



An
Bord
Pleanála

Inspector's Report ABP-302813-18

Development	Construction of a two storey data centre and delivery bays with associated three storey office block and services.
Location	Grange Castle Business Park, Clondalkin, Dublin 22.
Planning Authority	South Dublin County Council.
Planning Authority Reg. Ref.	SD18A/0134.
Applicant(s)	CyrusOne Irish Datacentres Holdings Ltd.
Type of Application	Permission.
Planning Authority Decision	Grant subject to conditions.
Type of Appeal	Third Party V. Decision.
Appellant(s)	Brian and Tara Beattie.
Observer(s)	None.
Date of Site Inspection	28 th January 2019
Inspector	Susan McHugh

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1.0 Site Location and Description

- 1.1. The appeal site is located on a site of 9.2 hectares and consists of (a) a greenfield site of 6.3 hectares within the southern section of the Grange Castle South Business Park, in Dublin 22, and (b) a site of 2.9 hectares comprising three existing residential properties 'Erganagh', 'Kent Cottage' and 'Weston Lodge' on land with the townlands of Aungierstown, Ballybane and Milltown. These properties are all located along the Baldonnel Road to the south of the Business Park.
- 1.2. Grange Castle South Business Park is located c. 2km north of Casement Aerodrome and c. 2km south of Adamstown and accessed from and bounded by the newly upgraded Baldonnel Road to the west. The Grange Castle South Business Park forms part of the larger Grange Castle Business Park extending to the north and includes other data hall facilities associated with Microsoft and Takeda.
- 1.3. The appeal site is bounded to the north by the access road serving Grange Castle South Business Park with undeveloped employment zoned land further north. To the north east lies the EirGrid 220/110kV substation. The appeal site is bounded to the east by the Google facility comprising substation, offices and two storey data centre, the latter of which is currently nearing completion on site.
- 1.4. The appeal site is bounded along its southern boundary by three no. detached residential properties, which include 'Comex McKinnon', 'Johnsfield' (home of the appellants) and 'Kerr'. The Comex McKinnon property, the most western of the properties, is operating as an office.
- 1.5. The site is defined along its northern boundary by a timber and mesh wire fence, to the east by a mature hedgerow with the Google site, to the south by planting and the rear boundaries of existing residential properties, and to the west by a recently constructed low wall and railing as part of the Baldonnel Road improvement works.
- 1.6. The Milltown Stream is located to the north of the site and is a tributary of the Griffeen River. It is culverted through the Grange Castle Business Park lands and beneath the New Nangor Road where it flows into the Griffeen River.

1.7. The larger part of the appeal site is relatively flat and falls from east to west by c. 4.5m. It is currently grassed following recent archaeological excavations. The three residential properties which form the smaller part of the appeal site comprise detached houses of varying styles and finishes.

2.0 Proposed Development

2.1. The application was lodged with the planning authority on the 17/04/2018 with further plans and details submitted on the 30/07/2018.

2.2. The proposed development as lodged comprises:

- Demolition of the existing single storey house of 'Erganagh'.
- Construction of a two storey data centre and delivery bays, associated three storey office block and services with a gross floor area of 35,426sq.m.

2.2.1. The two storey data centre facility and delivery bay (32,419sq.m) will be separated into two adjoining blocks over two floors with a single data hall on each floor of each block with service and technical space around each data hall (4 data halls overall) with a two storey delivery bay attached to the east of the data centre block.

2.2.2. The overall height of the data hall development is dictated by the parapet level that will be some 15.585m above the finished floor level.

2.2.3. The three storey office block and delivery bay (2,882sq.m) is attached to the west of the data centre block. The height of the office will be some 13m to parapet.

2.2.4. The data centre will be served by services and plant to the north of the data centre blocks that will include 32 containerised standby diesel generators with 2 associated flues per generator (64 in total) and grouped into 16 towers of four flues each (each 20m high). The flue towers are situated between each pair of generators, each housing four stainless steel flues that have a 650mm diameter,

2.2.5. There are proposed to be 32 acoustically attenuated chillers located on the upper level plant gantries to the north of the data hall blocks (eight on each gantry).

2.2.6. The development will also include a new 110kV substation with associated transformer yard and single storey transformer building (125sq.m) that will be located

to the northeast of the site. This will connect to the local Grange Castle substation to the north east of the site.

2.2.7. The development will be accessed from the Grange Castle South Access Road from the north via the Baldonnel Road.

2.2.8. It will also include ancillary site development works, including 2 attenuation ponds, to connect to existing Grange Castle infrastructural services as well as fencing, signage, services road, entrance gate, 70 car parking spaces including 3 disabled car parking spaces, and 30 sheltered bicycle parking spaces.

2.2.9. The development will be enclosed with landscaping to all frontages including a wetland area to the west.

2.2.10. External finishes will be primarily trapezoidal cladding with a higher quality finish to the offices that will utilise anthracite brick and cladding to the base and parapet and frameless bonded curtain walling for the external finish to the offices.

2.2.11. It is proposed that the new facility will operate 24 hours per day, 7 days per week in a 3-shift cycle.

2.2.12. 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 (including a report from the Department of Defence)
- Geophysical Survey - Rubicon Heritage Services
- Outline Construction Management Plan – MPA Consulting Engineers
- Flood Risk Assessment – Pinnacle Consulting Engineers
- Geotechnical Investigation Report – IGSL Ltd
- Preliminary Tree Survey Report – The Tree File Consulting Arborists
- Engineering Planning Report - Pinnacle Consulting Engineers

2.2.13. Letters of consent from South Dublin County Council and the three individual owners of residential properties 'Erganagh', 'Kent Cottage' and 'Weston Lodge', Baldonnel Road.

2.2.14. Significant further information was lodged 30/07/2018. The application was revised to include a reduction in overall building height of 0.6m, changes to finishes, increased landscape berm and tree height along boundary with adjacent residential properties. The application was accompanied by the following;

- Revised Environmental Impact Assessment Report & Appendices including Bat Survey, Biodiversity Management Plan, Updated Traffic Counts, and additional photomontages,
- Landscaping Report and Outline Landscape Specification – Kevin Fitzpatrick Landscape Architecture
- Design Statement – Hyphen Architects
- Archaeology Report – Rubicon Heritage Services
- Heat Recovery Feasibility Report – J Dunton Associates Ltd
- Energy Statement – J Dunton Associates Ltd

2.2.15. The applicant also clarified in terms of land ownership that the sites have now been acquired from South Dublin County Council and the respective residential property owners.

3.0 Planning Authority Decision

3.1. Decision

The planning authority decided to **grant** permission subject to 23 no. conditions. Conditions of note include the following;

Condition no. 2 Aviation Safety requirements to be agreed with Department of Defence and Irish Aviation Authority, and with Air Corps Air Traffic Services.

Condition no. 3 Bat survey to be carried out on 'Erganagh'.

