

| Fans | | | | | | | | | |
|-----------------------|---------------------|----------|--------|-----------------------|--------------------------------|-------------------------|--------------|-------|--|
| Unit Reference Number | System | Quantity | Type | Air Volume max l/s | External Static Pressure Pa | Motor input power kW | Manufacturer | Notes | |
| EF-01 | Hospitality Kitchen | 1 | Inline | 450 | 150 | 0.5 | Nuair | | |
| EF-02 | Waste Room | 1 | Inline | 60 | 55 | 0.5 | Nuair | | |
| EF-03 | Cleaner's Room | 1 | Inline | 30 | 100 | 0.25 | Nuair | | |

| FCUs | | | | | | | | | |
|-----------------------|---------------|----------|----------------|------------------------|--------------------------|--------------------|--------------|-----------|-------|
| Unit Reference Number | System | Quantity | Type | Size H X W X D (mm) | Supply Volume max l/s | Motor rating kW | Manufacturer | Model Ref | Notes |
| FCU/01 & 02 | Changing Room | 2 | FCU | 245 x 700 x 800 | 208 | 0.13 | Daikin | FBA35A9 | |
| DX-COM1 | Changing Room | 1 | Ext. Condenser | 550 x 765 x 285 | 616 | 1.246 | Daikin | ZMXM50M9 | |

