormwater and wastewater run-off are managed and will not cause an off-site environmental impact. Measures will include silt control, diversion of clean water, treatment and disposal of wastewater, refuelling controls, etc.
- Outline Construction and Environmental Management Plan specifies a number of general pollution prevention measures.
- Hydrology chapter includes measures to prevent contaminated surface water run-off entering the stream, measures to prevent spillage of fuels and chemicals, measures to deal with accidental releases and measures to prevent impact arising from the management of soil removal and compaction.
- Construction phase lighting designed to be sensitive to the presence of commuting and foraging bats along the eastern boundary of the substation and in accordance with relevant guidance.
- If the removal of vegetation must take place during the bird breeding season, checks for breeding birds will be undertaken immediately prior to site clearance. Where active nests are found, works will cease until such a time that the nests are deemed inactive.

- Pre-construction survey will be undertaken to determine whether breeding common frogs are present. Any capture and translocation works will be undertaken immediately in advance of site clearance / construction works.

Residual Impacts

9.6.12. There is no potential for residential impacts on designated sites, habitats and flora, bats and common frog. Residual impacts on breeding birds include temporary displacement during construction and vegetation clearance. No long-term significant impacts are predicted on breeding birds. Residual impacts for wintering birds includes the loss of agricultural grassland habitat.

Conclusions on Biodiversity

9.6.13. The proposed development will be located in an area of low ecological value and within a business park setting where existing development is taking place. Any species on site would therefore be habituated to a certain level of human disturbance. There are no designated sites is proximity to the site and no potential for measurable effects on any downstream designated sites.

9.6.14. Overall, I consider that the EIAR has adequately assessed the impact of the proposed development on biodiversity and the cumulative impacts of the adjoining permitted development. I am satisfied that with proper implementation of mitigation and best practice measures, together with implementation of environmental commitments under the Construction and Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on water quality, habitats and species are likely to arise.

9.7. Land, Soil, Water, Air and Climate

9.7.1. This assessment deals separately with the above environmental factors as they appear in the EIAR. Chapter 7 of the EIAR addresses land, soil, geology and hydrogeology and Chapter 8 deals with hydrology. Noise and vibration are covered under Chapter 9 and air quality and climate and included under Chapter 10.

9.7.2. The topography of the site ranges from 75m OD in the south-east to c. 70m OD in the north-west. The site has been in agricultural use up until recent years. The soil type underlying the site is composed of mainly basic well drained soils. Glacial till is

the common soil cover in the region. Bedrock geology underlying the site and surrounding area is dominated by rocks of the Carboniferous Age and the bedrock aquifers are classified as locally important with extreme and high vulnerability. Local groundwater flow is expected to be to the north and the Dublin Groundwater Body is not at risk. Site investigation sampling was also carried out on site showing topsoil to a depth of 0.4m underlain by natural till made up of stiff to very stiff gravelly sandy clay. Weathered rock depth varied between 1.2m and 2.45m below ground level and more competent bedrock was encountered at 3m below ground level. There are no sensitive receptors in the surrounding area such as groundwater-fed wetlands, council water supplies/ group water schemes or geological heritage sites.

9.7.3. In terms of land take, there will be a loss of agricultural land resulting from the proposed development; however, the site is zoned for enterprise and employment and is due for development. Much of the lands surrounding the site have recently been developed for data centres and other industrial development.

9.7.4. The site is within the sub-catchment of the Griffeen River which is a tributary of the River Liffey. The Milltown Stream flows through the site from south-east to north-west via a culvert. This stream discharges into the Griffeen River to the north-west The EPA classifies the Griffeen River as being ‘at risk’ and the overall quality status for the Griffeen Lower was ‘bad’.

9.7.5. Indicative flood mapping contained in a flood study shows the site located within Flood Zone C “Low Probability” and therefore the proposed development is classified as appropriate. It is not expected that the proposed development would adversely impact on flood risk for neighbouring properties.

9.7.6. With respect to air quality and in particular noise and vibration, overall acceptable levels of construction noise and vibration are set out in the Transport Infrastructure Ireland publication “Guidelines for the Treatment of Noise and Vibration in National Road Schemes”. In addition, the cumulative effect of the day to day operations of the permitted data centre and proposed development will comply with the criteria set out in Condition 16 of the Board’s Decision to grant permission under Ref: ABP-302813-18. Three noise sensitive locations were selected around the site and measurements were conducted over a 4 day period at the closest location, with attendant spot check measurements conducted at the other two locations during

daytime hours. At all measurement locations, road traffic noise was noted as the most significant source of noise and typically dictated ambient noise levels.

9.7.7. The Air Quality Standards Regulations, 2011 incorporates Directive 2008/50/EC, which sets limit values for a number of pollutants relevant to this assessment. The TA-Luft standard has been applied for this assessment as a standard for dust deposition. New national emissions reduction commitments for certain atmospheric pollutants are also established under Directive (EU)2016/2284. The Climate Action Plan, 2019 outlines the various broadscale measures required for key sectors, including electricity, transport, built environment, industry and agriculture to achieve ambitious decarbonation targets.

Characteristics of the Proposed Development

9.7.8. The activities associated with the construction phase of the proposed development on land, soils, geology and hydrogeology include run-off percolating to ground; earthworks including cut and fill, excavations, subsoil stripping and stockpiling; storage of hazardous materials; and import and export of materials. During the operational phase, there will be an increase in hardstanding areas altering local recharge. Diesel will also be stored on site for supply of the back-up generator for the proposed substation.

9.7.9. Key civil engineering works that have a potential to impact on the water and hydrological environment during construction include excavation and installation of ducting for the 110kV transmission, possible discharge of collected rainwater during excavation and groundworks, and storage of cement and concrete materials. Fuel will also be stored on site during the operational phase and there is potential for high levels of noise from plant and machinery.

9.7.10. An amount of soil will be generated as part of the construction works. Infilling and landscaping will also be undertaken and there will be temporary storage of construction materials. Construction traffic will emit a certain level of air pollutants and greenhouse gases.

Potential Impact of the Proposed Development on Land, Soil, Geology and Hydrogeology and Hydrology

9.7.11. The following impacts are applicable to **land, soils, geology, and hydrogeology** as well as surface water (**hydrology**):

Construction

- Excavation of soil will be required for levelling of the site for substation platform – will not change the vulnerability category of the site which is already high to extreme.
- No contamination or existing hazardous substances on site and no treatment of any water will be required during construction works.
- Local removal and reinstatement of soil during trenching for cable works will not change the overall vulnerability, as excavations are shallow in depth.
- Potential for rainfall and/ or groundwater to become contaminated with pollutants associated with construction activity – include potential for suspended solids arising from ground disturbance, cement/ concrete arising from construction materials, hydrocarbons from accidental spillages and wastewater.
- Potential for slight increase in run-off due to introduction of impermeable surfaces and compaction of soils reducing the infiltration capacity and increasing the rate and volume of run-off.
- Some removal of perched rainwater from excavation may be required – volumes will be quite low, and all pumped water will be subject to onsite settlement before release.

