

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1

Our Ref: 21047

14th February 2022

Re : Planning and Development Act 2000-2021 and the statutory regulations (as amended). Application by Vantage Data Centers DUB11 Ltd. for planning permission for the provision of two no. 110kV underground transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation compound along with associated and ancillary works and is described as follows: The proposed 110kV GIS Substation Compound is to be located on lands to the south of those that are subject of an application for 2 no. data centres under South Dublin County Council Reg. Ref. SD21A/0241 and to the south of Falcon Avenue within Profile Park, and within an overall landholding bound to the north by Falcon Avenue, Profile Park; to the west by Casement Road, Profile Park; and to the east and south by undeveloped lands; and partly by the Digital Reality complex to the south-east within Profile Park, Clondalkin, Dublin 22. The site of the proposed development has an area of c. 3.19 hectares. The proposed 110kV Gas Insulated Switchgear (GIS) Substation Compound includes the provision of a two storey GIS Substation building (with a gross floor area of 1,477sqm) (known as the Kilcarbery Substation), three transformers with associated ancillary equipment and enclosures, a single storey Client Control Building (with a gross floor area of 51.5sqm), lightning masts, car parking, associated underground services and roads within a 2.6m high fenced compound and all associated construction and ancillary works. One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV Barnakyle Substation to the west. The proposed transmission line covers a distance of approximately 274m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass under the internal road network within Profile Park to where it will connect into the Barnakyle substation. One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV underground Castlebaggot - Barnakyle circuit to the west within the Grange Castle South Business Park. The proposed transmission line covers a distance of approximately 492m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass both under, and to the north of the internal road network within Profile Park and Grange Castle Business Park South where it will connect into the Castlebaggot - Barnakyle circuit at a proposed new joint bay. The development includes the connections to the two substations (existing and proposed) as well as to the Castlebaggot - Barnakyle circuit, associated underground services, and all associated construction and ancillary works.

Dear Sir / Madam,

We, Marston Planning Consultancy, 23 Grange Park, Foxrock, Dublin 18 are instructed by Vantage Data Centers DUB11 Ltd. (herein referred to as the 'applicant') and further to a determination received from An Bord Pleanála confirming the proposed development constitutes Strategic Infrastructure Development (SID) pursuant to Section 182A of the Planning and Development Act 2000, as amended (hereinafter referred to as 'the Act'), we hereby submit this planning application in respect of the Proposed Development for the project as outlined in the Statutory Notice that accompanies this application.

1. INTRODUCTION

The Proposed Development comprises:

- The proposed development primarily comprises the provision of two no. 110kV underground transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation compound along with associated and ancillary works and is described as follows:
- The proposed 110kV GIS Substation Compound is to be located on lands to the south of those that are subject of an application for 2 no. data centres under South Dublin County Council Reg. Ref. SD21A/0241 and to the south of Falcon Avenue within Profile Park, and within an overall landholding bound to the north by Falcon Avenue, Profile Park; to the west by Casement Road, Profile Park; and to

the east and south by undeveloped lands; and partly by the Digital Reality complex to the south-east within Profile Park, Clondalkin, Dublin 22. The site of the proposed development has an area of c. 3.19 hectares.

- The proposed 110kV Gas Insulated Switchgear (GIS) Substation Compound includes the provision of a two storey GIS Substation building (with a gross floor area of 1,477sqm) (known as the Kilcarbery Substation), three transformers with associated ancillary equipment and enclosures, a single storey Client Control Building (with a gross floor area of 51.5sqm), lightning masts, car parking, associated underground services and roads within a 2.6m high fenced compound and all associated construction and ancillary works.
- One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV Barnakyle Substation to the west. The proposed transmission line covers a distance of approximately 274m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass under the internal road network within Profile Park to where it will connect into the Barnakyle substation.
- One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV underground Castlebaggot - Barnakyle circuit to the west within the Grange Castle South Business Park. The proposed transmission line covers a distance of approximately 492m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass both under, and to the north of the internal road network within Profile Park and Grange Castle Business Park South where it will connect into the Castlebaggot - Barnakyle circuit at a proposed new joint bay.
- The development includes the connections to the two substations (existing and proposed) as well as to the Castlebaggot - Barnakyle circuit, associated underground services, and all associated construction and ancillary works.

The details of the proposed development are discussed at Section 5 of this report and illustrated in the accompanying architectural and engineering drawings.

An Environmental Impact Assessment (EIA) Report has been prepared by Ramboll and other EIA contributors and accompanies this SID planning application submitted to An Bord Pleanála.

The proposed development is designed to support power demand for the Concurrent Application of two data centres made under Reg. Ref. SD21A/0241 for which Additional Information was requested by the Planning Authority on the 26th October 2021. The response to the Additional Information request is intended to be made in mid-March 2022

The route alignment of both routes has been the subject of discussions and agreement with the relevant landowners / Planning Authority prior to lodgement (see letters of consent submitted herewith from ESB Networks [ESBN], Google Ireland Ltd., Moffash Ltd. and South Dublin County Council [SDCC]).

The main stakeholders for the development are as follows:

- EirGrid, is responsible for operating and developing the national high voltage electricity grid in Ireland;
- ESB Networks, (Asset Owner) is responsible for carrying out maintenance, repairs and where works are not contestable, the construction of the national high voltage electricity grid in Ireland; and
- Vantage Data Centers DUB11 Ltd. role for this project is to act as the Developer/Applicant.

Development method

The development of the proposed Kilcarbery 110kV GIS Substation building and 2 no. underground single circuit transmission lines will be a contestable development. The meaning of this, is the developer will be responsible for the design, construction, fit-out and pre-commissioning of the proposed Kilcarbery 110kV GIS Substation building and the 2 no. underground single circuit 110kV transmission lines that will tie in with the Castlebaggot to Barnakyle circuit and the Barnakyle 110kV substation to the west.

Upon completion of the works by the Developer, the proposed Kilcarbery 110kV GIS Substation building and 2 no. underground single circuit 110kV transmission lines will be handed over to EirGrid, whom in

conjunction with ESB Networks (ESBN) will carry out the final commissioning and energisation of the proposed Kilcarbery 110kV GIS Substation and 110kV transmission lines.

Once energised, the proposed Kilcarbery 110kV GIS Substation and the 2 no. underground single circuit transmission lines will form part of the ESN infrastructure, which EirGrid will be responsible for operating.

