

Inspector's Report ABP-305948-19

Development	Phased development of 4 single storey data halls all with associated plant at roof level, 32 standby generators, office and service areas, service road infrastructure, car parking, ESB substation/transformer yard, An EIAR was submitted with the application. Site within the townland of Ballymakaily, Newcastle Road, Lucan,
	Co Dublin.
Planning Authority Planning Authority Reg. Ref.	South Dublin County Council SD19A/0042
Applicant	EdgeConneX Ireland Ltd.
Type of Application	Permission.
Planning Authority Decision	Grant subject to conditions.
Type of Appeal	Third Party V. Decision.
Appellant	John Power.
Observer(s)	None.

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Date of Site Inspection

23rd June 2020.

Inspector

Susan McHugh

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1.0 Site Location and Description

- 1.1. The appeal site is located to the west of the Grange Castle Business Park and recently realigned R120 Adamstown Road within the townland of Ballymakaily, Lucan, Dublin 22.
- 1.2. The site is located c.1.5km north of Casement Aerodrome and c.0.5km south of Adamstown and the Kildare railway line. The Clonburris Strategic Development Zone (SDZ) is located to the north of the Grand Canal.
- 1.3. The appeal site forms part of a larger landholding outlined in blue which includes the existing EdgeConneX Ireland Ltd data hall facility located to the east within the Grange Castle Business Park.
- 1.4. The Grand Canal forms the northern boundary to the site. The eastern boundary of the site has been subject to a compulsory purchase order by South Dublin County Council to facilitate the Adamstown/Newcastle Road improvement scheme. A traveller site is located some 180m to the south-west of the site.
- 1.5. The appeal site in terms of its current use can be divided into two areas, with the majority of the land forming open grassland, with a former farmhouse and associated barns as well as similar buildings forming a small part of the northern part of the site to the immediate south of the Grand Canal.
- 1.6. The appeal site is accessed from an agricultural road which leads from the realigned R120 Adamstown Road to the north east to the former agricultural buildings. The site is also accessed via internal roads serving the Grange Castle Business Park off the R136 to the east and R134 to the south of the site.
- 1.7. A large electricity pylon is situated in the northern portion of the site to the immediate south of the disused farm buildings and in the north-west corner of the site. A 110kv electricity line crosses the northern portion of the site, running in an east-west direction.
- 1.8. The site has a stated area of 22.1ha. It is relatively flat with a slope towards the north-east corner.

2.0 Proposed Development

- 2.1. The application was lodged with the planning authority on the 05/02/2019 with further plans and details submitted on the 29/08/2019.
- 2.2. The proposed development <u>as lodged</u> comprises, a phased data centre that will include 4 no. single storey data halls all with associated plant at roof level; 32 no. standby generators with associated flues (each 15m high); associated office and service areas; service road infrastructure and car parking; ESB substation/transformer yard with an overall gross floor area of 17,685sq.m.
- 2.3. The development will also include a temporary gas-powered generation plant within a walled yard containing 19 no. generator units with associated flues (each 17m high) to be located to the west of the proposed data halls. The development will be constructed across two distinct phases that will facilitate the future use and take up of space within the data halls. It is intended that Phase 1 will be complete and operational prior to the commencement of Phase 2 of the development.
- 2.4. Phase 1, comprises:
 - 2 no. single storey data halls (6,950sq.m.) with roof plant and 16 no. stand-by generators with associated flues (each 15m high) as well as associated water tower and pump room and other services;
 - Single storey goods receiving area/store and single storey office area (1,522sq.m.) located attached and to the north-east of the data halls;
 - Temporary gas-powered generation plant with 15 no. generators with associated flues (each 17m high) to be located within a compound to the west of the proposed data halls;
 - Attenuation pond with a capacity of 2,282m³ located in the north east corner of the site; and
 - Two storey ESB sub-station (494sq.m) with associated transformer yard and single storey transformer building (247sq.m) within compound.
- 2.5. Phase 2, comprises;

- 2 no. single storey data halls (6,950sq.m.) with roof plant and 16 no. stand-by generators with associated flues (each 15m high) as well as associated water tower and pump room and other services;
- Single storey goods receiving area/store and single storey office area (1,522sq.m) located attached and to the east of the data halls under this Phase and attached and to the north of the offices proposed under Phase 1;
- 4 no. additional generators with associated flues (each 17m high) to be constructed within the temporary gas powered generation plant that will mean that the overall temporary gas powered generation plant will operate on the basis of 17 operating and two on standby.
- 2.6. The temporary gas generation plant is required as a result of the limited capacity available on the electricity utility network in the area. The development will include ancillary site works, connections to existing infrastructural services as well as fencing, signage, and will include new vehicular access off the realigned R120 to provide a new vehicular access into the site as well as internal service roads and entrance gates, a car park for 39 car parking spaces (including 4 disabled car parking spaces), and sheltered bicycle parking to serve the development. The development will be enclosed with landscaping to all boundaries of the overall site.
- 2.7. An application for enabling works to facilitate this development has been made under Reg. Ref. SD19A/0004.
- 2.8. An EPA-Industrial Emissions (IE) license will be applied for to facilitate the operation of Phase 2 of the permission.
- 2.9. The development is proposed to create a campus level of finish as opposed to an industrial form of development with heavy landscaping along all boundaries and particularly to the north of the overall site along the canal. External finishes will be primarily metal cladding.
- 2.10. It is proposed that the new facilities will operate 24 hours per day, 7 days per week, on a 3-shift cycle.
- 2.11. The application was accompanied by the following;
 - Environmental Impact Assessment Report (EIAR) and Appendices
 - Appropriate Assessment Screening Report Scott Cawley

- Planning Report Marston Planning Consultancy
- Flood Risk Assessment Pinnacle Consulting Engineers
- Transport Statement Pinnacle Consulting Engineers
- Engineering Planning Report Pinnacle Consulting Engineers
- Heat Recovery Feasibility Ethos Engineering
- Contaminated Land Preliminary and Generic Risk Assessment WYG Environment
- Tree Constraints Plan The Tree File Consulting Arborists
- Landscape Masterplan, Planting Plan & Schedule Kevin Fitzpatrick
- 2.11.1. Further information was lodged 29/08/2019. The application was revised to include a revised site plan to include revised Temporary Gas Generated Power Plant and drawings of the ESB substation. The application was accompanied by the following;
 - Archaeological Testing Report AMS-CRDS
 - EIAR Mitigation Measures Schedule Marston Planning Consultancy
 - Lighting Plan Review Scott Cawley
 - Noise Assessment Report AWN Consulting

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to **grant** permission subject to 33 no. conditions. Conditions of note with respect to this appeal include the following:

Condition no. 23

'No development shall take place under this permission until the applicant, owner or developer has submitted the following details for the written agreement of the Planning Authority:

Details of future proofing of the site, including safeguarding of any future pipe network routes up to the site boundaries/boundaries with adjoining roadways, shall be submitted, to facilitate future connection to potential low carbon district energy schemes in Grange Castle Business Park and adjoining lands. Drawings submitted shall clearly demonstrate future-proofing of the site in this regard.

Reason: In the interests of energy efficiency, climate change mitigation and the proper planning and sustainable development of the area.'

3.2. Planning Authority Reports

3.2.1. Planning Reports (dated 29/03/2019 and 23/10/2019)

The Planner's Report is the basis for the Planning Authority decision. The 1st Senior Executive Planners report in summary states:

- Zoning Site is subject of two different zoning objectives. The majority of the site is zoned 'EE' 'To provide for enterprise and employment related uses', while the northern portion of the site is zoned 'RU' 'To protect and improve rural amenity and to provide for the development of agriculture'.
- The area zoned 'RU' of the proposed development provides for the location of the proposed attenuation pond and wetland habitat.
- Proposed data centre development is located immediately north of the Grange Castle Business Park (GCBP), on the outskirts of the existing campus where three data centres have been permitted/constructed (to the east of the R120).
- Precedent Numerous data centres have been granted planning permission within GCBP which has established an acceptable precedent for this use. Proposed development is acceptable in principle subject to compliance with the relevant policies, standards, and requirements of the current South Dublin County Council Development Plan (SDCCDP).
- Design Statement While one has not been submitted, the accompanying Planning Report discusses site analysis, access, and the concept plan for the proposed development. Considering the proposed development relates to a data centre of similar design, in this particular instance only, the PA considers the information submitted to be adequate, in lieu of a Design Statement.

- Visual Impact and Residential Amenity The parapet height of the proposed data centre is 12.7m, with associated generator flues at 15m in height. The height of the proposed structure containing the ancillary services is 9.1m in height and situated on the eastern elevation of the data centre and is set back at least 65m from the edge of the R120.
- Energy Usage Notes section 11.7.6 of the SDCCDP requires proposals to carry out energy analysis, include heat recovery and heat distribution infrastructure, and the submission of a Heat Recovery Feasibility Study. The study concludes that the use of such a system is not feasible due to the limitations of temperatures available within the condensing circuit, particularly in winter and the limitations on finance. The Study also states that should district heat be adopted at a strategic government level, in line with the phasing out of fossil fuels, this would have a significant impact on viability.
- Notes previous permissions in the vicinity of the site for similar type development, required conditions regarding future proofing for the potential provision of a low carbon district energy network and the submission of an Energy Report, to include information on the projected annual energy demand of the proposed development, in order to inform the evidence base to develop low carbon energy options in Grange Castle, and recommends an appropriate condition be attached.
- Adequacy of the Environmental Impact Assessment Report Lacking information in relation to archaeology and further archaeological assessment is required.
- Appropriate Assessment Screening Not considered that an Appropriate Assessment is required.
- Recommends further information be submitted.

The 2nd Senior Executive Planners Report in summary states;

• *District Heating Scheme* - Notes that should a district heating scheme be implemented as an energy saving strategy then the data centre could be connected to such a scheme.

- Archaeology Archaeological Testing Report submitted acceptable subject to conditions recommended by the DoCH&G.
- *Mitigation Measures* Mitigation schedule of all mitigation measures proposed within the EIAR acceptable.
- ESB substation Proposed material finishes of Kingspan Basalt (grey) colour acceptable and similar to other types of structures within the vicinity.
- Lighting Schedule and plan submitted has had regard to the proximity of the site to the pNHA Grand Canal and the old buildings located in the northern end of the site, close to the canal, and is acceptable in terms of ecology.
- Noise Assessment Notes noise assessment document submitted, is acceptable subject to conditions as recommended by the EHO.
- Surface Water Run-Off/Water Quality Response in terms of land drainage, surface water run-off and the potential risk to water quality is acceptable.
 Notes that the 'Contaminated Land Preliminary and Generic Risk
 Assessment' was submitted in error and does not relate to this application.
- Concludes that the proposal is acceptable.