Condition no. 4	Project Ecologist to oversee and monitor the protection of biodiversity.
Condition no. 5	Lighting scheme requirements.
Conditions no. 6 & 7	Construction Traffic Management Plan and Mobility Management Plan.
Condition no. 8	Taking in Charge requirements.
Conditions no. 9 & 10	Drainage and surface water drainage requirements.
Condition 10(b)	<i>'All floor levels shall be a minimum of 500mm above the highest known flood level for the site.'</i>
Condition no. 11	Energy proposal requirements.
Condition no. 12	Archaeological Monitoring, recording and reporting requirements.
Condition no. 13	Green wall landscape design rationale.
Condition no. 14 & 15	Wildflower meadow and parking area, and landscape architect requirements.
Condition no. 16-19	Tree planting, tree survey, arborist and tree bond of €25,000.
Condition no. 20-21	Environmental Health Officer, construction dust and noise requirements.
Condition no. 23	Section 48 Development Contribution of €2,824,514.98.

3.2. Planning Authority Reports

3.2.1. Planning Reports (dated 07/06/2018 and 24/09/2018)

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

- Site is located in an area zoned 'EE' - 'To provide enterprise and employment related uses' and as such the principle of use is acceptable at this location.

- *Design Statement* - A Design Statement including a Site Analysis and Concept Plan was not submitted as required for commercial proposals greater than 1,000sqm.
- *Visual Impact and Residential Amenity* - Serious concerns in relation to the visual impact of the proposed structure on the residential amenity of the properties to the south, recommends photomontages be submitted, and the building be relocated further north to increase separation distances to adjoining residential properties.
- *Traffic and Access* – Access and parking proposed acceptable, query the baseline traffic count data.
- *Landscaping and Green Infrastructure* – Considering the scale of the proposed development recommends further landscaping details.
- *Adequacy of Environmental Impact Assessment Report* – Lacking information in relation to the protection of bats.
- *SEA Sensitivity Screening* – Proposed attenuation ponds are inadequate in terms of managing surface water on site.
- Recommends further information be submitted.

The 2nd Senior Executive Planners Report in summary states;

- Full and comprehensive Bat Survey submitted is acceptable.
- Revised EIAR submitted, including updated traffic count data, photomontages, revised landscaping and design, and further archaeological testing results is acceptable.
- Revised plans submitted indicate a reduction in height of the proposed building by 0.6m, the building has not been repositioned, revised cladding and green planting proposed on stairwells. Revised design for the proposed office incorporating higher quality materials. It is also proposed to increase the height of the berm and trees in order to mitigate the impact of the proposal on the residential amenity of the adjacent residential properties. Proposals are considered acceptable.
- Design statement and photomontages submitted are acceptable.

- Topographical survey submitted acceptable.
- Notes the lack of a green roof, so proposed wildflower meadow to the south east and proposed wetland area are therefore considered essential to help manage surface water run-off.
- Details in relation to the utilisation of climbing plants to help reduce the impact of the proposal are insufficient. Condition requiring a landscape design rationale for the proposed green walls should be attached.
- Biodiversity Management Plan submitted as part of the EIAR is acceptable – appropriate conditions of the County Heritage Officer to be attached.
- Report on Heat Recovery and Energy acceptable and appropriate to attach condition.
- Revised landscape design rationale masterplan for the development submitted acceptable to the Parks and Landscape Services/Public Realm Department. Condition requiring provision of a lighting plan should be attached.
- Report on archaeological testing submitted acceptable and appropriate to impose condition on archaeological testing and monitoring, and the retention of the upstanding section of townland boundary.
- Concludes that the proposal is acceptable.

3.2.2. Other Technical Reports

- **Water Services:** Report dated 23/05/2018 recommends no objection subject to conditions.
- **Roads Section:** Reports dated 16/05/2018 and 10/08/2018 recommends no objection subject to conditions.
- **Heritage Officer:** Report dated 06/06/2018 recommends further information.
- **Parks & Landscape Services/Public Realm:** Report dated 09/05/2018 recommended further information. Report dated 09/08/2018 recommends no objection subject to conditions.

- **Environmental Health Officer:** Report dated 23/05/2018 recommends no objection.

3.3. **Prescribed Bodies**

- **Irish Water:** Report dated 01/06/2018 and 11/08/2018 recommends no objection.
- **Irish Aviation Authority:** Report dated 14/05/2018 recommends no objection.
- **An Taisce:** Report dated 21/05/2018 recommends further information.

The application was also referred to Inland Fisheries Ireland the Department of Defence but no reports were received at the time of writing.

3.4. **Further Referrals**

The Board referred the proposed development to The Heritage Council, and the Development Applications Unit, Department of Culture, Heritage and the Gaeltacht. No reports were received at the time of writing.

3.5. **Third Party Observations**

A number of submissions were lodged by the following parties

- Cllr. Francis Timmons.
- Tara and Brian Beattie, Johnsfield, Baldonnel Road.
- Declan and Margaret Ennis, Baldonnel.
- David Kerr, Bally Bane.
- Rory and Sandra Dunworth, Weston House, Baldonnel Road.

Issues raised can be summarised as follows;

- Negative impact on the value of residential property.
- Overlooking and overshadowing.
- Detract from visual and residential amenity of the area.
- Archaeological dig of a ring fort currently taking place.
- Loss of three residential properties in a housing crisis.

- No traffic should be allowed to use Baldonnell Road, queries timing of traffic counts.
- Renewable energy needs to be considered.
- Inadequacy of the EIAR in relation to identifying alternative sites, need for a bat survey and consideration of property values under material assets.
- Landscaping will not contain the negative impacts of the proposal on residential properties.
- Flooding concerns.
- Query baseline noise levels.
- A right of way from a property to the south to the lands subject has not been identified.

4.0 Planning History

There is no planning history pertaining to the appeal site.

Adjoining Site to the East - Google Two Storey Data Centre

P.A. Reg. Ref. SD17A/0392 ABP-300752-18 Permission **granted** July 2018 for an amendment and completion to permission granted under SD17A/0141 to facilitate a 125sqm extension to the north and south of the permitted standalone single storey data hall of 1,515sqm to create an extended stand-alone single storey data hall of 1,640 sqm.

P.A. Reg. Ref. SD17A/0141 Permission **granted** August 2017 for the development of a data hall of 1,515sqm. 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 SD14A/0023 Permission **granted** April 2014 for construction of a two storey data storage facility (30,361sq.m.), a double height warehouse building (1,670 sq.m) and a HV Substation area with two buildings; 1 no. 2 storey building (968sq.m.) and 1 no. single storey building (190 sq.m) and associated site development works. Permission is also sought for a new site access and entrance gates, a security gatehouse, security gates, load bank garage, perimeter fencing, internal roadways, sprinkler tank, pump house, 10KV substation, water and fuel tanks, attenuation ponds, hard and soft landscaping, 83 no. new car parking spaces and bicycle shelter with ancillary site works. The highest point of any of the buildings is within 20m of the original ground level with the 25 no. stacks at 25m. Provision for a temporary construction entrance and haul road off the Baldonnel Road to the south of the site has been allowed for; an EIS (Environmental Impact Statement) will be submitted with this application, all on a 11.25 ha site.