Applicant

The Applicant for the proposed development(s) is Vantage Data Centers DUB11 Ltd., with a registered address at 1-2 Victoria Buildings, Haddington Road, Dublin 4. Mr. Adam Cunningham is the contact for Vantage Data Centers DUB11 Ltd. and can be reached on +44 (7960) 388379.

The main agent acting on behalf of the Applicant is Marston Planning Consultancy Ltd., with an address at 23 Grange Park, Foxrock, Dublin, D18 T3Y4.

2. SITE LOCATION AND CONTEXT

The Proposed Development is to be located on a site of c. 3.19 hectares that consists of a primarily greenfield site within primarily Profile Park and partly within the Grange Castle South Business Park. The proposed 110kV GIS Substation Compound; the transmission line to the existing 110kV underground Castlebaggot - Barnakyle circuit and Barnakyle substation are located on lands that are in the ownership of Profile Park; with the transmission lines also passing through lands in the control and ownership of Google Ireland Ltd., South Dublin County Council and ESB Networks. Letters of consent are included within this submission from all of these parties.

Proposed 110kV GIS Substation

The proposed Kilcarbery 110kV GIS Substation, 3 no. transformer bays, and associated compounds and site infrastructure is to be located on land to the immediate south of Falcon Avenue within Profile Park and to the south of the concurrent application for two data centers and ancillary development on lands to the north of Falcon Avenue. The proposed Kilcarbery 110kV GIS Substation is located outside of the site that is subject to the concurrent application although the red application boundaries overlap. In consultation with the Board prior to making the application, it was agreed that the planning site notices shall be erected on yellow paper having regard to Article 19(4) of the Planning and Development Regulations (as amended) as the overlap was considered to be substantial.

The proposed 110kV GIS substation is located on lands that are bounded to the north by Falcon Avenue, Profile Park; to the west by an internal access road; and to the east and south by undeveloped lands within Profile Park, Clondalkin, Dublin 22.

110kV transmission line to the Barnakyle substation

The route of the underground 110kV transmission line to the Barnakyle Substation passes out to the west of the proposed substation and then under the western access road and Falcon Avenue within Profile Park before passing into the Substation approximately half way along its northern boundary. The length of the 110kV cable route is c. 274m.

110kV transmission line to the Castlebaggot – Barnakyle circuit

The route of the underground 110kV transmission line to the Castlebaggot - Barnakyle circuit passes out to the west of the proposed substation and then under the western access road and along the north of Falcon Avenue within Profile Park. It then passes through a field that divides Profile Park and Grange Castle Business Park South before travelling to the north of the internal access road within Grange Castle Business Park South to a proposed joint bay within lands to the south of the Castlebaggot 220kv / 110kV substation. The proposed transmission line covers a distance of approximately 492m within the townlands of Aungierstown and Ballybane, and Kilbride. A proposed joint bay is to be installed at the connection to the Castlebaggot - Barnakyle circuit

The Proposed Development is not located directly adjacent to any areas of national or local environmental sensitivity/designation.

3. PRE-APPLICATION CONSULTATIONS

The Applicant has had 1 no. pre-application consultation meeting with An Bord Pleanála on the 14th of October 2021, in response to a pre-application consultation request received by An Bord Pleanála on the 3rd of August 2021.

The purpose of the consultation meeting was to provide further information to An Bord Pleanála to inform their determination as to whether or not the proposed development might constitute strategic infrastructure. Consultation has also been undertaken with Eirgrid and ESB Networks to ensure the Proposed Development design meets their requirements.

A request to conclude the pre-application process was submitted to An Bord Pleanála on the 1st November 2021.

An Bord Pleanála determination

An Bord Pleanála confirmed in a letter dated the 25th of November 2021 that the proposed development constitutes Strategic Infrastructure Development within the meaning of section 182A of the Act. Therefore, the current application is required to be submitted directly to An Bord Pleanála under section 182A(1) of the Act. The determination from the Board that the development constitutes a SID was accompanied by an Inspector's Report, which recommended that the applicant be informed that the proposed development constitutes Strategic Infrastructure.

4. RELEVANT PLANNING HISTORY

This section sets out relevant Planning History within and adjacent to the Proposed Development site as well as the immediate local area.

Reg. Ref. SD21A/0241

An application was made to SDCC on the 31st August 2021 for two no. two storey data center buildings. The application site is what is identified by way of a blue line on the OS Map that accompanies this application and overlaps partly with the application site under this SID application. This application was subject a request for Additional information on the 26th October 2021, and a response to this is expected to be made to the Council in March 2022. The nature and extent of the application as described in the statutory planning notices was:

We, Vantage Data Centers Dub 11 Ltd. are applying for permission for development at this site that includes an abandoned single storey residential property on the New Nangor Road (R134), Dublin 22; and on land within the townlands of Ballybane and Kilbride within Profile Park, Clondalkin, Dublin 22 on an overall site of 8.7 hectares.

The development will consist of the demolition of the abandoned single storey dwelling and associated outbuilding (206sqm); and the construction of 2 no. two storey data centers with plant at roof level of each facility and associated ancillary development that will have a gross floor area of 40,589sqm that will consist of the following:

- 1 no. two storey data center (Building 11) that will be located to the south of the site and will have a gross floor area of 24,667sqm. It will include 22 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height;
- 1 no. two storey data center (Building 12) that will be located to the north of the site, and to the immediate north of Building 11 and will have a gross floor area of 12,915sqm. It will include 11 no. emergency generators located at ground floor level within a compound to the western side of the data center with associated flues that will be 22.3m in height;
- Each of the two data centers will include data storage rooms, associated electrical and mechanical plant rooms, loading bays, maintenance and storage spaces, office administration areas, and plant including PV panels at roof level as well as a separate house generator for each facility that will provide emergency power to the admin and ancillary spaces. Each generator will include a diesel tank and there will be a refuelling area to serve the proposed emergency generators;
- The overall height of each data center apart from the flues and plant at roof level is c. 14.23m above the finished floor level;

- Construction of internal road network and circulation areas, with main entrance off Falcon Avenue to the south, as well as a secondary vehicular access off Legacy Drive to the south-west, both from within Profile Park; footpaths, provision of 144 no. car parking spaces, and 66 no. cycle parking spaces;
- single storey step-up substation (38sqm) as well as 2 no. single storey switch substations (121sqm);
- AGI Gas Regulator compound that include 3 no. single storey buildings (134sqm)
- construction of a gas powered generation plant in the form of a 13m high single storey building with a gross floor area of 2,714sqm that will contain 10 gas generators with associated flues that will be 25m in height, and grouped in pairs and threes. The Gas Plant will be located to the west of Building 11;
- Ancillary site development works, that will include reorientation of the Baldonnel Stream, biodiversity management initiatives, attenuation ponds and the installation and connection to the underground foul and storm water drainage network, and installation of utility ducts and cables, that will include the drilling and laying of ducts and cables under the internal road network within Profile Park. Other ancillary site development works will include hard and soft landscaping, lighting, fencing, signage, services road, entrance gates, sprinkler tanks and pump room; and
- A temporary gas powered generation plant within a fenced yard containing 21 no. generator units in containers, each with associated flues (each 25m high), 12 transformers and 10 containers of controls to be located to the west of, and associated with the first phase of Building 11, and will be required for a period of up to 2 years if connection to the national grid is delayed. This temporary plant will not be built if the connection to the national grid is in place prior to the operation of Building 11.