3.2.2. Other Technical Reports

- **Surface Water Drainage**: Report dated 11/03/2019 recommends further information. Report dated 18/10/2019 recommends no objections.
- Roads Section: Report dated 05/03/2019 recommends no objections subject to conditions.
- **EHO**: Report dated 05/03/2019 recommends further information. Report dated 10/09/2019 recommends no objection.
- Heritage Officer: Report dated 08/03/2019 recommends no objection.
- Parks and Landscape Services/Public Realm: Report dated 04/03/2019 recommends no objection.

The application was also referred to Economic Development, Water Pollution Section, County Architect, Waste Management, Forward Planning, and Public Lighting but no reports were received.

3.3. Prescribed Bodies

- Irish Water: Report referred to in Planners Report but not on file.
- Irish Aviation Authority: Report dated 01/03/2019 recommends no objections subject to conditions.
- **DoCH&G Archaeological Heritage**: Report dated 14/03/2019 recommended further information. Report dated 20/09/2019 recommends no objection.
- **EPA**: Report dated 12/03/2019 recommends no objection subject to requirements in relation to an Industrial Emissions Licence.
- Department of Defence: Report dated 14/02/2019 recommends no objection.
- Inland Fisheries: Report dated 05/02/2019 recommends no objection.

The application was also referred to Waterways Ireland, DOCHG National Parks and Wildlife, but no reports were received.

3.4. Further Referrals

The Board referred the proposed development to An Taisce, The Heritage Council and the EPA.

• **EPA**: Report dated 16/07/2020 recommends no objection.

No reports were received from An Taisce and The Heritage Council at the time of writing.

3.5. Third Party Observation

A submission was made from the appellant. The appeal is addressed in Section 6 below but in summary the submission states:

• Notes additional information request under P.A.Reg.Ref.SD19A/0004.

• Cites previous submission made to proposed Variation No.1 Zoning Amendment to lands at Grange Castle West relating to Strategic Flood Risk Assessment.

• Queries why a temporary gas supply is required and where it will be sourced from.

• Notes that waste heat from the facility will contribute to climate change, which has a value to the local area and benefit horticulture, aquaculture, local food production and district heating.

- Quotations from several articles from different sources.
- Outlines the Tallaght District Heating Scheme process.
- Notes several data centres on the western fringe of Dublin City which should be used to harness heat.
- Potential to use EdgeConneX Ireland and Grange Castle Business Park as a potential energy source for a district heating system for Clonburris.
- SDCC should apply the Polluter Pays principle with the applicant.

4.0 Planning History

Appeal Site

P.A.Reg.Ref.SD19A/0004: Permission **granted** in April 2019 for enabling works to facilitate the future development of the site; topsoil strip and a cut and fill operation across the site; temporary construction access will be created off the R120 to facilitate the works within the townland of Ballymakaily to the west of the Newcastle Road (R120).

EdgeConneX Site to the East of R120 - Grange Castle Business Park

P.A.Reg.Ref.SD17A/0392 ABP-300752-18: Permission **granted** in July 2018 for amendment and completion of the permission granted under planning register reference number SD17A/0141 to facilitate a 125 square metres extension to the north and south of the permitted stand-alone single storey data hall of 1,515 square metres to create an extended stand-alone single storey data hall of 1,640 square metres. The permitted data hall will remain located as per SD17A/0141 – that to the north of the data hall and its extension, and to the west of the temporary gas

powered generation plant permitted under planning register reference numbers SD16A/0214, SD16A/0345 and SD17A/0027 and to the immediate east of the R120. This amendment application will increase the height of the compound and data hall building by 1.2 metres to 1.96 metres and it will remain single storey. Internal alterations to the data hall layout are also proposed. No changes are proposed to the plant at roof level; associated support services, with a slight repositioning to the north of the four number standby generators with associated flues (each 15 metres high). The development will include a revised location for the sprinkler tank and pump room, as well as revisions and extension to the permitted service road and new access gate to provide vehicular access to the data hall and three number car parking spaces permitted under SD17A/0141. The development will also include modifications to the landscaping to all frontages permitted under SD16A/0214, SD16A/0345 and SD17A/0141. The application also includes for revisions to the former access off the R120 that will allow emergency access only from this point into the site. It will continue to maintain local access to the rear of the property to the south of this former access as permitted and will reduce the number of car parking spaces permitted under SD16A/0214 from 26 to 25 number car parking spaces. The development will continue to include ancillary site works, connections to existing Grange Castle infrastructural services as well as fencing and signage. No changes to the permitted attenuation pond is proposed. An Environmental Impact Assessment Report (EIAR) has been submitted with this application, all on a site within the townlands of Ballymakaily and The Grange, Newcastle Road, Lucan, County Dublin.

P.A.Reg.Ref.SD17A/0141: Permission **granted** in August 2017 for the development of a data hall of 1,515sq.m. The data hall will include plant at roof level and associated support services, and 4 standby generators with associated flues (each 15m high). The development includes ancillary site works, a new water tower, pump room and connections to existing Grange Castle infrastructural services as well as fencing, signage, and an extension to the permitted service road as granted under Reg. Ref. SD16A/0214 to provide vehicular access as well as 3 car parking spaces to serve this development. Includes modifications to the permissions granted under SD16A/0214 and SD16A/0345 - revised landscaping to all frontages as well

as modifications to the attenuation pond. An Environmental Impact Statement (EIS) accompanied the application.

P.A.Reg.Ref.SD17A/0027: Permission was **granted** in April 2017 for an amendment to permission granted under SD16A/0345 to relocate the temporary gas powered generation plant from lands to the rear of the Takeda Ireland complex to the east of the site (if ever required to be moved). The generation plant was permitted for a temporary period while awaiting connection to upgraded utility network. An EIS was lodged with that application.

P.A.Reg.Ref.SD16A/0345: Permission granted in January 2017 for the construction of a new single storey data hall of 4,176sg.m as an extension to the immediate south of the data hall and single storey office (5,776sq.m) permitted under Reg. Ref. SD16A/0214 to create an overall development of 9,952sg.m. The new data hall includes plant at roof level, associated support services, 5 standby generators with associated flues (each 15m high) and services road. The development also includes a temporary gas powered generation plant within a walled yard containing 12 generator units with associated flues (each 15m high) to be located within and to the rear of the Takeda Ireland complex to the east side of the site. The development also includes a new two storey ESB substation (507sq.m) with associated transformer yard and single storey transformer building (157.5sq.m) to replace aforementioned temporary gas generation plant located to north of entrance into the site from Grange Castle. The development also includes ancillary site works, including attenuation pond, connections to existing Grange Castle infrastructural services as well as fencing, signage, and new vehicular access to the generator farm and sub-station off the permitted service road as granted under Reg. Ref. SD16A/0214. The development to be enclosed with landscaping to all frontages. An EIS was submitted with this application.

P.A.Reg.Ref.SD16A/0214: Permission **granted** in September 2016 for the construction of a single storey data centre (4,435sq.m) with plant at roof level, associated support services and 6 standby generators with associated flues (each

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15m high), and single storey office and loading bay (1,341sq.m) as well as an electricity sub-station (63sq.m) with a total floor area of 5,839sq.m. An EIS was submitted with this application.

P.A.Reg.Ref.SD16A/0176: Permission **granted** in August 2016 for enabling works on the site including the demolition of the existing storage and outbuildings (3,118sqm) and other temporary buildings on the site; and it's clearing as well as the diversion of existing services, including existing culvert, that traverses the site; and to level the site for future development.

5.0 Policy Context

5.1. South Dublin County Development Plan 2016-2022

- 5.1.1. Chapter 1 refers to Core Strategy, Chapter 4 refers to Economic Development and Tourism and Chapter 11 refers to Implementation.
- 5.1.2. Section 1.12.0 refers to Employment Lands. It states that the Economic Strategy for the County seeks to ensure that there is a sufficient supply of zoned and serviced lands at suitable locations to accommodate future demand for enterprise and employment investment across a diverse range of sectors.
- 5.1.3. Section 4.1.1 of Chapter 4 states with respect to Grange Castle:

The Citywest Business Campus and Grange Castle Business Park are modern business parks located in the west of the County with capacity to attract large scale industries of regional and national significance, due to the availability of large plot sizes, infrastructure, and corporate park style environments. These areas have attracted some of the largest industrial facilities in the County and house several blue-chip national and multi-national corporations. Significant investment has been made over the past two decades in infrastructure and services to support these economic areas.

ET1 Objective 3 states:

To support the continued development of economic clusters to the west of the County by prioritising compatible and complementary enterprise and

employment uses that would not undermine the established character of these areas.

ET3 Objective 2 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.

ET3 Objective 5 states:

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.

5.1.4. Table 11.10 of Chapter 11 lists uses that are permitted in principle, open for consideration and not permitted. Data centres are not specifically identified but science and technology based enterprises, warehousing, and industry are. Section 11.2.5 refers to Enterprise and Employment Areas. It states:

Enterprise and employment areas are characterised by a structure that is distinctly different to those of other urban areas. Most industrial estates are characterised by large functional buildings that are set back from the street, extensive areas of hard surfacing and security fences. A number of industrial estates, and in particular newer business parks, incorporate extensive areas of open space to create a more attractive parkland-like setting.

5.1.5. Section 11.7.6 refers to Waste Heat Recovery & Utilisation

Development proposals for new industrial and commercial developments and large extensions to existing premises, where the processes associated with the primary operation of the proposal generates significant waste heat, must:

- Carry out an Energy Analysis of the proposed development and identify the details of potential waste heat generated and suitability for waste heat recovery and utilisation on site and with adjoining sites, and
- Include heat recovery and re-use technology on site, and

• Include heat distribution infrastructure above or below ground (including future proofing of the building fabric to facilitate future connection, safeguarding any pip work route up to the boundary to adjoining sites).

or

• Provide evidence that heat recovery and distribution has been fully explored and is unfeasible.

