

DEPUTY PLANNING OFFICER

APPLICATION NO. PROPOSAL	3641/21 Permission for development on a site at Clonshaugh Business and Technology Park, Dublin 17. The subject site (with an area of c. 3.75 ha) comprises the site of former Units 15 and 16 (previously demolished) and the former Ricoh Building. The site is located to the north of the Santry River and the R104 Oscar Traynor Road, to the west of Clonshaugh Road, and to the south and east of existing estate roads. The proposed development, for which a seven-year permission is sought, comprises the following: -Demolition of the existing former Ricoh building, and all other associated site clearance works including removal of existing site services and ESB pillar boxes (other buildings previously occupying the site were demolished under Reg. Ref: 2229/19, a previously permitted data centre development, as amended by Reg. Ref: 3200/20); -Construction of two data centre buildings (Data Centre A and Data Centre B), with a gross floor area (GFA) of c. 12,875 sq.m and c. 1,455 sq.m respectively, each over two storeys (with Data Centre A also including two mezzanine levels), with plant at roof level; -Data Centre A will be located in the northern portion of the site, with a parapet height of c. 19.8 metres and will accommodate data halls, associated electrical and mechanical plant rooms, a loading bay, maintenance and storage space, office administration areas, with plant and solar panels at roof level; -Data Centre B (which will be ancillary to Data Centre A) will be located to the south of Data Centre A, with a parapet height of c. 12.8 metres and will accommodate data halls, associated electrical and mechanical plant rooms, a loading bay, maintenance and storage space, office administration areas, with plant at roof level; -Emergency generators and associated flues will be provided within compounds adjoining each of the two data centre buildings (11 no. for Data Centre A and 1 no. for Data Centre B). -The development includes a diesel tank and a filling area to serve the proposed emergency generators; -Ancillary structures including a sprinkler tank and pumphouse, security building, MV building, and provision of two additional MV substation rooms to the existing substation on site (c. 115 sq.m additional GFA), which was previously constructed under Reg. Ref.: 2229/19 as amended by Reg. Ref.: 3200/20. -Construction of access arrangements and internal road network and circulation areas, footpaths, provision of car parking (58 no. spaces) and bicycle parking (24 no. spaces); and -Hard and soft landscaping and planting, lighting, boundary treatments, and all associated and ancillary works including underground foul and storm water drainage network, and utility cables.
LOCATION	Site at Clonshaugh Business and Technology Park, Dublin 17. The subject site (with an area of c. 3.75 ha) comprises the site of former Units 15 and 16 (previously demolished) and the former Ricoh Building. The site is located, to the north of the Santry
APPLICANT	Colliers Properties LLC
DATE LODGED	06-Oct-2021
ZONING	, , ,
APPLICATION TYPE	Permission

DM/SM
30/11/21

Zoning/Designations

Most of the subject site would be located in an area zoned District Centres – Z4 with the objective: *To provide for and improve mixed-services facilities.*

The area north and east of the Ricoh building (as is most of the Clonshaugh Industrial Estate) is zoned Employment/Enterprise – Z6 with the objective: *To provide for the creation and protection of enterprise and facilitate opportunities for employment creation*

The southern portion of the site is zoned Amenity/Open Space Lands/Green Network Z9 with the objective: *To preserve, provide and improve recreational amenity and open space and green networks*

A Conservation Area follows the corridor of Santry River valley area.

The Z4 zoned portion of the site is located with Key District Centre (KDC) 2 'Northside'.

The Santry River Corridor is identified as being part of the Green Infrastructure Network for Dublin City extending from west of Coolock as far as the North Bull Island

Site Description

The subject site, which has a stated area of 3.75ha, is located within the Clonshaugh Business and Technology Park beside the entrance into the estate. The site sits to the north side of the Santry River. To the north is the GTT EMEA Ltd data centre (Reg. Ref. 4111/18 etc refers). To the east is the former Atlantic homecare site which was vacant for a number of years but is now in reuse as a Range retail unit (Reg. Ref. 3529/19 etc refers) - south of which permission was recently granted for a new Lidl store (Reg. Ref. 3865/20 refers). To the north west is a collection of buildings housing Amazon operated datahalls and associated structures (Reg. Ref. 2244/17 etc refers). Datahalls have also been constructed in the north west corner of the industrial estate (Reg. Ref. 4185/18 etc refers) – with an extension to the campus recently granted by ABP for two additional datahalls (Reg. Ref. 3803/20 refers) which superseded a previous lapsed c.28,000m² light industrial scheme. (Reg. Ref. 3553/07 refers) and contemporaneous adjoining applicant-assigned future proposed development lands.

The subject site formerly accommodated two conjoined long term vacant (20+ years) double-height, mainly red-brick finished flat roofed light industrial units. These units have since been demolished and the site cleared to accommodate a data hall approximately on the footprint of the former western building (Unit 15) – but no further works have taken place with the exception of the permitted ESB substation located in the western side of the site. The applicant notes that the aforementioned permission left a 'fallow area' roughly on the site of the now-demolished Unit 16 which they consider to be capable of further development to the eastern portion of the previous site which is now bounded by construction hoardings.

The subject in this instance has been expanded (from 3.1Ha to 3.754Ha) and now encompasses a vacant and boarded-up light industrial unit to the north east – the Ricoh unit (which was also in control of the previous applicants).

As the LVIA submitted with the application notes the development area of the site is brownfield in nature and relatively flat where it is zoned Z4 and Z6. A c.45m deep strip of southern part of the site extends down a wooded and grassed slope towards the Santry River. The applicant notes that the existing permission allows for a limited removal of a number of existing trees to facilitate the permission while retaining the existing mature planting along the river corridor, the estate entrance and along Clonshaugh Road to the north east to the other side of the vacant Ricoh building.

Adjoining existing wayleaves have been indicated on the site location map.

It is noted that under Reg. Ref. 5950/07 the subject site, as well as the site of the Range and permitted Lidl development and associated car parking (all part of KDC lands to the east and north of the river) - were to accommodate a 2-storey/double height 63,728sqm gross (45,000sqm net) retail centre. The site of the 16m+ to 18m+ retail centre would have encompassed the entire current pocket of Z4 zoned lands situated west of Clonshaugh Road (which had previously been

rezoned from Z6 in anticipation of the major shopping centre redevelopment) as well as taking in portions of Z9 lands north of the river.

Proposed Development

A 7-Year Permission is sought for the following:

- Demolition of the existing former Ricoh building(2400sqm GFA), and all other associated site clearance works including removal of existing site services and ESB pillar boxes (other buildings previously occupying the site were demolished under Reg. Ref: 2229/19, a previously permitted data centre development, as amended by Reg.Ref:3200/20);
- Construction of two data centre buildings (Data Centre A and Data Centre B), with a gross floor area (GFA) of c. 12,875 sq.m & c. 1,455 sq.m respectively, each over two storeys (with Data Centre A also including two mezzanine levels), with plant at roof level;
 - *Data Centre A will be located in the northern portion of the site, with a parapet height of c.19.8 metres and will accommodate data halls, associated electrical and mechanical plant rooms, a loading bay, maintenance and storage space, office administration areas, with plant and solar panels at roof level;*
 - *Data Centre B (which will be ancillary to Data Centre A) will be located to the south of Data Centre A, with a parapet height of c.12.8 metres and will accommodate data halls, associated electrical and mechanical plant rooms, a loading bay, maintenance and storage space, office administration areas, with plant at roof level;*
- Emergency generators and associated flues will be provided within compounds adjoining each of the two data centre buildings (11 no. for Data Centre A and 1 no. for Data Centre B).
- Diesel tank and a filling area to serve the proposed emergency generators;
- Ancillary structures including:
 - sprinkler tank and pumphouse,
 - security building,
 - MV building, &
 - provision of two additional MV substation rooms to the existing substation on site (c. 115 sq.m additional GFA), which was previously constructed under Reg. Ref.: 2229/19 as amended by Reg. Ref.3200/20.
- Construction of access arrangements and internal road network and circulation areas, footpaths,
- 58no. of car parking &
- 24no. bicycle parking;
- Hard and soft landscaping and planting, lighting, boundary treatments, and all associated and ancillary works including underground foul and storm water drainage network, and utility cables.

Phasing

The applicant notes that while the proposal could be developed within standard 5 year permission period- that due operational requirements and demand that plant and equipment may continue to be constructed, installed and adjusted beyond standard permission completion period. This would

not appear to be over problematic in itself – noting also the provision in the Act to extend the lifetime of a permission where a development is substantially complete.