The development will be accessed from Falcon Avenue and Legacy Drive from within the Profile Park Business Park that contains an access from the New Nangor Road (R134). An Environmental Impact Assessment Report (EIAR) has been submitted with this application.

The data centers will be fed from the proposed Kilcarbery substation and gas plant. As noted above the temporary gas powered generation plant will not be built if the connection to the national grid is in place at the time of Building 11 becoming operational. This is required due to the Flexible Demand Offer from Eirgrid and their Data Centre Connection Offer Process and Policy Guidance to achieve a firm connection to the national grid.

Google Data Centre development

Reg. Ref. SD11A/0121

A decision to grant planning permission was made to this application that sought to change its use from an existing logistics / distribution warehouse facility granted under Reg. Ref. SD08A/0052 to a two storey data centre (described as an electronic technology facility) on the 2nd August 2011. This building is known as the Google PPK1 facility and lies to the immediate south of the Barnakyle substation.

Reg. Ref. SD14A/0023

A decision to grant planning permission for a two storey data centre (30,361sqm) and associated facilities including 83 car parking spaces was made on the 14th April 2014. Google were the applicant and operate the data centre that has now been constructed to the west of the Google PPK1 site. The highest point of any of the buildings is within 20m of the original ground level with the 25 no. stacks at 25m. The application also included the development of what is now known as the Barnakyle substation

Castlebaggot substation

An Bord Pleanála Reg. Ref. 06S.VA0019

An order to grant permission dated the 27th June 2016 was issued by An Bord Pleanála for the development of a 220kV /110 kV Substation & Associated Works on land within the Grange Castle South Business Park, Baldonnel, Dublin 22.

The development description for the application as outlined in the Board's own Inspector's Report was a 220/110 kV Gas Insulated Switchgear (GIS) substation compound, on an approximately three hectare site (including associated landscaped space). The main elements of the substation comprise:

- a 220 kV substation building of approximately 720sqm, rising to approximately 16.6m over ground level;
- a 110 kV substation building of approximately 528sqm, rising to approximately 14.5m over ground level;

- four no. associated 220 kV to 110 kV transformers sited within transformer bunds;
- associated external over ground electrical equipment and apparatus including cable sealing ends, surge arrestors, conductor support structures, post insulators, lightning monopoles (approximately 15m over ground), lighting and associated underground cabling;
- associated ancillary drainage works;
- associated site development and landscaping works;
- associated substation car parking (12 spaces), vehicular circulation route, and other hard surfacing; and
- associated 2.6m (approximately) high metal palisade substation perimeter fence, including substation entrance gates approximately 5.1m wide.

The application also included two interface compound sites (approximately 0.1ha each) to connect the existing Inchicore-Maynooth 220 kV double-circuit overhead line to the proposed substation by means of underground cable. These interfaces were located to the west of the Lucan Sarsfields GAA Club sports grounds and to the north-western side of Lynches Lane (L-5218- 1).

The development also included various infrastructural changes to the alignment of the Inchicore-Maynooth 220 kV double-circuit overhead line; and the implementation of 4 no. 220 kV underground cables connecting the two interface compound sites with the new substation; and one 110 kV underground cable connecting the proposed substation with the existing 110 kV Corkagh substation located within the existing Grange Castle Business Park. The decision to grant permission was made on the 27th June 2016 and was subject to 14 conditions.

5. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The Proposed Development will consist of:

- The proposed development primarily comprises the provision of two no. 110kV underground transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation compound along with associated and ancillary works and is described as follows:
- The proposed 110kV GIS Substation Compound is to be located on lands to the south of those that are subject of an application for 2 no. data centres under South Dublin County Council Reg. Ref. SD21A/0241 and to the south of Falcon Avenue within Profile Park, and within an overall landholding bound to the north by Falcon Avenue, Profile Park; to the west by Casement Road, Profile Park; and to the east and south by undeveloped lands; and partly by the Digital Reality complex to the south-east within Profile Park, Clondalkin, Dublin 22. The site of the proposed development has an area of c. 3.19 hectares.
- The proposed 110kV Gas Insulated Switchgear (GIS) Substation Compound includes the provision of a two storey GIS Substation building (with a gross floor area of 1,477sqm) (known as the Kilcarbery Substation), three transformers with associated ancillary equipment and enclosures, a single storey Client Control Building (with a gross floor area of 51.5sqm), lightning masts, car parking, associated underground services and roads within a 2.6m high fenced compound and all associated construction and ancillary works.
- One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV Barnakyle Substation to the west. The proposed transmission line covers a distance of approximately 274m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass under the internal road network within Profile Park to where it will connect into the Barnakyle substation.
- One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV underground Castlebaggot - Barnakyle circuit to the west within the Grange Castle South Business Park. The proposed transmission line covers a distance of approximately 492m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass both under, and to the north of the internal road network within Profile Park and Grange Castle Business Park South where it will connect into the Castlebaggot - Barnakyle circuit at a proposed new joint bay.

The compound is bound by undeveloped lands that is proposed to be used as the construction compound for the Proposed Development to the south (located with the red line); and by Casement Road (an internal road within Profile Park) and land in the ownership of Google and the PPK1 data centre to the west.

The proposed 110kV GIS Substation Compound, which will be enclosed by a 2.6m high fence includes the provision of a two storey GIS Substation building (with a gross floor area of 1,477sqm) (to be known as the Kilcarbery Substation) that will accommodate a cable room, control room, mess room, generator room, battery room and workshop at ground floor level, with a storeroom and substation room at first floor level. The 110kV GIS substation building will also include a small generator and 145 litre diesel tank within a bunded room of the GIS Substation building to provide back-up emergency power to the GIS substation.