5.2. Natural Heritage Designations

Name	Designation	Site Code	Distance
Rye Valley/Carton	SAC	001398	4.1km NW
Glenasmole Valley	SAC	001209	9.5km S
Wicklow Mountains	SAC	002122	11.1km S
Wicklow Mountains	SPA	004040	14.3km S

The following European sites are in the vicinity.

6.0 The Appeal

6.1. Grounds of Appeal

An appeal was lodged by a third party who lives adjoining the north eastern corner of the appeal site. In summary it states:

- Applicant has not included best practice in planning of this proposed data centre. This application and previous applications have been proposed on a piecemeal basis.
- Notes as part of Phase 1 of this application for permission for both an Electricity Substation and a Temporary Gas Generator compound. Queries the need for a temporary gas supply, and is unclear from where the electricity power supply is sourced.

- Data centres are now accepted to be contributing to climate change. Heat emitted, should have a value to the local area, which could benefit horticulture, aquaculture, local food production and district heating.
- Further Additional Information is required in relation to climate change and is accepted to contribute to global climate change.
- Refers to numerous articles in various publications where progress has occurred in other relevant fields including a project between Codema (Dublin's Energy Agency) and SDCC to develop the Tallaght District Heating Scheme.
- Cites European city examples in Stockholm and Barcelona in respect of energy reuse of data centres.
- Suggestions for energy reuse, including developing a masterplan for Clonburris as an end-node for waste heat reuse in district heating systems.
- Requests that the 'Precautionary Principle' be applied until such time that the applicant submits the requested additional information on the attenuation and other drainage matters to the satisfaction of SDCC.
- Attachments to the appeal include: extract from Chief Executives Response to concerns raised by the appellant in relation to the Strategic Flood Risk Assessment as part of Proposed Variation No. 1, of the SDCCDP and interview with Interxion's Chief Data Centre Technology and Engineering Officer, in relation to .

6.2. Applicant Response

Marston Planning Consultancy on behalf of the applicant responded to the appeal. In summary, it states:

- Appellant makes a number of inaccurate and unsubstantiated statements in the appeal, all of which have been dealt with in the application and the decision of the PA and in this response.
- *Piecemeal Development* Disputes claim of piecemeal approach to proposed development. Asserts that a best practice approach to the development has

been undertaken in terms of the content and assessments under the EIAR and mitigation proposed.

- Contends that the proposal does not require any amendments of previous applications other than the enabling application granted under Reg.Ref.SD19A/0004, the impacts of which were fully considered under the EIAR.
- Submit that the application has employed best practice in the planning and design of the site. Proposal has been developed on a phased basis in a manner that provides their clients with their specific requirements. This approach has also been taken to the overall planning and environmental impact assessment process, and has addressed both in terms of attenuation, flooding and environmental impact, the individual and cumulative impact of all applications, including the applicants data centre to the east of the R120.
- Appeal in context Notes the site area is 22.1ha which is located immediately to the west of the recently realigned R120. The eastern boundary of the site has been subject to a compulsory purchase order by SDCC to facilitate the Adamstown/Newcastle Road improvement Scheme. This has resulted in the removal of hedgerow for some 430m of the eastern boundary with length of hedgerow remaining of 100m to the south-east and 130m to the north-east along the realigned road.
- Archaeology Refer the Board to geophysical survey (Licence no.18R0257) carried out in January 2019 by Joanna Leigh of JM Leigh Surveys, which identified potential archaeological features. An archaeological test excavation following Archaeological works was conducted by AMS-CRDS between 29th January and 12th February 2019 under licence (Licence no.19E0038). Report attached to the additional information submission detailed the assessment of the excavations and the need for further excavation. These works have been completed under licence and all mitigation measures complied with the National Monuments Act 1930 (as amended) were all considered and addressed within the EIAR.
- Compliance with CDP Proposal is a permitted use under the EE zoning.
 The proposed landscape mitigation, attenuation and wildflower meadows are

acceptable in principle within the 'RU' zoning. Significant precedent for this use on other 'EE' zoned lands in the area. 'EE' zoning has been recently expanded to what is known as Grange Castle West to the west of the site under Variation no. 1 of the CDP. Notes Policy ET3 Objective 2, and Policy ET3 Objective 5 of the CDP.

- Refers the Board to positive decisions of the PA on adjacent and application site and reflects the carefully considered, designed and engineered proposals, including P.A.Reg.Ref.SD19A/0004 for enabling works, and on the adjoining EdgeConneX site to the east of the R120.
- Notes the nature and extent of permitted development and landscape boundary treatment and attenuation relative to the appellants property and northern boundary along the Grand Canal within 'RU' zoning.
- Power Supply There remains limited capacity available on the existing electrical utility network in the short-term, and therefore it is proposed to provide the electrical power for the development in the interim by locating a temporary gas generation plant on the lands to the immediate west of the proposed data halls. The gas generation plant will be constructed within an open compound with 10.15m high walls on all sides.
- The data centre element, which generated the request from the PA for an EIAR, of the proposal is entirely reliant on the operation and function of the temporary gas generation plant in the short term. Therefore, any future MV or HV connections were not cumulatively assessed under the EIAR given their unknown paths, and the unknown scale of works that may be required. Any future connections that require new works will be subject to where required new planning applications where the cumulative impact will be assessed. Contend that these works would likely be minor and not alter the conclusions of the EIAR and mitigations proposed. Request the Board to dismiss this element of the appeal as having no grounds.
- Zoning– The subject site did not form part of the rezoning lands under Variation no.1 of the SDCCDP as inferred by the applicant. Proposed data centre and temporary plant are to be located within lands solely zoned as 'EE'. Appellant is correct in stating that Variation no. 1 of the CDP extended

the 'EE' zoning significantly further to the west of the site to what is known as Grange Castle West.

- Flooding A Flood Risk Assessment (FRA) was undertaken and was considered within the EIAR. The FRA concluded that that the proposed development would not pose any flooding issues in relation to the site itself but also to any lands/properties that lie downstream, is located in Flood Zone C 'Low Probability' and is 'Less Vulnerable' to flooding.
- Heat Recovery Refer the Board to the Heat Recovery Feasibility Report by Ethos Engineering Limited submitted with the Further Information response to the PA. Arrangements can be made in relation to the incorporation and connection to any district heating scheme that may be forthcoming in the future in accordance with section 11.7.6 of the CDP. Report concludes that the installation of a heat network to recover waste heat is unfeasible, and that a potential connection is indicated in Appendix B of the Ethos report.
- Concludes that the appeal is without due grounds and note it does not request that the decision of the PA be overturned.

6.3. Planning Authority Response

None.

6.4. **Observations**

None.

6.5. Further Responses

None.

7.0 Assessment

7.1. Introduction

7.1.1. I draw the Board's attention to the fact that this appeal relates to a site where planning permission has previously been granted by the Council under

P.A.Reg.Ref.SD19A/0004 for enabling works. There is an existing EdgeConneX data hall facility immediately to the east of the R120. The subject application is for a new data hall facility as summarised in Section 2 above and is to be developed in two phases, on the western side of the R120.

7.1.2. The assessment below is carried out as follows: Section 8 of my report is a Planning Assessment of the case, Section 9 is the Environmental Impact Assessment and Section 10 is the Appropriate Assessment. 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

The main issues in this appeal are those raised in the grounds of appeal and I am satisfied that no other substantive issues arise. The issues can be are addressed under the following headings.

- Procedural Matters
- Principle and Consistency with Statutory Plans
- Attenuation/Drainage/Flooding
- Power Supply/Heat Recovery/Climate Change
- Other Matters

8.1. Procedural Matters

- 8.1.1. The appellant contends that the applications have been submitted by the applicant on a piecemeal basis which does not allow for best practice. I have had regard to the planning history and address as follows.
- 8.1.2. The planning history of the site and adjoining EdgeConneX facility is set out in detail in Section 4 of the Report. As the Board will note, there has been one previous application on the appeal site and a number of planning applications on the overall

landholding, primarily on the adjoining lands to the east of the R120 with respect to different phases of development.

- 8.1.3. In respect to the subject appeal site permission was granted in April 2019 under
 P.A.Reg.Ref.SD19A/0004 for enabling works to facilitate the future development of the site. The impacts of these enabling works are considered under the EIAR.
- 8.1.4. The first phase of development for a data hall on the adjoining EdgeConneX site was permitted in September 2016 under Reg. Ref. SD16A/0214. That was for a single storey data centre (4,435sq.m) and ancillary works. That planning application was accompanied by an EIS. A second planning application Reg. Ref. SD16A/0345 was granted for an extension of 4,176sq.m to the immediate south of the previously permitted data hall to create an overall development of 9,952sq.m. This extension application was also accompanied by an EIS. A third data hall application was permitted under Reg. Ref. SD17A/0141. The application for the third data hall was accompanied by an EIS.
- 8.1.5. The third data hall is the parent permission for the fourth application under SD17A/0392 ABP Ref.300752-18 which was granted for an extension of 125sqm to the north of the previously permitted single storey data hall from 1,515sqm to 1,640sqm. The application was accompanied by an EIAR.
- 8.1.6. As can be seen the planning applications for each data hall on the overall landholding were accompanied by an EIS or an EIAR. The applicant states that the individual and cumulative impact of each application was addressed within the relevant accompanying documentation.
- 8.1.7. I note that the earlier planning applications all met with positive decisions from the Planning Authority and the Board. I do not consider it unusual that there would be a number of planning applications for development on an overall site this is quite normal for industrial type development. I will address in further detail the adequacy of the EIAR below, however having regard to the assessment of cumulative impact, I am satisfied that the subject EIAR has adequately assessed the cumulative impact of the entire development.
- 8.1.8. In conclusion, I am of the view that the proposed development does not constitute piecemeal development and that there is no basis to this ground of appeal.

8.2. Principle and Consistency with Statutory Plans

- 8.2.1. The proposed development, comprising a data centre, offices, temporary gas powered generation plant and substation, was determined by the Planning Authority to be permitted in principle on lands zoned 'EE', and this is not disputed by either party.
- 8.2.2. I would concur that the principle of a data centre on lands zoned 'EE' Enterprise and Employment Areas – in the South Dublin County Development Plan 2016-2022 is acceptable under the Plan. The type of development proposed was envisaged within this land use zoning. In addition to being a plan-led development, the Development Plan itself was subject to a Strategic Environmental Assessment.
- 8.2.3. I also concur with the applicant that the proposed data centre development complies with Policy ET3 Objective 2, and Policy ET3 Objective 5 as they relate to Grange Castle Business Park as set out in the CDP.
- 8.2.4. In conclusion, I am satisfied that the proposed development is in accordance with the proper planning and sustainable development of the area.

