Water Services Planning Report

Register Reference No.:	*SD21A/0186*
Development:	Construction of a 3 storey (part 4 storey) data centre known as 'DB8' to include data halls, electrical/plant rooms including internal generators, offices, lobbies, ancillary staff areas including break rooms and toilets, stores, stair/lift cores throughout and photovoltaic panels at roof level; the total gross floor area excluding hot air plenums and external staircase is c.9,601sq.m and the overall height of the data centre ranges from c.16m to c.20m to roof parapet level and up to c.24.48m including roof top plant, flues and lift overrun; provision of 5 external generators, 8 fuel tanks and ancillary plant contained within a plant yard to the north of DB8; provision of a water tank plant room, air cooled chillers and ancillary plant contained within a chiller plant yard to the south of DB8; provision of a water sprinkler pump room (c.23sqm), 2 sprinkler tanks (c.12m high each), heat recovery plant room (c.17sqm), ESB substation (c.44sqm), waste/bin stores (c.52sqm); total floor area of ancillary structures and plant (c.303sqm); provision of a delivery yard and loading bays, 64 car parking spaces, 5 motorcycle spaces, bicycle shelter serving 14 spaces, smoke shelter, internal access roads and footpaths, vehicular and pedestrian access to the west from Falcon Avenue and closure of an existing vehicular entrance from Falcon Avenue; all associated site development works, services provision, drainage works including attenuation, landscape and boundary treatment works including berming, hedgerow protection areas and security fencing; no buildings are proposed above the existing ESB wayleave and SDCC watermain wayleave to the west and north of the site; the area to the southwest of the site (temporary meadow) is reserved for a future data centre, subject of a separate application to South Dublin County Council on a site bounded to the east and south by Grange Castle Golf Club, to the north by Nangor Road (R134) and to the west by an estate road known as Falcon Avenue. This application is accompanied by a Natura Impact Statement.
Location:	Plot 100, Profile Park, Nangor Road, Clondalkin, Dublin 22
Report Date :	6th August 2021

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Surface Water Report: Further Information Required:

1.1 The applicant is required to submit a report showing greenfield run off rates and attenuation calculations for **each** surface water drainage catchment. The report shall include a breakdown of all surface types and run off coefficients for **each** surface water catchment area.

1.2 The applicant is required to submit a drawing which clearly shows :

- All surface water catchment areas proposed.
- The location of all proposed flow control devices and corresponding maximum discharge rates for each device. There shall be a flow control device inserted on the outfall of the proposed attenuation pond. The maximum surface water discharge rate from the site must not exceed 4.4 L/S

1.3 The applicant is required to minimise the use of underground attenuation systems on site. Where this cannot be achieved arch type systems should be installed as oppose to concrete tanks. The applicant is required to submit a cross section detail of the proposed attenuation pond and underground attenuation systems.

1.4 The applicant is required to clarify what attenuation volumes are proposed for the development as the volumes referred to in the engineering report do not correlate with the submit surface war drainage plans.

1.5 The applicant is required to submit a drawing showing the inclusion of more Sustainable Drainage Systems (SuDS) for the development such as swales, filter drains, tree pits, rain gardens and Rainwater harvesting systems. A cross sectional detail is required of all proposed SuDS features.

1.6 The applicant is required to demonstrate how water pollution mitigation measures have been incorporated into the design regarding fuel storage onsite. Fuel tank leakages must not allow polluted water to enter surface water driange network. All works shall comply with the Greater Dublin Regional Code of Practice for Drainage Works in this regard.

1.7 All petrol/oil interceptors proposed on the surface water drainage network shall be of Class 1 standard as per the requirements of the Greater Dublin Regional Code of Practice for Drainage Works.

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.

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- All works for this development shall comply with the requirements of the Greater Dublin Regional Code of Practice for Drainage Works.

Water Report: **Referred to IW**

Foul Drainage Report: **Referred to IW**

Signed: _____ Date: _____
Ronan Toft AE

Endorsed: _____ Date: _____
Chris Galvin SE.