

TECHNICAL SERVICES
Refrigeration & Air Conditioning

Notes:

1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELATED DESIGN PROPOSAL DOCUMENTS INCLUDING THOSE FROM THE PROJECT ARCHITECTS, INTERIOR DESIGNER, STRUCTURAL AND ACOUSTIC CONSULTANTS, SERVICES, MAIN CONTRACTOR'S, DIRECTS AND ANY SPECIFIED MANUFACTURER'S CONTRACT DRAWINGS.
2. THE MECHANICAL SERVICES WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CLIENT SPECIFICATION & BRIEF TOGETHER WITH LANDLORD TECHNICAL GUIDE & SPECIFICATION WHERE AVAILABLE.
3. DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL CURRENT BUILDING STANDARDS REGULATIONS.
4. THE MECHANICAL DUCTWORK SERVICES INSTALLATION WORKS SHALL BE COORDINATED WITH THE BUILDING STRUCTURE, FINISHES AND ALL OTHER SERVICES. RADUS BEAMS TO BE UTILISED ON KITCHEN EXTRACT DUCT DIRECTION CHANGES WHEREVER POSSIBLE.
5. ALL HEAT RECOVERY AND CONDIONED AIR DUCTWORK SHALL BE THERMALLY INSULATED. EXTERNAL DUCTWORK TO BE WEATHERPROOF WRAPPED / SEALED.
6. ALL DUCTWORK PENETRATING FIRE COMPARTMENT PARTS SHALL BE INCORPORATE CERTIFIED FIRE DAMPERS TO MATCH THE PARTED TOGETHER WITH ACCESS PANELS. KITCHEN EXTRACT FIRE RATED DUCTWORK WHERE EXISTING KITCHEN COMPARTMENT. REFERENCE TO BE MADE TO ARCHITECT'S FIRE STRATEGY DRAWING TO ESTABLISH LOCATIONS / FIRE DAMPER TYPE.
7. VOLUME CONTROL DAMPERS SHALL BE INSTALLED ON ALL BRANCHES AND DISTRIBUTER / GRILLE TERMINALS TO FACILITATE COMMISSIONING.
8. ATTENUATION AND ANTI-VIBRATION MEASURES SHALL BE INCORPORATED ON ALL PLANT AND DUCTWORK SUPPORTS IN ACCORDANCE WITH ACOUSTIC CONSULTANT'S SPECIFICATION.
9. ACCESS PANELS TO BE PROVIDED BY MAIN CONTRACTOR IN ANY SOLID CEILINGS WHERE FINAL REQUIREMENTS INDICATED BY MECHANICAL INSTALLATION CONTRACTOR.
10. AIR CONDITIONING CASSETTE UNITS TO BE FITTED WITH CONDENSATE PUMP WHERE GRANIT FILL CANNOT BE ACHIEVED.
11. ALL INTERCONNECTING INSULATED REFRIGERANT PIPENWORK AND CABLES SHALL BE ROUTED AND FIXED ON DEDICATED CABLE TRAY.
12. ALL NEW MECHANICAL PLANT TO BE MOUNTED ON ANTI-VIBRATION MOUNTS.

Do not scale from drawing
Report all discrepancies immediately
This drawing is to be read in conjunction with all relevant documents and drawings

Client Project

Maya
40 Chorlton Street
Manchester

Revisions

Driving Status
INFORMATION ISSUE

Project Code	Scale: 1:300@A1/1:100@A3
TS_M_CSM	Date/drawn: May/23
	Drawn by: MJB
	Reviewed by:

Drawing Title
LOWER BASEMENT LEVEL
HVAC MECHANICAL SERVICES
LAYOUT

Drawing Number	Revision
M_01	-

LOWER BASEMENT VENTILATION AND AIR CONDITIONING NOTES:

ANY MODIFICATIONS REQUIRED TO LANDLORD SERVICES FOR PURPOSES OF TENANT FIT OUT COORDINATION TO BE UNDERTAKEN BY OTHERS UNLESS SEPARATELY AGREED / INSTRUCTED AND IN FULL ACCORDANCE LANDLORD APPROVALS, SPECIFICATION, AND PROGRAMMING.

ALL BUILDERS WORK FORMATION BY MAIN CONTRACTOR FOR PURPOSES OF PROGRAMMING AND COORDINATION.