8.3. Attenuation/Drainage/Flooding

- 8.3.1. The appellant has raised concern in relation to attenuation and drainage proposals in the context of potential flooding and submits that the 'Precautionary Principle' be applied until such time that the applicant submits the requested additional information on the attenuation and other drainage matters to the satisfaction of SDCC.
- 8.3.2. The applicant contends that the overall planning and environmental impact assessment process, has addressed issues in terms of attenuation, flooding and environmental impact, the individual and cumulative impact of all applications, including the applicants data centre to the east of the R120.
- 8.3.3. In this regard I note the report of the Water Services section of the PA and further information request in relation land drainage, surface water run-off and the potential risk to water quality. The response to which was considered acceptable, to the PA.

- 8.3.4. I note the area of the overall site, the capacity of the attenuation pond of 2,282m³ and its location in the north east corner of the appeal site. I also note that the appeal site is located in flood zone 'C' and is less vulnerable to flooding.
- 8.3.5. I have had regard to the Flood Risk Assessment (FRA) submitted with the application and accept the findings.
- 8.3.6. Based on the information on file, I am satisfied that the proposed development adequately provides for surface water attenuation and will not give rise to flooding. If the Board are of a mind to grant permission, a condition requiring the applicant to comply with the requirements of the planning authority for such works and services is appropriate to append.

8.4. Power Supply/Heat Recovery/Climate Change

- 8.4.1. The appellant queries the requirement for a temporary gas generation plant, and asserts that further additional information is required in relation to harnessing waste heat generated from the facility which otherwise is accepted to contribute to global climate change.
- 8.4.2. The applicant in response to the appeal notes the limited capacity available on the existing utility network in the short-term, and the proposed temporary gas generation plant is proposed as an interim measure. I accept this as a reasonable approach, in the context of the proposed development and the location of the site.
- 8.4.3. The applicant refers the Board to the Heat Recovery Feasibility Report by Ethos Engineering Limited submitted with application. The applicant has also stated in their response to the grounds of appeal that arrangements can be made in relation to the incorporation and connection to any district heating scheme that may be forthcoming in the future in accordance with section 11.7.6 of the CDP. They also note the Heat Recovery Feasibility Report concludes that the installation of a heat network to recover waste heat is unfeasible, and that a potential connection is indicated in Appendix B of the Ethos Report.
- 8.4.4. While I would contend that there certainly is merit in terms of the appellants case, I would also note that a proposal to provide a heat recovery system does not form part of the proposed development, and therefore is not before the Board on which to make a determination.

- 8.4.5. Condition no. 23 of the Notification of decision to grant permission, requires details of future proofing of the building fabric and safeguarding of pipe network routes up to the site boundaries, to facilitate future connection to district energy networks in the area to be submitted for agreement in writing by the PA. I consider this a reasonable approach and consistent with similar decisions for data centres in the vicinity of the appeal site. If the Board are of a mind to grant permission, a condition requiring the applicant to comply with the requirements of the planning authority for such works and services is appropriate to attach.
- 8.4.6. In conclusion, I am of the view that the proposed development is acceptable, and complies with the requirements of section 11.7.6 of the County Development Plan.

8.5. Other Matters

8.6. EPA Licence – I note that as part of the application an EPA-Industrial Emissions (IE) license will be applied for to facilitate the operation of Phase 2 of the permission. The Report of the EPA to the PA indicated no objection.

8.7. Conclusion

8.7.1. I am satisfied that the subject application has been assessed in terms of the cumulative impact as well as a standalone application. It is therefore, in accordance with the proper planning and sustainable development of the area.

9.0 Environmental Impact Assessment

9.1. Introduction

9.1.1. The Environmental Impact Assessment Report (EIAR) accompanying the application has been prepared by Marston Planning Consultancy and is presented in the grouped format in two bound documents. The Non-Technical Summary (NTS) is set out as a separate chapter which is required to provide a summary of the EIAR in non-technical language. The second bound document of the EIAR includes appendices where appropriate.

- 9.1.2. The EIAR was supplemented with an additional Archaeological Testing Report, EIAR Mitigation Measures Schedule, Lighting Plan Review and Noise Assessment Report, as part of the response to Further Information.
- 9.1.3. This application was submitted after 16th May 2017, the date for transposition of Directive 2014/52/EU amending the 2011 EIA Directive. The Directive was transposed into Irish legislation on 1st September 2018. In accordance with the advice on administrative provisions contained in Circular letter PL05/2018, it is proposed to apply the requirements of Directive 2014/52/EU herein.
- 9.1.4. I am satisfied that the information provided in the EIAR is sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment and has been prepared by competent experts. I am satisfied that the information contained in the EIAR complies with the provisions of Article 5 of the EU Directive 2014/52/EU amending Directive 2011/92/EU. I am satisfied that the information contained in the EIAR complies with Article 94 of the Planning and Development Regulations 2000, as amended, and the provisions of Article 5 of the EIA Directive 2014.
- 9.1.5. As is required under Article 3(1) of the amending Directive, the EIAR describes and assesses the direct and indirect significant effects of the project on the following factors: (a) population and human health; (b) biodiversity with particular attention to the species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air, and climate; (d) material assets, cultural heritage and the landscape. It also considers the interaction between the factors referred to in points (a) to (d). Article 3(2) includes a requirement that the expected effects derived from the vulnerability of the project to major accidents and/or disasters that are relevant to the project concerned are considered. This is addressed throughout the EIAR.
- 9.1.6. I have carried out an examination of the information presented by the applicant including the EIAR submitted 5th February 2019 and revised EIAR submitted 29th August 2019, and the submission made by the appellant has been set out at Section 6 of this report.

9.1.7. This EIA has had regard to the application documentation, including the EIAR the appeal lodged and responses to same, and the planning assessment completed in Section 8 above.

9.2. Alternatives

9.2.1. Article 5(1)(d) of the 2014 EIA Directive requires:

(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;

- Annex (IV) (Information for the EIAR) provides more detail on 'reasonable alternatives':
 2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.
- 9.2.2. The matter of alternatives is addressed in Chapter 4 of the EIAR. The chapter states that at the outset of the overall project, the applicant undertook a detailed assessment of a number of countries and following the decision to locate in Ireland, an assessment of alternative site, the site adjacent to the Grange Castle Business Park was chosen.
- 9.2.3. With respect to the alternative design, and layout it was apparent that a north south design for the data centre and all the services to the west provided the most appropriate design and layout.
- 9.2.4. With respect to processes it is stated that data server technology is essentially the same around the world.
- 9.2.5. Having regard to the sites EE and RU land use zoning, I am satisfied that the matter of the examination of alternatives has been satisfactorily addressed.

9.3. Likely Significant Direct and Indirect Effects

- 9.3.1. The likely significant direct and indirect effects of the development are considered under the following headings, after those set out in Article 3 of the EIA Directive 2014/52/EU:
 - Population and Human Health
 - Biodiversity
 - Lands and Soils including soils, geology, and hydrogeology
 - Water including flood risk assessment
 - Air including Noise and Vibration and Air Quality
 - Climate
 - Landscape and Visual Impact
 - Cultural Heritage
 - Material Assets to include traffic and transportation and waste management
 - Significant Interactions.

9.4. **Population and Human Health**

- 9.4.1. Population and Human Health is considered in Chapter 6 of the EIAR. The components considered include land use, population, employment, community facilities and amenity aspects. Further potential impacts on population and human health are also considered under Noise and Vibration, Air Quality and Climate and Landscape and Visual. Impacts on property are addressed under Material Assets.
- 9.4.2. With respect to land use, the proposed development is to be located in the south eastern corner of the overall site. The site is currently primarily in agricultural use, with an abandoned agricultural property and associated buildings located to the north. Some of the lands along the eastern boundary have been subject to works and being used as construction compounds under the R120 realignment. The majority of the site is on land zoned EE.
- 9.4.3. There is a single residential property that bounds the site to the north-east adjacent to the old canal bridge and lock. This house is located within the RU zoning and is

served by a rear garden that backs onto the canal. The house is located some 500m from the nearest data hall. The attenuation pond and mitigation landscaping proposed under this application will be located adjacent to the house in this corner of the site.

- 9.4.4. The residential properties to the immediate east of the subject site are primarily in a ribbon form of development and almost entirely located to the east side of the Adamstown /Newcastle Road (R120). There are three residential properties located to the east of the R120 opposite the main development part of the site being applied for under this application. There is further ribbon development to the north along the eastern side of this realigned road as well as either side of the road further south.
- 9.4.5. Grange Castle Business Park and surrounding lands is already home to several industrial facilities and comprises a number of different land uses. These include the permitted EdgeConneX data centre facility and associated offices on the lands to the east of the R120; two large biotechnology facility campuses Pfizer Ireland and Takeda Pharma Ireland Ltd. Microsoft's existing data centres are located within the business park to the south-east, and in close proximity to the site of the proposed development. They are currently constructing a much larger data centre campus to the immediate west of the Pfizer campus that will significantly extend the proposed use in this location.
- 9.4.6. With respect to population it is noted that the study area is located within the northeastern corner of the Newcastle Electoral Division and immediate west of the Clondalkin Dunawley Electoral Division which extends to the south of the Canal to Clondalkin to the west.
- 9.4.7. There has been significant population growth in the in the Newcastle Electoral Division of 13.6% between 2011-2016. This compares to the 4.4% increase in the population of the Clondalkin-Dunawley Electoral Division between 2011 and 2016. The significant change in population of the ED in which the application is proposed is not reflective of the immediately adjoining population trends but of the growth of Newcastle as a settlement over the last ten and more years.
- 9.4.8. It is noted that tourism is not a major industry on the immediate environs of the site. The primary area of amenity in the vicinity of the site is the Grand Canal, located to the north.