The single storey Client Control Building (with a gross floor area of 51.5sqm) will accommodate 4 number electrical switch-rooms and a control room. The 110kV GIS Substation building and the Client Control building are rectilinear in form, and finished in metal cladding to compliment the concurrent Proposed Development (Ref. SD21A/0241) on the site to the north.

The proposed transformers will be located to the north within the substation compound, set out in a row running east-west within the compound area. The Substation compound and the Client Control Building and Transformers will be accessed separately from the west off the Casement Road that forms an internal circulation road within Profile Park. The Substation compound also includes Lightning Masts, Car Parking, associated Underground Services and Roads and all associated construction and ancillary works. A gate is provided from the client control compound to facilitate future access to the east if required.

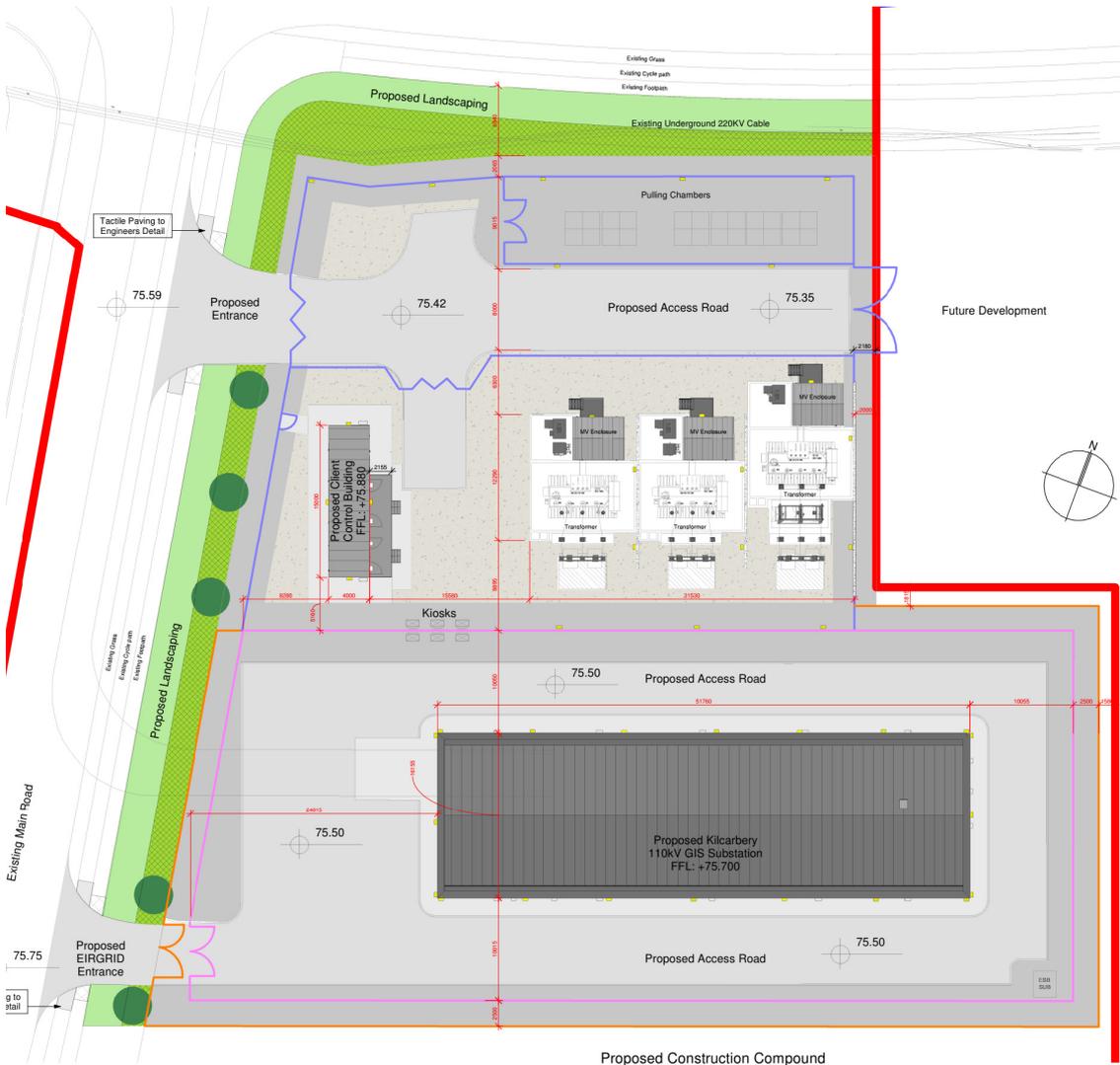


Figure 2 Extract from Drawing no. GIS-KT-Z0-ZZ-DR-A-1003-P4 by Kavanagh Tuite Architects indicating the Proposed Substation Compound, Client Control Building and Transformers Compound

110kV transmission line to the Barnakyle substation

The proposed southern underground single circuit 110kV transmission line will run through private lands between the proposed 110kV GIS Substation and the existing 110kV Barnakyle Substation that is located on lands to the west of the substation and to the south of the Falcon Avenue access road. The proposed transmission line covers a distance of approximately 274m within the townlands of Aungierstown and Ballybane, and Kilbride. This underground transmission line will follow a route originating at the proposed 110kV GIS Substation, and will pass along and under the internal road network within Profile Park to the existing 110kV Barnakyle Substation.

110kV transmission line to the Castlebaggot - Barnakyle circuit

The proposed northern underground single circuit 110kV transmission line will run through private lands between the proposed 110kV GIS Substation and the existing 110kV underground Castlebaggot - Barnakyle circuit to the north-west. The proposed transmission line covers a distance of approximately 492 within the townlands of Aungierstown and Ballybane, and Kilbride.

This underground transmission line will follow a route originating at the proposed 110kV GIS Substation and extending from its west will pass under the internal road network within Profile Park and will pass along and under the internal road network, and to the north of the internal road network within Profile Park and Grange Castle South Business Park where it will connect into the Castlebaggot - Barnakyle circuit at a proposed new joint bay.

Associated / Ancillary Works

The Proposed Development includes a joint bay at the connection point into the Castlebaggot - Barnakyle circuit. The joint bay is used for the jointing of cables to allow installation of cables into the ducting network, the joint bay also allows for maintenance works including periodic testing of the circuits. The development includes all associated construction and ancillary works.

6. NATIONAL AND REGIONAL POLICY CONTEXT

Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy

The Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy was published by the Department of Business, Enterprise and Innovation in June 2018. The Statement notes the role which data centres play in Ireland's ambition to be a digital economy hot-spot in Europe.