Other Data Centres within Grange Castle Business Park

Takeda Ireland Complex – Single Storey Data Hall

P.A. Reg. Ref. SD17A/0027 Permission **granted** 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 was **granted** in January 2017 for the construction of a new single storey data hall of 4,176sq.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 9,952sq.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 was **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 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. The development includes ancillary site works, including attenuation tank, to connect to existing Grange Castle infrastructural services as well as fencing, signage, services road, entrance gate, 26 car parking spaces including 2 disabled car parking spaces, as well as sheltered bicycle parking. The development to be enclosed with landscaping to all frontages. An EIS was submitted with this application. An application for enabling works to facilitate this development has been made under Reg. Ref. SD16A/0176.

P.A. Reg. Ref. SD16A/0176: Permission was **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.

Microsoft Single Storey Data Centre

P.A. Reg. Ref. SD16A/0088 Permission **granted** May 2016 for site enabling works including demolition of existing vacant house and outbuildings (total floor area c.241sq.m), diversion of Baldonnel stream, provision of below ground attenuation. Development of 4 single storey data centres (DUB09, DUB10, DUB12, DUB13)

located west of data centres DUB06 (existing), DUB07 & DUB08 (both granted under SD15A/0343), each data centre will contain the following: offices, computer and associated support areas, electrical component rooms, plant and associated equipment, plant at roof level and 5 flues each (each c.25m high) (gross floor area of each data centre c.17,598sq.m c.70,392sq.m in total). The height of each data centre will range between c.6.1m & c.13.3m high. Ancillary site works for connection to infrastructural services, as well as fencing, landscaping, perimeter service roads around the buildings. The provision for installation of heat dispersal infrastructure to facilitate the future potential recycling of waste heat energy by 3rd parties. 160 additional operational parking spaces (including universal accessible spaces). Provision of 20 bicycle parking spaces. Provision of 1 adiabatic water storage tank (c.273sq.m), 1 water treatment storage tank (416sq.m) and 2 pump houses (c.75sq.m each). Provision of 1,750 temporary construction worker parking spaces on adjoining Takeda and SDCC sites. All associated site development, service provision, landscaping and associated works. This application includes modifications to permission ref. SD15A/0343 in relation to the lands west of permitted DUB07 & DUB08 now forming part of the current application. An Environmental Impact Statement (EIS) has been submitted with this application.

EirGrid Substation to the North East

ABP 06S.VA0019 Permission **granted** June 2016 for West Dublin 220/110kV substation and associated works.

5.0 **Policy Context**

5.1. **South Development County Development Plan 2016-2022**

5.1.1. **Chapter 1** refers to Core Strategy, Chapter 4 refers to Economic Development & Tourism and Chapter 11 refers to Implementation.

5.1.2. **Section 1.12.0** refers to Employment Lands. It states, '*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.' (See Zoning map attached.)

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.'

5.2. Natural Heritage Designations

The following European sites are located in the vicinity.

Name	Designation	Site Code	Distance
Rye Valley/Cartron	SAC	001398	5.6km NW
Glenasmole Valley	SAC	001209	8.6km SE

6.0 The Appeal

6.1. Grounds of Appeal

The third-party appeal was submitted by Michael Halligan, Planning Consultants on behalf of Brian and Tara Beattie, 'Johnsfield', Castlebaggot, Baldonnel, Dublin 22. The grounds of appeal can be summarised as follows;

- Family home and granny flat are located to the south east of the appeal site.
- Applicants were advised at a pre- planning consultation to address issues in relation to the close proximity to residential properties.
- Reference to planning officers report and concerns in terms of scale, height and massing of the proposed structures.
- Refers to planning history and cites P.A. Reg. Ref. SD17A/0392 ABP 300752-18 and P.A. Reg. Ref. SD17A/0141 for single storey data halls.
- References a number of other permissions for single storey data centres and SD14A/0023 which relates to a two storey data storage facility.
- Refers to South Dublin County Development Plan 2016-2022 and section 11.1.1 Transitional Areas.

Grounds

- *Residential Amenity/Noise* – When the applicants constructed their house the area was zoned rural, note that the zoning has now changed, accept that they now reside in an area zoned EE, and that appropriate EE development will take place in this zone. Expect that their residential amenity will be protected from excessive and inappropriate development.

- The need to respect existing residential dwellings was highlighted in a pre-planning meeting and the planning officers report which requested that the data centre be relocated further north so as to increase the separation distance to residences by way of further information item 4.
- *Excessive in Massing and Scale* - Notes that the building was not re-positioned on site, and asserts that the minimal reduction in height and the construction of a berm with planting will not result in an improvement in visual aspect and will not reduce the massing and scale of the Data bank building. Noted that most of the permitted data centres in the locality have been single storey.
- *Flood Risk* - Information in relation to flood levels should have been submitted as part of the application. Condition 10 (b) which requires that floor levels be a minimum of 500mm above the highest known flood level for the site, is unacceptable as there are unmeasured implications for third parties in terms of increased building height.
- The proposed building is only 56m from the appellants house and only 40m from their residential boundary.
- *Traffic Hazard and Premature* – Notes assessment by the Board under (PL06S.236145) and reference by the inspector to the capacity of the Baldonnel Road to accommodate limited traffic. Notes that the Baldonnel Road has not been upgraded in the intervening period and is still a third-class county road. It does not have the capacity to safely accommodate the vehicular and HGV traffic that will be generated by the proposed development, and as such would be premature pending the upgrade of this road.
- *Increase the Risk of Flooding* – Have experienced flooding at the nearest corner of their property closest to the berm and attenuation area, which has happened since the development of the Google facility nearby. Concerned that the proposed structure and berm will significantly increase the risk of flooding and this has not been addressed in any of the planning conditions.
- *EIAR* – Did not adequately focus on and realistically examine more appropriate alternative locations for the very substantial development adjacent to residential properties.

6.2. Applicant Response

In response to the grounds of the third party appeal the applicant has submitted further comments which can be summarised as follows;

- *Residential Amenity* – The appellants property does not amount to a Transitional Area as defined under the County Development Plan. The Design Statement submitted as part of the further information response addresses matters relating to the design, massing, scale, height and location of the proposal in terms of the visual impact of the proposal and the upholding of residential amenities. Clarifies that as part of the further information response no change to the height of the berms to the rear of the appellants property was undertaken and that the triple line of trees along the berm were only increased from 5-6m to 6-7m.
- The rear elevation of the appellants' property at its nearest point is located 56.9m and at its furthest point is located 68.794m from the proposed development. The appellants house is located 25.5m from their rear property boundary. Cross sections from the rear of each residential property indicate that the proposed data centre would be substantially screened by the berming and planting along the southern boundary of the application site.
- The landscape drawing (Section C-C) submitted by the appellant as part of their appeal, was submitted as part of the further information response. It shows the relationship to the rear of the Comex Mckinnon property and the subject development, and not the appellants property. The applicant has therefore, submitted three separate sections from the appellants property to the subject development to replicate the visual impact of the proposal from their property. The applicant submits that the distances to the data centre and the length of the appellants rear garden together with the mitigation planting and bunding that the proposal will not impact upon the residential amenity of the appellants.
- *Traffic Hazard* – No construction traffic will use the Baldonnel Road and irrespective of the upgrade of this road the proposal will not result in a traffic hazard.
- *Flood Risk* – Condition no. 10b is a standard condition. The lowest FFL of the development is set at 73.915m and the highest flood level recorded for the site is 70.5m. The FFL of the development is therefore 3.415m above the highest flood

level recorded for the site and is well in excess of the required 0.5 (500mm) set out under the condition.