- 9.4.9. With respect to characteristics of the project which could impact on human health, it is noted that the application includes for a temporary gas generation plant and new vehicular access off the realigned R120. The development will be constructed across two distinct phases.
- 9.4.10. In terms of potential impact on the construction stage, the overall development will result in the creation of a large construction site in a single stand-alone site that will have a potential negative impact on the immediate local environment, amenity of local residents, amenity of the Grand Canal and workers within nearby facilities. The potential implementation of the new data halls will have a construction period of between 18-24 months. Other potential impacts are increased vehicular traffic, noise, dust generation and increased employment.
- 9.4.11. It is expected that the majority of the workforce will travel from existing places of residence to the construction site rather than reside in the immediate environs of the site. However, some local employment from within the wider local area is expected. The construction phase of the development will generate construction employment directly on site, that will be 250 at peak but will fluctuate during the construction process.
- 9.4.12. During the operation phase the development will help to sustain 40 jobs and further help to sustain jobs created by the EdgeConneX development to the east of the R120. The facility will also attract a significant level of day to day additional support services that will match the permanent employment levels and therefore have a positive impact on employers and employees in the area.
- 9.4.13. The increased planting and separation distances to the canal, as well as noise attenuation will ensure that the development will not have a negative impact on the amenity value of the canal and therefore not be detrimental to human health.
- 9.4.14. During construction, no mitigation measures are required beyond the normal landscaping, noise, and construction mitigation. No adverse impacts relating to employment are predicted during construction.
- 9.4.15. The 'do nothing' scenario has no significant effect on the land use.
- 9.4.16. No mitigation is proposed beyond the landscaping during operation as detailed in chapter 12. The development will result in the creation of 40 new jobs as well as a

similar level of employment for additional service activities and creation of some local jobs. This is considered a slight positive impact of the proposed development.

- 9.4.17. With respect to predicted impacts and the construction phase of the proposed development will have a short-term and temporary slight negative impact on the immediate local environment and the amenity of existing residents as a result of noise and disturbance. Community facilities will be used more regularly as a result of the temporary working population resident in the local area.
- 9.4.18. During operation, the proposal will facilitate the creation of a more intensive use for the lands and employment.
- 9.4.19. In the worst-case scenario, the failure of the proposal to proceed will not lead to any profound, irreversible, or life-threatening consequences.
- 9.4.20. I have considered all the documentation in relation to Population and Human Health. I am satisfied that any potential negative impacts would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of Population and Human Health.

9.5. **Biodiversity**

- 9.5.1. Biodiversity is considered in Chapter 7 of the EIAR. The applicants consultants previously completed ecological assessments of the site in November and December 2018, as well as ecological surveys in Grange Castle Business Park between 2013 and 2018.
- 9.5.2. The site is presently managed for agricultural, mostly arable crops with some grazed pasture. The northern section of the proposed site comprises derelict buildings including farmyard sheds, outbuildings, and a residential property, which are adjacent to the Grand Canal. Agricultural land extends to the south, west and immediate north, with Grange Castle Business Park occupying lands to the east.
- 9.5.3. There is overlap of the Grand Canal (pNHA) boundary with the very northern section of the proposed development site but is not hydrologically linked to the site. The closest European site is the Rye Water Valley/Carton SAC which is located c.4.1km

north west. The proposed development is located within the Liffey catchment. The nearest river in the proximity of the site is the Griffeen River which is located c.400m to the east of the site. The Griffeen River converges with the River Liffey c.4km downstream of the proposed development site.

- 9.5.4. Potential impacts during construction could arise from further site clearance, soil stripping and earthworks; surface water carrying silt or hydrocarbons into the surface water drainage network which ultimately discharges to the River Liffey via the River Griffeen; noise, dust, lighting, or other physical disturbance.
- 9.5.5. The proposed development will require the removal of two short stretches of hedgerow vegetation of 65m and 35m lengths, accounting for 4.1% of the total hedgerow/treelines within the proposed site. Drainage ditches which line the retrospective hedgerow sections to be removed will be culverted or filled in to accommodate the proposed development. The proposed development will only result in a small loss of this habitat throughout the site which is not considered to be significant.
- 9.5.6. Bats can be adversely affected by lighting. Potential impact on bat flight paths is significant at the local level. Trees, tree lines and the derelict residential property identified as Potential Roost Features (PRFs) and located in the north of the proposed site, will not be removed, or demolished as a result of the proposed development. Site clearance and disturbance could result in injury to frogs and newts. However, given the limited extent of habitat loss adverse impacts are likely to be within the significant at a local level.
- 9.5.7. Potential Impacts during operation may arise from lighting, noise, electromagnetic or air emissions. With respect to cumulative impacts there will be no significant cumulative impacts on nationally designated sites.
- 9.5.8. With respect to mitigation, standard construction mitigation measures are proposed. Hedgerows and treelines bordering the proposed development site will be retained and strengthen with additional planting. Additional planting will occur in the northern area of the site which has been designated as an ecological buffer with native species. An attenuation pond will be located in the north-east of the proposed development site which will serve as attenuation for surface waters generated by the proposed development prior to discharge to the existing surface water drainage

network along the R120. It has been designed with the aim of creating a native wetland habitat. Full wetland and terrestrial planting details are provided in the Landscaping Plan.

- 9.5.9. During construction care will be taken so as not to illuminate the eastern hedgerows, Grand Canal and Griffeen culvert with visible light to protect bats. Vegetation will not be removed between March and August wherever possible, to avoid impacts on nesting birds. Native trees and shrubs will be planted on site to provide new shelter for birds.
- 9.5.10. No significant residual impacts are predicted with the successful implementation of mitigation measures. Appropriate monitoring following construction will be carried out by an Ecologist to check that hedgerows and watercourses and Grand Canal habitats are not subject to direct illumination or light spill from permanent lighting and adjustments made where required.
- 9.5.11. I have considered all the documentation in relation to biodiversity. (Impact of the proposed development on European sites is also considered in the appropriate assessment below). I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore, satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of biodiversity.

9.6. Land, Soil, Geology and Hydrogeology

9.6.1. Chapter 8 refers to land, soil, geology, and hydrogeology. The site is located to the west of the Grange Castle Business Park and the Adamstown/Newcastle Road (R120), Clondalkin. The site is relatively flat. There is a fall of c.3-4.5m from the south-western boundary of the site north-east towards the canal. The site is within the catchment of the Griffeen River. Site specific information has been derived from geotechnical investigation drilling and trial tests undertaken in March 2018. The importance of the bedrock and soil features is rated as low quality significance or value on a local scale. Sampling of groundwater and soils did not indicate any evidence of contamination across the site.

- 9.6.2. Public watermains and sewer will serve the site. Interpretive cross sections have been finalised for the site with views appropriate to the site in terms of the geological and hydrogeological environment.
- 9.6.3. The potential impacts are addressed in both Chapter 8 and 9 of the EIAR. During construction accidental spillages which are not mitigated may result in contamination of soils and groundwater.
- 9.6.4. During operation it is noted that there will no direct discharges of contaminated water to groundwater or soils. There is a hardstanding area of 35,80m², of which 17,640m² is the roof area of the data centre. 13,620m² of this will form roads and car parking spaces with permeable paving for the car park. 550m² for the substation and 4,000m² as a standby general yard. The overall area of hardstand is small in relation to the area of the entire aquifer and will only have a very local effect on groundwater recharge in the area, i.e. no change in the overall groundwater flow regime.
- 9.6.5. During operation, the potential impact on the land, soils, geology, and hydrogeology is considered to have a long term imperceptible impact with a neutral impact on water quality. There will also be a local reduction in discharge to the aquifer due to the increase in hardstand on this and surrounding developed lands.
- 9.6.6. During construction standard mitigation measures are proposed. A project-specific Construction and Environmental Management Plan (CEMP) will be prepared and followed during the operational phase.
- 9.6.7. There are no likely significant effects on the geological or hydrogeological environment associated with the proposed development following the implementation of the mitigation measures. The impact is considered to have a long-term imperceptible significance.
- 9.6.8. The main vulnerability arising is the removal of protective topsoil during construction which may provide a more direct pathway to the bedrock from accidental leaks. During operation capping of the site will provide additional protection.
- 9.6.9. I have considered all the written submissions made in respect of land, soil, geology, and hydrogeology. I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme,

the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of land, soil, geology, and hydrogeology.

9.7. Hydrology

- 9.7.1. Hydrology is addressed in Chapter 9, and I have also had particular regard to Chapter 8 of the EIAR, and my planning assessment above (section 8.3). It is stated that the Griffeen River (stream) is located 330m east of the site and flows in a northerly direction where it is culverted beneath the Grand Canal and from there it flows through Lucan. A section of the Griffeen River was realigned during the construction of the Business Park and now runs alongside the local access road in a northerly direction to the east of the Takeda facility.
- 9.7.2. The Lucan stream is located 310m to the west of the proposed site and runs in a northerly direction where it enters the River Liffey north of Lucan Village and to the west of the Griffeen outfall. The Grand Canal runs in an east to west direction along the northern boundary of the development and is classified as a proposed National Heritage Area (pNHA). There is no hydrological connection between the site and the Grand Canal.
- 9.7.3. From a review of the EPA Maps Database the status of the Griffeen River at the nearest monitoring station is poor but no subsequent monitoring has taken place since 2004. The most up to date status of the River Liffey at the nearest point is good.
- 9.7.4. As noted above, water and waste are served by mains. The Flood Risk Assessment identifies the development site as within Flood Zone C and 'less vulnerable'.
- 9.7.5. Potential impacts during construction include increased run-off and sediment loading and contamination of local water courses. During operation potential impacts include increased surface water run-off, contamination of surface water, foul and water supply. The Do Nothing scenario will result in no effect.
- 9.7.6. Mitigation includes best practice construction measures. During operation, the drainage system has been designed appropriately including the attenuation pond which is to be located to the north of the site.

- 9.7.7. Predicted impacts are considered negligible during both construction and operation.Worst case scenario is from potential spillages onsite during construction. TheGriffeen River is not used for water supply purposes but would require remediation.
- 9.7.8. I have considered all the written submissions made in respect of hydrology, in addition to those specifically identified in this section of the report. I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore, satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of hydrology.