The Statement includes a section dealing with electricity infrastructure (page 8 onward refers). The Statement includes the following statement in relation to the electricity infrastructure requirements of planned and projected data centre development:

“Currently, a large portion of existing and planned data centres that are due to connect to the electricity system are expected to be in the Dublin area. Based on existing data centres, committed expansion and expected growth, total demand could treble within the next ten years. A consistent and supportive whole of government approach will be brought to the realisation of the transmission and distribution assets required to support the level of data centre ambition that we adopt.”

The current Strategic Infrastructure Development proposal constitutes the provision of transmission infrastructure required to provide electricity for development within Profile Park, including the proposed data centres that are subject of the concurrent application.

National Planning Framework

The National Planning Framework (NPF) was published in February 2018 setting out a vision for Ireland in land use and planning terms to 2040. The NPF replaced the National Spatial Strategy once it was adopted as the long term land use and planning vision for Ireland.

National Strategic Outcome 6 of the NPF relates to the creation of “A Strong Economy Supported by Enterprise, Innovation and Skills”. This strategic outcome is underpinned by a range of objectives relating to job creation and the fostering of enterprise and innovation. The following objective, relating to Information

and Communications Technology (ICT) infrastructure (including datacentres) is included under National Strategic Outcome 6:

“Promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities.”

The Proposed Development comprises the provision of a permanent power supply for the Permitted Development, in a location which is well suited and serviced to accommodate such a use. The NPF also states under National Strategic Outcome 5, A Strong Economy Supported by Enterprise, Innovation and Skills:

“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 storage facilities. This sector underpins Ireland’s international position as a location for ICT and creates added benefits in relation to establishing a threshold of demand for sustained development of renewable energy sources.”

The NPF is favourably disposed to the location of ICT infrastructure in Ireland, and the Proposed Development, which comprises of such ICT infrastructure, is therefore considered to be wholly in accordance with this key body of national planning policy.

Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly

The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Regional Assembly (EMRA) includes Regional Policy Objective (RPO) 8.25 which states the following:

“Local Authorities shall:

- *Support and facilitate delivery of the National Broadband Plan.*
- *Facilitate enhanced international fibre communications links, including full interconnection between the fibre networks in Northern Ireland and the Republic of Ireland.*
- *Promote and facilitate the sustainable development of a high-quality ICT network throughout the Region in order to achieve balanced social and economic development, whilst protecting the amenities of urban and rural areas.*
- *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.*
- *Promote Dublin as a demonstrator of 5G information and communication technology”*

The site is therefore considered to be an appropriate location for the development of data centres and associated ancillary development under this Strategy.

The RSES recognises the need to facilitate the provision of sufficient electricity to meet increasing demand in the region. In terms of Energy Infrastructure it is noted that Regional Policy Objective (RPO) 10.20 states the following:

“Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. Including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.”

The proposed development constitutes a transmission project which is required to serve the electricity needs of permitted and potential future development in the Grange Castle South Business Park in accordance with the foregoing objective.

The strategy goes on to state the following:

“The Dublin Region is the major load centre on the Irish electricity transmission system. Approximately one third of total demand is located here, similarly the Eastern Region is a major load centre on the Irish transmission system. The main urban demand centres are composed of a mix of residential,

commercial and industrial demand, which is expected to grow up to 2025 and beyond. Developing the grid in the Region will enable the transmission system to safely accommodate more diverse power flows from renewable generation and also to facilitate future growth in electricity demand. These developments will strengthen the grid for all electricity users, and in doing so will improve the security and quality of supply. This is particularly important if the Region is to attract high technology industries that depend on a reliable, high quality, electricity supply.”

The current proposal seeks to provide for the development of the grid via a new transmission line which will supply inter alia high technology industry in the area, which is dependent on a reliable, high quality electricity supply.

The RSES provides for a series of principles, pursuant to which Local Authority Development Plans will “facilitate the provision of energy networks in principle”:

- *“The development is required in order to facilitate the provision or retention of significant economic or social infrastructure.*
- *The route proposed has been identified with due consideration for social, environmental and cultural impacts and address issues of climate resilience, biodiversity, impact on soils and water quality.*
- *The design is such that it will achieve least environmental impact.*
- *Where impacts are inevitable mitigation features have been included.*
- *Where it can be shown that the proposed development is consistent with international best practice with regard to materials and technologies and that it will ensure a safe, secure, reliable, economic and efficient high-quality network.*
- *In considering facilities of this nature that traverse a number of counties or that traverse one county in order to serve another, planning authorities should consider the proposal in light of the criteria outlined above. It is important that planning authorities are engaged in early consultation and discussion with the relevant Transmission System Operator.*
- *Corridors for energy transmission or pipelines should avoid creating sterile lands proximate to key public transport corridors, particularly rail routes, and in built up urban areas.*
- *Regard for any National or Regional Landscape/ Seascape Character Assessment.”*

In response to the above it is considered that the proposed, comparatively short, electricity transmission infrastructure is required to facilitate significant economic infrastructure in the area. It is also considered that the route for the proposed transmission line has been identified with due consideration for social, environmental and cultural impacts (as set out in detail within the EIA Report). The design selected has been predicated on the need to minimise environmental impact and includes mitigation measures as set out within the EIA Report submitted herewith. The design of the project has been undertaken in accordance with best practice by the project engineers, and the corridor selected will avoid the sterilisation of lands proximate to key public transport corridors or built-up urban areas.

Changing policy

Policy in terms of both climate change and data centres has significantly altered over the last few years. This has been incorporated within the publication of the Climate Action Plan 2021 at the start of November 2021; and the publication on the 23rd November 2021 by the Commission for Regulation of Utilities (CRU) of their “*Direction to the System Operators related to Data Centre grid connection processing*”. Furthermore, we note that it is established Government policy (as stated in the Policy Statement on Security of Electricity Supply that is dated November 2021) that it is a national priority to construct gas fired power plants to combat the squeeze on electricity supplies in the short to medium term. These documents are the most up to date policy documents governing climate action and grid connections for data centres and power plants.

The proposed substation will provide power to the concurrent data center application, but also enable power to be exported from the proposed Multi-Fuel Generation Plant proposed under Reg. Ref. SD21A/0241 to the national grid.

The policies and long term aims of Climate Action Plan 2021 are based on continuing to facilitate data centre development, subject to certain criteria, and future reviews, up to 2030. The Plan recognises, and takes account of the changes in demand for electricity over the next 10 years; and that this will alter the profile for demand and recognises that the forecast growth in data centres will represent a challenge to Ireland’s emissions targets.