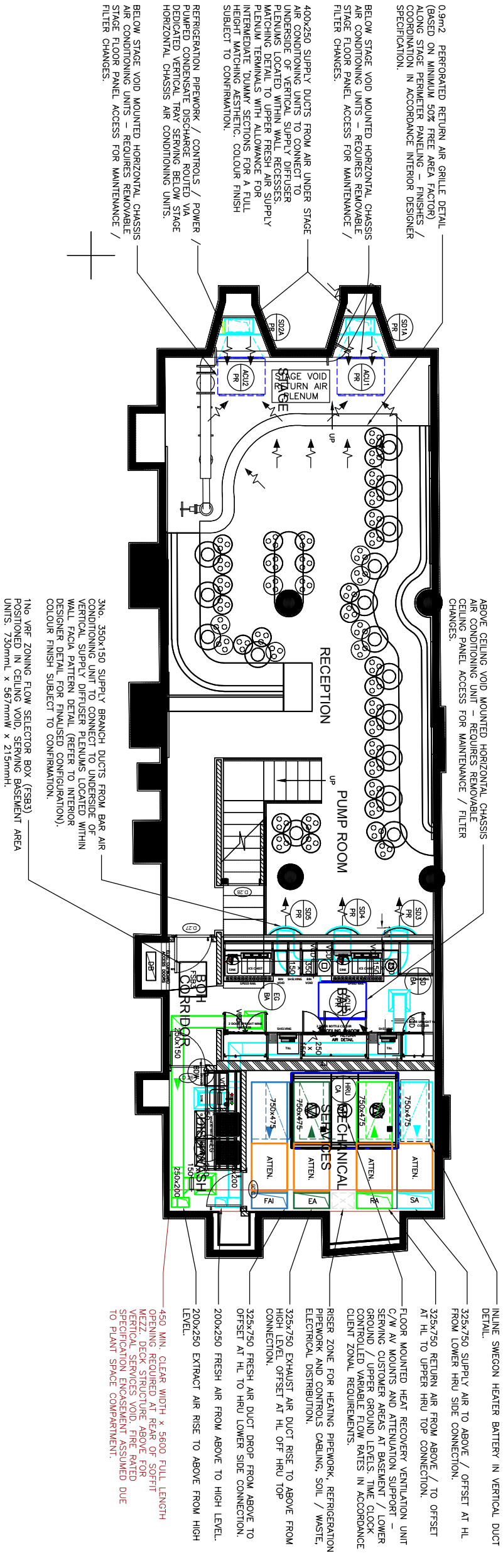
MECHANICAL SERVICES INDICATED FIRE STOPPING PROVISION SUBJECT TO RECEIPT OF AN AUTHORITY APPROVED CLIENT DESIGN TEAM FIRE STRATEGY PROPOSAL.

BAR / COLD PREP / WASH UP EQUIPMENT SUPPLIED AND INSTALLED BY OTHERS, SERVICES SUBJECT TO RECEIPT OF APPOINTED SPECIALIST CONFIRMED REQUIREMENTS WITH PROVISIONAL ALLOWANCES CURRENTLY INDICATED, TERMINATING TO AN AGREED POINT WITH FINAL CONNECTION BY OTHERS UNLESS SEPARATELY INSTRUCTED.

DETAILS OF CLIENT DIRECTS INCLUDING IT / DATA / SECURITY / OFFICE & BOH EQUIPMENT NOT KNOWN – CLIENT CONFIRMED REQUIREMENTS TO BE INCORPORATED BY APPOINTED INSTALLATION CONTRACTOR.

LANDLORD ABOVE GROUND DRAINAGE PROPOSED TO BE USED FOR COLLECTED PLANT CONDENSE. TRAPPED WASTE DISCHARGE AS NO DEDICATED AS DENSE DRAIN POINTS PROVIDED.

SERVICES VERTICAL PRIMARY SUPPORT FRAMEWORK REQUIRED / TO BE PROVIDED BY MAIN CONTRACTOR WHERE WALL FIXINGS PREVENTED BY SHELL TANKING MEMBRANE SYSTEM.



LOWER BASEMENT AIR CONDITIONING INDOOR UNIT DETAILS:

ACU1&2, PR: PUMP ROOM STAGE VOID MOUNTED HORIZONTAL CHASSIS UNIT / 1000mmW / 750mmH x 275mm H, 230V-1PH-5A, TOSHIBA UP0241BHP-E, (366/s (HighSpeed) / 303/s (MidSpeed) / 242/s (LowSpeed). (500mm MIN SERVICE SPACE REQUIRED AT SIDE).