9.8. Noise and Vibration

- 9.8.1. Noise and vibration are addressed in Chapter 10 of the EIAR. Noise surveys have been undertaken at locations reflective of noise sensitive locations. The primary sources of noise during construction of the overall development will be from excavation and erection of new buildings. During operation it will be building services noise, emergency site operations and additional vehicular traffic.
- 9.8.2. In the absence of Irish guidance regard has been had to British Standards relating to noise and vibration during construction. Information is provided relating to values which, if exceeded, signify a potential effect at the facades of residential receptors. It is noted that in exceptional circumstances there may be a requirement that certain construction works are carried out during the night time.
- 9.8.3. Potential impact during operation is addressed. If noise levels are less than 50dBA at night and 55dBA during the day the key objective is to avoid, prevent and reduce the harmful effects due to long term exposure to noise. EPA noise criteria would require 45dBA at night.
- 9.8.4. Noise emissions will be from building service noise (i.e. chillers) and emergency site operations (i.e. generators). A number of generators are proposed for emergencies when grid power supplies fail.
- 9.8.5. During operation it is proposed that the majority of noise emissions at the nearby receptors will not exceed 55dBL_{ArT} (15 mins) during daytime, 50dBL_{ArT} (15 mins) evening and 45dBL_{Aeq} (15 mins) at night. A number of locations marginally exceed

the 55dBL_{Aeq} where all emergency generators across the site are operating, however with consideration of the likelihood of regular grid failure and the marginal nature of the predicted exceedance, it is considered that the overall impact of noise emissions during grid failure is moderate.

- 9.8.6. In order to mitigate the likely noise impact a schedule of noise control measures has been formulated for both construction and operational phases. During construction various mitigation measures will be applied as well as a variety of practical noise control measures. During operation, noise from external plant will be minimised by selecting plant items that do not exceed the noise emission values previously presented.
- 9.8.7. During construction it is predicted that there will be some impact on nearby noise sensitive properties due to noise emissions from site traffic and other activities. Appropriate mitigation measures will ensure that noise is kept to a minimum. Any impact will be temporary and short term in nature. During operation, measures will be employed to ensure that any noise emissions from the development will comply with acceptable limits at any nearby noise sensitive locations.
- 9.8.8. With respect to cumulative effects the potential noise emissions from the proposed development and adjacent facilities both existing and permitted were considered, as well as ambient noise levels from road traffic on the surrounding network. Predicted cumulative plant noise emissions are therefore within the daytime, evening, and night-time limit values.
- 9.8.9. In a Do Nothing scenario there would be no change. Background noise may increase over time.
- 9.8.10. I have considered all the documentation in respect of noise and vibration. I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore, satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of noise and vibration.

9.9. Air Quality and Climate

- 9.9.1. Air Quality and Climate are addressed in Chapter 11 of the EIAR. Air dispersion modelling was carried out using AERMOD to assess the concentrations of Nitrogen Dioxide (NO₂) and the consequent impact on human health. Two scenarios were assessed in the EIAR in order to quantify the impact from the site (including emergency standby diesel generators) as well as the predicted impact from the cumulative worst-case scenario which quantified the impact on ambient NO₂ concentrations from the proposed development, as well as the neighbouring developments located in the immediate vicinity (EdgeConneX, Takeda and Pfizer sites).
- 9.9.2. Only 24 of the 36 generators associated with the stand by generators will be in operation until such time as the temporary generator farm is decommissioned and the development is fully connected to the national grid. The proposed development on the connection to the national grid will see the removal of the temporary gas generation compound and the proposed development will have 4 data halls with 32 standby diesel generators. The diesel generator flues will all have a height of 15m and the temporary gas generator flues will have a height of 17m.
- 9.9.3. Modelling for NO₂ was undertaken in detail. Continuous operation of the temporary gas generation plant was assumed.
- 9.9.4. The potential impacts during construction involve dust emissions and greenhouse gas emissions from construction traffic. During operation, the primary sources of air and climatic emissions involve the use of the emergency diesel generators are deemed long term.
- 9.9.5. Mitigation measures have been formulated for both phases. During construction, standard construction mitigation measures are proposed in order to ensure no dust nuisance occurs. During operation stack heights have been designed to ensure that an adequate height will aid dispersion of the plume. The air impact assessment has demonstrated that mitigation measures are not required. Emissions of greenhouse gases are not expected to be significant due to the infrequent testing and emergency operation of the generators.

- 9.9.6. During construction, the predicted fugitive emissions of dust will be short term and insignificant and pose no nuisance at nearby receptors.
- 9.9.7. During the operational phase, the NO₂ modelling includes emissions from Takeda and Pfizer and of the neighbouring EdgeConneX site. With respect to cumulative impacts the results indicate that the ambient ground level concentrations are below the relevant air quality standards for NO₂.
- 9.9.8. In terms of climatic impacts, on-site emissions of greenhouse gases from electricity to operate the facility are not expected to be significant. The results of the air dispersion study show that the residual impacts of the proposed development on air quality and climate will insignificant.
- 9.9.9. I have considered all the documentation in respect of air quality and climate. I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore, satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of air quality and climate.

9.10. Landscape and Visual Assessment

- 9.10.1. Landscape and Visual Assessment is considered in Chapter 12 of the EIAR. It is noted that the site is located on the edge of two landscape types- the landscape to the east and south east is characterised by large built developments and new tree lined roads. Between these built developments are large flat green areas that are used for agriculture and the landscape is still of a traditional field and hedgerow boundary typology. To the west and south the landscape is that of a traditional agricultural landscape with medium to large field patterns. The landscape to the north beyond the canal is that of the urban fringe characterised by the transition from rural landscape to a built urban environment.
- 9.10.2. The site is most visually prominent from the R120 to the east of the lands where the road almost abuts the site boundary. It is also noted that from this section of road the site is open to views as there is currently no vegetation due to recent road works. The Dublin Mountains are partially visible from this location and form part of the ridgeline of the views to the south.

- 9.10.3. The site is also visible from the Green Route of the Grand Canal Way at the lock gate and towpath directly to the north of the lands on both sides of the canal. The hedgerows, trees, and buildings on the most northern section of the lands form part of this view.
- 9.10.4. It is also noted that the site and vegetation are visible from the residences along the R120 on the eastern side of the road.
- 9.10.5. It is stated that the site is not visible from locations in the wider landscape due to the flat nature of the topography, the scale of the local built development and the significant number of trees in the area. There are no protected trees or tree groups within the lands. There are no views or prospects that include the subject lands. The Landscape Character Assessment of the South Dublin County designates the lands as being in the 'Newcastle Lowlands Character Area'. This is listed as having a medium sensitivity, due to the vulnerability of the agricultural landscape to urban pressures. The subject lands are located in the east of the 'Limestone Farmland' character type separated from the 'Urban 'Urban Fringe' character type by the R120.
- 9.10.6. There are no specific landscape objectives that apply to the subject lands, while there are a number of objectives that apply to the general environs of the site most notably to the Grand Canal (Proposed Natural Heritage Area).
- 9.10.7. During construction there is the potential to impact visually due to the introduction of new structures, access roads, machinery etc. and the change in ground levels and earthworks.
- 9.10.8. During operation, there is the potential for visual impacts due to the new buildings and built structures, a change in character and use, visual impact of landscape proposals and impact due to trees and vegetation.
- 9.10.9. The mitigation measures have influenced the design and layout of the scheme. Earth modelling, large tree planting, and creation of a large wetland and woodland habitat in a buffer zone between the canal and the built development is proposed to provide a high level of visual screening. The colour palette chosen for the building aims to further reduce the visual impact.
- 9.10.10. Predicted impact during construction, through the conversion of part of the site from agricultural field landscape to a building site, is likely to be perceived in the

short term as a negative 'loss' of landscape character, particularly by sections of the local community closest to it. It would be considered moderate in magnitude and short term in its duration.

- 9.10.11. During operation, the landscape measures proposed will give rise to a noticeable change in the landscape character particularly in the southern section of the site. The development will not have a negative on any of the more sensitive aspects of the landscape character, hedgerows, trees, and field boundaries near the canal. In the long-term as the habitats establish, the impact of change in the landscape is reduced and the impact on the landscape character of this area would be considered positive in nature. The site is zoned for this type of development and there have been recent built development of a larger scale in the local vicinity. In this context the proposal would be considered a continuation of the existing trend.
- 9.10.12. A Visual Impact Assessment including photomontages of the 'before' and after' are provided. The images include views of the data hall from 6 different viewpoints. The existing EdgeConneX data hall to the east of the R120 is also included. I have reviewed all the photomontages and visited the site and am satisfied that they are representative of the likely views and impact of the proposed development.
- 9.10.13. In the 'Do Nothing' scenario the lands would continue to be left in a 'transition state'.
- 9.10.14. I have considered all the documentation in respect of landscape and visual impact. I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of landscape and visual impact.

9.11. Traffic and Transport

9.11.1. Traffic and Transport is addressed in Chapter 13 of the EIAR. The methodology adopted is referred to which refers to the overall development of the campus. It is noted that there is an access into the site to the abandoned agricultural complex,

and a separate access close to the Grand Canal. The area including the Grange Castle Business Park is accessed from the R136 Grange Castle Road to the east.

- 9.11.2. The Adamstown/Newcastle Road (R120) and Nangor Road (R134) Improvement Scheme is noted. This involves the re-alignment of the existing Adamstown (R120) and Nangor (R134) Regional Roads (ongoing), immediately adjacent to Grange Castle Business Park. The upgrade works included a new bridge over the Grand Canal and will include the provision of pedestrian footpaths and cyclepaths either side of the R120 on completion. Baseline traffic data is provided.
- 9.11.3. Trip generation and traffic distribution is estimated for the full development. The potential impact for of the trip generation, traffic impact, car parking, walking, and cycling infrastructure and construction traffic are also considered.
- 9.11.4. Mitigation includes the preparation of a Construction Management Plan (CMP) during construction. During operation, the Business Park offers suitable travel by sustainable modes which employees will be encouraged to avail of.
- 9.11.5. The predicted impact of the general workforce during construction of 200-250 is considered. It is considered that construction will have a negligible impact on pedestrian and cycle infrastructure. During operation it is considered that the proposal would have an impact of approx. 4.76% of the estimated AADT for the upgraded Adamstown/Newcastle Road (R120). It is not considered necessary to undertake any further junction assessment.
- 9.11.6. During operation 39 car parking spaces are proposed to cater for the predicted employees and visitors.
- 9.11.7. Mitigation includes encouraging employees to avail of sustainable modes of transport during operation.
- 9.11.8. I have considered all the documentation in relation to traffic and transport. I am satisfied that potential impacts have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of traffic and transport.