The Government policy set out under the Climate Action Plan 2021, states that the strategy on data centres will be reviewed (but with no set date for such a review) to ensure that growth of such users can only happen in alignment with sectoral emission ceilings and renewable energy targets. There are currently no planned reviews and this document and the recent CRU policy document clearly set out that each data centre must be considered on its own individual merit, and must, due to Eirgrid's DCCOPP requirement, have an on-site back-up power source.

We respectfully submit that it is in this context that the concurrent application is being considered by the Planning Authority. Having regard to this, the data center on the adjacent site has been considered as worthy of a connection agreement from Eirgrid. Before addressing the local planning context, it is incumbent that the roles and functions of the statutory bodies involved in energy production, and policy changes, and how the proposal falls into these are outlined.

What is the CRU's role in energy policy and data centre connections?

The Commission for Regulation of Utilities (CRU) mission is to protect the public interest in Water, Energy and Energy Safety and one of their four strategic objectives is to deliver sustainable low-carbon solutions with well-regulated markets and networks. In their decision paper of the 22nd November, the CRU have confirmed that it will work with Eirgrid and ESB Networks, government and wider industry to facilitate the delivery of an electricity generation fleet that can meet Ireland's Climate Action Plan 2021 (CAP) target of up to 80% of electricity demand from renewable energy sources by 2030, whilst ensuring Ireland's energy needs are met. These targets align with the *National Development Plan 2021 – 2030* which commits to increasing the share of renewable electricity up to 80% by 2030.

We respectfully submit that these changes to a greater reliance on renewable electricity are clearly outside the control of the applicant, but are strongly welcomed as the applicant will source 100% renewable power through a supplier via the national grid and its connection to the proposed substation that is subject of this application. The Multi-Fuel Generation Plant on the concurrent application and site, has also been future proofed, not only to run on HVO as opposed to gas, in both the short-term; but also as the back-up power to gas in the medium to long term (as opposed to diesel being used as back-up); and has the capacity to operate with biogas and / or hydrogen which is transported through the high pressure gas connection when the GNI change the gas mix to include biogas or hydrogen. This will aid the reinforcement of the national grid in a sustainable and renewable manner.

The CRU in their decision paper have outlined criteria that both Eirgrid and ESB Networks will need to consider in assessing data centre connection applications to determine whether to make a connection offer. In this regard we refer the Board to the fact that the applicant already has a Flexible Demand Connection Agreement with Eirgrid.

Eirgrid offer to Vantage

We respectfully submit that in this instance the applicant is already in receipt of a connection offer from Eirgrid to connect the data center with the proposed substation (known as Kilcarbery) that is subject to this separate SID application by the same applicant, as is required under legislation, into the national grid. This offer was executed with Eirgrid on the 1st April 2021 in the full knowledge of the constraints within the Greater Dublin Area. This delivers a ramped connection starting in Q4, 2023 when it is intended that the first data center (DUB11) is expected to be in operation on the adjacent site. This current connection agreement provides an initial low import of power and then is ramped up to the final Maximum Import Capacity (MIC) over a number of years.

Given this was made following both the *'Data Centre Connection Offer Process and Policy'* Document published in July 2019 by Eirgrid and the National Climate Action Plan 2019; it is only reasonable to conclude that the locational requirements and other criteria in place at the time, were considered to have been met. The nature of this offer is that it will facilitate the multi-fuel generation plant proposed under the Additional Information response to this concurrent application, to supply and reinforce the national grid from c. Q1, 2025.

We respectfully submit that it is not the case that there is an absence of power supply available via Eirgrid and this would be an incorrect interpretation of the current system issues. Grid constraints (as opposed to grid reinforcements) are created through a combination of factors, including the lack of any new conventional generation being added to the grid over the past decade. By bringing new flexible generation to the point of demand via the adjacent site, not only does this ease grid constraints, it will also provide much needed

flexible capacity on the grid via the proposed Kilcarbery substation to facilitate the increased level of renewables aspired to in the Climate Action Plan; and meets the requirements of the CRU policy in terms of new grid connections for data centers.

7. LOCAL PLANNING CONTEXT

South Dublin County Development Plan 2016-2022

The South Dublin County Development Plan is the statutory planning document that covers the entire South Dublin administrative area. The Plan was adopted in June 2016. The Proposed Development is to be located within an area zoned EE (Enterprise and Employment) under the County Development Plan with the stated aim:

“To provide for enterprise and employment related uses.”

The County Development Plan (s. 10.2.9) supports the provision of transmission and energy infrastructure with the appropriate service providers such as ESB Networks and Eirgrid that facilitates the economic development and expansion of the County. Energy (E) Policy 11 of the County Development Plan specifically 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”*. The service providers and operators have been fully consulted in formulating this SID application. Significant precedent exists for the establishment of this use on other EE zoned lands in the area. EE zoned areas are established economic industrial areas running essentially in an arc northwards from City West to Grange and Grange Castle.