Site Planning History

<u>Reg. Ref.</u>	<u>Decision/Description</u>
3200/20	<p>RETENTION PP GRANTED for development at a site located at Units 15/16 Business & Technology Park, Clonshaugh, Dublin 17. The development comprises a modification to Permission DCC Ref. 2229/19 (currently under construction) granted for a 2 storey data centre, (with generator yard and all associated works). The development now provides a larger, single storey substation (increased in size from c.34.5 sq.m (as permitted) to c.68.4 sq.m) and located to the south-west of the data centre building as per the parent permission DCC Ref. 2229/19.</p>
2229/19	<p>PP GRANTED for</p> <ul style="list-style-type: none">• Demolition of existing former industrial buildings (c.7,400m²) total GFA), associated plant and hard-standing.• Construction of a 2 storey data centre including:<ul style="list-style-type: none">○ Data halls, offices/admin, staff areas, storage/loading areas, circulation, UPS rooms, and roof plant (total floor area c.9,250m²). <p>Break down of main site floor areas</p> <ul style="list-style-type: none">- Admin office Block (635m²)- Data Hall over two levels (6825m²)- Storage & Loading area(435m²)- UPS room (1205m²)- Generator Yard (760m²) <ul style="list-style-type: none">• Provision of a generator yard with 3 no. buildings housing 5 no. back-up generators.• Provision of a substation building (floor area c.34.5m²),• waste compound building (floor area c.16 m²),• 14 no. car parking spaces,• 10 no. bicycle parking spaces, internal roads, docking/service yard, site lighting, new entrance gate, new security fencing to replace existing fencing.• All associated site development works, landscape works and services provision.
5950/07	<p>10 YR PP GRANTED for a mixed use retail, office, residential, restaurant, bar, crèche, community and recreational development over two phases on a 30.28 hectare site.</p> <p>Phase 1 includes the demolition of all existing buildings on the Phase 1 site, including Coolock Health Centre and adjacent community buildings, industrial and retail warehouse units and 128no. habitable dwellings at the Cromcastle Court residential scheme. The development includes the construction of the following: two storey 63,728sqm gross (45,000sqm net) retail centre north of the Santry River including service yard, energy centre(1,100sqm) and a bus only link to Clonshaugh Road; 2,553sqm two storey pool and leisure centre and 4,170sqm</p>

two storey combined library and community centre north of Oscar Traynor Road; 200sqm single storey sports changing facility west of Clonshaugh Industrial Estate access road; 150sqm single storey pigeon club east of Clonshaugh Road; 5,000sqm five storey medical centre; 850sqm two storey crèche facility; 400sqm community building; 66sqm management/security office; 1 no. retail unit (167sqm); 940no apartment and duplex apartment units (148no. one bed; 622no. two bed, 166no. three bed; and 4no. four bed) arranged in two, three, four, five, six and seven storey courtyards (including set back storey on the four, five six and seven storey blocks) located between Oscar Traynor Road, Kilmore Road, Kilbarron Road, Cromcastle Park and Cromcastle Road and including 30no. sheltered units in a three storey development in the grounds of Woodville House, a Protected Structure in a semi-derelict state located east of Kilmore Road which will be renovated and restored to provide communal support facilities for the sheltered housing units; 16no. car parking spaces associated with Woodville House; all residential units are provided with private gardens, terraces, balconies and semi-private courtyards; landscaping to riverside parkland; engineering works to Santry River; two new civic plazas linked by a pedestrian bridge across Oscar Traynor Road; a multi-purpose outdoor games area; temporary accommodation for the Kilmore West recreation centre including the boxing club (350sqm), community centre (880sqm) in the grounds of Scoil Fhursa; road improvements throughout; busways on both sides of Oscar Traynor Road; ESB substations; plant and associated services; 2,340no. basement level car parking spaces located under the development areas, 1,300no. for use by the retail centre, 50no. for the community/library/pool leisure buildings, 940no. for the residential units and 50 no. for the health centre together with 155no. surface residential car parking spaces.

Phase 2 comprises the demolition of the existing Northside Shopping Centre; the construction of 11,924sqm gross retail space; 6,200sqm (10no. screens) cinema and family entertainment centre; 1,100sqm sports bar/restaurant; a 7,990sqm 16no. storey office tower with associated 244sqm ground floor and 584sqm first floor tea rooms/restaurant; 400no. residential apartments units (50no. one bed units; 233no. two bed units, 112no. three bed units; 3no. 3 bed live-work units and 2no. 2 bed love-work units) arranged in three, four, five and six storey courtyards (including set back storey on four, five and six storey blocks); 600sqm crèche; realignment of Clonshaugh Road to form new cross roads junction with Kilmore Road; a new pedestrian high street with lifts and stairs to basement car park; basement level car parking for 954 cars (151 for retail, crèche and sports bar/restaurant use, 500 for residential use, 230 for cinema use; and 73 for office use) accessed from the realigned Clonshaugh Road, Barrycourt Road and via an underground link from the Phase 1 car park west of the existing Clonshaugh Road; 1,815 no. bicycle spaces are distributed throughout the overall scheme; modifications to existing road junctions between Kilmore Road and Kilbarron Road and Cromcastle Road and Oscar Traynor Road; modifications to access to Woodville House; modifications to existing road junction between Oscar Traynor Road and IDA road and intersection between Cromcastle Road and Cromcastle Avenue; civic plaza; landscaping; ESB substations; plant and associated auxiliary services and all other associated site development works.

4355/02 PP GRANTED for erection of an unlit sign 6mx 1.5m displaying their company logo, at high level on the south facade of their existing warehouse premises at unit 28b Clonshaugh Industrial Estate, Dublin 17.

2128/00 PP GRANTED for new business and technology park comprising the erection of nine four storey office type buildings (total floor area 34,751 sq.m) with plantrooms over and basement car parking, uses to include those provided for under the Zoning Objective including light industry, data processing, software development, technical consulting uses, research and development, training and publishing, science and technology based industry and offices, with associated administrative offices, training facilities etc. on a heavily landscaped site, entered adjacent to the existing site entrance to its north, at the former 'Little Tikes' premises, located to the south east corner of the IDA Clonshaugh Industrial Estate, facing onto the Santry River linear park and the Oscar Traynor Road to the south, the main

entrance road into the Estate to the west, the access road to the site to the north and retail warehouse developments entered from the Clonshaugh Road to the west.

Observations

Prescribed Bodies:

Irish Water: Awaited However a Pre-connection letter attached to submission notes that proposed connection can be facilitated by IW

CRU: Awaited

Dept. Of Communications,
Climate Action & Environment -
GSI: No issues raised with the proposal
DAA: No issue with proposal – recommends consultation with the IAA and the IAA-ANSP

Third Parties:

A number have been received and are summarised as follows

Data centres are huge users of energy – which in turn is mostly derived from fossil fuels (with on-site back-up diesel generators also being noted) which contributes to CO2 emissions which significantly impacts on Climate Change. The climate crisis means there is a need to urgently reduce greenhouse gas emissions.

Ireland is out of kilter with other European countries with respect to the amount of our annual electricity demand that it is willing to offer up to the data centres.

The CRU/CER need to be notified of proposal – they are a designated entity in relation to developments which may have an impact on energy infrastructure.

There are 70 data centres currently operational in Ireland with power capacity of 900MW and 8 more currently being constructed that will add another 255MW. In addition a further 30 data centres have Planning Approved in the Dublin Metropolitan Area alone and a further 7 with Active Planning Applications

Amazon has the largest presence in country with a total of 224MW built and 45MW under construction. DCC have permitted them a 33.6MW data centre that projected its own annual power consumption at 589GWh – with another application following. The figure of 589GWh annual usage would represent the average electricity demand for 140,000 homes. A 48MW data centre was granted by Meath Co Co in June which followed a 2020 permission for another 48MW datacentre.

There is an over concentration of data centres in and around Dublin - whose electricity grid was not built to cater for such high demand, and which has resulted in network supply constraints. The proposal will lead to dangerous planning precedent.

It's clear that Eirgrid are very worried about the growth of Data Centres in Ireland and that this will lead to blackouts and are now proposing to ban any more in the GDA and as such the proposal is premature.

The EIAR has made no reference to the cumulative effects of the proposed development in combination with other data centre developments in the GDA. The proposal should also be assessed cumulatively on a national basis.

Renewable energy has increased dramatically but is not keeping pace with meeting national energy demand which has grown by more than renewables have added.

While developers of data centres may make projections about renewable energy and future technologies that may mitigate emissions in future, decisions must be based on the fact that the current energy system is overwhelmingly based on the burning of fossil fuels.

Ireland is very dependent on external electrical energy supply - the solution that is being proposed for the Data Centre problem. The recent Climate Action Plan stated that the plan is to deliver another 2GW of new Gas power stations. If these gas plants are used similarly to our existing gas stations, the emissions are likely to be in the range of adding another 3.4 million tonnes of CO2 emissions to our national output. These new gas plants are primarily needed because of the existing and projected data centres that have been built, with Eirgrid stating recently that they have 1.8GW worth of contracts in place.