- Despite the claim that the appellants have experienced flooding in the north-east of their site, no evidence of this flooding is provided. The creation of an attenuation pond within the application site to the north east of the appellants' property will result in a reduction in the potential ponding of the appellant's garden.
- *EIAR* – The applicants considered alternative project locations, alternative designs/layouts and alternative processes in accordance with the EIA Directive 2014/52/EU.

6.3. Planning Authority Response

None received.

6.4. Observations

None.

6.5. Further Responses

In response to the applicant's response to the third party appeal the appellant has submitted further comments which can be summarised as follows;

- Contend that the appellants property despite the EE zoning is located in a 'transition area' as stated by the area planner in her report.
- Notes the close proximity of the proposed two storey data centre to the appellants residential property.
- The building has not been repositioned further north as requested and neither has the massing been reduced.
- The minimal reduction in height and the construction of a berm with planting will not be an effective protection of the residential amenities of the appellants property. Any failure in the planting proposal will have serious consequences for the appellants, and the view from their first-floor bedroom window will not be mitigated.

- In terms of precedent note that other data centres in the immediate area are single storey.
- Contend that the proposed development would be premature pending the upgrade of the overall road network in the area.
- Concern that the proposed very substantial structure and footprint and construction of a berm will significantly increase the risk of flooding and this has not been addressed in any of the planning conditions.
- EIAR did not adequately focus on and realistically examine more appropriate alternative locations.
- Consider that in view of its location immediately adjacent to residential properties a single storey building is more appropriate, and the proposed two storey centre should be relocated north away from residential properties.

7.0 **Assessment**

7.1. **Introduction**

- 7.1.1. 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 relevant issues are addressed under the following headings:

- Principle and Consistency with Statutory Plans
- Height and Visual Impact
- Residential Amenity / Noise
- Traffic Hazard

- Flooding Issues

8.1. Principle and Consistency with Statutory Plans

- 8.1.1. The proposed development, comprising a data centre, offices 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. 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.
- 8.1.2. The South Dublin County Development Plan Section 4.1.1 of Chapter 4 states with respect to Grange Castle that it is a modern business park *'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.'* It is also recognised that *'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.'*
- 8.1.3. It is the objective of the Council (ET1) Objective 3 to support the continued development of economic clusters to the west of the County by prioritising compatible and complementary enterprise and employment uses, and (ET3) Objective 2 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). As noted above there are a number of data halls already located within the business park including Google, Microsoft, and Takeda. The principle of the data centre development is clearly supported by the policies and objectives of the Plan.
- 8.1.4. Furthermore, the site is well located with respect to public infrastructure, including the national and local road network, the national electricity grid, water and drainage network and local populations and commercial centres. I am satisfied that the EIAR, Chapter 4 Alternatives, provides justification for the selection of the application site within the planning framework context and that there is nothing to suggest that this particular site is not suitable for the development proposed in planning and environmental sensitivity terms.

8.1.5. The appellant contends that their residential property is located in a transitional area and refers to section 11.1.1 of the County Development Plan. However, it should be noted that the appellants property and adjoining residential properties are all within lands zoned EE. I concur with the applicant that the reference to 'transitional areas' refers to a transition in zoning objectives. This however, does not apply in this instance.

8.1.6. I am satisfied therefore that the proposed development is acceptable in principle.

8.2. Height and Visual Impact

8.2.1. The appellants have raised concern in relation to the massing and scale of the proposed data centre which is considered excessive primarily in relation to height. They also note the concerns of the planning authority in this regard and the fact that the building was not re-positioned on site as requested at further information stage. It is further asserted that the minimal reduction in height, and the construction of a berm with planting will not result in an improvement in visual aspect and will not reduce the massing and scale of the Data centre building as viewed from their property. A number of permitted data centres in the locality are cited which are single storey only.

8.2.2. The proposed two storey data hall is significant in scale with a stated floor area of 32,419sq.m. It has a building height of 15.585m above the finished floor level, which was reduced by 0.6m in response to the further information request. The three storey office block and delivery bay has a stated floor area of 2,882sq.m is attached to the west of the data centre block, and has a height of 13m to parapet. It is positioned away from adjoining residential properties.

8.2.3. The proposed data hall is located to the west of the Google data centre which is also two storey with a height of c.20m off the original ground level. It includes 25 no. stacks at 25m. I do not consider a two storey building which is c. 5m lower than the adjoining facility inappropriate on this site.

8.2.4. The data centre will be served by services and plant located to the north of the data centre blocks. These will include 32 containerised standby diesel generators with 2 associated flues per generator (64 in total) and grouped into 16 towers of four flues

each (each 20m high). These flues are also 5m lower than those on the adjacent data centre facility and are not considered excessive within the context of a Business Park.

- 8.2.5. The application was accompanied by a Visual Impact Assessment which was expanded to include a number of additional photomontages by way of further information. The applicant made further changes to the proposal including the introduction of revised cladding in order to reduce the visual impact of the development on the surrounding landscape. Further elements introduced include green climbers to the stairwells which also help to break the principal northern and southern elevations. The applicant also submitted a Design Statement which sets out the rationale for the proposed amendments and justification for not repositioning the development further north away from adjoining residential properties.
- 8.2.6. In total 8 photomontages were submitted and are included in Chapter 12 of the EIAR and the further information response. I have reviewed all the photomontages and visited the site and am satisfied that they are representative of the likely views.
- 8.2.7. The proposed development will have a significant visual impact on the surrounding landscape and this is illustrated clearly in View 8 from within the Business Park. However, I consider that the design and layout of the proposal seeks to make optimum use of this large, serviced and employment zoned lands.
- 8.2.8. I note that there are no designated protected views and the landscape sensitivity is identified as 'medium'.
- 8.2.9. I am satisfied that from a planning precedent perspective and planning policy point of view, it is reasonable to conclude that the landscape in which the proposal is to be located is one of the more suitable types within the county, subject to further consideration of impacts on specific viewpoints.
- 8.2.10. I also note the comprehensive landscaping and planting proposals detailed in the landscape masterplan submitted, which will in my opinion significantly assist in assimilating the proposed development into the receiving environment. I concur also with the applicant that the repositioning of the development further north would have a minimal effect on reducing the visual impact on the adjoining residential properties. I am satisfied that the proposed earth modelling, and large tree planting will provide

a high level of visual screening, while the colour palette chosen for the building will further reduce the visual impact.

8.2.11. I am satisfied therefore, that the proposed two storey building height of the data hall is appropriate and the visual impact is acceptable in its context.

8.3. Residential Amenity / Noise

8.3.1. The crux of this appeal is the impact of the proposed development on the residential amenities of the properties to the south of the appeal site and which back onto the subject site. The planning authority had concerns also in relation to the impact on residential amenity given the proximity of the proposed building to these properties. The planning authority requested by way of further information that the proposed development be repositioned further north away from the rear boundaries of these houses.

8.3.2. Revised proposals submitted however, did not provide for an increased separation distance to the properties as anticipated by the appellants.

