

# Water Services Planning Report

**Register Reference No.:** *SD21A/0203*

**Development:** Modifications and minor additions to previously approved scheme (Planning Register Reference SD20A/0283) at this site of c.16.23ha (in total) comprising of the following changes to previously approved scheme SD20A/0283; Approved Central Administration Building (CAB), relocation of building to the east by approx. 7m; reconfiguration and setting out of building plans at all levels (including roof level) resulting in increase in building footprint of approximately 170sq.m (from 1,424sq.m to 1,594sq.m) associated changes to building elevations (design and finishes); approved single storey Cafeteria Element, additional basement level below cafeteria to accommodate plant; 9 rooflights (2.8 m diameter) and 9 rooflight (1.8m diameter), inclusion of MEP Plant on roof level including new flue extending approx. 1m above parapet; approved four-storey Office element, parapet at roof level to be raised by approx. 1.1m (increased from approved 19.5m in height to proposed 20.6m); overall increase in GIFA of 395sq.m; reconfiguration of area available for PV panels and sedum roof finish in order to accommodate required MEP equipment at roof levels. approved Data Centres - DUB14 and DUB15, reconfiguration and setting out affecting building locations and plans at all levels (including roof level) resulting in reduction in overall building footprint (for each building) by 48sq.m (from 13,442sq.m to 13,394sq.m), associated changes to staircases design, building elevations design and finishes, increase in parapet height of Vent Houses (at roof level) by approx. 350mm and omission of previously proposed zone of sedum roof finish; overall decrease in GIFA of 1,352sq.m in respect of DUB 14 and decrease of 1,453sq.m in respect of DUB 15; all plant equipment at ground level - reduced in height compared to approved layout so that the screening is deemed not required; DUB 14, reduction in height of approved flues by approx. 650mm, reduction in number of flues from 11 approved to 8 proposed; DUB 15, change to level of ground floor and associated increase in overall building height of approx. 700mm (parapet height increased from approved +83.0m O.D. to proposed +83.7m O.D.); reconfiguration of associated external plant at ground level (including generators / E-Houses & transformers) flues, omission of approved Modular Electrical Rooms (MERs) and associated screening serving approved Data Centres DUB14 &15; relocation, modifications to design and expansion of approved Water Treatment Building and associated plant to include, Water Treatment Tanks, 2

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sprinkler tanks and relocated approved pump house (contained in the main Water Treatment Plant building) and 1 generator with additional proposed flue stack (height 30.75m) and 1 transformer; Gas Generator Compound - Relocation & reconfiguration of previously approved gas generator compound including, additional 4 generators (from 20 approved to 24 proposed), omission of approved E-houses; additional 7 electrical rooms, additional 7 flues (from 5 approved to 12 proposed); modifications to approved layout of internal site roads, yards and footpaths; relocation and modifications to design of approved Sprinkler Tanks and Pump Houses, Pump House serving DUB 14, relocated into proposed Water Treatment Building and compound, redesign of approved larger tank into proposed two smaller tanks; Pump House serving DUB 15, relocated to south of DUB15 the north facilitate space for electrical equipment redesign of approved larger tank into proposed two smaller tanks; relocation of Approved Gas Networks Ireland (GNI) gas skid & compound including approved 3 kiosk buildings; modifications to approved car park layouts and landscaping design; modifications to location and design of approved bicycle shelters; modifications to site development works, including underground water and building services provision, landscaping, internal security and compound enclosure fencing, and associated works; the remainder of the development (including permitted temporary construction car parking) to be carried out in accordance with parent permission SD20A/0283. An Environmental Impact Assessment Report (EIAR) has been submitted with this application; The application relates to a development which comprises an activity requiring an integrated pollution prevention and control (IE) licence relating to lands located west of the existing MS Data Centre Campus and also a site located north of the main entrance to the business park from Grange Castle Road.

Location: Grange Castle Business Park, Nangor Road, Clondalkin, Dublin 22

Report Date : 18<sup>th</sup> August 2021

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### **Surface Water Report:**

### **Further Information Required:**

The applicant has proposed to make significant changes to the surface water drainage layout for the development, therefore the applicant is required to submit further information for clarification purposes as follows. The applicant shall contact SDCC Water Services Section prior to submitting a response to this request for further information.

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**1.1** The applicant is required to submit a surface water drainage catchment drawing showing what areas are served by all proposed and existing attenuation and rain water harvesting facilities. The drawing shall show attenuation and rainwater harvesting volumes for each system as well as the flow control device locations and corresponding maximum discharge rates. No attenuation system shall be located under a proposed building and must be adequately distanced away from same so that building foundations are not adversely affected.

**1.2** The applicant is required to submit a report showing a breakdown of all surface area types, surface areas (in m<sup>2</sup>) including corresponding surface run off coefficients for all drainage catchments. The report shall also include greenfield discharge rate (Q<sub>bar</sub>) calculations. The applicant shall ensure that the maximum discharge rate from each catchment does not exceed Q<sub>bar</sub> rural for all storm events.

**1.3** The proposed location of attenuation system to the north underneath process water storage tanks is not acceptable. This system shall be relocated so that it is a minimum distance of 3m away from the proposed water treatment facility and 5m from any building.

**1.4** The applicant shall investigate if the proposed concrete attenuation tank to the west can be changed to a modular underground storage system such as an arch type system or similar. These systems offer more in terms of interception storage volumes and also are easier to maintain. Concrete attenuation structures are only acceptable as a last resort.

**1.5** The applicant has proposed to relocate attenuation systems and rainwater harvesting systems so that they are underneath proposed gas compound to the east. The applicant is required to demonstrate how these attenuation and rainwater harvesting systems will be accessed for maintenance purposes. All demonstrate how these systems will not be adversely affected by loading from compound structures above.

**1.6** The applicant is required to submit an updated SuDS (Sustainable Drainage Systems) layout plan for the development. SuDS shall be maximised across the site and shall include features such as but not limited to: Swales, detention basins, tree pits, filter drains, channel rills, permeable pavement and green roofs. The applicant shall submit details of all such SuDS features.

**1.7** All proposed parking bays shall be constructed using a porous surface material.

**1.8** No industrial water or potable water supplied from the public watermains network shall enter the storm water network. Only clean untreated and uncontaminated rainwater shall enter the stormwater network. All treated water and process cooling water shall be discharge to the public wastewater drainage network.

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**1.9** All design of overground fuel storage tanks shall comply with the requirements of the Greater Dublin Regional Code of Practice for Drainage Works Section 17-  
GUIDELINES FOR THE BUNDING OF OVERGROUND OIL STORAGE TANKS

**1.10** Conditions 12 and 13 of previously granted planning permission ref:  
SD20A/0283 shall continue to apply.

### **Flood Risk**

**No objection**

- The Developer shall ensure that there is complete separation of the foul and surface water drainage for the proposed development.
  - All new precast surface water manholes shall have a minimum thickness surround of 150mm Concrete Class B.
  - All works for this development shall comply with the requirements of the Greater Dublin Regional Code of Practice for Drainage Works.
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### **Water Report:**

**Referred to IW**

### **Foul Drainage Report:**

**Referred to IW**

Signed: \_\_\_\_\_  
Ronan Toft AE

Date: \_\_\_\_\_

Endorsed: \_\_\_\_\_  
Brian Harkin SEE

Date: \_\_\_\_\_