It is noted that there have been reductions in Greenhouse Gas emissions from electrical power generation overall but this has largely been achieved by replacing coal and peat power stations with gas. The benefit from that switch has been reaped and won't continue the downward trend

Major development should be subject to carbon proofing. No detail is provided as to how proposal will assist Ireland in reaching its CO2 reduction goals or how it will assist with legal requirement to reduce greenhouse gas emissions.

No information is provided on connections to electricity and water or that the site is already serviced

If permitted the proposal should be conditioned to be 100% reliant on renewable energy sources.

There is a need to rapidly reduce our energy demand back to within the capacity of our renewable resources. Reduction in energy use is the only viable basis of tackling climate change - and that don't mine our non-renewable resources. There has been no limits set on how much data is reasonable to store - and there are no incentives for individuals and organisations to minimise their data usage in the face of ever increasing demands on energy.

Amazon are project splitting with sequential individual applications - which is being used to hide the impact of their developments.

Amazon have been engaged in extensive lobbying including councils and politicians - the meeting with DCC's Chief Executive should be recorded as pre-planning associated with this application.

The power rating for the windfarm is given, as is also the on-site EV points but not for the proposal itself and should have been included in the Energy Statement. The peak electricity demand for this proposed development is not detailed anywhere in the application. This has been done to obfuscate the real impact of the proposal.

The provision of PVs is noted - but it's not clear how they would compensate for demand on the national grid.

No details of heat recovery are provided that could support a District Heating network - a timeframe to facilitate local distribution should be provided prior to commencement of development, or that there is a requirement that the subject proposal be future proofed to provide same.

There is no provision of green roofs. Green/living walls are suggested as means to soften the visual impact of the proposal and also enhance on-site SUDs measures.

Landscape plan is deficient in promoting/enhancing biodiversity

A 5 year grant should be given instead of requested 7 years.

The submissions are noted. Planning issues will be dealt with within the substance of the following assessment.

Interdepartmental Report

Drainage Division:	No objection subject to conditions
TPD (Roads):	No objection subject to conditions
Parks & landscape Services Division	Further information is sought
EHO:	No objections subject to conditions

Planning Assessment

National Guidelines

Project Ireland 2040 National Planning Framework (NPF2040)

Relocating less intensive uses outside the M50 ring in particular and from the existing built-up area generally

National Strategic Outcome 6 - 'A Strong Economy Supported by Enterprise, Innovation and Skills'

'Digital and Data innovation.'

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

Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy 2018:

This Government Statement contributes to the Strategic Policy Framework and outlines the

Government's desire for a plan-led approach to data centres.

The strategic approach aims to:

- Drive Ireland's ambition in the digital economy as a location of choice for investment and a seed-bed for technology entrepreneurship across a range of sectors and activities;
- contribute to regional development, deliver associated economic activities and support the creation of high quality, sustainable jobs;
- align enterprise electricity demand with generation capacity and transmission planning; and
- ensure that potential downside costs are minimised and that economic impact is optimised.

The plan-led approach aligns with the objective set out in Ireland 2040, National Planning Framework for the 'promotion of Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities' to deliver on the National Strategic Outcome 6 'A strong economy supported by enterprise, innovation and skills

Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy 2019-2031 (RSES)

Chapter 5 - Dublin Metropolitan Area Strategic Plan (MASP)

5.3 Guiding Principles for the growth of the Dublin Metropolitan Area

- Increased employment density in the right places – To plan for increased employment densities within Dublin City and suburbs and at other sustainable locations near high quality public transport nodes, near third level institutes and existing employment hubs, and to relocate less intensive employment uses outside the M50 ring and existing built-up areas.

Chapter 6 – Economy and Employment

6.3 Economic Strategy

Spatial Enterprise Strategy

Guiding Principles for Investment Prioritisation in Placemaking for Enterprise Development

- Align to national strategy and approach for data centres – right location for use and energy demand.

Chapter 7 – Environment and Climate

7.9 Climate Change

Decarbonising the Energy Sector

The Region will need to shift from its reliance on using fossil fuels and natural gas as its main energy source to a more diverse range of low and zero-carbon sources, including renewable energy and secondary heat sources. Decentralised energy will be critical to the Region's energy supply and will ensure that the Region can become more self-sufficient in relation to its energy needs.

Waste heat presents a huge indigenous resource. Waste heat is the single largest available low-carbon source of energy available in the Region that is not being used. In Dublin City alone, there is enough waste heat to meet the heating demands of nearly half of the city's buildings. These sources of heat are typically used in District Heating systems. Sources of waste heat include data centres. Waste heat is a resource which is too often overlooked and can meet a large proportion of the Region's heat demands indigenously and without fossil fuels. In response, the Strategy seeks to support the micro-generation, geothermal energy, district heating, storage of heat and energy and the role of the electricity transmission and distribution network.

RPO 7.38: Local authorities shall

Consider the use of heat mapping to support developments which deliver energy efficiency and the recovery of energy that would otherwise be wasted. A feasibility assessment for district heating in local authority areas shall be carried out and statutory planning documents shall identify local waste heat sources.

Chapter 8 – Connectivity

8.6 Communications Network and Digital Infrastructure

RPO 8.25: Local authorities shall:

- Support and facilitate delivery of the National Broadband Plan.
- Facilitate enhanced international fibre communications links, including full interconnection between the fibre networks in Northern Ireland and the Republic of Ireland.
- Promote and facilitate the sustainable development of a high-quality ICT network throughout the Region in order to achieve balanced social and economic development, whilst protecting the amenities of urban and rural areas.
- Support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations.
- Promote Dublin as a demonstrator of 5G information and communication technology.

2016-2022 Dublin City Development Plan

2.2.4.1	Local Economic and Community Plan (7) Identify and support the growth sectors such as tourism, technology, food chain, education, and green business that will create, sustain and grow quality employment and self-employment opportunities for all
C11:	To promote employment and economic opportunities in the KDCs, district centres/urban villages and in neighbourhood centres in the identified innovation corridors and clusters
Chapter 6	City Economy and Enterprise
CEE1(i)	To promote and enhance the role of Dublin as the national economic engine and driver of economic recovery and growth, with the city centre as its core economic generator
SIO33	To support the development of energy efficient initiatives such as use of District Heating and Combined Heat and Power, and to promote the use of CHP in large developments

14.8.4	District Centres – Zone Z4
KDC 2	Northside Shopping Centre
14.8.6	Employment/Enterprise – Zone Z6
14.8.9	Amenity/Open Space Lands/Green Network – Zone Z9
16.7	Building Height in a Sustainable City
16.22	Industry, Warehousing and Business Park Development

Evaluation

Principle of development

As noted previously that prior to Variation 6 of the 2005-2011 Dublin City Development Plan (CDP) the subject site and adjoining lands to the east (north of the river and up to the Clonshaugh Road) were both previously zoned *Employment/Enterprise Z6* and *Open Space – Z9* - but were then rezoned '*Strategic Development & Regeneration Areas (SDRA) Z14*', in conjunction with the PUC2 '*Northside shopping centre lands*'. However the enlarged (KDC 2) Northside shopping centre lands were subsequently rezoned '*District Centre – Z4*' in the 2011-2017 CDP and remains so under the current 2016-2022 CDP.

As with most recent applications on site it is again noted that *Science and technology-based industry*, is a permissible use under the Z4 and Z6 zonings.

Under Appendix 21 *Science and technology-based industry* is defines as:

Knowledge-based processes and industrial activities (including ancillary offices) in which research, innovation and development play a significant part, and which lead to and accommodate the commercial production of a high-technology output, i.e. commercial laboratory, data processing, enterprise centre, film production, healthcare, information technology, light industry, media recording and general media associated uses, publishing, research and development, software development, telemarketing, teleservicing and training

The applicant on the previous data centre proposal on site noted that subject site was controlled by NAMA prior to April 2018, and was part of larger holding including the 'Range–Atlantic Homecare' lands to the east' along with Northside Shopping Centre to the south east. The previous applicant noted that the genesis of the rezoning of this site and the adjacent site from Z6 to Z4 stemmed from the now moribund Northside Shopping Centre proposal (Reg. Ref. 5950/07 refers). As noted there seems to be no prospect that this scale of District Centre development will happen in the short to medium term. It is however considered that the development on site (notwithstanding the investment involved) would not preclude future redevelopments as say a residential development would in the same circumstances.

As before it would seem logical if the subject development is permitted and a light industrial use or similar is developed on the 'fallow' eastern half of the subject site - then these lands could be rezoned back to Z6 *Employment/Enterprise* use again as with the rest of the Clonshaugh Industrial Estate – from where the site and all the previous and existing buildings on site where accessed. (It is however noted that the Z4 zoned lands remain as Z4 in the draft 2022-2028 CDP)

As noted while the NPF2040 and RSES makes reference to relocating less intensive uses outside the M50 ring in particular and from the existing built-up areas generally, it is also noted that National Strategic Outcome 6 of the NPF2040 '*A Strong Economy Supported by Enterprise, Innovation and Skills*' notes the following objective in relation to 'Digital and Data innovation.'