8.3.3. The home of the appellants 'Johnsfield' is one of three detached houses located on large plots. Each have planted boundaries to the side and rear with the exception of 'Johnsfield' which has no planting along its rear boundary. This boundary which comprises a timber and wire mesh fence provides an open view of the appeal site to the north unlike the other properties.

8.3.4. The rear elevation of the appellants' property at its nearest point is located 56.9m and at its furthest point is located 68.794m from the proposed development. The appellants house is located 25.5m from their rear property boundary. Cross sections from the rear of each residential property indicate that the proposed data centre would be substantially screened by the berming and planting along the southern boundary of the application site.

8.3.5. The applicant in recognising the relationship of the proposed development with the adjoining residential properties and the need to protect their residential amenity proposed a berm with planting to help screen the proposed development. In their response to the appeal the applicant has submitted three separate sections from the appellants property to the subject development to replicate the visual impact of the proposal from their property. The applicant submits that, having regard to the

distances to the data centre and the length of the appellants rear garden together with the mitigation planting and bunding the proposal will not impact upon the residential amenity of the appellants.

- 8.3.6. I have examined the cross sections provided and am satisfied that the proposed screening will help to mitigate the impact of the proposed development on the adjoining properties and over time reduce any perceived overbearing impact.
- 8.3.7. I also note that the proposed development will not give rise to overlooking of the adjoining residential properties, nor will it give rise to overshadowing as it is located to the north of the subject properties.
- 8.3.8. The appellants have raised concern in relation to noise. The applicant has carried out noise surveys and has predicted that noise levels particularly from the chillers and the emergency generators at nearby noise sensitive properties will not exceed the Environmental Protection Agency guidance in relation to noise.
- 8.3.9. The chillers and emergency generators are located to the north of the data centre furthest from the residential properties. I also noted from my site inspection that existing noise levels were not excessive.
- 8.3.10. I am also satisfied that, subject to normal standards of good practice, the proposed development would not give rise to excessive noise.
- 8.3.11. I am satisfied therefore, that the proposed development will not seriously injure the residential amenities of these properties to the extent to warrant a refusal.

8.4. Traffic Hazard

- 8.4.1. The appellants have expressed concern in terms of the capacity of the Baldonnel Road to safely accommodate the vehicular and HGV traffic that will be generated by the proposed development. As such they submit that the proposal would be premature pending the upgrade of this road.
- 8.4.2. The main entrance into the Grange Castle Business Park South is along the Grange Castle South Access Road which has a priority T-junction with the Baldonnel Road, 140m south of the R134 Nangor Road. The Baldonnel Road has a priority T junction with the Baldonnel Road. The R134 Nangor Road has a signal-controlled junction with the R136 2km east of its junction with the Baldonnel Road.

- 8.4.3. The appeal site is accessed from the north via the main entrance to the Business Park, from the Baldonnel Road to the west. This section of Baldonnel Road is currently being upgraded under an approved Part 8 Scheme. The appeal site is also bounded by the Baldonnel Road to the south, which is a local road.
- 8.4.4. The application was accompanied by a Traffic Impact study. The Transport Section of the planning authority queried the timing of the traffic counts undertaken. The applicant submitted further traffic counts which, in addition to the outline Construction Management Plan, were considered acceptable.
- 8.4.5. The applicant in response states that the proposed development will not result in a traffic hazard and is not premature, noting that no construction traffic will use the Baldonnel Road.
- 8.4.6. I am satisfied that the Construction Management Plan submitted addresses the concerns of the appellants. I am also satisfied given the nature of the proposed use that the proposed development during operation will not give rise to a significant volume of traffic. The proposed development will operate 24 hours per day, 7 days per week in a 3-shift cycle. The number of employees anticipated is 200-220. These will be spread across the three shift operating times of the development with the majority (c.60%) working during the day shifts.
- 8.4.7. I am satisfied therefore, that the proposed development will not give rise to a traffic hazard and is not premature, and that there is no basis to this ground of appeal.

8.5. **Flooding Issues**

- 8.5.1. The appellant states that since the development of the adjacent data centre facility they have experienced flooding at the corner of their property closest to the proposed berm and attenuation area. They have also expressed concern that the proposed structure and berm will significantly increase the risk of flooding on their site and that this has not been addressed in any of the planning conditions. They contend that information in relation to flood levels should have been submitted as part of the application and refer specifically to Condition 10 (b) which requires that floor levels be a minimum of 500mm above the highest known flood level for the site. They assert that this is unacceptable as there are unmeasured implications for third parties in terms of increased building height.

- 8.5.2. The applicant contends that information on flood levels was submitted as part of the application. It is further stated that Condition 10 (b) is appropriate taken in conjunction with the proposed Suds measures i.e. two surface water attenuation ponds and wetland area. They also note that the lowest FFL of the development is set at 73.915m and the highest flood level recorded for the site is 70.5m. The FFL of the development is therefore 3.415m above the highest flood level recorded for the site and is well in excess of the required 0.5 (500mm) set out under the condition.
- 8.5.3. The Food Risk Assessment which accompanied the planning application concludes that the development of the site will be carried out in a sustainable manner. It states that the site falls into category Flood Zone C. It notes that approximately 75m to the west of the site is shown to be an area that is affected by the 0.1% AEP Flood Event (1 in 1000 year) which is based on local modelling. It is stated that all surface water on-site will be sustainably managed and discharged off site via approved run-off rates to the Local Authority sewer network.
- 8.5.4. I am satisfied that the site is located within Flood Zone C and the development can be classed as 'less vulnerable'. The Suds measures proposed include two attenuation ponds and a wetland area. The capacity of the attenuation ponds was also increased by way of further information to allow for a 100 year storm event. The Water Services section of the planning authority and Irish Water had no objection to the proposal subject to all finished floor levels being a minimum of 500mm above the highest known flood level. I am satisfied that the proposed development will not result in an increased risk of flooding in the area.
- 8.5.5. I note from my site visit of the appellants property and the subject site that I saw no evidence of flooding. I also note that the appellant has not provided any evidence of previous flooding to support their claim. I also note the location of the Milltown Stream to the north east of the site which is culverted through the Grange Castle Business Park, and the separation distance to the appellants property.
- 8.5.6. I am satisfied therefore, that the proposed development will not give rise to potential flooding of adjoining sites.

8.6. Conclusion

- 8.6.1. In conclusion, I am satisfied that the proposed development is in accordance with the zoning objective for the site and is an appropriate use, and that it has been designed to take account of the residential amenity of the adjoining residential properties, while also making the most optimal use of the site. I am satisfied that the proposal will not give rise to a traffic hazard. I am also satisfied that the proposed attenuation ponds and wetland area will mitigate against the risk of flooding, and that the proposed landscaping will enhance and contribute positively to the development of the Business Park.

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 bat survey and additional photomontages 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.