Loss of agricultural land

- There will be loss of agricultural soil; however, the land has not been used for agriculture for a number of years and area is small in the context of overall available land in the area.

Operational Phase

- Potential for leaks and spillages for fuel storage and from vehicles along access roads, loading bays and parking areas contaminating soil and groundwater.

- Rainwater run-off from substation roof will be collected in stormwater drainage channels and diverted to the permitted stormwater attenuation basin – designed to accommodate surface water drainage from the proposed development.
- Hydrobrake flow control systems will be used to achieve required discharge rates.

Mitigation Measures for on Land, Soil, Geology and Hydrogeology and Hydrology

- CEMP sets out requirements and standards that must be met during the construction stage and will include the relevant mitigation measures outlined in the EIAR and subsequent planning conditions.
- Proposed development will incorporate reduction, reuse and recycle approach in terms of soil excavation on site.
- Excavation works will be carefully monitored for any potentially contaminated soils, which will be segregated and removed to an authorised waste facility.
- Effects of stripping and stockpiling will be mitigated through implementation of an appropriate earthworks handling protocol. Anticipated that there will be no direct link or pathway from stockpiles to any surface waterbody.
- Soils to be removed off site will be correctly classified for transportation and recovery/ disposal offsite.
- All fill and aggregate will be sourced from reputable suppliers.
- Measures to prevent any spillages that may result in impacts to soils/ groundwater include designation of bunded refuelling areas, provision of spill kits and appropriate measures where mobile fuel bowsers are used.
- Measures for use of drummed fuel include secure storage and clear labelling of all containers, use of quality approved drums, use of oil spill pallets, and loading and unloading of drums by trained personnel using appropriate equipment.
- Earthwork operations will be carried out on surface with adequate drainage, falls and profile to control run-off and prevent ponding and flowing – will ensure that there is minimal inflow of shallow/ perched groundwater into any excavation.
- Care will be taken to ensure that soil surfaces are stable to minimise erosion.

- All run-off will be prevented from directly entering into any watercourses/ drainage ditches.
- Silt reduction measures will include silt fencing, settlement measures (silt traps, 20m buffer between machinery and watercourses, refuelling of machinery off site) and hydrocardon interceptors.
- Weather conditions will be considered when planning construction activities to minimise risk of run-off from the site during construction.
- All ready-mixed concrete will be brought to the site by truck and suitable risk assessment for wet concrete will be put in place to prevent discharge of alkaline wastewater or contaminated stormwater.
- Provision of spill kit facilities and training of operatives in use of same for diesel tank for back-up generator.
- Reduction of local recharge of the aquifer from increased hardstanding will have no significant impact on the natural hydrogeological regime.
- Implementation of Environmental Safety and Health Management System by operator

Residual Impacts for on Land, Soil, Geology and Hydrogeology and Hydrology

9.7.12. Following implementation of mitigation measures, residual impacts during construction and operational phases will be imperceptible and neutral.

Potential Impact of the Proposed Development on noise and vibration

9.7.13. The potential impacts on **noise and vibration** are summarised as follows:

- Construction works associated with cable laying will be the dominant source of noise at the nearest noise sensitive locations when they occur – all noise sensitive properties are at a distance greater than 200m.
- Specifically high impact activities will not be permitted during night-time hours.
- Review of predicted increases in noise levels from the permitted and proposed development in day to day and emergency operating scenarios at the nearest noise sensitive locations concludes that the associated impact is not significant or imperceptible.

- Additional traffic introduced onto the local road network due to the construction phase will not result in significant noise impact.
- Review of predicted increases in noise level at the nearest noise sensitive locations concludes that the associated impact during operation is imperceptible – existing soundscapes will remain unchanged in terms of ambient noise levels.

Mitigation Measures for Noise and Vibration

- Various measures will be applied during construction including the limitation of hours during which site activities are likely to create high levels of noise or vibration; establishing channels of communication; appointing site representatives; all access roads will be kept even to mitigate the potential for vibration from lorries, etc.
- Selection of plant with low inherent potential for generation of noise / vibration.
- Erection of barriers around items such as generators or high duty compressors.
- Situation of noisy plant as far away from sensitive properties as permitted by site constraints.
- Potential cumulative noise emissions from the permitted development, proposed development and neighbouring Google Data Centre and Grange Castle Data Centre have been considered. Cumulative construction noise will effectively be masked by existing traffic noise at the nearest noise sensitive locations. During operation, the cumulative noise impact will be negative, not significant and long-term.

Residual Impacts for Noise and Vibration

9.7.14. There are no significant impacts at the closest noise sensitive locations subject to implementation of mitigation measures.

Potential Impact of the Proposed Development on Air Quality and Climate

9.7.15. The potential impacts on **Air Quality and Climate** are summarised as follows:

- Greatest potential for impacts on air quality during construction is from dust emissions and dust nuisance.

- Level of dust emission from earthworks can be classified as small as the total excavated material will be significantly less than 20,000 tonnes. Dust emission magnitude from construction and track out can also be classified as small.
- There is potential for greenhouse gas emissions to the atmosphere during construction – considered to be imperceptible and short-term.
- Operational stage impacts on air quality and climate are predicted to be imperceptible and long-term.

Mitigation measures for Air Quality and Climate

- Management plan has been formulated for dust control based on best practice guidance.
- CEMP will set out an overarching vision of how the construction of the proposed development will be managed in a safe and organised manner by the contractor.
- Good site management through good design and effective control strategies to avoid dust becoming airborne at source.
- Pro-active control of fugitive dust will prevent significant emissions rather than attempting to control them once released.
- Specification of a site policy on dust and the identification of the site management responsibilities for dust issues.
- Development of a documented system for managing site practices with regards to dust control.
- Development of a means by which the performance of the dust minimisation plan can be regularly monitored and assessed.
- Specification of effective measures to deal with any complaints received.

Residual Impacts for Air Quality and Climate

9.7.16. Fugitive emissions of dust and particulate matter from the site will be short-term and imperceptible in nature, posing no nuisance to nearby receptors. Mitigation measures will ensure that the proposed development complies will all EU ambient air quality legislative limit values.

9.7.17. The potential impact for climate change and transboundary pollution from the proposed development is deemed to be short-term and imperceptible in relation to Ireland's obligations under the EU 2020 target. The operational phase of the proposed development will give rise to long-term and imperceptible impacts for both air quality and climate.

Conclusions on Land, Soil, Water, Air and Climate

9.7.18. The main potential effects to land relate to the change from former agricultural use to enterprise and employment use, which is in accordance with the zoning objective for the site and surrounding lands. The soil type underlying the site is composed of mainly basic well drained soils and there are no sensitive receptors in the surrounding area such as groundwater-fed wetlands, council water supplies/ group water schemes or geological heritage sites. Local groundwater flow is expected to be to the north and the Dublin Groundwater Body is not at risk.