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

This is reiterated in the *Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy 2018*, (Government Statement) which also notes that Ireland has become a leading European destination for data centres with investment in same forming the backbone of Ireland's overall digital economy. At present this statement still holds for planning authorities in terms of considering such proposals.

The Government Statement notes that employment in data centres are high value jobs and provide secure employment for a considerable period, and although the numbers directly employed in data centres is relatively low they stimulate additional economic activity. It notes that data centres are highly capital intensive and provide job opportunities during the construction phase which can run for three years or more. Furthermore, deep expertise has been developed in Ireland's construction firms. In addition, data centre operations create employment in the firms from which they purchase goods and services.

Dublin City's 2016-2022 Development Plan requires that redevelopment proposals on Z6 lands should ensure that the employment element on site should be in excess of that on site prior to redevelopment in terms of the numbers employed and/or floor space. As noted the previous light industrial buildings on site had been vacant for over 20+ years. Indeed new data centres permissions in Clonsaugh have replaced long term vacant units, unimplemented permissions or long term undeveloped zoned lands i.e. none of the later data centre developments displaced any existing employment – with the applicant noting below the direct and employment generation and facilitation capacity the Operator's developments provide nationally and internationally.

In the last application on site it was estimated that c.25 people will be employed on site by T5 (the envisaged end-user at that time) which they considered at that time to be comparable to modern day high-end manufacturing and manufacturing uses. The current proposal has an estimated 15 – 58 staff over a 24hr period during the operational phase (- with an estimated 275no. staff increasing to 400 at peak construction.)

The applicant notes that the intended Operator recently commissioned Indecon to complete an independent analysis of their investment in Ireland since 2011 - which noted that they sustain 8,700 jobs in Ireland (3,100 direct employees/3,900 working as contractors & suppliers and 1,700 individuals employed as a result of income generated by the Operator's investments). The report notes that the Operator increased economic output in Ireland by almost €7.5 billion over the last decade and directly invested €4.5 billion in the same period. The report notes that the Operator is generating growth in economic output in Ireland of €1.45 billion a year and is forecast to exceed €1.5 billion in 2021, 2022 and 2023. The Indecon analysis has also provided a further breakdown for Dublin City as per the above (see submission).

As noted previously the Government Statement states that it is important to acknowledge that data centres pose considerable challenges to the future planning and operation of Ireland's power system. The Government Statement also notes that currently, a large portion of existing and planned data centres that are due to connect to the electricity system are expected to be in the Dublin area. Based on existing datacentres, committed expansion and expected growth, the 2018 Government Statement notes that total demand could treble within the next ten years. The Government Statement notes that it is important that Ireland retains the ongoing capacity to meet a range of energy intensive industry demands over time, and that a plan-led and strategic approach should ensure that suitable locations throughout Ireland are promoted for investment that minimise the need for deep reinforcements on the energy grid.

The Government Statement also notes that to ensure a streamlined decision making process for planning, the planning process will be amended for data centres over certain size thresholds to reclassify them as strategic infrastructure development (SIDS) – which will be directly determined by ABP rather than local authorities. However to date Section 49 of the Planning and Development (Amendment) Act 2018 has not yet commenced. The subject development would have a combined gross floor area of over 14,000sqm (12,875 sq.m and c. 1,455) whereas the previous scheme has a GFA of 9,250sqm – which would be below the SIDS application to ABP threshold – although as noted by the current applicant the previous scheme left a fallow area to its east which could take a similar footprint of development – i.e. at least doubling the floor area of data centres on the permitted site.

Energy Statement

The applicant notes via their Energy Statement etc in terms of energy efficiency and sustainability that the Operator runs 175 data centres globally and is investing and innovating in efficiency in every aspect of their operations (including their global cloud infrastructure) and state that they are on a path to be powered via 100% renewable energy by 2025 – which they note is in line with the Climate Pledge co-founded by the Operator - which commits their businesses to be net zero by 2040 which they note will be 10 years ahead of the Paris Agreement.

The submission notes that in 2020 the Operator announced a new 115MW wind farm project to begin operating in 2022 – which will support the Operator's data centres in the country. They note

that along with existing projects in Cork (online 2020) and Donegal (on line early 2022) will provide 229MW of renewable energy per annum - enough to power 185,000 homes a year - reducing carbon emissions by 366,000 tonnes of CO² a year- and. The applicant notes that the Operator was first to sign unsubsidised Corporate Power Purchase Agreements – meaning that their three renewable energy projects will save tens of millions of PSO subsidy cost on people's energy bills. The submission notes that the Operator's Irish and international customers are in turn able to support their own goals in terms of sustainability by moving to the 'cloud' - with the Operator's data centres being up to 3.6 time more energy efficient than traditional operations. Moving data off site to the Operator's cloud infrastructure also allows businesses to achieve reductions in their own operations' carbon footprints.

The submission notes that power requirements will be provided by the to-be extended permitted ESB substation on site, with the applicant to install low-loss transformers. Emergency back-up generators will be provided on site and as such will be non-operational for the vast majority of time. External lighting will use high efficiency low energy LEDs and will also be designed to minimise light pollution. Sensor lighting will be used in secondary areas. PV panels will provide on-site renewable energy. The applicant notes that 26kWp(peak) would be required for compliance with a 'Near Zero Energy Building'. The applicant notes that the development consists of unheated operational space and heated office space, and that the data storage space is therefore exempt from TGD Part L 2017 – while the fully air conditioned office space will meet the Part L requirements by being designed to meet a BER rating of A3 or higher – by using highly efficient VRF Air Conditioning and roof mounted PV panels.

The site will also provide for 5 x EV as well as ducting to allow the potential for 5no. more.

The submission notes that through the design of mechanical systems the applicant notes that for 95% of the year no water will be used to cool the facilities (with an estimated use of c.264m³ of water a year). Also 90% of annual cooling water requirements will be via Rainwater harvesting. Fans will only be required for cooling during peak cooling season. Adiabatic cooling system which is to be employed does not require electrically powered chillers/coolers. The data storage rooms' temperatures will be kept as high as possible to minimise use of cooling measures. The applicant notes that significant power savings can be achieved by way of achieving minimum necessary fan speeds via system monitoring. Fans are to be lighter weight than traditional versions.

In terms of potential waste heat recovery – the submission notes that the Operator supports decentralised energy networks and note an example elsewhere where a new datacentre will provide recycled heat to a Local Authority developed District Heating System (DHS) The applicant notes while an energy intensive heat recovery coil system could be developed they however note that there would need to be an 'off taker' and a DHS network in place to offset energy losses in the development – but note that none is provided in this instance. While there is support for the concept there is currently no requirement in the Development Plan that data centres or other light industrial developments should provide heat recovery systems. As has been suggested the applicant could be asked what measures can be taken to future proof the project in terms of waste heat recovery and potential linkages to a local network.

This application has been referred to the Commission for Regulation of Utilities (CRU/CER) and a response is awaited. The issue of actually connecting the development to the national grid would be outside the remit of the planning authority, and it should be noted that as per Section 34(13) of the Planning & Development Act 2000(as amended) that while a planning authority can provide a scheme with planning permission it does not mean that the scheme has right to be developed by any party. Ultimately in this instance Eirgrid would be the main gate keeper for the allowing the proposal to commence operations. As noted in the submission there were no initial objections from Irish Water in terms of connections.

Overall it is considered the subject proposal subscribes to the above national objectives for data centres – with the development redeveloping of existing long-term vacant site for a permitted 'Z4' use type which is already present on the estate and in close proximity to strategic ICT infrastructure is a good fit for the subject site.

It is noted that since the subject application was made the CRU have recently published (23/11/2021) the 'CRU Direction to the System Operators related to Data Centre grid connection processing Decision' which includes an assessment criteria to determine whether a connection offer can be made within the system stability and reliability needs of the electricity network. The criteria includes the following:

- The location of the data centre applicant with respect to whether they are within a constrained or unconstrained region of the electricity system.

- The ability of the data centre applicant to bring onsite dispatchable generation (and/or storage) equivalent to or greater than their demand, which meets appropriate availability and other technical requirements as may be specified by the relevant SO, in order to support security of supply.
- The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by the relevant SO in times of system constraint through the use of dispatchable on-site generation (and/or storage) which meets appropriate availability and other technical requirements as may be specified by the relevant SO, in order to support security of supply.
- The ability of the data centre applicant to provide flexibility in their demand by reducing consumption when requested to do so by the relevant SO, in times of system constraint, in order to support security of supply.