- 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 17th April 2018 and revised EIAR submitted 30th July 2018, and the submissions made during the course of the application. A summary of the results of the submissions made by the planning authority, and 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 and revised 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 sites, Grange Castle was chosen.
- 9.2.3. With respect to the alternative design, and layout it was apparent that a west east design for the data centre with all the services to the north 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 land use zoning, and concerns raised by the appellants, 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. Impacts on property are addressed under Material Assets.
- 9.4.2. With respect to land use, the proposed development is to be located on a site of 9.2 hectares that consists of a greenfield site of 6.3 hectares that sits within the Grange Castle Business Park, and a site of 2.9 hectares that forms the plots of three residential properties known as Erganagh, Kent Cottage, and Weston Lodge, Baldonnel Road. The overall site is on land zoned EE with the Google Data Hall located to the immediate east.
- 9.4.3. Erganagh is to be demolished as part of the application, while the residential use of the other two properties will be extinguished within 6 months of permission being granted.
- 9.4.4. There are three residential properties outside the application boundary to the immediate south of the subject site, and a further dwelling to the south-east of the site (Weston House). The most western of these houses was in use as an office under a temporary permission, and remains in office use.
- 9.4.5. Further housing occurs to the south east of the application site and to the south of the Baldonnel Road. This includes a creche that is set-back a considerable distance to the south of the road at Castlebaggot House.
- 9.4.6. With respect to population it is noted that there has been very little population growth in the immediate areas as there is very little undeveloped residentially zoned land within the Electoral Division of Clondalkin- Village, as the western part of the ED is covered by the Grange Castle Business Park. There has been significant population growth in the greater area of South Dublin of 12.9% between 2011-2016.

- 9.4.7. It is noted that tourism is not a major industry in the immediate environs of the site. The primary area of amenity is the Grand Canal located 1km to the north of the site.
- 9.4.8. With respect to characteristics of the project which could impact on human health, it is noted that as part of the further information response the building has been reduced in height by 0.6m. The increased height of planting, as well as elevational improvements to the southern elevation, will enable the safeguarding of the residential amenity of properties to the south.
- 9.4.9. In terms of potential impact of the construction stage, the overall development will result in the creation of a large construction site that will have a potential negative impact on the immediate local environment, amenity of nearby residents, users of the Grange Castle Golf Course, Grand Canal and workers within nearby facilities. The potential implementation of the new data hall will occur over a 14-18 month construction period. Other potential impacts are increased vehicular traffic, noise, dust generation and increased employment.
- 9.4.10. It is expected that the majority of the work force 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 area is expected. The construction phase of the development will generate construction employment directly on site, ranging between 100 on average to a maximum of 250 during the construction process.
- 9.4.11. During the operation phase the development will help to sustain 200-220 jobs that will be spread across the three shift operating times of the development with the majority (c.60%) working during the day shifts of the office space and data centre.
- 9.4.12. The proposal has the potential to have long-term and negative impacts on the amenity of the residential dwellings to the immediate south of the site. The increased planting and separation distances to residential dwellings, as well as noise attenuation and overall master planning of the site will ensure that the development will not have an impact on the amenity of the area or local residents and therefore not be detrimental to human health.
- 9.4.13. 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.

- 9.4.14. No mitigation is proposed beyond the landscaping during operation as detailed in chapter 12. Noise mitigation in relation to the chillers will not give rise to any adverse impacts. The development will result in the creation of a significant number of jobs especially in-service activities and creation of some local jobs. This is considered a slight permanent positive impact of the proposed development.
- 9.4.15. 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.
- 9.4.16. During operation the proposal will facilitate the creation of a more intensive use for the lands and employment.
- 9.4.17. In the worst-case scenario, the failure of the proposal to proceed will not lead to any profound, irreversible or life-threatening consequences.
- 9.4.18. 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 applicant's consultants previously completed ecological assessments of the site in February and March 2018, as well as ecological surveys in Grange Castle Business Park regularly since 2011. Further Bat surveys were carried out at the end of June and start of July. A Biodiversity Plan was also submitted by way of further information.
- 9.5.2. The site is occupied by three dwellings and their associated outbuildings and gardens, a large grass field, previously under agricultural management and currently largely occupied by archaeological investigations and a smaller field which has been heavily grazed. The southern area of the site contains a number of boundary treelines while to the north and west a fence line marks the field boundary.

- 9.5.3. The Grand Canal (pNHA) is located c.15m to the north of the site but is not hydrologically linked to the site. The closest European site is the Rye Water Valley/Cartron SAC which is located c.5.6km north-west. The proposed development site is located within the Liffey catchment. The nearest river in the proximity of the site is the Griffeen River which is located c. 150m to the west of the site. The Griffeen River converges with the River Liffey c. 4km downstream of the proposed development site. A small drainage ditch that is culverted under the access road to the north is located at the north-eastern edge of the site to the west of the hedgerow.
- 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 existing culvert 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 areas of amenity and improved agricultural grassland, a portion of the tree line No. 3 and other treelines of lower ecological value. The relatively low ecological value of the habitats to be lost is significant at the local scale only. Retention of treelines along the southern boundaries will minimise the scale of the habitat loss.
- 9.5.6. Bats can be adversely affected by lighting. Potential impact on bat flight paths is significant at local level. The demolition of Erganagh would not have any adverse effect on the local bat population. Birds are likely to be habituated to human and vehicle related disturbance. 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 site at a local scale.
- 9.5.7. Potential impacts during operation may arise from lighting, noise, electromagnetic or air emissions. The lighting plan includes lux levels below the threshold of 3 lux, and shading and screening is also proposed by planting and raised earth berms which will further mitigate the effect of light spill surrounding the attenuation pond and wetland habitat to the west. The design parameters of the site mean it will not give rise to any emissions of hot air, noise or electromagnetism to any perceptible effect on sensitive receptors.
- 9.5.8. With respect to cumulative effects the developed aspect of the proposed site is relatively small in comparison to other developments in the locality.

- 9.5.9. With respect to mitigation, standard construction mitigation measures are proposed. Hedgerows and treelines bordering the proposed development site will be retained where possible and strengthened with additional planting. Additional woodland and hedgerow planting will occur around the perimeter of the site, with native species. Full landscaping planting details will focus on creating areas of grassland, wildflower meadows, tree planting and wetlands. Two attenuation ponds and a wetland habitat are designed with the aim of creating a native woodland habitat.
- 9.5.10. Checks for bats will be carried out prior to the felling of any trees or demolition of any buildings with potential roost features to confirm the presence or absence of bats. If bats are found the Local Conservation Ranger of the National Parks and Wildlife Service will be consulted.
- 9.5.11. No significant residual impacts are predicted with the successful implementation of mitigation measures. Appropriate monitoring following construction is proposed and detailed in the Biodiversity Management Plan.
- 9.5.12. 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 within the Grange Castle Business Park South, and to the south of the Grange Castle South Access Road. The site is relatively flat. There is a fall c. 4.5m from the south-eastern boundary to the west/north-west towards the Griffeen River. 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 January and March 2018. The importance of the bedrock and soil features is rated as Low Importance. Sampling of groundwater and soils did not indicate any evidence of contamination across the site.