9.7.19. The Milltown Stream flows through the site and is culverted under the business park access road. The proposed grid connection will pass under this culvert and there will be no direct discharge to this watercourse. After attenuation within permitted infrastructure, surface water will discharge to the business park surface water system via a new connection. Wastewater will discharge to the foul drainage system and water supply will be from mains.

9.7.20. The main activities associated with the construction phase of the proposed development that can give rise to potential impacts include run-off percolating to ground, contaminants in surface water, earthworks, excavations, subsoil stripping and stockpiling, storage of hazardous materials and import and export of materials. An increase in hardstanding areas during the operational phase may also alter local recharge. The CEMP sets out requirements and standards that must be met during the construction stage and will include the relevant mitigation measures outlined in the EIAR and subsequent planning conditions. This will include measures to prevent impacts to soil/ groundwater and surface water such as silt fencing, settlement measures and buffer areas.

9.7.21. Construction works associated with cable laying will be the dominant source of noise at the nearest noise sensitive locations. The greatest potential for impacts on air quality is from dust emissions and dust nuisance during construction. The CEMP will

set out an overarching vision of how the construction of the proposed development will be managed in a safe and organised manner by the contractor. Various measures will be applied to control noise and dust emissions including the establishment of channels of communication, weather monitoring, limitation of construction hours and procedures for dealing with any complaints.

9.7.22. Overall, I consider that the impacts on land, soil, water, air and climate would be avoided, managed and/ or mitigated by the design and measures that form part of the proposed development. Taken with other developments in the wider area, the cumulative effects of the proposal are not likely to be significant to an extent that might warrant a refusal of the proposed development. Environmental Health Services are satisfied that once mitigation measures are implemented in full, there will be minimal impacts on hydrology and water quality during construction, and negligible impacts during the operational phase.

9.8. Cultural Heritage and the Landscape

9.8.1. Chapters 11 and 13 of the EIAR describe the general characteristics with respect to landscape and cultural heritage in the study area. A landscape and visual impact assessment has been prepared to analyse the existing landscape and the potential visual impacts of the proposed development. The site was inspected and photomontages, plans, aerial photography and historic maps were analysed. The assessment of the impact on archaeological, architectural and cultural heritage included a desk top study and reference is made to a number of recent archaeological investigations carried out previously.

9.8.2. There are some remnants on the subject site of agricultural hedgerow field boundaries around the eastern perimeter of the site; however, the lands are currently part of a construction site. The wider landscape is flat and sits between two landscape types. To the east and north, the landscape is characterised by very large built development and new tree lined roads, and to the west and south, landscape is generally rural with medium to large field patterns and individual residences. The local landscape to the south-east is dominated by Casement Aerodrome.

9.8.3. There are two recorded monuments within the study area both of which are enclosure sites (CH001-002) that have been fully excavated. There is also one protected structure in the study area, namely Castle Bagot House (CH003). John Rocque's map of Dublin (1756) shows a road or trackway and a double field boundary along the Ballybane/ Aungierstown & Ballybane townland boundary may reflect this route.

Characteristics of the Proposed Development

9.8.4. The proposed Aungierstown substation is situated within the north-eastern part of the data centre development permitted under Reg. Ref: SD18A/0134 (ABP-302813-18). The substation compound will include a 2-storey GIS substation building with gross floor area of 1,307.2 sq.m., as well as lighting and lightning masts, car parking and associated underground services within a 2.6m high fenced compound. The substation building will be finished in metal cladding.

9.8.5. Excavation works for the 110kV transmission lines will typically be 1.25m below ground level but will increase to 3m at utility crossings. Trenches will be 0.6m, widening to 1.5m closer to the proposed substation.

9.8.6. Landscaping will be in accordance with the landscape masterplan for the permitted development apart from the immediate north and east of the GIS substation.

Potential Landscape and Visual Impact of the Proposed Development

9.8.7. The potential **landscape and visual** impacts are summarised as follows:

- Initial construction operations created by the clearance of the site and construction of buildings and plant will give rise to temporary impacts on landscape character.
- Construction of underground transmission lines will require trenching and stockpiling of material along its route. Temporary works required to install the cables would be similar to works that have been undertaken in the area recently and will require some recently planted trees along the road to be removed.
- Visibility from most of the surrounding landscape will be limited by the existing buildings and vegetation of the permitted data centre.

- Proposed development is located adjacent and within the Grange Castle Business Park and the visual elements associated with construction would be considered part of the urban landscape.
- Permitted development will significantly alter the landscape character and new landscape will surround the proposed substation.
- Proposed development will be visible in glimpse views from the New Nangor Road.
- Any visual impact will be significantly reduced to the scale of the surrounding permitted development – proposed development would be considered a continuation of recent trends in the local area.
- Proposed landscape treatment under the permitted development will only be minimally altered under the proposed development to its immediate north and east due to EirGrid design requirements.
- The level of tree cover and woodlands proposed will significantly increase the ecological value of the permitted development site.

Mitigation Measures for Landscape and Visual

- Construction compounds, temporary car parking and storage facilities, etc. will be located sensitively to avoid local visual sensitivities.
- Permitted development will provide substantial mitigation of the proposed development – no additional landscape mitigation measures are proposed as part of the proposed development that will increase the visibility of the proposed substation in localised views from the north and east.
- Earth modelling and large tree planting with woodland whip planting will provide a high level of visual screening.
- Set back of built development will accommodate significant landscape buffer zones.
- Incorporation of stormwater attenuation systems as above ground wetlands and ponds will improve amenity, visual and biodiversity of the landscape.

Residual Impacts for Landscape and Visual

9.8.8. The residual impacts are visualised by five verified photomontages taken from around the site. The landscape and visual impacts of the proposed development will be not significant and will range from slight to moderate and neutral to negative. There will be a moderate and long-term impact from View 4 adjacent the site during the operational phase; however, the proposed development would be consistent with the existing and emerging trends in the area.

Potential Impact on Cultural Heritage

9.8.9. The potential impacts on **cultural heritage** are summarised as follows:

- Most impacts during construction phase are likely to be direct as a result of sub-surface disturbance or construction works.
- Proposal will require removal of topsoil and localised deeper ground reduction; however, entire compound is already stripped of topsoil and this groundworks programme was already subject to archaeological monitoring – construction works within compound should have no further direct impacts on archaeological features or deposits.
- There is generalised potential that unknown subsurface features could be present along the proposed grid connection route.

Mitigation Measures for Cultural Heritage

- Archaeological monitoring of groundworks associated with the cable connection route will be carried out.
- Any features of archaeological potential that are discovered will be investigated and fully recorded and if significant material is encountered, the National Monuments Service will be notified.

Residual Impacts for Cultural Heritage

9.8.10. No predicted residual impacts if mitigation are carried out fully and successfully.

Conclusions on Cultural Heritage and the Landscape

9.8.11. Construction phase visual impacts on the landscape will include the creation of compounds, use of machinery, clearing of vegetation and topsoil, reinstatement, etc.

Operational phase impacts will relate mainly to above ground structures associated with the proposed substation. The surrounding landscape has no inherent aesthetic qualities of note and can be described as a transitional landscape, with the proposed development representing a continuation of recent trends in the local area.