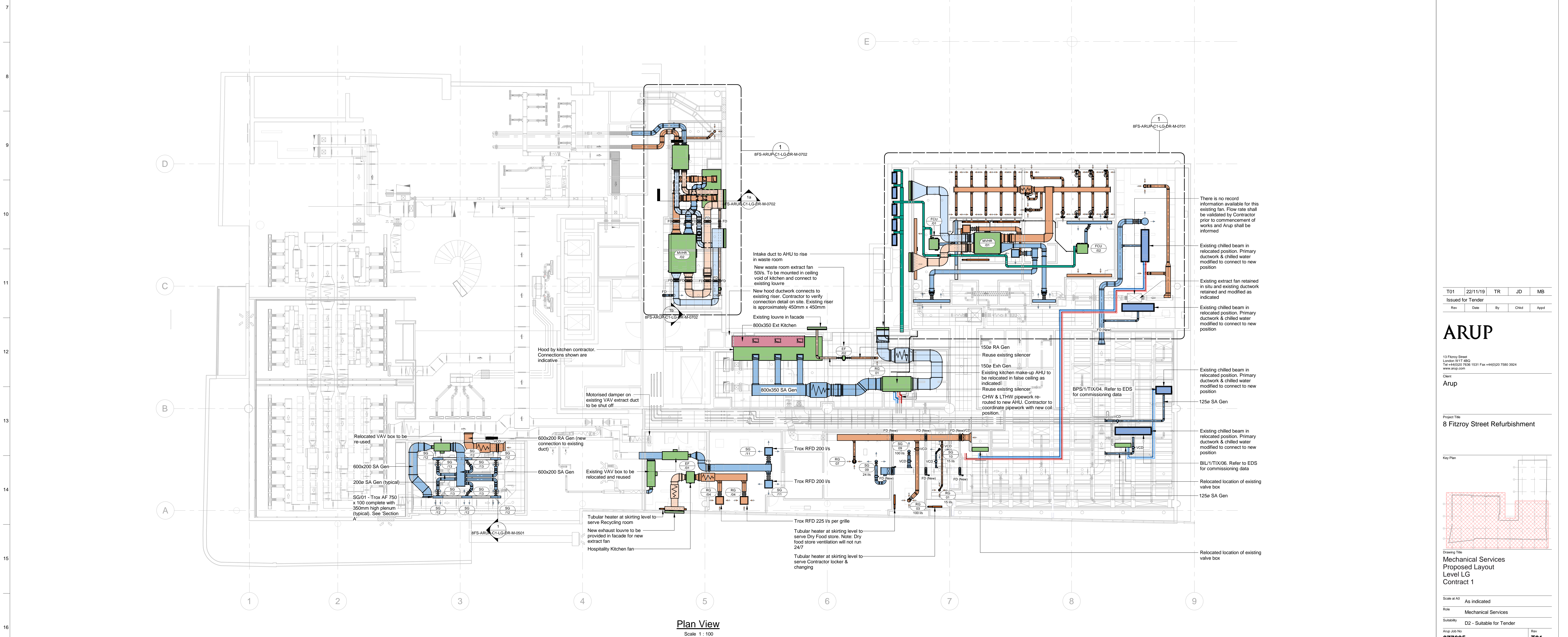
| Grilles & Diffusers | | | | | | | | |
|-------------------------|----------|------------------------|-----------------------------|---------------|-----------|--------------|-----------|--|
| Grille Reference Number | Quantity | Type | Total Length/diameter mm | Volume l/s | Plenum | Manufacturer | Model Ref | Notes |
| RG01 | 24 | Circular disk valve | Ø160 | 20-40 | N/A | Trox | LVS | Showers & Waste Room |
| RG02 | 1 | Egg Crate Grille | 600 x 600 | 190 | 600 x 600 | Trox | ADQL | Drying Room |
| RG03 | 3 | Circular disk valve | Ø200 | TBC | N/A | Trox | LVS | Flow rate to be confirmed once existing fan is validated |
| RG04 | 2 | Perforated Diffuser | 600x600 | 225 | 600 x 600 | Trox | ADQL | |
| RG05 | 1 | Linear 2 slot Diffuser | 2800 | 208 | N/A | Trox | ALS25 | Female changing FCU return |
| RG06 | 1 | Linear 2 slot Diffuser | 4500 | 208 | N/A | Trox | ALS25 | Male changing FCU return |
| RG07 | 1 | - | Ø200 | - | - | - | - | - |
| SG01 | 1 | Egg Crate Grille | 600 x 600 | 160 | 600 x 600 | Trox | ADQL | Drying Room |
| SG02 | 1 | Linear 2 slot Diffuser | 2600 | 170 | 2 x 1400 | Trox | ALS25 | Male changing supply |
| SG03 | 1 | Linear 2 slot Diffuser | 1700 | 170 | 2 x 800 | Trox | ALS25 | Female changing supply |
| SG04 | 1 | Linear 2 slot Diffuser | 3600 | 208 | 2 x 1200 | Trox | ALS25 | Female changing FCU supply |
| SG06 | 1 | Linear 2 slot Diffuser | 3200 | 208 | 2 x 1200 | Trox | ALS25 | Male changing FCU supply |
| SG08 | 1 | Circular disk valve | Ø500 | TBC | N/A | Trox | 2-LVS | Flow rate to be confirmed once existing fan is validated |
| SG09 | 4 | Circular disk valve | Ø200 | 24-100 | N/A | Trox | 2-LVS | - |
| SG10 | 1 | Circular disk valve | Ø160 | 15 | N/A | Trox | 2-LVS | - |
| SG11 | 2 | Perforated Diffuser | 600x600 | 200 | 600 x 400 | Trox | ADQL | |
| SG12 | 6 | Linear grille | 750x100 | 50 | 750 x 400 | Trox | AF | C/W plenum box |
| SG13 | 4 | Linear grille | 1380x100 | 0 | N/A | Trox | AF | Aesthetic 'dummy' grille |
| SG14 | 1 | Linear grille | 1050x100 | 0 | N/A | Trox | AF | Aesthetic 'dummy' grille |

| MVHR Units | | | | | | | | | |
|-----------------------|----------|----------|------|--------------------------|--------------------------|---|--|-------------------------|-------|
| Unit Reference Number | System | Quantity | Type | Supply Volume max l/s | Return Volume max l/s | External Static Pressure (Supply) Pa | External Static Pressure (Extract) Pa | Motor input power kW | Notes |
| MVHR/01 | Changing | 1 | R | 500 | 590 | 100 | 200 | 3 | Nuair |
| MVHR/02 | Pot Wash | 1 | MVH | 640 | 750 | 200 | 200 | 8 | Nuair |