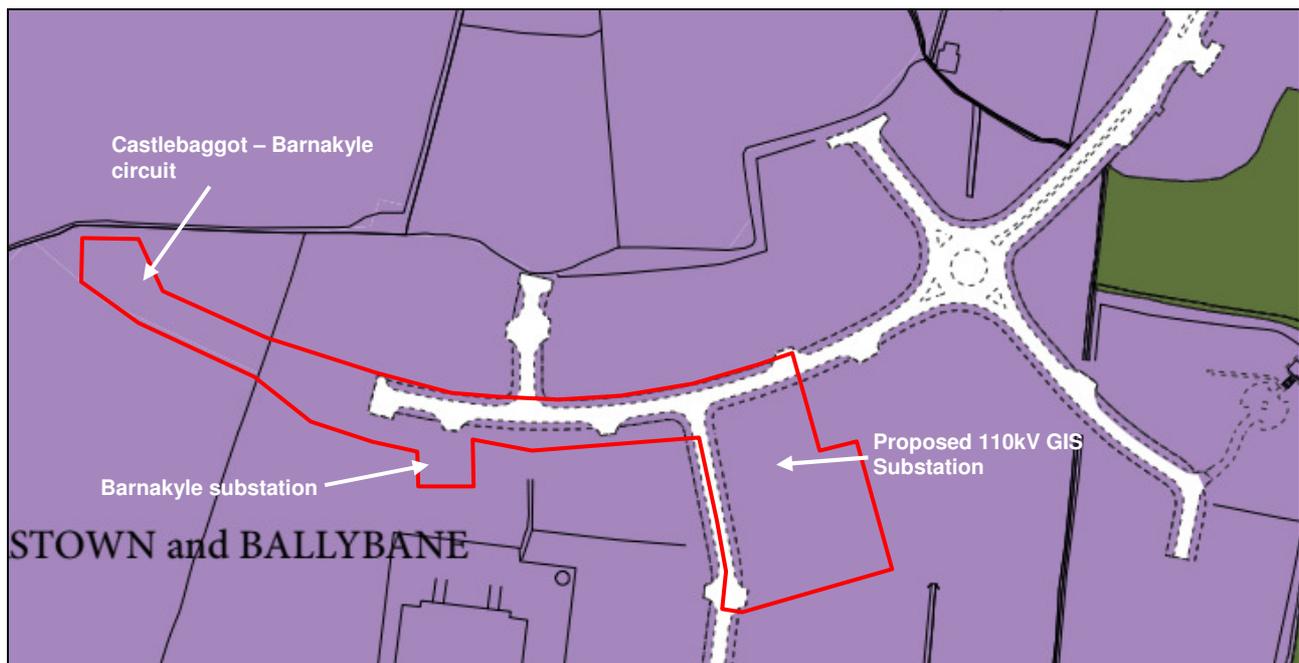


Figure 3 Extract from Zoning Map 4 of the South Dublin County Development Plan 2016-2022 (including Variations 1 & 2) – Red Line Boundary for Illustrative Purposes Only

It is the policy of the Council to support sustainable enterprise and employment growth in South Dublin and in the Greater Dublin Area, whilst maintaining environmental quality. A number of objectives relate to EE zoned lands that include ET3 Objective 2 that states:

“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.”

Policy ET3 Specific Local Objective 1 supports the conducting of a review of the zoning of lands south of the

Grand Canal and west and north of the R120, with a view to preparing a long term plan for the expansion of the Grange Castle Economic and Enterprise Zone, to accommodate strategic investment in the future, while also seeking to provide public open space along the Canal, including a natural heritage area in the vicinity of the historic canal quarries at Gollierstown. This rezoning has formed Variation no. 1 of the County Development Plan and does not relate to these lands.

The nature of the concurrent application, as will be presented as part of the Additional Information response for that application, will be informed by a site analysis of environmental issues and an EIA Report has been prepared and revised from that submitted with the original application. The revised scheme will include the enhancement and creation of new bio-diversity corridors that will fully integrate the data center application into the surrounding environment as it has a public edge along the New Nangor Road that the subject development will not have that ensures that direct and cumulative effects on biodiversity are addressed in the overall design.

The Suitable attenuation and sustainable drainage systems have also informed the design of both the concurrent applications. This mitigation of design of the concurrent data center application also increases native tree planting within the adjoining site from its current position. The concurrent application incorporates SUDS fully in accordance with policies of the Plan.

In conclusion it is considered that the Proposed Development is in accordance with the policies and objectives of local, regional and national land use planning policy.

8. ENVIRONMENTAL IMPACT ASSESSMENT REPORT

An Environmental Impact Assessment Report has been prepared / coordinated by Ramboll and is submitted along with this application. The following is a summary of its findings.

Construction Stage

Based on the assumption that planning consent is secured in Quarter 2/3 (Q2/3) 2022, the construction works would commence in Q3 2022. The works are anticipated to be undertaken over an 8 to 10 month period (excluding commissioning) with a completion target of Q2/Q3, 2023.

ElAR Topic	Effects Assessed	Effects after mitigation (Residual Effects)
Population and Human Health	Employment, air quality, noise, transport and accessibility, and amenity effects.	Not Significant
Transport	Pedestrian severance, pedestrian delay, amenity, fear and intimidation, driver delay, accidents and safety.	Not Significant
Air Quality	Dust soiling and change in NO ₂ , PM ₁₀ and PM _{2.5} levels due to vehicle emissions.	Not Significant
Noise	Construction noise, construction traffic, and construction vibration.	Not Significant
Water Resources and Flood Risk	Potential contamination of surface water, potential disruption of groundwater, increases in surface runoff, capacity changes to water supply and foul drainage.	Not Significant
Ecology	Pollution of designated sites, habitat loss and disturbance of wildlife.	Not Significant
Ground Conditions	Human exposure to contaminated soils/dust/ground gasses/water, increased potential for leaching of contaminants from soils and mobilisation of contamination in surface water and ground water, and loss of agricultural land.	Not Significant
Climate Change	Climate Change Resilience (CCR) assessment, In-Combination Climate Impacts (ICCI) assessment, and Greenhouse Gases (GHG) assessment.	Not Significant
Waste	Waste management infrastructure capacity, and changes to void space in landfill sites.	Not Significant
Material Assets	Changes in demand on power and electrical supply, gas supply, foul water infrastructure, water supply, telecommunications, and risk of contamination of surface water infrastructure.	Not Significant
Landscape and Visual	Landscape character areas and visual amenity.	Not Significant
Cultural Heritage	On site archaeology* and built heritage.	*Significant Positive Built Heritage effects are Not Significant

For the purposes of the EIAR, it has been assumed that 2022 would be the peak year for the construction works as this would include site preparation and building construction works and would result in the noisiest works, the majority of waste generation (such as from site clearance and levelling works) and imported material associated with cut and fill and associated heavy good vehicles (HGV) trips.

Construction Stage Residual Effects

A summary of the construction stage residual effects is presented below. Where **significant positive** effects are likely these are highlighted in bold green and where **significant negative** effects are predicted these are highlighted in bold red.

The predicted significant positive effect for onsite archaeology is associated with the Applicants commitment to undertake archaeological evaluation in the area of the oval/circular enclosure and associated linear ditches that are present beneath the site as an archaeological asset. These works will result in an increase in the knowledge gained and understanding of these features in relation to the other recorded contemporary enclosure sites in the wider landscape.

Operational Stage

During operation the proposed development will operate 24 hours a day but would be an unmanned facility. The only operational staff on site would be those associated with maintenance inspections on a weekly basis. These inspections would be conducted by two staff members.

Operation Stage Residual Effects

A summary of the operation stage residual effects is presented below. Where **significant positive** effects are likely these are highlighted in bold green and where **significant negative** effects are predicted these are highlighted in bold red.