- 9.6.2. Public watermains and sewers 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 be an increase in surface water runoff from the site. There is a hardstanding area of 30,294sqm, of which 17,642sqm is the roof area of the data centre. 725sqm will be permeable paving for the car park spaces to the north west. This increase in flow will be directed to 2 no. attenuation ponds located to the north and south of the site. The attenuation ponds are adequately sized with a total attenuation volume of 3,444m³ and will be fitted with a hydro brake flow control mechanism to limit outfall.
- 9.6.5. During operation there will be no direct discharges to groundwater or the soil. Indirect discharges could occur. This could have a long term imperceptible effect with a neutral impact on water quality.
- 9.6.6. During construction standard mitigation measures are proposed. A site-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 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 8.5). It is stated that the Griffeen River flows in a northerly direction west of the site prior to being culverted beneath the Grand Canal and from there it flows north through Lucan. A section of the Griffeen River was realigned during the construction of the Business Pak and now runs alongside the local access road in a northerly direction to the east of the Takeda facility. The Milltown Stream is located to the north of the site and is a tributary of the Griffeen river. It is culverted through the Grange Castle Business Park lands and beneath the New Nangor Road where it flows into the Griffeen.
- 9.7.2. From a review of the EPA Maps Database the status of the Griffeen River at the nearest monitoring station is poor but the no subsequent monitoring has taken place since 2004. The most up to date status of the River Liffey at the nearest point is good.
- 9.7.3. 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'.
- 9.7.4. 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.
- 9.7.5. Mitigation includes best practice construction measures. During operation the drainage system has been designed appropriately including two attenuation ponds and wetland area.
- 9.7.6. Predicted impacts are considered negligible during both construction and operation. Worst case scenario is from potential spillages onsite during construction. The Griffeen River is not used for water supply purposes but would require remediation.
- 9.7.7. 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. I also address noise in my planning assessment above (section 8.3). 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 the 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 noise emissions at the nearby receptors will not exceed 55dBL_{art}(15 mins) during daytime, 50dBL_{art}(15mins) evening and 45dBL_{aeq}(15mins) at night.
- 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 building service will be controlled 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 it 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 facility were considered, as well as ambient noise levels from road traffic on the surrounding network. Predicted cumulative plant noise emissions are within the daytime, evening and night-time limit values,
- 9.8.9. 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 existing generator developments located in the immediate vicinity (Google Ireland site).
- 9.9.2. The proposed development will have a total of 32 generators with 64 generator stacks, as each generator will have two associated stacks, all of which have a height of 20m above finished ground levels. The Google Ireland data centre adjacent to the eastern boundary of the site has a total of 23 generators with a stack height of 17m-25m. These emission points emit air pollutants on a continuous basis. Modelling for NO₂ was undertaken in detail.

- 9.9.3. The potential impacts during construction involve excavation over the site and the erection of new buildings. There is potential for dust emissions, and for greenhouse gas emissions from construction vehicles.
- 9.9.4. During operation the primary sources of air and climatic emissions involve the use of the emergency diesel generators.
- 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 not significant and pose no nuisance at nearby receptors.
- 9.9.7. During the operational phase the NO₂ modelling includes emissions from the adjacent Google Ireland facility. 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 not be significant.
- 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. I also address visual impact in my planning assessment above (section 8.2).
- 9.10.2. A Visual Impact Assessment including photomontages of the 'before' and 'after' are provided. The appellants have expressed particular concern with respect to the visual impact of the proposal on their residential property. The Planning Authority requested additional photomontages as part of the Further Information which form part of the assessment. The images include views of the data hall from 8 different viewpoints.
- 9.10.3. It is noted that the site is located on the edge of two landscape types – the landscape to the east and north is characterised by very large built developments and new tree lined roads. Between these built developments are some large flat green areas that were used for agriculture and the landscape is still of a traditional field and hedgerow boundary typology. To the west and south the landscape is generally that of a rural landscape typical of the area with medium to large field patterns and individual residences. The local landscape to the south east is dominated by the Casement Aerodrome.
- 9.10.4. The Tree Survey Report notes that tree cover on the site is contained within the perimeter hedgerows on the southern boundaries of the site and the garden boundaries in the south-east corner. These comprise thorn based hedgerows and ornamental garden hedges. It notes that the old townland boundary hedgerow still has some structure and form.
- 9.10.5. The site is most visually prominent from the Baldonnel Road directly to the west of the lands where the road almost abuts the site boundary. It is also noted that from this section of road the site is fully visible as there is currently no vegetation due to the road widening works. It is also noted that the Google data centre dominates views from this location. The site is also visible from the Baldonnel Road to the south of the site, but only where it directly abuts the road. From further east along the Baldonnel Road views of the site are screened by the tree cover and built environment.
- 9.10.6. 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 environment 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 South Dublin County designates the lands as being in the 'Newcastle Lowlands Character Area'. This is listed as having a medium landscape sensitivity, due to the vulnerability of the agricultural landscape to urban pressures. The subject lands are located in the east of the area within the border area between the Urban Fringe character type and the Limestone Farmland Character type.

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 the installation of trees and vegetation.

9.10.9. The mitigation measures have influenced the design and layout of the scheme. Earth modelling, and large tree planting is proposed to provide a high level of visual screening and 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 significantly improve the quality of the of the landscape due to the amount of native woodland, wetland and grassland habitats to be created. This will have a positive impact on the landscape character of the area. In the long term as the habitats establish, the impact of the 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 developments of a large scale in the local vicinity. In this context the proposal would be considered a continuation of the existing trend.

9.10.12. From my site visit I can confirm that the proposed development will be clearly visible from within the Business Park and along the Baldonnel Road to the west. Views from the Baldonnel Road to the south will be intermittent given the existing hedgerows and trees. I am satisfied that from a planning precedent with respect to other large data centres and a planning policy point of view, it is reasonable to conclude that the landscape in which the proposal is to be located is one of the more suitable landscape types within the county, subject to further consideration of impacts on specific views.

9.10.13. In total 8 photomontages were submitted in the EIAR and the further information response. I have reviewed all the photomontages and visited the site and am satisfied that they are representative of the likely views and impact. I specifically address views highlighted by the appellant in their appeal in section 8.2. above, but I have assessed all the views. I have referred to the local views from Baldonnel road above. Having regard to the intermittent screening along this particular road, I am of the opinion that the proposal will have a locally significant visual impact in this locality and on residential properties therein. This impact has to be balanced and seen against the fact that the landscape is a highly moderated working landscape which is identified in the County Development Plan as employment zoned land within an evolving Business Park.

9.10.14. The proposal will result in intermittent local visual impact within this immediate locality, but this has to be balanced against the need to develop these zoned and serviced lands.

9.10.15. I have considered all the documentation in respect of landscape and visual impact in addition to those specifically identified in this section of the report. I am satisfied that the majority of potential impacts would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions.

9.10.16. I am of the view that there will be some intermittent locally negative visual impacts, in particular from the Baldonnel Road to the south and on the residential properties therein. 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.

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

9.11. Traffic and Transportation

9.11.1. Traffic and Transport is addressed in Chapter 13 of the EIAR. I also address traffic in my planning assessment above (section 8.4). The methodology adopted is referred to which refers to the overall development of the campus. It is noted that the main access into the site is from the Grange Castle Business Park. Access.

9.11.2. Works under the Part 8 proposal of South Dublin County Council for the improvement of the R120 to the west of the site are noted. Baseline data is provided.