9.8.12. The site of the proposed compound has been stripped of topsoil and has previously undergone archaeological monitoring. I am satisfied that with proper implementation of all mitigation measures, no significant direct, indirect or cumulative adverse effects on cultural heritage and the landscape are likely to arise.

9.9. Material Assets

9.9.1. Material assets are addressed under Chapters 15 of the EIAR. Chapter 12 on Traffic and Transportation and Chapter 14 on Waste Management also contain elements relating to material assets and are covered under this section. Transport impact assessment methodology includes a review of plans and existing traffic information; a review of the development permitted under Reg. Ref: SD18A/0134 (ABP-302813-18); estimation of transport demand during construction and operational phases; and assessment of the percentage impact of traffic on local roads and junctions, car parking requirements and accessibility of the site for sustainable modes.

9.9.2. The Material Assets chapter assesses the potential impact on ownership and access, built services and infrastructure in terms of power and electricity supply, telecommunications, surface water infrastructure, foul drainage infrastructure and water supply. A key site selection reason for the permitted development is the relative proximity to the existing Castlebaggot substation. EirGrid has confirmed that there is sufficient power available from the existing area network for the proposed development.

9.9.3. An outline Construction & Demolition Waste Management Plan has been prepared for the construction phase of the proposed development. The Waste Management chapter considers the legislative context and describes the typical waste materials that will be generated during construction and operational phases. Mitigation measures are included to prevent waste generation and promote the management of waste in accordance with the waste hierarchy.

Characteristics of the Proposed Development

9.9.4. The proposed substation will be served by informal parking and access to the site will be directly off Grange Castle South Business Park access road. This access was permitted under Reg. Ref: SD18A/0134 (ABP-302813-18). It is assumed that all development traffic will continue through the Kilcarbery Park and Grange Castle Business Park access road roundabout junctions.

9.9.5. Excavation of trenches will be carried out in consultation with the ESB and once construction of the proposed development is completed, ESB Networks will complete the commissioning. The construction phase will require temporary electrical supply and telecommunications. Drainage proposals for the site during construction and operational phases are set out in the hydrology chapter.

9.9.6. It is estimated that c. 12,300m^3 of excavated material will be generated and suitable soil and stones will be reused on site as backfill. However, most of the excavated material will be removed off site as waste and removal and reuse/ recycling/ recovery/ disposal of the material will be carried out in accordance with waste legislation.

Potential Impact of the Proposed Development

9.9.7. The potential/ predicted impacts on **traffic and transport** are summarised as follows:

- Additional c. 30 construction personnel will be on site during the construction period of the proposed GIS substation (2021 – mid 2022). 95% will travel by car/ van and occupancy factor will be 1.5.
- Proposed development expected to generate approximately three daily inbound and outbound HGV movements in early 2021 and 15 daily inbound and outbound HGV movements in 2021 and 2022.
- At peak, there will be approximately 89 inbound and outbound car/ van movements on a daily basis.
- Development's trip generation (operational phase) and impacts on the surrounding road network have previously been assessed and approved under Reg. Ref: SD18A/0134 (ABP-302813-18).

- 70 no. on-site car parking spaces, including three accessible spaces will be provided as part of the permitted development. Car parking requirements for the proposed development will be limited to occasional maintenance workers – informal parking available to the front and within substation compound.
- It will be necessary to ensure that the proposal incorporates access facilities for pedestrians, cyclists and public transport.

Mitigation Measures for Traffic and Transport

- Construction Traffic Management Plan (CTMP) has been prepared to minimise the potential impact of the construction phase of the permitted development – will be updated to considered additional impact of additional construction traffic associated with the proposed development.
- Contractor will be required to provide wheel wash facilities and temporary car parking, as well as monitoring of construction traffic to minimise movements during peak hours and construction traffic routes.
- Construction traffic manager will co-ordinate and schedule all deliveries to the site to ensure that roadways are kept clear of mud and debris, advise haulage contractors on routes and adhere to good traffic management principles. Car sharing and use of public transport will be encouraged by construction traffic manager.
- No mitigation measures necessary for the operational phase of the proposed development.
- Proposed and permitted development will generate a similar number of trips on the surrounding road network.
- Detailed cumulative assessment carried out at Junction 1 (Baldonnel Road/ Grange Castle Business Park South Access Road Junction) as part of the recently approved development under Reg. Ref: SD20A/0121 concluded said the junction will operate well within capacity past the year 2043.
- Monitoring will be carried out during the construction phase to ensure compliance with construction vehicle routing and parking practices, external road conditions and timing of construction activities.

- Mobility manager will be required during operational phase to update public transport timetables and other travel data, and to disseminate information to data centre employees.

Remedial Impacts for Traffic and Transport

9.9.8. The residual impacts of the proposed development will be neutral and imperceptible.

Potential Impacts of the Proposed development on Material Assets

9.9.9. The potential impacts on **Material Assets** are summarised as follows:

- Power requirements for the construction phase will be relatively minor.
- Excavation of trenches in the vicinity of existing electrical services will be carried out in consultation with ESB to ensure there will be no impact on existing users.
- No potential impacts associated with surface water infrastructure for the proposed development during the construction phase.
- There are no predicted impacts on the culverted stream – there will be a requirement to excavate and hand dig below existing utilities and culverts to the required depth.
- There are no potential impacts during the operational phase on water supply, surface water or foul drainage infrastructure.
- Nature of proposed development ensures that rather than utilising electricity, it will ensure continuity of supply of electricity to the permitted development.

Mitigation Measures for Material Assets

- Ongoing consultation with EirGrid, ESB Networks, South Dublin County Council, Irish Water and other relevant utility providers and compliance with any requirements or guidelines they may have.
- Excavation of trenches will be carried out in consultation with ESB Networks and commissioning will be in accordance with ESB Network requirements.
- Surface water run-off during the operational phase will be contained on site and treated to ensure adequate silt removal.

Residual Impacts

9.9.10. The proposed development entails minimal use of material assets (power and electrical supply, telecommunications, drainage infrastructure and water supply) during construction with no impact once operational.

Potential Impacts of the Proposed development on Waste Management

9.9.11. The potential impacts on **Waste Management** are summarised as follows:

- Proposed development will generate surplus excavated material as well as waste from welfare facilities.
- Surplus excavated material classified as waste will be segregated at source and transferred directly from the site to suitably authorised receiving facilities.
- If waste material is not managed or stored correctly, it is likely to lead to litter or pollution and vermin.
- Use of non-permitted waste contractors could give rise to inappropriate management of waste and result in negative environmental impacts or pollution.
- At present there is sufficient capacity for the acceptance of the predicted construction waste materials at facilities in the region.
- Potential for excavation of contaminated materials.
- No waste will be generated from the operation of the proposed 110kV transmission lines.
- Small volumes of waste will be generated at the proposed GIS substation – potential for small volumes of waste being sent unnecessarily to landfill.