9.12. Cultural Heritage

- 9.12.1. Cultural Heritage is addressed in Chapter 14 of the EIAR. The methodology used extends to the full site. Desk based, site based and geophysical surveys of the site were carried out. Archaeological test excavations were undertaken, and an Archaeology Report was prepared and submitted by AMS-CRDS by way of further information.
- 9.12.2. The receiving environment extends over a c. 20ha area, and is contained within six fields, which have been subject to intensive farming practices. It is characterised by archaeological monuments dating to the medieval period. Excavations have uncovered a number of prehistoric sites.
- 9.12.3. Potential impacts on cultural heritage during construction include ground disturbance associated with the construction of the data halls, attenuation pond, water tower, ESB substation, temporary gas powered generation plant and ancillary infrastructure including internal vehicular access parking and landscaping. The operational phase will have no impact on archaeological and cultural heritage. Neither will the Donothing scenario.
- 9.12.4. Mitigation measures include archaeological testing where ground disturbance works are planned in consultation with the National Monuments Service of the Department of Culture, Heritage, and the Gaeltacht. No remedial measures are required during operation.
- 9.12.5. It is possible that ground disturbance may impact on previously unrecorded subsurface features. No predicted impacts will occur during the operational phase.
- 9.12.6. I have considered all the documentation in respect of cultural heritage. I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of cultural heritage.

9.13. Waste Management

- 9.13.1. Waste Management is addressed in Chapter 15 of the EIAR. It is not anticipated that the facility will generate significant quantities of waste. The strategic targets for waste management are set out in the Eastern-Midlands Region Waste Management Plan 2015-2021. The South Dublin County Development Plan contains several objectives in relation to waste management.
- 9.13.2. A detailed Construction and Demolition Waste Management Plan (C&D WMP) has been prepared and is included as Appendix I. Excavated material will be reused on site for infilling and landscaping where possible.
- 9.13.3. During operations, the proposal will give rise to a variety of waste streams. The majority of waste will be generated from packaging for equipment deliveries to the facility which is likely to be at its peak in the early months of operation.
- 9.13.4. Mitigation include the implementation of the C&D WMP and correct management of waste during operation.
- 9.13.5. During construction phase the predicted impact is expected to be short-term, neutral, and imperceptible. During operation it will be long term, neutral and imperceptible.
- 9.13.6. Worst case scenario in construction and operation would represent poor waste storage and segregation and an increased volume of waste being sent for disposal at landfill.
- 9.13.7. I have considered all the documentation in respect of waste management. I am satisfied that any potential impact would be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of waste management.

9.14. Other Material Assets

9.14.1. Assessment of Traffic and Waste have been addressed in section 9.11 and 9.13 above. Other material assets are generally considered to include: Ownership and access, Local settlement, Property prices, Electricity supply, Transport, Water supply and sewerage, Waste, Telecommunications, Agriculture, Tourism and Natural resources. Several of these have already been addressed in the EIAR.

- 9.14.2. Supply of telecommunications, water and sewerage infrastructure are sufficient to serve the development. It is proposed to construct a temporary gas generator plant as a result of the limited capacity available on the electrical utility network in the area. The temporary plant will consist of a walled yard and 15 generators (12 operating and 3 standby) will be constructed and in use following completion of Phase 1. Phase 2 of the gas generation plant will consist of 4 no. additional generators (all operating).
- 9.14.3. All these are gas fired engines that result in lower emissions than the comparable diesel fired alternative. The temporary plant will operate on a continual basis until such time as the load demand can be accommodated on the electrical utility grid, which is predicted to be sometime in 2022.
- 9.14.4. The gas connection feeding the generator farm will be provided at medium pressure by Gas Networks Ireland and their high pressure transmission network with a pressure reducing skid located on the site for the lifetime of the plant. This will be decommissioned when the plant is replaced by a permanent utility connection.
- 9.14.5. Mitigation measures proposed include the establishment of an interface between all the relevant service providers within the local area during the construction phase of the development.
- 9.14.6. The proposal will not have any significant impact on material assets including utilities and natural resources. The impact can be classed as long terms and negligible with respect to material assets. While I consider that for Data Centres the power requirement is significant, the site has been designed for, and the infrastructure developed (or in the process of being developed) for an industrial development of this nature.
- 9.14.7. I have considered all the documentation in respect of material assets. I am satisfied that any potential impact has been appropriately addressed in terms of the application. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts in terms of material assets.

9.15. Interrelations between the factors

- 9.15.1. I have also considered the interrelationships between factors and whether these might as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis.
- 9.15.2. In my assessment of each environmental topic I have considered the likelihood of significant effects arising as a consequence of interrelationships between factors. Most interactions e.g. the impact of noise and air quality on the population and human health are addressed under individual topic headings. Given the generally modest impacts which are predicted to occur having regard to the nature of the proposed development, mitigation measures, or as a consequence of proposed conditions, I do not foresee any likelihood of any of these interrelationships giving rise to significant effects on the environment.
- 9.15.3. In conclusion, I am satisfied that there are no such effects and, therefore, nothing to prevent the granting of permission on the grounds of interaction between factors.

9.16. Reasoned Conclusions of Significant Effects

- 9.16.1. Having regard to the examination of the environmental information contained above, and in particular to the EIAR and supplementary information provided by the applicant at Further Information stage, prescribed bodies and appellant 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 listed below.
- 9.16.2. It is firstly of relevance to note that a Construction Environmental Management Plan (CEMP) is the overarching general mitigation embedded in the project design and delivery for the construction stage. In addition, plans relating to Landscaping, Tree Protection, Lighting, Traffic Management and Noise are also proposed. The remaining impacts, both positive and negative are:

• Landscape and Visual Impact: Localised significant visual impact from intermittent sections of the realigned R120 Adamstown Road to the east, the Green Route of the Grand Canal Way at the lock gate and towpath directly to the north of the site, and from adjacent residential properties to the east, of the development will not be avoided, mitigated, or otherwise addressed by means of condition. Mitigation

measures proposed include earth modelling and tree planting which will provide a high level of visual screening, and the colour palette chosen for the building will further reduce the visual impact.

This has to be considered in the context of a highly moderated working landscape which is relatively robust. Furthermore, the visual character of the wider landscape has changed and will change further as a consequence of the existing data centre developments, within the Business Park.

Notwithstanding the conclusion reached in respect of the inability of the proposed measures to fully mitigate the localised visual impact from the adjoining residential properties, it is considered that the environmental effects would not justify a refusal of planning permission having regard to the overall benefits of the proposed development and in particular having regard to the context which is that of a highly moderated working landscape.

• **Population and Human Health**: The proposed development will potentially extend the construction period which could give rise to increased vehicular traffic, noise, and dust generation. It is not considered that the proposal will have a significant impact on the numbers employed, rather it will prolong employment. The potential impact will be mitigated by the proposed landscaping, as well as the production of a detailed construction management plan to mitigate noise and dust during construction which can be subject to a condition.

• Land, Soil, Geology and Hydrogeology: The main vulnerability arising is the removal of protective topsoil during construction which may provide a more direct pathway to the bedrock from accidental leaks. This can be mitigated by the development of a Construction Environmental Management Plan.

I am therefore, satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

10.0 Appropriate Assessment

10.1.1. An Appropriate Assessment (AA) screening report prepared by Scott Cawley has been submitted by the applicant.

- 10.1.2. I follow the staged approach to screening for appropriate assessment as recommended in both EU Guidance and by the Department of Environment, Heritage and Local Government:-
 - 1. Description of the plan or project and local site or plan area characteristics.

2. Identification of relevant Natura 2000 sites and compilation of information on their qualifying interests and conservation objectives.

3. Assessment of likely significant effects-direct, indirect, and cumulative, undertaken on the basis of available information.

4. Screening statement with conclusions.

- 10.2. Project Description and Site Characteristics
- 10.2.1. The proposed development is as described in the report above and in the application submissions as revised.
- 10.2.2. Relevant Natura 2000 Sites, Qualifying Interests and Conservation Objectives:

Four Natura Sites are identified as being within a 15km radius of the site. The sites are:

Site Code, Site Name and Designation	Approx. distance from the site	Conservation Objectives; Qualifying Habitats and Species	Relevant source- pathway-receptor links between proposed development and European site?
001398 Rye Valley/Carton SAC	c.4.1km north-west	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. Petrifying springs with Tufa formation; Narrow-mouthed Whorl snail; Desmoulin's	This SAC lies c.4km upstream of the site. It is within a separate river sub basin to the development. Therefore it is deemed very unlikely that the proposal would impact on the SAC in anyway.
001209 Glenasmole Valley SAC	c.9.5km south	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. Semi-natural dry grasslands and scrublans facies on calcareous substrates; Molinia meadows on calcareous, peaty, or clayey-silt-laden	No, Due to distance and the absence of a hydrological link or any other linkage between the site and the SAC.

		soils; Petrifying springs with Tufa formation	
002122 Wicklow Mountains SAC	11.1km south	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) Natural dystrophic lakes and ponds Northern Atlantic wet heaths with Erica tetralix European dry heaths Alpine and Boreal heaths Calaminarian grasslands of the Violetalia calaminariae Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) Blanket bogs (* if active bog) Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) Calcareous rocky slopes with chasmophytic vegetation Siliceous rocky slopes with chasmophytic vegetation Old sessile oak woods with Ilex and Blechnum in the British Isles	No, Due to distance and the absence of a hydrological link or any other linkage between the site and the SAC.
004040 Wicklow Mountains SPA	14.3km south	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. Merlin (Falco columbarius) Peregrine (Falco peregrinus)	No, Due to distance and the absence of a hydrological link or any other linkage between the site and the SAC.

10.3. Assessment of likely Effects

10.3.1. The applicant's Screening Report identifies if there are possible impacts on the European sites based on the source-pathway-receptor approach. Direct effects are ruled out because the site is substantially removed from all the Natura 2000 sites in the area and I consider this to be reasonable given the distances involved. There is no hydrological or other links identified.

- 10.3.2. The proposed development will not have any significant impacts, direct or indirect, on the qualifying species or habitats of the Natura 2000 sites listed above.
- 10.3.3. In terms of cumulative impacts, the site is located on appropriately zoned lands and, taken in the context with existing development, is not considered to result in likely significant cumulative effects.
 - 10.4. Screening Statement and Conclusions
- 10.4.1. In conclusion having regard to the foregoing, it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually and in combination with other plans or projects would not be likely to have a significant effect on any European Site and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

11.0 **Recommendation**

11.1.1. I recommend that planning permission should be **granted** subject to conditions, for the reasons and considerations as set out below.