9.11.3. Trip generation and traffic distribution is estimated for the full development. The potential impact 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 during construction, while an outline Construction Management Plan has been prepared and is included with the application documents. 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 100-250 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 less than 3% at the R136/Grange Castle Business Park roundabout and less than 10% at the R134/Nangor Road/Baldonnell Road. It is not considered necessary to undertake any further junction assessment.

- 9.11.6. During operation there would be a maximum of 82 staff at the proposed development at any one time. 70 no. car parking spaces are proposed to cater for the predicted 60 no. office staff and 32 no. data centre staff.
- 9.11.7. Mitigation includes preparation of a Construction Management Plan during construction and encouraging employees to avail of the 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 applies 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 Rubicon Heritage Services by way of further information.
- 9.12.2. The receiving environment extends over a c. 9.2ha area, it is primarily a greenfield site but incorporates three residential properties located to the southeast of the site. It is characterised by 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 centre, office block and sub-station. It is also proposed to partially remove the upstanding townland boundary between Ballybane and Aungierstown and Ballybane currently demarcated by a field boundary bank and ditch. The operational phase will have no impact on archaeology or cultural heritage. Neither will the Do-nothing scenario.
- 9.12.4. Mitigation measures include archaeological testing where ground disturbance works are planned.

9.12.5. 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. 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. Excavated material will be reused on site for infilling and landscaping works 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 this 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, and Natural Resources. Several of these have already been addressed in the EIAR.
- 9.14.2. Supply of telecommunications, water and sewerage are sufficient to serve the development. It is proposed to construct an on-site substation to transform the voltage from the 110kV feed to 20kV. This substation will be owned and operated by the client with the point of metering being at the EirGrid substation. The intended supply arrangement will be from 2 no. 110kV feeders from the EirGrid substation which will be routed to the on-site substation.
- 9.14.3. The main transformers and 110kV switch gear are positioned to the north east of the proposed development. The proposed substation will be AIS (Air Insulated Switch gear) and bus bar to feed the main transformers. The 20kV system will be housed in a substation building located at the end of the substation area. This electrical feed will form the primary electrical feed to the facility using standby diesel generation in the event of a primary supply failure.
- 9.14.4. 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.
- 9.14.5. The proposal will not have any significant impact on material assets including utilities and natural resources. The impact can be classed as long term 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.
- 9.14.6. 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, and the submission from the planning authority, prescribed bodies and appellant in the course of the application, it is considered that the main significant direct and indirect effects (both positive and negative) 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, Biodiversity Management, Lighting, Traffic Management, Monitoring Plans, Noise and Vibration Management Plan, Construction and Demolition Waste Management Plan are also proposed. The remaining impacts, both positive and negative are:
- **Landscape and Visual Impact:** Localised significant visual impact from adjacent properties and intermittent sections of the local Baldonnel Road of the development

will not be avoided, mitigated, or otherwise addressed by means of condition. Mitigation measures proposed include earth modelling and large 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 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.

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:

Five 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.5.6km 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 Whorl Snail	This SAC lies c.5.6km 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.8.6km southeast	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 scrublands facies on calcareous substrates; Molinia meadows on calcareous, peaty or clayey-silt-laden soils; Petrifying springs with Tufa formation	No, Due to distance and the absence of a hydrological link or any other linkage between the site and the SAC.
002122 Wicklow Mountains SAC	11.5km southeast	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 (<i>Littorelletalia uniflorae</i>) Natural dystrophic lakes and ponds Northern Atlantic wet heaths with <i>Erica tetralix</i> European dry heaths Alpine and Boreal heaths Calaminarian grasslands of the <i>Violetalia calaminariae</i> Species-rich <i>Nardus</i>	No, Due to distance and the absence of a hydrological link or any other linkage between the site and the SAC.

		<p>grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)</p> <p>Blanket bogs (* if active bog)</p> <p>Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)</p> <p>Calcareous rocky slopes with chasmophytic vegetation</p> <p>Siliceous rocky slopes with chasmophytic vegetation</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p>	
000397 Red Bog Kildare SAC	14km southwest	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.	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	13.4 km southwest	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SPA has been selected. Merlin (<i>Falco columbarius</i>) Peregrine (<i>Falco peregrinus</i>)	No, Due to distance and the absence of a hydrological link or any other linkage between the site and the SPA.

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 are no hydrological or other links identified.
- 10.3.2. The proposed development will not give rise to any likely 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. 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 written submission made in respect of the application
- The established nature of Grange Castle Business Park
- Mitigation measures proposed for the construction and operation phases of the development,

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 amenities of the area, would not be prejudicial to public health and would be acceptable in terms of traffic safety. The proposed development would, therefore be in accordance with the proper planning and sustainable development of the area.

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.

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 adjacent properties and intermittent sections of the local Baldonnel Road of the development will not be avoided, mitigated, or otherwise addressed by means of condition.

Mitigation measures proposed include earth modelling and large 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.

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:

- a. The proposed development is consistent with national, regional and local planning policy, notably the South Dublin County Development Plan 2016 – 2022.
- b. The proposed development is situated in an established Business Park and is reasonably removed 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 comprises significant landscaping and planting. The proposed development will not therefore give rise to significant visual or landscape effects or indirect effects on heritage and/or tourism.
- d. Traffic arising from the development will result in a very 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 not be unacceptable, therefore, in terms of traffic safety.

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 30th day of July 2018, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. The mitigation measures and commitments identified in the environmental impact assessment report, and other plans and particulars submitted with the planning application shall be implemented in full by the developer, except as may otherwise be required in order to comply with the following conditions.

Prior to the commencement of development, the developer shall submit a schedule of mitigation measures identified in the Environmental Impact Assessment Report, to the planning authority for its written agreement.

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 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 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.

5. 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.

6. 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 (2013);
- (b) Details of the location, type, design and construction of the proposed gated access points in the security fence line;
- (c) Details and drawings showing the segregation of the loading bay area turning movement from the staff parking area.

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.

8. (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 facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall -
- (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
 - (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
 - (c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

11. Prior to any disturbance, or any pre-demolition works commencing on the building referred to as 'Erganagh', 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 (2006) or any document that might supersede it.

Should bats be found the applicant/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 5 years following the completion of the proposed development. The primary responsibilities of the Project Ecologist will be those as set out in the Biodiversity Management Plan. Annual reports shall be submitted to the planning authority.

Reason: In the interest of habitat and bat protection.

13. Prior to the commencement of development on site, a Construction Environmental Management Plan shall be submitted to and agreed in writing with the planning authority.

Reason: In the interest of orderly development, the environment and public health.

14. All planting/landscaping required to comply with the specification of the landscaping scheme submitted to the planning authority shall be maintained, and if any tree or plant dies or is otherwise lost within a period of five years, it shall be replaced by a plant of the same species, variety and size within the planting season following such loss.

Reason: In the interest of visual amenity.

15. Where the erection of cranes over 45m above ground level is required,

notification shall be provided to the Air Corps Air Traffic Services.

Reason: In the interest of air traffic safety.

16. 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.

Reason: In the interests of the environment, amenity and public safety.

17. The operational noise level shall not exceed 55 dB(A)_{Leq 1hr} (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 1hr} 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.

18. 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
Planning Inspectorate

13th February 2019