Mitigation Measures for Waste Management

- Adherence to the high-level strategy presented in the Construction & Demolition Waste Management Plan will ensure effective waste management and minimisation, reuse, recycling, recovery and disposal of waste material generated during the construction phase of the proposed development.
- Prior to commencement of construction, contractors will be required to refine/ update the C&D WMP to detail specific measures to minimise waste generation and

resource consumption and provide details of the proposed waste contractors and destinations of each waste stream.

- Suitable soils and stones will be reused as backfill in grassed areas where possible. Majority of material will require removal off site and will be reused where practical and if it cannot be reused it will be recycled/ recovered.
- On-site segregation of waste materials will be carried out, e.g. made ground, soil and stones, trees/ shrubbery, etc.
- Excavations will be carefully monitored for contaminated soils and waste manager will be appointed.
- Waste materials generated at the site compound will be stored in suitable receptacles (including hazardous materials).
- Construction staff will be trained on waste management procedures.
- Waste will be stored in colour coded bins in easily accessible locations.

Residual impacts for waste

9.9.12. Adherence to mitigation measures will ensure that the residual impact for waste management will be neutral and imperceptible.

Conclusions on Material Assets

9.9.13. The proposed development will not generate traffic levels during construction and operational phases that will give rise to a significant impact. The impact is assessed cumulatively with the permitted development during the construction phase and the increased traffic levels at peak times attributed to the proposed development are minimal.

9.9.14. There will be ongoing consultation with EirGrid, ESB Networks, South Dublin County Council, Irish Water and other relevant utility providers and compliance with any requirements or guidelines they may have. The mitigation measures for waste management will ensure compliance with the provisions of the Waste Management Act, 1996 (as amended) and associated regulations, the Litter Pollution Act, 1997 and the EMR Waste Management Plan (2015-2021).

9.9.15. I am satisfied that with proper implementation of mitigation and best practice measures, together with implementation of environmental commitments under the Construction and Environmental Management Plan, no significant direct, indirect or cumulative adverse effects on material assets are likely to arise.

9.10. Vulnerability of the Project to Major Accident and/ or Natural Disaster

9.10.1. Section 2 of the EIAR identifies any major accidents or natural disasters that have the potential to affect the proposed development, e.g. landslides, seismic activity and sea level rise/ flooding.

9.10.2. The potential for landslides occurring at the site is negligible due to the topography and soil profile. A Flood Risk Assessment carried out for the site concludes that there is no historic flooding on site, and it is not expected that the proposed development would adversely impact on flood risk for neighbouring properties.

9.10.3. It is confirmed that the development will not be a SEVESO/ COMAH facility and does not therefore pose a major hazardous accident risk. A small amount of diesel will be stored on site. The implementation of the CEMP and mitigation measures will ensure risk of minor accident/ spillage is low.

9.10.4. I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low probability of a major accident/ natural disaster, it is not likely that significant effects on the environment would arise in this regard.

9.11. Cumulative Impacts & Environmental Interactions

9.11.1. Chapter 16 of the EIAR sets out the various inactions between the environmental factors insofar as the effect of one environmental factor causes an indirect effect on another environmental factor. Throughout the EIAR, the cumulative assessment of the proposed development is carried out along with the permitted data centres and other developments in the area.

9.11.2. There are no interactions of note between population and human health and any of the other environmental factors. The only negative interactions are between biodiversity/ noise and vibration; land, soils, geology and hydrogeology/ noise and

vibration; landscape and visual impact/ traffic and landscape and visual impact/ biodiversity. All other interactions are neutral or not of note. Noise generated during the construction phase will have a short-term negative impact on fauna that are likely to be displaced. Excavation works will have a short-term negative impact on the local noise environment and effects on the landscape will be caused by the establishment of temporary traffic management regimes. The proposed development will involve the removal of some of the existing landscape; however, permitted landscaping features will only be minimally altered the thus the permitted habitat for flora and fauna will be substantially maintained.

9.11.3. Many of the interactions will take place during the construction phase of the proposed development and will therefore be short term. Mitigation measures are set out in each of the relevant chapters and can also be applicable to other environmental factors.

9.11.4. The potential cumulative impact of the proposed 110kV substation and transmission lines is assessed in each chapter throughout the EIAR with other existing, planned and permitted development. This includes the adjacent data centre development permitted under SD18A/0134 (ABP-302813-18), and the ongoing construction of the UBC Properties development data centre to the immediate north of the proposed development site.

9.11.5. The UBC Properties development will have on average 250 construction workers and 400 at its peak. The permitted development will employ an average of 100 construction workers and 250 at peak. The proposed development will employ 15-30 construction workers. Once operational, the permitted development and the UBC properties development will employ 150 and 300 persons respectively. This will give rise to positive effect on local businesses.

9.11.6. There is potential for cumulative impacts on population and human health in terms of air quality and climate, noise and vibration and traffic and transportation during the construction phase. Due to the larger scale of the permitted development, and other committed developments in the area, the cumulative impact with the proposed development will be neutral, short term and not significant.

9.11.7. Potential in-combination effects on water quality in the immediate downstream surface water environment, and in terms of disturbance to bats and birds, would be

temporary and could occur at a local geographical scale in the absence of mitigation. Other plans or projects at a wider scale could influence conditions in Dublin Bay via rivers and other surface water features. However, the proposed development will not result in any measurable effect and there are protective policies at a strategic planning level to protect water quality in Dublin Bay.

9.11.8. During construction, the anticipated cumulative effects on the geological or hydrological environment may include run-off containing silt and contamination of soils and groundwater from accidental spillages. These issues will be adequately addressed within a CEMP for the proposed development site and adjoining areas, which will include measures to manage sediment run-off and fuel leakages. During the operational phase, cumulative impacts may arise from increases in hardstanding resulting in reduced recharge to ground and increased run-off. However, the substation will have a relatively small footprint compared to the underlying aquifer. The loss of greenfield will also be small in the context of overall agricultural land available in the region.

9.11.9. The environmental noise survey for the proposed development takes account of noise emissions from existing developments at the Google Ireland Data Centre and Grange Castle Data Centre. Existing ambient noise levels are dominated by road traffic. Predicted cumulative plant noise emissions are within the adopted criteria at the closest shared receptors. Traffic noise will continue to dominate the noise environments at the nearest noise sensitive locations.

9.11.10. There is potential for cumulative dust impacts to nearby sensitive receptors should the construction phase coincide with other permitted development within 350m of the site. However, with mitigation measures in place, any impacts will be short-term and imperceptible. Cumulative emissions from back up diesel generators during the operational phase were in compliance with ambient air quality standards. In terms of climate, any necessary increase in electricity generation due to data centre demand will have no impact on Ireland's obligation to meet the EU Effort Sharing Decision.

9.11.11. The operational phase of proposed and permitted developments in the area will give rise to a noticeable change in landscape character. The permitted development on site will be altered so that there will be no planting to the immediate north and east of the substation compound as per EirGrid requirements. However, the landscape plan

for the permitted development will include belts of woodland linking existing hedgerow and trees into a larger ecological habitat to the west of the site.

