

CONNOLLY QUARTER

Notes of Meeting 18th October 2018 with ESBN + HOB

Location: South Lotts Road (ESBN Offices)

ATTENDANCE: Homan O'Brien Gerard Keating, Director

ESBN Aidan Finnegan, Design Technologist

Denis Culhane, Design Manager

A meeting was arranged by Homan O'Brien to discuss Project Connolly MV/LV requirements.

It was not intended as a final approval meeting but it was to propose our Design Intent for each Block in turn for MV/LV Connection, Metering Arrangements and subsequent civil works ducting and cable delivery details.

The Blocks were set up as follows with some Landlord allowances:

- 1. A1, A2
- 2. B1, B2, B3
- 3. C1, C2, C3
- 4. D1, D2, D3, D4
- 5. Open Plan Offices
- 6. Retail
- 7. Hotel

Homan O'Brien tabled some estimated loads based on industry norms with mechanical plant solutions proposed in line with Sustainability Reports issued i.e. Heat Pumps Local to each Block.

These loads were reviewed and accepted as being within ESBN parameters for such a development which included a Heat Pump Solution.

At this time each Block was reviewed for location of Substation, size of load, Metering Locations and Access (24 hour) for ESBN.

1.0. BLOCK A (A1, A2)

The Block A Substation Location was acceptable to the west of the site. However, an off-loader room and metering location is required. Block A has approximately 160 units. The load is approximately 660kVA plus retail loads. ESBN suggested a single substation for this Block. The Metering Room would be in the order of 8m x 5m.



2.0. BLOCK B (B1, B2, B3)

The Block B Substation is located to the north of the development and the location was acceptable to ESBN. However, the load was over the acceptable limits for a single substation given the apartment loads at 840kVA plus the Retail loads. A Twin Substation of 8m x 3.5m would be required at this location plus the off-loader room client side and the Metering Room for Retail and 228 no. apartments.

It was proposed to split these metering locations in two and house one set at the substation location and one at Block B3 within Metering Rooms of approximately 4.5m x 3m each.

3.0. BLOCK C (C1, C2, C3)

Block C to the North East of the Site comprises 3 distinct Blocks with Retail at ground level. The approximate load for this Block is 980kVA plus Retail.

Following discussion, it was agreed that an additional Substation Location would be more economical given the length of cable runs at low voltage to multiple apartments. It was proposed to locate a Substation to the south of Block C Apartment cluster c/w associated twin off loaders, metering rooms to serve Blocks C2 and C3.

Block C1 would be the same in size as Block B1 at 4.5m x 3m and Block C2 and C3 would be approximately 8m x 5.5m and 4m x 5.5m respectively with Retail in each Metering Room.

4.0. BLOCK D (D1, D2, D3, D4)

The layout for this Block would follow the same layout as Block C given the approximate load of 925kVA plus Retail.

An additional Substation, Off loader Room and Metering Room was proposed at Block D4 which would serve D4 and Retail.

D1, D2 and D3 would be served from Substation already indicated on the drawings. An additional off loader and Metering Rooms for each would be required.

D1, D2, D3 houses approximately 163 units and retail. This will require a Twin Substation c/w off loaders and Metering Room. Substation of 8.5m x 3.5m and Metering Room of 8m x 3.5m will be required for these Blocks.

Block D4 will house Substation and Metering for 63 units, Retail Outlets and Landlord Services. A standard Substation would be proposed here c/w a Metering Room of 4.5m x 3.5m given current layouts.



The remaining Blocks for Hotel and Offices had no allocated Substations on the Site Plan. Given the substation loads and potential for marketing the Blocks in the future it was proposed to service each of these with independent Substations. The Hotel load is approximately 280kVA and the load for the Office Block is approximately 750kVA using benchmark figures. Assuming a single meter for each a standard Substation and Switchroom would be required.

Finally, the network routes and overall load capacity was covered in the meeting.

It was noticed by ESBN that the overall load was approx. 6MVA. A local ESBN 110KV Station will be considered to supply this project.

The ESBN noted all civil works for their network must be buried at ground level within ESBN approved ducting arrangements. These are standard arrangements and were agreed by Homan O'Brien as being achievable in the podium level of the site.

The meeting ended.