

Water Services Planning Report

Register Reference No.: *SD21A/0042 AI*

Development:

Construction of two single storey data centres with associated office and service areas; and three gas powered generation plant buildings with an overall gross floor area of 24,624sq.m that will comprise of the following: Demolition of abandoned single storey dwelling, remaining agricultural shed and derelict former farm building; Construction of 2 single storey data centres (12,797sq.m), both with associated plant at roof level, with 24 standby diesel generators with associated flues (each 25m high) that will be attached to a single storey goods receiving area/store and a single storey office area (2,404sq.m) located to the west of the data centres as well as associated water tower and sprinkler tank and other services; Amendments to the internal access road and omission of access to loading bay permitted under SDCC planning Ref.

SD19A/0042/ABP Ref. PL06S.305948 that include the relocation of permitted, and new, internal security gates; and new internal access roads to serve the proposed development that will provide access to 39 new car parking spaces (including 4 electric and 2 disabled spaces) and sheltered bicycle parking to serve the new data centres; The development will also include the phased development of 3 two storey gas powered generation plants (9,286sq.m) within three individual buildings and ancillary development to provide power to facilitate the development of the overall site to be located within the south-west part of the overall site. Gas plant 1 (3,045sq.m) will contain 20 generator units (18+2) with associated flues (each 25m high) will facilitate, once operational the decommissioning of the temporary Gas Powered Generation Plant within its open compound as granted under SDCC Planning Ref.

SD19A/0042/ABP Ref. PL06S.305948. Gas plant 2 (3,045sq.m) will contain 20 generator units (18+2) with associated flues (each 25m high). and, Gas plant 3 (3,196sq.m) will contain 21 generator units (19+2) with associated flues (each 25m high). These plants will be built to provide power to each data centre, if and, when required. The gas plants will be required as back up power generation once the permitted power connection via the permitted substation is achieved; New attenuation pond to the north of the site; Green walls are proposed on the southern elevation of each power plant, as well as to the northern elevation of the generator compound of the data centres, and enclosing the water tower/pump room compound, and a new hedgerow is proposed linking east and west of the site; Proposed

Water Services Planning Report

above ground gas installation compound to contain single storey kiosk (93sq.m) and boiler room (44sq.m). The development will also include ancillary site works, connections to existing infrastructural services as well as fencing and signage. The development will include minor modifications to the permitted landscaping to the west of the site as granted under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948. The site will remain enclosed by landscaping to all boundaries. The development will be accessed off the R120 via the permitted access granted under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948. An EPA-Industrial Emissions (IE) licence will be applied for to facilitate the operation of the gas powered generation plant. An Environment Impact Assessment Report (EIAR) has been submitted with this application. All on a site of 22.1hectares.

Location: Site within the townland of Ballymakailly, West of Newcastle Road (R120), Lucan, Co. Dublin

Application Type: Permisssion

Report Date: 22nd September 2021

Surface Water Report:

Clarification of Further Information Required:

1.1 The applicant shall submit a drawing showing inclusion of further SuDS (Sustainable urban Drainage Systems) features for the proposed development such as but not limited to the following to convey, treat and attenuate water aswell as providing bio diversity and amenity value. The drawings submitted shall highlight the location and detail section view of all SuDS features, shall also highlight available surface water attenuation capacity within each feature and demonstrate how these features are linked to the on site surface water drainage system.

- Swales/Filter Drains to drain surface water run off from Roads
- Tree pits
- Bio Retention Rain Gardens
- Rainwater Harvesting for use within data halls where possible.

1.2 Initial attenuation assessments carried out by Water Services indicate that the overall proposed attenuation volumes for the 1 in 100 year storm (2645m³) is potentially undersized by 20%. The applicant is required to submit a drawing showing an additional overall attenuation volume of 20% is provided for the site by way of the use of Sustainable Drainage features (SuDS).

Water Services Planning Report

Note to Planner:

No reference of consultation with Casement Aerodrome has been submitted by the applicant which is located in close proximity to the site to the south. The applicant must consult with the Irish Aviation Authority in relation to the proposed attenuation pond to ensure that the proposed pond will not have any adverse impacts on Casement Aerodromes flight operations regarding bird attraction and/or other issues. This should be carried out irrespective of whether the pond is designed to hold attenuated water on a permanent or occasional basis.

- The Developer shall ensure that there is complete separation of the foul and surface water drainage for the proposed development.
 - All works for this development shall comply with the requirements of the Greater Dublin Regional Code of Practice for Drainage Works.
-

Flood Risk Report:

No objection

Water Report:

Referred to IW

Foul Drainage Report:

Referred to IW

Signed:	_____	Date:	_____
	Ronan Toft AE		
Endorsed:	_____	Date:	_____
	Brian Harkin SEE		