9.11.12. The construction phase of the proposed development will take place at the same time as the construction phases of the UBC Properties development and the permitted development. Cumulative landscape and visual impacts during construction will result in land use change to high tech development in accordance with the zoning objective. Impacts will reduce over time as developments are completed and mitigation measures establish.

9.11.13. The potential for additional construction traffic from committed and permitted developments is not considered to be significant given the short-term nature of the construction phases. Junctions serving the developments will have sufficient capacity to accommodate the cumulative traffic increase associated with construction works.

9.11.14. It is proposed to monitor construction activity and preserve any identified archaeological features by record on site. All other developments will be subject to archaeological, architectural and cultural heritage impact assessment. Other development will also be required to manage waste in accordance with legislation, policies and plans. The overall predicted cumulative impact on material assets is long term and not significant.

9.11.15. In general, I would be satisfied with the methodology provided within the EIAR for cumulative assessment. The applicant has considered the impact of the proposed 110kV grid connection, transmission lines and cable link cumulatively with the permitted data centre development and the nearby UBS Properties development. Overall, this provides for a robust and complete assessment of the proposal by itself and any cumulative interactions with other relevant aspects.

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 submissions from Planning Authority, observers and prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Positive impacts on **population and human health** in terms of the local economy from increased spending and jobs during the construction period.
- Construction phase impacts on Population and Human Health will be mitigated by a range of measures and through implementation of the CEMP.
- Potential adverse impacts on **Biodiversity** during the construction phase from site clearance, soil-stripping and earthworks, and from surface water carrying silt, hydrocarbons or other chemicals into surface water drainage. A range of mitigation measures will be put in place for the construction phase to prevent water pollution and impacts on flora and fauna.
- Potential long-term positive impacts on **Land** through change of use from former agricultural lands to enterprise and employment lands in accordance with the land use zoning objective.
- Potential adverse impacts on **Water** from silt run-off and incorrect handling of deleterious materials such as lubricants, waste oils, cement, etc. Measures will be put in place such that works are undertaken in accordance with best practice in relation to the handling and storage of fuels, oils, chemicals and stockpiles, and the CEMP will also provide a framework for water quality protection during construction.
- Potential adverse impacts in terms of **Air** during construction works associated with noise from cable laying and dust emissions throughout the site. Measures will be applied during construction including the limitation of hours during which site activities are likely to create high levels of noise or vibration, establishing channels of communication, good site management through good design and effective control strategies to avoid dust becoming airborne at source.
- Potential impacts on **Cultural Heritage and the Landscape** will be mitigated during the construction stage through archaeological monitoring of ground works.

Having regard to the above, I am satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment. The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision.

10.0 Appropriate Assessment

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

- Compliance with Articles 6(3) of the EU Habitats Directive
- Geographical Scope and Main Characteristics
- Screening the need for Appropriate Assessment
- Identification of Likely Effects
- Screening Determination

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

10.3. The proposed development comprises the construction of a 110kV GIS substation and 2 no. underground transmission lines (c. 150m in length) to the existing 220kV/ 110kV Castlebaggot substation. The proposal is not directly connected with or necessary to the management of any European site and is therefore subject to the provisions of Article 6(3).

10.4. **Appropriate Assessment Screening Report and Associated Documents**

10.4.1. The application for the proposed substation and grid connections was accompanied by an Appropriate Assessment Screening Report dated 13th January 2021. This report sets out the methodology for Appropriate Assessment screening based on relevant guidance and is informed by the description of the proposed development, an overview of the receiving environment, a desktop data review, baseline surveys and an assessment of the effects on European Sites. The Qualifying Interests and Special Conservation Interests of the European Sites in the vicinity of the subject

site, and the planning policies and objectives relating to the protection of European Sites and water quality are appended to the report. Other documents that accompany the planning application include an Environmental Impact Assessment Report, an Engineering Planning Report, an outline Construction and Environmental Management Plan and a Flood Risk Assessment.

10.4.2. The AA Screening Report was prepared in line with current best practice guidance and provides a description of the proposed development and identifies any European Sites within a possible zone of influence of the development. It is concluded within the AA Screening Report, following an examination, analysis and evaluation of best available information, and applying the precautionary principle, that the possibility of any significant effects on any European Sites, whether arising from the project alone or in combination with other plans or projects, can be excluded. In reaching this conclusion, the authors of the AA Screening Report have fully considered the nature of the project and its potential relationship with all European Sites within the zone of influence, and their conservation objectives.

10.4.3. Having reviewed the documents and submission on the application, I am satisfied that the information allows for a complete examination and identification of any likely significant effects of the development, alone or in combination with other plans or projects, on European Sites.

10.4.4. The AA Screening Report was informed by the following studies, surveys and consultations:

- Desk based studies including the following:
    - Online data available on European Sites and protected habitat/ species held by NPWS from www.npws/.ie, including conservation objectives documents,
    - Online data available on protected species as held by the National Biodiversity Data Centre from www.biodiversityireland.ie,
    - Information on surface water network and surface water quality from www.epa.ie,
    - Information on groundwater resources and groundwater quality from www.epa.ie and www.gsi.ie,

- OSi mapping and aerial photography from www.osi.ie.

- Habitat survey undertaken on 14th July 2020 following the methodology described in "Best Practice Guidance for Habitat Survey and Mapping" (Heritage Council, 2011).
- Classification of habitat types in accordance with "A Guide to Habitats in Ireland" (Fossitt, 2000).
- The DAFOR scale,
- The National Vegetation Database,
- Interpretation Manual of European Union Habitats EUR28.

10.5. Geographical Scope and Main Characteristics

10.5.1. The site is located within the Grange Castle South Business Park on the western periphery of Dublin City in a former agricultural area that has transitioned in recent years into a setting for high-tech business. Occupants of Grange Castle Business Park to the north include Pfizer, Microsoft, Takeda and Aryzta. Google are situated in the Grange Castle South Business Park to the east of the proposed development. The Microsoft and Google complexes include large data centres and there are a number of other existing and proposed data centres in the area. The business parks form part of an enterprise and employment zoning covering the wider area.

10.5.2. The subject site is an irregular shape and comprises an area of 0.9163 hectare that extends across the business park access road and up to the Castlebaggot 220kV and 110kV substations. Milltown Stream flows along the eastern boundary of the site before entering a culvert under the business park access road and onto the Griffeen River. The Griffeen River is a tributary of the River Liffey.

10.5.3. The proposed substation and grid connections are for the purposes of supplying power to an adjoining data centre development permitted under Reg. Ref: SD18A/0134 (ABP-302813-18). The permitted development included a AIS substation that will be replaced by the proposed development. The proposed 110kV GIS substation compound will be located to the north-east of the permitted data centre development. The compound will contain a 2-storey GIS substation building

(1,307.2 sq.m.), two transformers, lighting masts and associated underground services. The proposal also includes changes to permitted landscaping.