12.0 Reasons and Considerations

Having regard to the following:

- (a) the policies and objectives in the South Dublin County Development Plan 2016 to 2022 including the zoning objectives for the site,
- (b) the nature, scale and design of the proposed development,
- (c) the pattern of existing and permitted development in the area,
- (d) the established nature of Grange Castle Business Park, and
- (e) the submissions received with the application and the appeal,

it is considered that subject to compliance with the conditions set out below, the proposed development would be in accordance with the provisions of the South

Dublin County Development Plan 2016 – 2022, would not seriously injure the residential amenities of property in the vicinity or the visual amenities of the area, would not be prejudicial to public health and 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.

Appropriate Assessment

The Board considered the Screening Report for Appropriate Assessment and all other relevant submissions and carried out an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European Sites. The Board noted that the proposed development is not directly connected with or necessary for the management of a European Site and considered the nature, scale, and location of the proposed development, as well as the report of the Inspector. In completing the appropriate assessment screening, the Board adopted the report of the Inspector and concluded that, by itself or in combination with other plans or projects in the vicinity, the proposed development would not be likely to have a significant effect on any European Site in view of the sites' conservation objectives and that a Stage 2 appropriate assessment is not, therefore, required.

Environmental Impact Assessment

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

- the nature, scale, and extent of the proposed development
- the Environmental Impact Assessment Report and associated documentation submitted in support of the application
- the submissions from the Planning Authority, the appellant, and the prescribed bodies in the course of the application; and
- the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development, and identifies and describes adequately the direct, indirect, secondary, and cumulative effects of the proposed development on the environment.

The Board agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submission made in the course of the application and appeal.

The Board considered, and agreed with the Inspectors reasoned conclusions, that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated, as follows:

• Landscape and Visual Impact: Localised significant visual impact from intermittent sections of the realigned R120 Adamstown Road to the east, the Green Route of the Grand Canal Way at the lock gate and towpath directly to the north of the site, and from adjacent residential properties to the east, of the development will not be avoided, mitigated, or otherwise addressed by means of condition. Mitigation measures proposed include earth modelling and tree planting which will provide a high level of visual screening, and the colour palette chosen for the building will further reduce the visual impact.

This has to be considered in the context of a highly moderated working landscape which is relatively robust. Furthermore, the visual character of the wider landscape has changed and will change further as a consequence of the existing data centre developments, within the Business Park.

Notwithstanding the conclusion reached in respect of the inability of the proposed measures to fully mitigate the localised visual impact from the adjoining residential properties, it is considered that the environmental effects would not justify a refusal of planning permission having regard to the overall benefits of the proposed development and in particular having regard to the context which is that of a highly moderated working landscape.

• **Population and Human Health**: The proposed development will potentially extend the construction period which could give rise to increased vehicular traffic, noise, and dust generation. It is not considered that the proposal will have a significant impact on the numbers employed, rather it will prolong employment. The

potential impact will be mitigated by the proposed landscaping, as well as the production of a detailed construction management plan to mitigate noise and dust during construction which can be subject to a condition.

• Land, Soil, Geology and Hydrogeology: The main vulnerability arising is the removal of protective topsoil during construction which may provide a more direct pathway to the bedrock from accidental leaks. This can be mitigated by the development of a Construction Environmental Management Plan.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures referred to above, and other measures set out in the Environmental Impact Assessment Report and, subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

Proper Planning and Sustainable Development

It is considered that, subject to compliance with the conditions set out below:

- the proposed development is consistent with national, regional, and local planning policy, notably the South Dublin County Development Plan 2016 – 2022,
- the proposed development is situated in an established Business Park and is located at an acceptable remove from nearby sensitive receptors. The proposed development will not, therefore, have any significant adverse impact on the residential amenities of adjacent properties.
- c. the proposed development will not therefore give rise to significant visual or landscape effects or indirect effects on heritage and/or tourism, and the proposed development includes significant landscaping and planting.

d. traffic arising from the development will result in a modest increase in traffic on the local road network, relative to existing levels, and, subject to compliance with conditions in respect of the management of construction and operational traffic, would be acceptable, therefore, in terms of traffic safety and convenience.

The Board concluded that the proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

13.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 29th day of August, 2019, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. (a) The mitigation measures and commitments identified in the Environmental Impact Assessment Report, and other plans and particulars submitted with the planning application, and as identified in the schedule of mitigation measures identified in the Environmental Impact Assessment Report, to the planning authority on the 29th day of August, 2019, shall be implemented in full by the developer, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity and protection of the environment during the construction and operational phases of the proposed development.

3. Prior to commencement of development, full details, including drawings and samples, of:

(a) all proposed external finishes to the proposed buildings, including to the flue stacks,

(b) all proposed signage to serve the development, and

(c) all site fencing (site fencing shall be coloured in a dark green colour only),

shall be submitted to, and agreed in writing with, the planning authority. **Reason:** In the interest of visual amenity.

4. Notwithstanding the provisions of the Planning and Development Regulations 2001, or any statutory provision amending or replacing them, no additional development, other than that shown on the submitted drawings, shall take place above roof parapet level including lift motor enclosures, air handling equipment, storage tanks, ducts or other external plant, telecommunication aerials, antennae or equipment, unless authorised by a further grant of planning permission.

Reason: In the interest of visual amenity, and to allow the planning authority to assess any such further development through the statutory planning process.

- All service cables associated with the proposed development (such as electrical and communication cables) shall be located underground.
 Reason: In the interest of visual amenity.
- Prior to commencement of development, the developer shall submit to, and agree in writing with, the planning authority –

(a) details and drawings of the entrances from the site to the public roads, which shall comply with the Design Manual for Urban Roads and Streets issued by the Department of Transport, Tourism and Sport in 2013,

(b) details of the location, type, design, and construction of the proposed gated access points in the security fence line.

Reason: In the interests of pedestrian and cyclist permeability and safety across the proposed entrances to the site, and of traffic safety.

7. Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works.

Reason: To ensure adequate servicing of the development, and to prevent pollution.

 (a) All foul sewage and soiled water shall be discharged to the public foul sewer.

(b) Only clean, uncontaminated storm water shall be discharged to the surface water drainage system.

Reason: In the interest of public health.

9. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures, dust minimisation measures and off-site disposal of construction/demolition waste.

Reason: In the interests of public safety and residential amenity.

10. The developer shall implement the recommendations of the archaeological report prepared by AMS-CRDS submitted as further information received by the planning authority on the 29th August 2019 relating to further test trenches. The following shall apply:

(a) the developer shall employ a qualified Archaeologist, licensed to carry out archaeological monitoring of all sub-surface works carried out within the proposed development site. This will include the archaeological monitoring of the removal of topsoil, the excavation of trench for foundations, services, access roadway, associated with the development,
(b) the Archaeologist shall prepare and submit a report, describing the result of the archaeological monitoring to the planning authority and the Department of Culture, Heritage and the Gaeltacht within six weeks following completion of archaeological monitoring, and

(c) should archaeological material be discovered during the course of the archaeological monitoring, the developer shall facilitate the archaeologist in recording the material. The developer shall also be prepared to be advised by the Department with regard to the appropriate course of action, should arkeological material be discovered.

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.

11. Prior to any disturbance, or any pre-demolition works commencing on the disused farm buildings, a pre-demolition survey for bats shall be undertaken by an ecologist with appropriate qualifications, training and experience in bat surveys. The bat survey shall be undertaken in accordance with the provisions of the 'Bat Mitigation Guidelines for Ireland – Irish Wildlife Manuals Number 25', issued by the Department of the Environment, Heritage and Local Government in 2006 or any document that might supersede it.

Should bats be found, the developer shall make contact with the National Parks and Wildlife Service and seek advice regarding the necessity of a bat derogation licence before works to demolish can proceed. Similarly, prior to any removal of trees or hedgerows, a bat expert shall be on site to address any bats inadvertently found during felling.

Reason: To monitor and protect bat species in the area.

12. A project ecologist with the necessary expertise in habitat management and bat protection issues shall be engaged to oversee the protection of biodiversity both during construction and for a monitoring period of five years following the completion of the proposed development. Annual reports shall be submitted to the planning authority.

Reason: In the interest of habitat and bat protection.

 (a) The landscaping proposals as submitted to the planning authority as on the 5th day of February, 2019 shall be carried out within the first planting season following substantial completion of external construction works. (b) All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of residential and visual amenity.

 Having regard to the proximity to Casement Aerodrome, operation of cranes shall be co-ordinated with Air Corps Traffic Services, no later than 28 days before use.

Reason: In order to ensure the safety of aviation operations in the adjacent aerodrome/airport.

15. Lighting shall be provided in accordance with a scheme, details of which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

The lighting scheme shall be designed to minimise potential glare and light spillage and lighting shall be positioned and/or cowled away from residential properties, public roads, and any bat roosts with bat activity. **Reason**: In the interests of the environment, amenity, and public safety.

16. The operational noise level shall not exceed 55 dB(A) Leq 1 hour (corrected for any tonal or impulsive component) at the nearest noise sensitive locations, including dwellings, between 0800 and 2000 hours, Monday to Friday inclusive, and shall not exceed 45 dB(A) Leq 1 hour at any other time. All sound measurement shall be carried out in accordance with ISO 1996-1:2016 "Acoustics - Description, measurement and assessment of environmental noise - Part 1: Basic quantities and assessment procedures". Procedures for the purpose of determining compliance with this limit shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Reason: To protect the amenities of property in the vicinity of the site. 17. No development shall take place under this permission until the developer has lodged with the planning authority:

Details of future proofing of the building fabric and safeguarding of pipe network routes up to the site boundaries, to facilitate future connection to district energy networks in the area. Drawings submitted shall clearly demonstrate future proofing of the site in this regard.

Reason: In the interest of reducing energy demand and providing for future development of sustainable energy provision and in the interest of the proper planning and sustainable development of the area.

18. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security to secure the satisfactory protection of any tree/hedgerow on and immediately adjacent to the site and to make good any damage caused during the construction period, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory protection/replacement of trees/hedgerows for a period of three years from the substantial completion of the development. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the protection of trees and hedgerows immediately adjacent to the site.

19. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the

planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Susan McHugh Senior Planning Inspector

17th July 2020