The document states that the assessment criteria will have an immediate effect, upon issuance to the Directions to the SOs (System Operators includes Eirgrid ESB – issued 23/11/2021). The document also states ‘the applications that are categorised by the SOs as “Connected” and “Contracted” in table 1 and table 2 contained in section 2.2 of this document are not subject to the Directions’.

As noted the Operators three windfarms are to provide 229MW of renewal energy per annum and there is already permission for an extended ESB substation on site. However, for the purposes of clarity and in the context of the CRU direction it is considered appropriate to request the applicant respond to the direction considering it has been published following the submission of the planning application and whether it is likely to impact the proposed development.

Section 3.2 and 5.10 of the EIA Screening Report provides an assessment of the cumulative impacts of the proposed development on the environment and Appendix A provides a planning history of the Clonshaugh Business and Technology Park and wider area. From the information provided there would be no likely be significant interactions during construction and operation subject to the use of appropriate mitigation and management measures and an EIA would not be warranted. The report states that provided the mitigation measures for other permitted development are implemented as permitted, there will be no significant cumulative effects which would warrant an EIA.

Notwithstanding the above, at this point in time noting the planning history of the area whereby it would appear a substantial area of the Clonshaugh Technology & Business Park now comprises data centres and allied uses, it would be beneficial to understand fully the cumulative impacts (on the receiving environment) of the proposed development alongside these facilities and how the proposed development and wider Clonshaugh Technology & Business Park fits into the wider GDA in terms of existing and permitted developments. In order to assess potential cumulative impacts of such development it is recommended that further information is requested to include an up to date estimate of total floor area and the proportion of the overall Clonshaugh Technology and Business Park given over to data centre development such or allied uses noting also the presence of long standing data and telecom infrastructure within the estate. The applicant should also include a map indicating the existing and permitted data centres within the estate

Design & Integration

The site of the latest redevelopment proposal will still largely maintain the existing natural screening to the south and west, with minimal loss of tree cover and with an apparent upgrade in the boundary treatment. A tree survey, tree protection plan and landscape plans have been submitted with the proposal.

The applicant notes that the existing site is partially screened by existing development from the north, west and east (including the permitted Lidl store). The applicant notes that there is dense/mature planting to part of western and eastern boundaries, and along the entirety of the southern boundary. The proposed development is to see augmentation of screening and landscaping at key points

A 30m set back will be maintained from the Santry River. The proposed line of the southern boundary-fence runs just north of the 30m setback. While the applicant notes that the southern security-fence is set further back and sits outside the Z9 zoned portion of the site, and will generally sit well north (3-4m) of the tree belt so as to minimise impact on planting. The applicant notes that the southern fences lines were established by the previous permission. (See Parks Report)

As noted additional tree planting is proposed to the southern eastern and western portions of the boundary to supplement existing planting to provide an enhanced buffer and screen the site from existing nearby road network. As the applicant's submissions notes the low level fence and additional planting are the only proposed intervention on Z9 lands. (See Parks Report)

The proposed Building A will be set further back from both the western and southern site boundaries (and Z9/ river Conservation areas) when compared to the footprint of the extant permitted development on site. Also as noted above the current permission leaves a fallow area of brownfield zoned land capable of accommodating a building of a similar footprint to the east. As proposed the arrangement of Building A and Building B significantly decreases the available footprint of the main part of the site for future development when compared to the current scenario – with also the now-included site of the existing vacant Ricoh building being given over to the new entrance and circulation area to the site. (Of course additional datahall floors can be added to any footprint)

The applicant is proposing a light coloured contemporary finish to the new buildings - with a degree of articulation provided particular to the facades of Building A which will be viewable above the enhanced tree line. As evident in the submitted photomontages the development including associated plant will be largely or substantially screened from various vantage points except as noted for the upper levels of Building A.

While generally the treatment is appropriate to the light industrial/brownfield setting it is noted that the elevation of the site and height of Building A gives its upper level somewhat more local prominence – whereas the presence of the overall estate as viewed in more recent times from the Oscar Traynor Road was much more discrete presumably as the southern planted belt screening matured over the years. As such it is recommended that the Block A is finished in a neutral anthracite colour and in a matt finished treatment – finishes however can be conditioned and agreed. It is also noted that DCC's Parks, Biodiversity & Landscape Division recommend that a living wall type treatment be applied instead as suggested by a 3rd party observer. It is recommended that the applicant be asked to explore this option.

It is considered that the generator structure/compound to the western side of Building A has a degree of architectural quality exceeding its functional requirements. Either way it will not be overly observable from the general public realm and the main nearby public road network. The applicant is however looking for a pre-installation compliance condition in the event of a grant of planning permission as the exact dimensions of the emergency generators and the distance between the proposed shrouds and façade of Building A may be subject to minor adjustment. It is agreed that such changes will have minimal visual impact.

As a comparative baseline impact on the visual amenities of the area it is useful to remember that the previous double-height Retail Warehouse facility of Reg. Ref. 5950/07 – which encroached into the Z9 zoning - would have occupied the full vista of the Z4 zoned lands to the north of the Santry River with little in the way of mitigating natural buffers proposed or even capable of screening its c.250m+ frontage.

While the mainly c.19.8m Block A (with stacks & plant rising to c.25m) is in excess of 16m outer city height limit – it is not considered that excessively taller than existing units in the estate and 18m+ heights were granted on the subject KDC/Z4 zoned lands previously, with some existing buildings and structures in the estate also exceeding 16m. It is noted that the current Development Plan allows up to 50m in height - the equivalent of 16 residential storeys – within the estate – but only if a LAP/SDZ/SDRA was in situ. Although the subject site was within a SDRA in the 2011-2017 CDP that designation no longer applies under the current Development Plan or either are there any LAPs or SDZs in the pipeline for the area. The smaller Building B will be mainly under 13m in height with a stack rising to c.16m – with the building unlikely to be overly register from outside of the site.

The Development Plan however notes that plant, flues and lift overruns should not be included in the height of the building, as long as they are set back and properly screened and do not significantly add to the shadowing or otherwise of natural light beyond that of the main structure. It is not considered in this instance that stacks and roof plant will be in any way incongruous with their light industrial setting.

The to-be-extended electrical substation will be located along the western boundary tucked behind existing natural screening.

The applicant has submitted a Landscape & Visual Impact Assessment (LVIA) of the proposal in terms of both construction and operational phases – which also helps inform the EIA screening process. The report is accompanied by a set of verified photomontages illustrating before and after scenarios from various local vantage points (including a 'before' and 'after' views of a developed adjacent Lidl scenario to the east). As noted there are no listed or scenic views, no landscape or amenity designations or protected trees pertaining to the project site, and no protected structures or National Monuments on the site. Construction activity and the emergence of the new development will be more readily visible along the southern portion of Clonshaugh Road but only intermittently visible further north from Riverside Road to Riverside Park and Newbury Wood. (As noted the site has been cleared and hoarding is in place in relation to current on site permissions). It has also been noted that the ancillary spaces within the development site will incorporate mixed pollen-rich and bio-diverse planting areas as well as amenity grass areas and wild-flower meadow grass area, and that the riverside area will be enhanced in terms of natural buffering, landscaping and biodiversity.

The submission notes that the proposed development is carefully integrated within the established site with suitable stepping down, buffer zones and landscaping along the more sensitive site boundaries so as to protect the residential amenity and the open space amenity in the immediate locality of the site

During the estimated 48 month construction period the LVIA considers that the effects on landscape character during construction will be *temporary to short-term*, and will generally vary from *not significant* to *moderate*, and from *neutral* to *negative*.

When operational the LVIA considers that the effects on landscape character during operation will be *long-term* and will generally vary from *not significant* to *moderate*, and from *neutral* to *negative*, while effects on views during operation will be *long-term* and will also vary from *moderate* to *imperceptible*, and from *neutral* to *negative*

The LVIA considers that residual landscape and visual effects will range from *slight/moderate* and *negative*, to *imperceptible* and *neutral* as the development becomes a 'distinctive landmark' high technology building signalling the presence of the entire Clonshaugh Business and Technology Park. As noted DCC's Parks, Biodiversity & Landscape Services Division would prefer to see a living wall design applied.

DCC's Parks, Biodiversity & Landscape Services Division note that they promote the use of green roofs to at least 70% of flat or gently sloping roofs on new development. They recommend a green roof plan indicating the extent and types of green roofs should form part of the application. It is recommended that at least the option to at least see the extended ESB substation also fitted with a green roof be explored. Additional planting around this portion of the site can be agreed by condition.

DCC's Parks, Biodiversity & Landscape Services Division note that the conservation area designation falls within the site, beyond the Z9 zoning and over all the Z9 lands, but while the proposed layout excludes main buildings from the conservation area it includes fencing and surfacing.

