

# Consultants Advice Notice

Project:	K2 DUB6	Our Ref:	K2 DUB6
Attn:	South Dublin County Council	Discipline:	MEP
To:	David Hopkins RKD	Date Issued:	06/30/2022
From:	Gary O'Keeffe (Ethos Engineering)	Date Response required:	06/30/2022
Subject:	K2 DUB 6 - Planning Changes		

## 1 Summary

This document outlines the changes associated with the design for the Data Centre Building at Site 4070, City West, Dublin 24. The building was previously approved and this includes some design changes to the facility that are summarised in the sections below.

The primary changes are

- Alteration to proposed cooling methodology – changed from chilled water cooling solution to indirect air handling units
- Utility Grid connection changed from 10kV Substation to 38kV ESB Networks Substation.
- Inclusion of Solar PV Panels

## 2 Cooling Methodology

The original building design envisaged a multi story internal data centre layout which dictated that a chilled water cooling solution was adopted with a roof top plant compound indicated with the location of the external heat reject plant.

The new design consolidated the data center space on a single floor which means that an air based cooling system can no be adopted. Indirect Air handling units are located on the roof directed over the data hall space. The proposed solution relies on outside air for cooling with now a minimal volume of water used to supplement this in peak periods.

The proposed solution fits in within the overall height set in original application and has been validated to ensure it results in no acoustic impact to surrounding properties.

### 3 Substation

When the original application was made the working assumption was that a two stage connection process would be facilitated by ESB Networks with an initial connection of a 10kV Substation. Subsequent to the grant of planning the connection offer was provided by ESB Networks which necessitated the construction of a 38kV Substation. This revised application removes the original 10kV Substation and details the required 38kV substation.