10.5.4. The proposed 110kV transmission lines will pass under an existing culvert and it will therefore be necessary to excavate and hand dig below existing utilities and culverts. Trenches will be excavated with stable sloping and a pump will be available if groundwater is encountered. Two stream culverts have been identified along the route and exploratory works will be required to assess these structures and utilities. It is envisaged that the support of the existing stream culverts will require steel beams with support strapping. There will be no direct hydraulic link to the Griffeen River. Stormwater on site will discharge to the mains network after treatment and attenuation. Foul water will also discharge to gravity foul sewer network.

10.6. Screening the need for Appropriate Assessment

10.6.1. The proposed development site is not located in or immediately adjacent to a European Site. The closest European Site is the Rye Water Valley/ Carton SAC, which is approximately 5.8km north-west of the subject site.

10.6.2. Having regard to the information and submissions available, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the European Sites set out in Table 1 below are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects. A 15km study area from the proposed development is applied for this purpose, wherein a total of six European Sites are included (5 SACs & 1 SPA).

10.6.3. European sites considered for Stage 1 screening:

European site (SAC/SPA)	Site code	Distance to subject site	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Rye Water Valley/ Carton SAC	001398	5.8km	No potential connections	N
Glenasmole Valley SAC	001209	8.4km	No potential connections	N
Wicklow Mountains SAC	002122	10km	No potential connections	N

European site (SAC/SPA)	Site code	Distance to subject site	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
Red Bog, Kildare SAC	000397	14km	No potential connections	N
South Dublin Bay SAC	000210	c. 15km	No potential connections	N
Wicklow Mountains SPA	004040	13km	No potential connections	N

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

10.6.4. Table 2 below provides a screening summary matrix of the outcomes of the screening process explaining why the effects are not considered significant using objective information.

European Site	Distance to proposed development/ source, pathway receptor	Possible effect alone	In combination effects	Screening conclusions:
Rye Water Valley/ Carton SAC **Qualifying Interest:** Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	c. 5km Proposed development lies within the Dublin Groundwater Body and SAC is designated for groundwater dependent habitat and/ or species.	Proposed development will not interact directly with the underlying groundwater and the subject site lies downgradient of the SAC.	Proposed development itself will not have any effects on the QIs/ SCIs or conservation objectives and there is not potential for any other plan or project to act in combination with it to result in significant effects on any European Site.	Screened out for need for AA
Glenasmole Valley SAC **Qualifying Interests:** Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Petrifying springs with tufa formation (Cratoneurion) [7220]	c.8km This elevated site is outside of any zone of influence of the development due to the lack of ecological connections to the specific habitat type for which the site is designated.	No possibility of effects due to the distance from and lack of connections to the habitat for which this site is designated.	No effect	Screened out for need for AA
Wicklow Mountains SAC **Qualifying Interests:** Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	c. 10km This elevated site is outside of any zone of influence of the development due to the lack of ecological connections to	No possibility of effects due to the distance from and lack of connections to the habitat for which this site is designated.	No effect	Screened out for need for AA

Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Lutra lutra (Otter) [1355]	the specific habitat type for which the site is designated.			
Red Bog, Kildare SAC **Qualifying Interests:** Transition mires and quaking bogs [7140]	c. 14km Outside of water catchment area and no other ecological or hydrological connects.	No possibility of effects	No effect	Screened out for need for AA
South Dublin Bay SAC **Qualifying Interests:**	Milltown Stream is a tributary of the Griffeen River which in turn is a tributary of the River Liffey. The River Liffey enter	No possibility of effects due to the scale and location of the proposed development relative to the downstream	Proposed development itself will not have any effects on the QIs/ SCIs or conservation objectives and	Screened out for need for AA

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] Embryonic shifting dunes [2110]	Dublin bay c. 17.5km (hydrological distance) downstream of the subject site.	European Site; the relatively low volumes of any potential surface water run-off or discharge events from the proposed development site relative to the receiving water and marine environments; and the level of mixing, dilution and dispersion of any surface water run-off/ discharges from the proposed development site in the receiving waters, Dublin Bay and the Irish Sea.	there is not potential for any other plan or project to act in combination with it to result in significant effects on any European Site.	
Wicklow Mountains SPA **Qualifying Interests:** Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103]	c. 13km	No possibility of effects due to the significant distance between the proposed development site and the SPA.	No effect	Screened out for need for AA

Table 2 Screening summary matrix: European Sites for which the possibility of significant effects can be excluded

10.7. Identification of Likely Effects

10.7.1. The proposed development is assessed in the AA Screening Report for its potential to result in significant effects on European Sites, either alone or in combination with other plans or projects. Individual elements of the project occurring during construction and operational phases are assessed in terms of their potential for habitat loss and fragmentation; habitat degradation as a result of hydrological impacts; habitat degradation as a result of hydrogeological impacts; habitat degradation as a result of introducing/ spreading non-native species; and disturbance and displacement impacts.

10.7.2. There are no European Sites at risk of direct habitat loss or fragmentation. Furthermore, the proposed development site does not support populations of fauna species linked with the Qualifying Interests/ Special Conservation Interests populations of any European Site.

10.7.3. The proposed development works will not interact with the culverted Milltown Stream. Surface water from the proposed development will enter the downstream receiving environment via the existing surface water drainage network. The proposed development will not have a measurable effect on water quality in Dublin Bay or the Irish Sea based on the scale and location of the proposed development; the relatively low volumes of potential surface water run-off and discharge events; and the level of mixing, dilution, and dispersion of any surface water run-off/ discharge. There will also be no possibility of the proposed development undermining the conservation objectives of any European site as a result of foul water discharges.

10.7.4. The closest European Site to the proposed development site is the Rye Water Valley/ Carton SAC located approximately 5.8km to the north-west. This SAC is designated for groundwater dependent habitats and/ or species and the general groundwater flow direction is away from this European Site towards the coast, the River Liffey and Dublin City. The proposed development will not interact with the underlying groundwater body and is downgradient of the Rye Water Valley/ Carton SAC.

10.7.5. As the proposed development does not support populations of any qualifying interest/ special conservation interest species associated with European Sites, there will be no disturbance and displacement impacts associated with the mammals or birds that are QI/ SCI of any European Site.

10.7.6. In-combination impacts have been considered. Any permitted or future developments in the area are likely to be enterprise and employment in nature on fully serviced lands. The proposed development itself will not have any effects on the qualifying interests/ special conservation interests or conservation objectives of any European Sites and there is no potential for any other plan or project to act in combination with it to result in significant effects on any European Site. Furthermore, policies and objectives are contained within the relevant statutory plans affecting the Greater Dublin Area that will protect European Sites and water quality.

10.7.7. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

10.8. Screening Determination

10.8.1. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on any of the above listed European Sites, or any other European site, in view of the sites' Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required. This determination is based on the following:

- The distance of the proposed development from European Sites and demonstrated lack of any ecological connections.
- The scale and location of the proposed development and the relatively low volumes of surface water run-off and discharge events.
- The level of mixing, dilution and dispersion of any surface water run-off/ discharge in receiving watercourses, Dublin Bay and the Irish Sea.
- Non interaction of the proposed development with the underlying groundwater body and the downgradient location of the site from the Rye Water Valley/ Carton SAC.