DCC's Parks, Biodiversity & landscape Services Division note that the planting proposals for the scheme also includes a proposed native hedge along the existing perimeter fence - which will exclude public access to the enclosed area which they note may not be considered consistent with open space use. The boundary defining public access should be aligned with the Z9/ Z4 Boundary (reference is made to the Reg. Ref. 2229/19 landscape plan proposals).

DCC's Parks, Biodiversity & landscape Services Division require that the applicant's opinion on 'taking in charge' of the Z9 open space lands should be determined. DCC Parks Services would have an interest in taking in charge the full Z9 lands in consideration of the strategic importance of the Santry River Corridor as a green network.

Impacts on 3rd parties

No undue impacts are discerned in relation to 3rd party residential amenity in terms of shadowing, obstruction to daylight or overlooking. The development unlike typical similar proposals will have an active 1st floor elevation – which will provide for a degree of passive surveillance over the open Z9 lands to the south.

Archaeology

The applicant's expert report notes that there are no recorded archaeological or architectural heritage sites within the proposed development site boundary, and no previously unrecorded sites or potential sites were identified in the baseline survey. There is one recorded archaeological site,

as listed in the

Record of Monuments and Places (DU15-71), and five architectural heritage sites as listed in the National Inventory of Architectural Heritage, within a 1km buffer from the site. As noted the proposed development site which is brownfield in nature has been substantially disturbed by modern development, such that, should previously unrecorded archaeological features have existed, they would no longer survive. The report notes that the greenfield portion of the proposed development site, comprising the southern portion of the land adjacent to the Santry River, will not be subjected to ground disturbance during the course of the construction of the proposed development, or be impacted on by the operational phase of the proposed development. No impacts to archaeological, architectural or cultural heritage are predicted as a result of the proposed development, either at construction stage or at operational stage. The report considers that no mitigation measures relating to the archaeological, architectural or cultural heritage are required.

The report notes that should any excavations be required in the greenfield area then it is anticipated that a condition on grant of permission would require that the developer engage the services of a fully licenced archaeologist to coordinate and undertake the required excavation of identified archaeological features in consultation with the National Monuments Service, and concludes that the proposed development will not give rise to any archaeological, architectural or cultural heritage impacts and would not warrant preparation of an EIA on these grounds. It is recommended as with the previous permission that standard archaeological monitoring conditions are applied.

Air quality

The applicant's Air Quality and Climate Assessment was carried out to determine the ambient air quality impact of the site and also any air quality constraints that may be present. It has been noted that during the operational phase of the project there will be a total of 12 no. backup emergency diesel generators which will provide power to the site when power from the grid is not available - including 10no. emergency backup generators for Data Centre A, one house generator in Data Centre A and one emergency backup generator in Data Centre B. The applicant notes that the proposed diesel generators will be used solely for emergency operation (i.e. less than 200 hours per year), and that the emission limit values outlined in the Medium Combustion Plant Directive are not applicable to the diesel generators on site.

The study found that a stack height of 25m for the 10no. Data Centre A generators and the house generator, with a stack height of 16m for the Data Centre B generator was sufficient for dispersion of pollutants. The applicant also notes that the development was also considered cumulatively with the data centre 700m to the west. The applicant notes that the results indicate that the ambient ground level concentrations are in compliance with the relevant air quality standards for NO₂.

The applicant notes that due to the low volume of construction stage traffic associated with the proposed project potential significant impacts to air quality or climate were screened out. As noted the CEMP sets out minimisation measures to ensure nuisance dust arising from demolition, site clearance and construction activities is prevented where possible and managed in accordance with best practice. Appropriate planning conditions are also anticipated by the applicant.

On the basis of the above, with regard to the evidence set out within this report, the applicant considered that the potential effects on Air Quality are *negative, imperceptible, and long term* for the operational phase.

The Air Quality Monitoring and Noise Control Unit (EHO) has raised no objections to the proposal and advise that the developer should adhere to the *Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition*

Noise

The applicant has undertaken a Noise Assessment for the proposal in terms of its operational and construction phases. The report notes that the immediate boundaries of the site are shared with other commercial operations – with more sensitive residential locations looked further away. The study notes that the existing noise environment in the vicinity of the nearest noise sensitive locations is dictated by local and distant road traffic movements with a degree of existing plant noise becoming more apparent during night-time periods. During daytime monitoring periods, the sources of noise noted in the area were local traffic along Clonshaugh Road as well as occasional vehicular movements at the adjacent commercial buildings and intermittent (but significant) aircraft movements.

Following review of relevant guidance, the following appropriate noise criteria are proposed by the applicant for the development:

- Day to Day Operation (Noise Sensitive): – 55dB LAeq,15min (daytime) & 44dB LAeq,15min(night time)(Ref. BS4142)
- Day to Day Operation (Commercial): – 55dB LAeq,15min (Ref. BS8233)
- Emergency Operation (Noise Sensitive): – 55dB LAeq,15min (Ref. EPA: NG4)

The applicant asks that it be noted that plant noise emissions are to be designed such that they are not tonal and do not have impulsive characteristics at the nearest noise sensitive location

Based on day to day operations, the applicant's modelling indicates the predicted noise levels from the site are within the relevant adopted criteria at the nearest noise sensitive locations

In terms of emergency operations the modelling indicates the predicted noise levels from the site are within the adopted criterion at all locations

The modelling has indicated that noise emissions associated with generator testing is within the adopted daytime criterion when these activities will take place.

The applicant notes that construction noise and vibration will typically be considered through the applications of suitable limits.

The applicant's review of the predicted increases in noise level at the nearest residential noise sensitive locations conclude that the associated impact is 'Not Significant' at allocations for daytime periods as well as '*Not Significant*' at allocations for night periods

During construction of the proposed development it is anticipated that construction work on the proposed development site will be an audible noise source for certain periods / activities at certain locations.

The applicant considers that any construction being completed at other sites within the study area, whilst potentially significant in their own right, as a matter of good practice, would be expected to control impacts on nearest noise sensitive locations to these sites within appropriate limits, and once these best practice criteria are implemented there should be no significant cumulative impact with permitted, planned or existing developments as a result of the proposed development.

The EHO has raised no objections to the proposal over the above issues.

Light Pollution

It is noted that the site is located within a well-established industrial estate located within an urban outer city location albeit fronted by a partial sylvan buffer that is elevated over a southern foreground of open grassland/playing fields and discrete river corridor area. It will be recommended as proposed by the applicant who have noted the requirements for the adjacent Lidl permission to the east that any lighting will be 'bat friendly' and compliant with best practice guidelines.

DCC's Parks, Biodiversity & Landscape Division while also noting that the impact of lighting on bats is discussed in the lighting report and mitigation of 'bat sensitive lighting' is proposed – do also require further clarification on effectiveness by providing a southern boundary section at a lighting column to fully illustrate light distribution.

Solar Dazzle

The applicant is proposing PV arrays to the roof tops. It is noted that just in advance of the submission to the PA the applicant notified the IAA and DAA of the proposal. The applicant notes that the Dublin Airport is located 2Km NW of the site but is outside its Public Safety Zones (PSZ). The DAA have no comment to make on the application bar that it is referred to the IAA who have not responded to date.

The applicant has submitted a detailed Glint & Glare study based on FAA guidance with regard to aircraft safety which also has been adopted by the IAA – as there is no specific guidance or standard for the assessment of glint or glare from PVs etc in Ireland. The applicant's study notes that there is potential to impact two of the runway approaches – but the glare will be of a low

intensity and acceptable in terms of FAA standards with regard to potential hazard to aircraft safety. The submission is considered acceptable.

Traffic/Access/Parking

DCC's Transport Planning Division commented as follows:

The site is 3.75 hectares located within the IDA managed Clonsaugh Business and Technology Park, located 6.5km north of Dublin City Centre and 3km south-east of Dublin Airport. The access road into the Business and Technology Park is located 200m south-west of the site linking out onto the R104 Oscar Traynor Road, to the east of the M1. This access road is private and serves the wider business park.

Traffic Assessment & Environmental Impact Assessment Screening Report

An Environmental Impact Assessment Screening Report (EIA SR) accompanies the application. Construction and Operational Traffic is assessed under Section 5.8 which is supported by Appendix E: Traffic and Transport Impact Assessment (TTIA). The TTIA includes traffic counts and uses first principals to determine traffic trips (TRICS data, as outlined in the TTIA, can overestimate the actual trips from Data Centres) based on the details of the operational phase of the proposed development. It is noted that traffic survey data used was conducted in May 2019, before Covid-19 related travel restrictions and consequently the 2019 traffic counts have been scaled up using TII growth factors to represent predicted traffic flows for the opening, future and horizon years.