EIAR Topic	Effects Assessed	Effects after mitigation (Residual Effects)
Population and Human Health	Amenity effects.	Not Significant
Transport	Pedestrian severance, pedestrian delay, amenity, fear and intimidation, driver delay, accidents and safety.	Not Significant
Air Quality	Predicted annual average operation traffic flows and emissions associated with the backup generator.	Not Significant
Noise	Plant noise emissions from normal operation, and plant noise emissions with emergency kit.	Not Significant
Water Resources and Flood Risk	Changes to flood risk, potential alteration to local groundwater flows and levels, and change in capacity of water supply and foul drainage	Not Significant
Ecology	Pollution of designated sites, potential for ecological enhancement, disturbance of wildlife, potential for foraging habitat enhancement.	Not Significant
Ground Conditions	Human exposure to contaminated soils/dust/ground gasses/water and contaminates released from leakages/spillages.	Not Significant
Climate Change	Climate Change Resilience (CCR) assessment, In-Combination Climate Impacts (ICCI) assessment, and Greenhouse Gases (GHG) assessment*.	*Significant (Negative) Remaining effects are Not Significant
Waste	Waste management infrastructure capacity, and changes to void space in landfill sites.	Not Significant
Material Assets	Increased demand on power and electrical supply, gas supply, foul water infrastructure, water supply, telecommunications, and risk of contamination of surface water infrastructure.	Not Significant
Landscape and Visual	Landscape character areas and visual amenity.	Not Significant
Cultural Heritage	Archaeology and built heritage.	Not Significant

With regard to the predicted significant negative effect anticipated for the GHG emissions, IEMA best practice guidance states all GHG emissions contribute towards climate change and are therefore significant, however, it is important to consider these emissions in the context of Ireland's carbon budget for 2021 to 2025, for which the predicted emissions make only a minor contribution.

9. APPROPRIATE ASSESSMENT

An Appropriate Assessment Screening Report has been prepared by Ramboll and is submitted along with this application, and is included as a stand-alone document that accompanies the application.

10. FLOOD RISK ASSESSMENT

A Stage 1 Flood Risk Assessment has been undertaken for the site and is submitted along with this application, and is included as a stand-alone document by CSEA.

11. CONCLUSION

This planning application relates to the provision of:

- The proposed development primarily comprises the provision of two no. 110kV underground transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation compound along with associated and ancillary works and is described as follows:
- The proposed 110kV GIS Substation Compound is to be located on lands to the south of those that are subject of an application for 2 no. data centres under South Dublin County Council Reg. Ref. SD21A/0241 and to the south of Falcon Avenue within Profile Park, and within an overall landholding bound to the north by Falcon Avenue, Profile Park; to the west by Casement Road, Profile Park; and to the east and south by undeveloped lands; and partly by the Digital Reality complex to the south-east within Profile Park, Clondalkin, Dublin 22. The site of the proposed development has an area of c. 3.19 hectares.
- The proposed 110kV Gas Insulated Switchgear (GIS) Substation Compound includes the provision of a two storey GIS Substation building (with a gross floor area of 1,477sqm) (known as the Kilcarbery Substation), three transformers with associated ancillary equipment and enclosures, a single storey Client Control Building (with a gross floor area of 51.5sqm), lightning masts, car parking, associated underground services and roads within a 2.6m high fenced compound and all associated construction and ancillary works.
- One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV Barnakyle Substation to the west. The proposed transmission line covers a distance of approximately 274m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass under the internal road network within Profile Park to where it will connect into the Barnakyle substation.
- One proposed underground single circuit 110kV transmission line will connect the proposed Kilcarbery 110kV GIS Substation to the existing 110kV underground Castlebaggot - Barnakyle circuit to the west within the Grange Castle South Business Park. The proposed transmission line covers a distance of approximately 492m within the townlands of Aungierstown and Ballybane, and Kilbride and will pass both under, and to the north of the internal road network within Profile Park and Grange Castle Business Park South where it will connect into the Castlebaggot - Barnakyle circuit at a proposed new joint bay.
- The development includes the connections to the two substations (existing and proposed) as well as to the Castlebaggot - Barnakyle circuit, associated underground services, and all associated construction and ancillary works.

This Proposed Development is designed to support current power demand and future growth within the area inclusive but not limited to the power requirements for the concurrent application (Ref. SD21A/0241) within the same landholding, in a location which is well suited and serviced to accommodate such a use within Profile Park, Clondalkin, Dublin 22.

The proposal is in accordance with the policies and objectives of national and regional planning policy, and the South Dublin County Development Plan 2016-2022.

It has been demonstrated within this report, as well as within the accompanying drawings, documents, and Environmental Impact Assessment Report that the proposal provides a suitable use of the subject lands. The applicant and design team in preparing the application documentation have considered the issues raised within the pre-application consultations undertaken with An Bord Pleanála and their determination issued prior to the lodgement of this application.

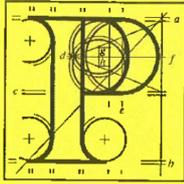
If you require any further information, or clarification on the above, please do not hesitate to contact us. We trust that everything is in order and look forward to a favourable decision in due course.

Yours faithfully,

A handwritten signature in cursive script that reads "Anthony Marston".

Anthony Marston (MIPI, MRTPI)
Marston Planning Consultancy

APPENDIX 1 EXTRACT OF BOARD ORDER CONFIRMING THAT THE PROPOSED DEVELOPMENT CONSTITUTES STRATEGIC INFRASTRUCTURE DEVELOPMENT



**An
Bord
Pleanála**

**Board Direction
BD-009518-21
ABP-311009-21**

At a meeting held on 24/11/2021, the Board considered the report of the Inspector, and the documents and submissions on file generally, in relation to the proposed development, consisting of a 110 kV substation and associated infrastructure in Profile Park Business Park, Clondalkin, Dublin 22.

The Board decided that the proposed development, as described in the documents received by the Board on the 3rd day of August 2021, falls within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made directly to the Board.

Board Member:

Dave Walsh

Date: 24/11/2021

APPENDIX 2 COPY OF EIA PORTAL CONFIRMATION

An EIA Portal notification was received on 14/02/2022 in respect of this proposed application. The information provided has been uploaded to the EIA Portal on 15/02/2022 under EIA Portal ID number 2022013 and is available to view at <http://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>.

Portal ID: 2022013

Competent Authority: An Bord Pleanála

Applicant Name: Vantage Data Centers DUB11 Ltd.

Location: Townlands of Aungierstown and Ballybane; and Kilbride within Profile Park Business Park and partly within Grange Castle South Business Park, Dublin 22.

Description: Two no. underground 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation (to be known as Kilcarbery).

Linear Development: No

Date Uploaded to Portal: 15/02/2022

Regards,

Karl.

EIA Portal team

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An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta
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