11.0 **Recommendation**

11.1. I recommend that planning permission for the proposed development should be approved, subject to conditions, for the reasons and considerations as set out below.

12.0 **Reasons and Considerations**

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

a) EU legislation including in particular:

- The relevant provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive) on the assessment of the effects of certain public and private projects on the environment,
- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.

b) National Legislation including in particular:

- Section 182A of the Planning and Development Act 2000 (as amended)

c) Regional Policy including in particular:

- The Regional Spatial and Economic Strategy for the Eastern and Midlands Region,

d) Local Planning Policy including in particular:

- The provisions of the South Dublin County Development Plan, 2016-2022

e) The following matters:

- the nature, scale and design of the proposed works as set out in the application for approval and the pattern of development in the vicinity,
- the documentation and submissions of the Local Authority, the environmental impact assessment report and associated documentation submitted with the application, and the range of mitigation and monitoring measures proposed,

- the submissions and observations made to An Bord Pleanála in connection with the application,
- other relevant guidance documents,
- the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites, and
- the report and recommendation of the inspector including the examination, analysis and evaluation undertaken in relation to appropriate assessment screening and environmental impact assessment.

12.2. Proper Planning and Sustainable Development

12.2.1. It is considered that subject to compliance with the conditions set out below, the proposed development would accord with European, national, regional and local planning and related policy, it would not have an unacceptable impact on landscape or ecology, it would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and it would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

12.3. Environmental Impact Assessment

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

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

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

(c) the submissions from the applicant, the observers and prescribed bodies in the course of the application, and

(d) the Inspector’s report.

The Board agreed with the summary of the results of consultations and information gathered in the course of the environmental impact assessment, and the examination of the information contained in the Environmental Impact Assessment Report and the associated documentation submitted by the applicant, and the submissions made in the course of the application as set out in the Inspector's report. The Board was satisfied that the Inspector's report sets out how these various environmental issues were addressed in the examination and recommendation which are incorporated into the Board's decision.

Reasoned Conclusion of the Significant Effects:

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the Environmental Impact Assessment Report is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are those arising from the impacts listed below.

The main significant effects, both positive and negative, are:

- Positive impacts on **population and human health** in terms of the local economy from increased spending and jobs during the construction period.
- Construction phase impacts on Population and Human Health will be mitigated by a range of measures and through implementation of the CEMP.
- Potential adverse impacts on **Biodiversity** during the construction phase from site clearance, soil-stripping and earthworks, and from surface water carrying silt, hydrocarbons or other chemicals into surface water drainage. A range of mitigation measures will be put in place for the construction phase to prevent water pollution and impacts on flora and fauna.

- Potential long-term positive impacts on **Land** through change of use from former agricultural lands to enterprise and employment lands in accordance with the land use zoning objective.
- Potential adverse impacts on **Water** from silt run-off and incorrect handling of deleterious materials such as lubricants, waste oils, cement, etc. Measures will be put in place such that works are undertaken in accordance with best practice in relation to the handling and storage of fuels, oils, chemicals and stockpiles, and the CEMP will also provide a framework for water quality protection during construction.
- Potential adverse impacts in terms of **Air** during construction works associated with noise from cable laying and dust emissions throughout the site. Measures will be applied during construction including the limitation of hours during which site activities are likely to create high levels of noise or vibration, establishing channels of communication, good site management through good design and effective control strategies to avoid dust becoming airborne at source.
- Potential impacts on **Cultural Heritage and the Landscape** will be mitigated during the construction stage through archaeological monitoring of ground works.

Having regard to the above, I am satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment. The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision.

Appropriate Assessment Screening

In conducting a screening exercise for appropriate assessment, the Board considered the nature, scale and context of the proposed development, the documentation on file, in particular the Appropriate Assessment Screening Report submitted in support of the proposed development, the submissions on file and the assessment of the Inspector in relation to the potential for significant effects on European Sites. In undertaking the screening exercise, the Board accepted the analysis and conclusions of the Inspector. The Board concluded that, by itself and in combination with other development in the vicinity, the proposed development would not be likely to have significant effects on any European Site in view of the Sites'

Conservation Objectives. In reaching this conclusion, the Board took no account of mitigation measures intended to avoid or reduce the potentially harmful effects of the project on any European Sites.

13.0 **Conditions**

1.	The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. **Reason**: In the interest of clarity.
2.	The mitigation measures identified in the EIAR and other plans and particulars submitted with the planning application, shall be implemented in full by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this permission. **Reason:** In the interest of clarity and protection of the environment during the construction and operational phases of the proposed development.
3.	Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the Planning Authority for such works in respect of both the construction and operational phases of the proposed development. Prior to commencement of development, and following consultation with Irish Water, the developer shall agree with the Planning Authority proposals for all works as they affect water and drainage services, together with written commitment to undertake the proposed development in accordance with this agreement.

	Reason: In the interest of environmental protection and public health.
4.	The landscaping proposals shall be carried out within the first planting season following commencement of construction of the proposed development. Any trees or shrubs planted in accordance with this condition which are removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those originally required to be planted. The landscaping and screening shall be maintained at regular intervals. **Reason:** To blend it into its surroundings in the interest of visual amenity.
5.	A wildflower management plan shall be submitted to, and agreed in writing with South Dublin County Council, prior to commencement of development. **Reason:** In the interest of environmental protection and orderly development.
6.	Prior to commencement of development, a detailed Construction Environmental Management Plan (CEMP) for the construction phase shall be submitted to and agreed in writing with the local authority, generally in accordance with the Outline CEMP included in the Environmental Impact Assessment Report. The CEMP shall incorporate the following: (a) a detailed plan for the construction phase incorporating, inter alia, the construction programme, supervisory measures, noise, dust and surface water management measures, including appointment of a site noise liaison officer, construction hours and the management, transport and disposal of construction waste, (b) a comprehensive programme for the implementation of all monitoring commitments made in the planning application and supporting documentation during the construction period, (c) an emergency response plan, and (d) proposals in relation to public information and communication.

	A record of daily checks that the works are being undertaken in accordance with the Construction Environmental Management Plan shall be kept for inspection by the local authority. **Reason:** In the interest of environmental protection and orderly development.
7.	The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the undertaker shall – (a) notify the local authority in writing at least four weeks prior to the commencement of any site operations (including hydrological and geotechnical investigations) relating to the proposed development, (b) employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works, and (c) provide arrangements, acceptable to the local authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove. In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination. **Reason:** In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.
8.	The construction of the development shall be managed in accordance with a Construction Management Plan, a Traffic Management Plan and a Waste Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. **Reason:** In the interest of orderly development and the protection of the environment
9.	Prior to commencement of development, the applicant shall agree in writing with the Planning Authority a public lighting and site lighting scheme for the proposed development.

	Reason: In the interests of orderly development.

Donal Donnelly
Senior Planning Inspector

11th June 2021