In terms of the Construction and Demolition Phase, there will be additional traffic movements to/from the site (workers, security, professional staff, excavations, dumper trucks and delivery/removal of materials. It is estimated to be on average 275no. staff increasing to 400 at peak construction. Based on the evidence under Appendix E, the development both in isolation and cumulatively, would result in a short-term, negative and not significant. As set out, there are no likely significant effects from Transportation during construction and demolition phase.

For the operational phase, the assessment concludes that potential effects are long-term, neutral and imperceptible based on a 15 – 58 staff over a 24hr period and one daily HGV delivery to the site.

This Division is broadly satisfied with the information contained within the traffic aspect of the EIAR SR.

Proposed layout

The proposed development will be served by one main entrance at the north-east of the site, a secondary entrance along the northern boundary and pedestrian entrance at the west side, near the entrance to the Business Estate. The documentation notes that secondary gate access will be retained to provide alternative access in the unlikely event that the main entrance is temporarily obstructed.

Auto tracking for articulated trucks are submitted showing movements across the site at the entrance, around site and entering/existing proposed loading bays. An 8.5m wide internal road surrounds Data Centre A, with an 8m wide entrance into Data Centre B. The internal road incorporate pedestrian paths and crossings from the main site entrance and western pedestrian entrance to the main entrance of each data centre.

Taking in Charge

A taken-in-charge drawing is submitted with the application for the green open space along the southern extent of the site near the Santry River. It would appear from the submitted document that no roads, junctions, car parking areas, footpaths and hard landscaping areas to be taken in charge including shared surface areas and public lighting, including all materials. It is noted that the Business Park is a private Road. Notwithstanding, and factoring in any future development of the site or ownership, a Condition relating to taking in charge is required to factor to safeguard future changes.

Car Parking

The site is located within Area 3 as identified in Map J of the City Development Plan 2016-2022. There is no clear category for data centres within the Development Plan. The closest use available is 'Enterprise and Employment/Offices/General Industry (including warehousing)'. Under such a category, the maximum number of car parking spaces permissible is 148.

It is proposed as part of this application to provide a total of 58 car parking spaces to serve the proposed 2 no. buildings which is 61% below the maximum. The TTIA includes a rationale for proposed car parking, based on anticipated visitor and staff levels of the

proposed development. Of the spaces, 4 no. are accessibly designed. All car parking spaces are facilitated with some form of EV infrastructure as follows: 5no. spaces incorporate EV charging initially, a further 5 can be brought forward based on demand with the remaining 43no. spaces ducted for future expansion. In addition, 4 no. motorcycle parking bays are proposed. This Division has no objection to the proposed level of car parking and provision of other types of parking.

A Mobility Management Plan (MMP) has been submitted. This sets out measures to encourage sustainable transport to the site and sets out target modal splits and includes regular monitoring and travel surveys. A Mobility Manager will be appointed for the complex and other measures to promote more sustainable transport commuting includes promotion of car-sharing and the provision of covered cycle parking spaces and shower/changing facilities. This Division has no objection and will attach a Condition.

Bicycle Parking

The development includes the provision of 12no. Sheffield stands (24 spaces) within a designated shelter. The submitted drawings outline an area of 20no. Sheffield stands (40 spaces) to be installed at a later date as the need arises. Showers and changing facilities are also proposed as part of the development. The proposed level of bicycle parking is considered acceptable, having regard to the location of the site, the designation of future provisions and the numbers of staff and shift work patterns onsite.

Outline Construction Environmental Management Plan (OCEMP)

An OCEMP is submitted with the Application which outlines the construction programme and phasing, excavation, site logistics, construction traffic and site access and health, safety and environmental considerations during construction.

This division would require further detail in relation to: tree protection within the OCEMP, the location, size, duration and reinstatement works of the off-site construction staff car park within the Clonshaugh Business and Technology Park, and ensuring that the contractor liaises with the Dublin Airport Authority (DAA), Irish Aviation Authority (IAA) and IAA Air Navigation Service Provider (ANSP) to determine their requirements. These details can be addressed by Condition

Soil & Water

The applicant's 'Soil and Water Review' notes that the GSI categorises the bedrock aquifer underlying the site as having a 'Low' vulnerability. The report notes the site is not located near any public groundwater supplies or group schemes. The applicant notes that environmental testing was carried out on 18 samples – which concluded that the material tested can be classified as suitable for disposal as non-hazardous material to a licenced facility. The EPA classifies the Santry River waterbody located to the south of the site as having 'Poor' status. No direct discharge proposed to the Santry River or groundwater from the scheme when operational but that the contractor will be required to operate in compliance with a Construction Environmental Management Plan (CEMP) to manage any accidental risk of discharge of sediment or hydrocarbon contaminated water. The area proposed for development is located within Flood Zone C but is at risk of pluvial flooding. However the report notes the surface water drainage network including SUDS measures will provide sufficient protection to the development from the potential pluvial flooding risk. The immediate vicinity of the Santry River) is within Flood Zone A – but no development is proposed near this area as part of the subject application.

The GSI have raised no issue with the subject proposal.

C&D Wastes

The applicant has submitted a Construction & Demolition Waste Management Plan which among other things notes that there will be waste materials generated from the demolition of the existing buildings and hardstanding areas on site, as well as from the further excavation of the building foundations. Soil, stones, clay and made ground will be excavated to facilitate construction of new foundations and underground services.

The CDWMP notes that during the construction phase there may be a surplus of building materials, such as timber off-cuts, broken concrete blocks, cladding, plastics, metals and tiles generated. The contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised. Waste will also be generated from construction workers

The report recommends that material on site if excavated should be removed to the most appropriate facility if deemed hazardous

It has been recommended that non-hazardous material across the site if excavated should be removed from site to an appropriate facility - with any potentially contaminated material when encountered to be segregated from clean / inert material, tested and classified as either non-hazardous or hazardous

The applicant's submission notes that in the event that Asbestos Containing Materials (ACMs) are found within the excavated material, the removal will only be carried out by a suitably permitted waste contractor. In the event that hazardous soil, or historically deposited waste is encountered during the Construction phase, the contractor will notify DCC

As per the applicant's EclA and AA Screening reports no evidence is found of Japanese Knotweed (*Fallopia japonica*) or any other 'scheduled 3' invasive species within the redline boundary

A demolition asbestos survey will be undertaken prior to the demolition of the existing building onsite. However as the building was constructed in the 1990s the report notes that it is not expected that it will contain asbestos or asbestos containing materials

Environmental Considerations

An Ecological Impact Assessment (EclA) has been submitted with the proposal which has also helped inform the EIA Screening as well as inform and complement the AA Screening processes.

The EclA notes that the predominant habitat within the site is Spoil and bare ground (ED2). The grassy verges (previously amenity grassland (GA2)) (campus type parkland) surrounding the central cleared area have become rank and overgrown. The amenity grassland buffer between the main site area and the Santry River is noted to be populated by dense grass and tall herbs with scattered trees forming a woodland type of habitat including Horse chestnut, Hybrid Black poplar, White poplar, Aspen, Birch, Willow, Sycamore, Alder and Rowan – with the denser area is located to the south-western corner of the site.

As noted above the EclA (as also the AA Screening statement) states that the proposed development site observes a minimum non-development buffer zone of 30m to the Santry River and that there here will be no direct or indirect discharges during construction to the Santry River. It has been noted that there are no streams or ditches discharging from the construction area to the Santry River and it is considered highly unlikely that surface water would reach the Santry River during construction given the distance of removal from the proposed development area and the intervening grassland and woodland buffer. During operation, it is noted that all surface water flows will be collected by the site surface water drainage network – with no surface water flows to discharge to the foul water network. Petrol interceptors are to be provided within the surface water drainage network in accordance with the requirements of the Greater Dublin Regional Code of Practice.

The proposed surface water attenuation system is located in the northeast corner of the site with a closed Stormtech attenuation system (or similar) being proposed. No objections has been raised by DCC's Drainage Division to the proposal subject to conditions. The applicant notes that these SuDS features are standard design features and not considered measures for the avoidance of potential effects on downstream European sites (mitigation). There is no open water connection to the Santry River but there is an indirect connection through the storm water drainage. Based on the distance to the nearest Natura site (North Dublin Bay, 4.5 km down gradient along the Santry River), even without mitigation or design measures the applicant considers that there is no potential for impact on water quality within Dublin Bay.

As noted the proposed development is located within the hydrological catchment of the Santry River where downstream, its waters enter Dublin Bay with its associated European sites.

The EclA notes that there are no records of rare plants, and no rare or protected plants were recorded, with also no third schedule invasive species being recorded. Butterfly bushes (*Buddleia davidii*) were noted as being common, but are of low concern and can be removed with site waste.