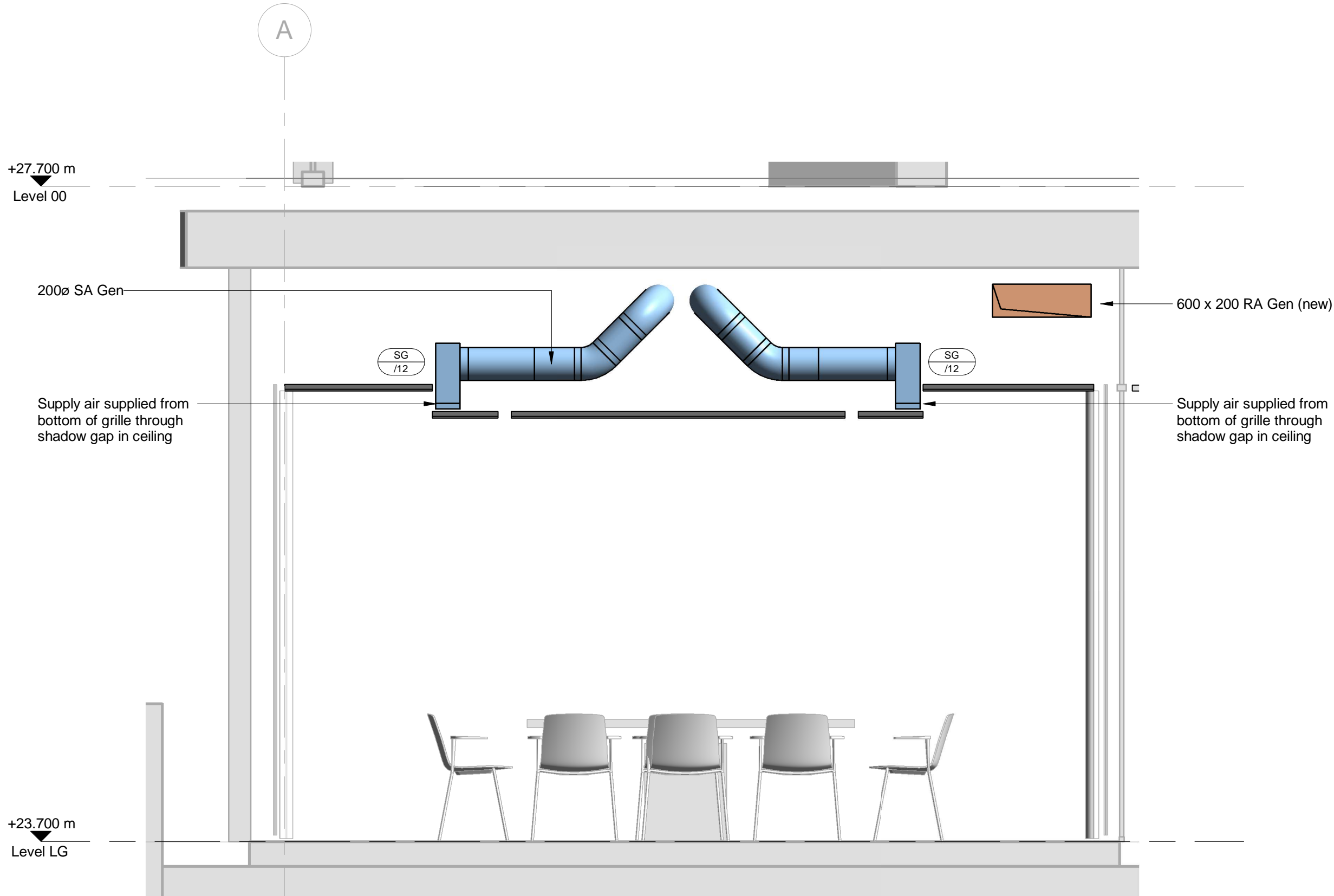
| Server Room Cooling Units | | | | | | | | | |
|---------------------------|-------------------|----------|----------|-------------------------|------------------------|-------------------------------|--------------|-----------|--|
| Unit Reference Number | System | Quantity | Location | Type | Size H X W X D (mm) | Sensible Cooling Output kW | Manufacturer | Model Ref | Notes |
| DX/00/001 - 004 | Level 0 IT Server | 4 | Level 0 | Unit | 340x1200x240 | 7 | Daikin | FAA100A | |
| CON-RF-01 - 02 | Level 0 IT Server | 2 | Roof | External Condenser Unit | 870x1100x460 | 19 | Daikin | RZA2000 | 2no. Refrigerant systems required considering size of internal cooling load. External condenser units to be transported to roof via 1.22m x 1.22m existing access hatch. |