No otter, badger, habitats or potential for same found on site. The EclA notes that no records for bats are held for the site or surrounding area. The applicant notes that previous surveys as part of the adjacent granted Lidl application have also shown that there have been low levels of only one species in the area, Liesler's bats (*Nyctalus leisleri*) particularly along the general route of the Santry River. The report notes that an internal bat survey of a remaining warehouse building and offices on site and which are to be demolished as part of the current permission was undertaken on the 11th August 2021. Proposed trees to be removed on the site boundary include juvenile and semi-mature Horse chestnut and Birch which were surveyed for bat roost potential and found to have none.

The EclA considers that there will be no impacts on roosting or commuting bats. The proposed development is set back from the ecological corridor of the Santry River by a buffer zone of at least 30m affording a zone of no development and no lighting which would affect bats. As a precaution the design of lighting is to be 'bat friendly' as was required of the recently permitted Lidl development adjacent to the east. As noted above DCC's Parks, Biodiversity & Landscape Division require more information on lighting arrangement in relation to bats.

The EclA notes all nesting birds are protected under the Wildlife Acts –with no records of nesting birds found in the remaining building to be demolished. The warehouse building type is also deemed not suitable for nesting Swallows, Owls or Swifts. As a precaution any mature trees to be removed will be felled outside the bird nesting season of March 1st to August 31st

In collusion the EclA notes that there are no significant impacts predicted from the proposed development on habitats, flora, fauna or biodiversity. Best practice measures are proposed for nesting birds during construction and the design of lighting during operation for bats is to be proven best practice and once these measures are employed, there will be no residual impacts on Birds or Bats.

The report also notes that should best practice guidelines for the prevention of invasive species spread be adhered to, no potential for the spread or introduction of high impact invasive species are foreseen as a result of this Scheme

Appropriate Assessment

Under Article 6 (3) of the EU Habitats Directive and Regulation 30 of SI no. 94/1997 "European Communities (Natural Habitats) Regulations (1997)" of Council Directive 92/43/EEC any plan or project which has the potential to significantly impact on the integrity of a Natura 2000 site (i.e. SAC or SPA) must be subject to an Appropriate Assessment. This requirement is also detailed under Section 177 (U) of the Planning and Development Act 2000 (as amended)

In this instance a screening report for Appropriate Assessment has also been submitted with the application in tandem with an EclA – in order to aid the planning authority as the competent authority to screen out any likely significant effects on the Qualifying Interests of a European site. The AA Screening report describes the existing environment as well as existing and proposed drainage regimes as detailed also in the EclA as above

It is noted that there are Natura 2000 sites present within 15km Zone of Influence (ZOI). Also in this instance no Natura 2000 site is located on site or adjacent to the site – with the closest potentially linked sites being North Dublin Bay SAC (000206) and North Bull Island SPA(004006) (-with South Dublin Bay and River Tolka Estuary SPA (004024) being the closest by linear distance.) The applicant identifies 8no Natura 2000 sites due to their potential for source-pathway-receptor(S-P-R) connectivity. The Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the European sites in the vicinity of the Proposed Development are detailed.

As per the OPR Guidelines and as the applicants note the 15km ZOI distance is based on the DoEHLG's Guidance on Appropriate Assessment (2009), whereas it is now considered that a potential ZOI of any proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. As such it is now recommended that the potential for significant effects should be established on a case-by-case basis using the S-P-R framework and not by arbitrary distances (such as 15km). For example in this instance the development area of the proposal is located within the hydrological catchment of the Santry River which flows 30m to the south of the and as

such could act as a potential pathway as downstream its waters enter Dublin Bay with its associated European sites as noted by the applicant's AA Screening and EIA reports

The submission also notes that Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account during the preparation of this AA Screening report. In this instance the applicant notes that there are no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies which was confirmed during fieldwork for the applicant on 11/08/21

While as previously mentioned that there is no open water connection to the Santry river the applicant identifies an indirect connection through the stormwater drainage - but based on the distance to the nearest Natura site (North Dublin Bay, 4.5 km down gradient along the Santry River), they however consider that even without mitigation or design measures there is no potential for impact on water quality within Dublin Bay. DCC's Drainage Division has raised no objections to the proposal subject to standard conditions.

It is concluded that the proposed project on its own or in combination with other plans or projects will have no significant impacts on Natura 2000 sites in relation to their conservation objectives, and therefore a Stage 2 Appropriate Assessment of the project will not be required in this instance.

EIA Screening

It is agreed that the proposed development is a 'project' for the purposes of EIA as per Article 1(2) of the EIA Directive. There is no specific project type listed under Schedule 5, Part 1 or Part 2 of the Regulations that applies to the proposed data centre development

As the applicant notes the most relevant project type in the context of the Proposed Development is Class 10 (a) and Class 10 (iv) of Schedule 5, Part 2 of the Planning & Development Regulations 2001(as amended):

10. Infrastructure projects:

(a) Industrial estate development projects, where the area would exceed 15 hectares.

(iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere

In this instance the project site area being 3.75Ha would be subthreshold in this instance in relation to Class 10(a). While most of the site is zoned Z4 District Centre the site is not a business district as it has accommodated light industrial type units and operations for decades – while the 2007 Northside Shopping Centre redevelopment never commenced. As such the subject development is subthreshold with regard to Class 10(iv).

It is also agreed that the development does not entail an extension or change to any existing EIA project as per Class 13 of Part 2 of Schedule 5 of the P&D Regs 2001(as amended)

The proposed scheme's development footprint will be restricted to the existing brownfield site area and will not impact on the Santry River corridor and associated conservation area or Z9 zoned open space amenity lands. A Flood Risk Assessment is submitted with the application, the development will not give risk to a flood risk

The applicant has submitted an environmental assessment screening report which includes information set out in Schedule 7A of the Planning and Development Regulations, 2001 (as amended) so as to allow a screening for EIA in accordance with the criteria in Schedule 7 regarding the

- Characteristics of Proposed Development (Section 3.0)
- Location of Proposed Development (Section 4.0)
- Types and Characteristics of Potential Impacts (Section 5.0)

The applicant' submission has had regard to each aspect of the environment in accordance with EPA guidance including Population and Human Health; Biodiversity; Land, Soils, Geology, Hydrogeology, and Hydrology; Air Quality and Climate; Noise and Vibration; Landscape and Visual Impact; Cultural Heritage, and Archaeology; Traffic and Transportation; Material Assets, and Waste

The applicant submitted the following specific supporting reports which have informed the EIA Screening process:

Relevant Planning History
Appropriate Assessment (AA) Screening Report
Ecological Impact Assessment (EclA)
Noise and Vibration Assessment
Air Quality and Climate Assessment
Traffic Impact Assessment
Soil and Water Assessment
Construction and Demolition Waste Management Plan
Cultural Heritage Assessment
Landscape Assessment

It is recommended that the EIA screening process not be concluded until the applicant's further information response is submitted with regard to potential cumulative impacts in conjunction with similar developments within the wider estate area.

It is recommended that Further Information be provided as follows:

1. DCC's Parks, Biodiversity and Landscape Services have requested the following information to address the issues raised in their report (attached) as follows:

- a) A revised landscape master plan excluding all elements of the security boundary from Z9 zoned lands.
- b) A revised landscape masterplan removing all existing fencing from Z9 lands and proposals for hedging. A boundary railing along the Z9/Z4 boundary may be provided.
- c) A taking in charge plan - as Parks are interested in managing this area as per the previous permission on site.
- d) Section(s) through the southern boundary illustrating 'Bat Sensitive Lighting' approach and effectiveness with associated lighting mitigation specifications.
- e) Provision of revised building elevations with architectural cladding of a suitable organic design approach (supported by updated and revised photomontages)
- f) A green roof plan for all proposed buildings (including the ESB structures)

2. The applicant is requested to clarify what measures etc can be taken to future proof the project in terms of waste heat recovery and potential linkages to a possible future district heat system.

3. For clarification of information provided the applicant is asked to update their energy statement estimate power rating for the proposal itself and to detail estimated peak electricity demand for this proposed development.

4. The planning authority note at this point in time that a substantial area of the Clonsaugh Technology & Business Park now comprises data centres and allied uses. The planning authority considers that in order to fully assess the cumulative impact of the proposed development alongside existing and permitted data centres and allied uses in the Park and how the scheme fits into the wider GDA area noting concentrations of similar development in the wider city and region. It is requested that the applicant submit the following further information:

- a) Submit an up to date estimate of total floor area and the proportion of the overall Clonsaugh Technology and Business Park given over to data centre development such and allied uses noting the presence of long standing data and telecom infrastructure within the estate.
- b) Provide a map indicating all existing, under construction and permitted data centres and allied uses within the Clonsaugh Technology and Business Park
- c) An analysis of the cumulative impact of the information provided in response to items a) and b) above.

5. For clarification the applicant is requested to frame their development and proposed future connection regime against the very recent CRU Direction to the System Operators related to Data Centre grid connection processing decision (CRU/21/124) and implications if any for the subject proposal.