| Tubular Heaters | | | | | | | | |
|-----------------------|----------|-----------------------------|------------------------|-------------------|----------------------|--------------|-----------|---|
| Unit Reference Number | Quantity | Type | Size H X W X D (mm) | Cable length m | Electric Supply W | Manufacturer | Model Ref | Notes |
| TTH01 | 7 | Thermostatic tubular heater | 81 x 1933 x 80 | 1.5 | 240 | Dimplex | ECOT8FT | Mounted to the wall using brackets provided. Heater guard mounted over heater |
| THG01 | 7 | Tubular heater Guard | 508 x 1933 x 114 | N/A | N/A | AINO | STG 61 | Mounted around tubular heater - 1 per heater |

| Existing Chilled Beams (to be modified) Schedule | | | | | | | | | | | | | | | | | | | |
|--|-----|---------------------------|------------------|------------------------|--------------------------------|-----------------------|-----------------------|--------------------------|-------------------------|------------------------|--------------------------------|-----------------------|------------------------|---------------------------|--------------------------|-------------------------|--|--|--|
| Type Ref | Qty | Primary Air °C db/ w/b | Fresh Air l/s | Max Air Pressure Pa | Summer Room Condition °C db | Cooling Capacity W | CHW Flow Rate kg/s | CHW Pressure Drop kPa | CHW Entering Temp °C | CHW Leaving Temp °C | Winter Room Condition °C db | Heating Capacity W | LTHW Flow Rate kg/s | LTHW Pressure Drop kPa | LTHW Entering Temp °C | LTHW Leaving Temp °C | Notes | | |
| BL-01 | 1 | 16.0 / 12.7 | 40 | 99 | 24 | 1369 | 0.078 | 99 | 14 | 17 | N/A | N/A | 17 | 7.1 | N/A | N/A | Being relocated refer to drawing | | |
| BPS-01 | 1 | 16.0 / 12.7 | 15 | 99 | 24 | 650 | 0.04 | 3.9 | 14 | 17 | 22 | 487 | 0.013 | 0.37 | 45 | 35 | Being relocated refer to drawing | | |
| BPL-01 | 3 | 16.0 / 12.7 | 30 | 103 | 24 | 1294 | 0.08 | 6.66 | 14 | 17 | 22 | 870 | 0.022 | 1.37 | 45 | 35 | 2No. Relocated, 1 retained for spares | | |
| Unknown | 1 | | | | | | | | | | | | | | | | Record information not available. To be retained for spares. | | |



Plan View
Scale 1 : 100



Section 1
Executive Dining
Scale 1 : 25

- Notes:
1. This drawing shall be read in conjunction with all mechanical, electrical, public health, architectural, structural & utility drawings, reports, schedules, surveys, specifications and relevant documentation.
 2. This drawing is not to be dimensioned from and shall not be used for construction. For exact mounting positions refer to Architect's setting out.
 3. Refer to the Architect's specification and details for requirements of penetrations and waterproofing details for external services.
 4. Modified chilled beams shall be recommended as per flow rates indicated in schedule. Refer to drawing for type reference.

| | | | | |
|-------------------|----------|----|------|------|
| T01 | 22/11/19 | TR | JD | MB |
| Issued for Tender | | | | |
| Rev | Date | By | Chkd | Appd |

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Client

Arup

Project Title
8 Fitzroy Street Refurbishment

Key Plan

Drawing Title
Mechanical Services
Proposed Layout
Level LG
Contract 1

| | |
|-------------|--------------------------|
| Scale at A0 | As indicated |
| Role | Mechanical Services |
| Suitability | D2 - Suitable for Tender |
| Drawn By | 707625 |
| Rev | T01 |
| Name | 8FS-ARUP-C1-LG-DR-M-0501 |