ACU3, PR: PUMP ROOM BAR AREA VOID MOUNTED HORIZONTAL CHASSIS UNIT / 1000mmW x 750mmH x 275mm H, 230V-1PH-5A, TOSHIBA UP0241BHP-E, (366/s (HighSpeed) / 303/s (MidSpeed) / 242/s (LowSpeed). (500mm MIN SERVICE SPACE REQUIRED AT SIDE).

BASEMENT FRESH AIR & EXTRACT VENTILATION UNIT DETAILS:

HRU CA: CUSTOMER AREA FLOOR MOUNTED ROTARY WHEEL HEAT RECOVERY VENTILATION UNIT / 2203mmL x 1600mmW x 191mmH, 845KG, 1200mm x 500mm CONNS. DUTY 1.6m³/s @ 300Pa ESP, 400V-3PH-50 / 10A. SWEGON GOLD F RX SIZE 025. DUCT MOUNTED UTHW HEATING COIL PROVISION INCLUDED TO MAINTAIN 22°C WINTER SEASON SUPPLY TEMP.

LOWER BASEMENT DIFFUSER & GRILLE DETAILS:

SD1A-2A, PR: PUMP ROOM STAGE AREA AC SUPPLY DIFFUSERS – MID LEVEL VERTICAL FACE WALL DIFFUSERS EACH 0.36m²/s (HighSpeed), 600mmW (NOM) x 1500mmH (TBC). TYPE DISPLACEMENT / PERFORATED FACE / SWEGON SELECTION TBC. RETURN AIR GRILLES AT LOW LEVEL, ALSOOR STAGE PERIMETER EACH 0.45m² FREE AREA / PATTERN IN ACCORDANCE INTERIOR DESIGNER REQUIREMENTS.

SD3-5, PR: PUMP ROOM BAR AREA AC SUPPLY DIFFUSERS – HIGH LEVEL VERTICAL FACE WALL DIFFUSERS – EACH 0.12m²/s (HighSpeed), 500mmW (NOM) x 650mmH (TBC). TYPE DISPLACEMENT / PERFORATED FACE / SWEGON SELECTION TBC. RETURN AIR VIA CEILING SHADOW GAP DETAIL AT REAR OF BAR PROVIDING 0.45m² FREE AREA / DETAIL IN ACCORDANCE INTERIOR DESIGNER REQUIREMENTS.

SD, BA: BAR AREA SUPPLY DIFFUSER – CEILING DIFFUSER MOUNTING HEIGHT 2200mm AFFL – 0.12m²/s. TYPE SINGLE WAY SQUARE.

EG, BA: BAR AREA EXTRACT GRILLE – CEILING GRILLE MOUNTING HEIGHT 2200mm AFFL – 0.12m²/s. TYPE SINGLE WAY SQUARE.

SD, BDW: BAR DISHWASH AREA SUPPLY DIFFUSER – CEILING DIFFUSER MOUNTING HEIGHT 2200mm AFFL – 0.08m²/s. TYPE TWO WAY SQUARE.

EG, BDW: BAR DISHWASH AREA EXTRACT GRILLE – CEILING GRILLE MOUNTING HEIGHT 2200mm AFFL – 0.08m²/s. TYPE TWO WAY SQUARE.

ABOVE CEILING VOID MOUNTED HORIZONTAL CHASSIS AIR CONDITIONING UNIT – REQUIRES REMOVABLE CEILING PANEL ACCESS FOR MAINTENANCE / FILTER CHANGES.

0.9m² PERFORATED RETURN AIR GRILLE DETAIL (BASED ON MINIMUM 50% FREE AREA FACTOR) ALONG STAGE PERIMETER PANELING – FINISHES / COORDINATION IN ACCORDANCE INTERIOR DESIGNER SPECIFICATION.

BELOW STAGE VOID MOUNTED HORIZONTAL CHASSIS AIR CONDITIONING UNITS REQUIRES REMOVABLE STAGE FLOOR PANEL ACCESS FOR MAINTENANCE / FILTER CHANGES.

400x250 SUPPLY DUCTS FROM AIR UNDER STAGE AIR CONDITIONING UNITS TO CONNECT TO UNDERSIDE OF VERTICAL SUPPLY DIFFUSER. PLENUMS LOCATED WITHIN WALL RECESSES. MATCHING DETAIL TO UPPER FRESH AIR SUPPLY PLENUM TERMINALS WITH ALLOWANCE FOR INTERMEDIATE 'DUMMY' SECTIONS FOR A FULL HEIGHT MATCHING AESTHETIC. COLOUR FINISH SUBJECT TO CONFIRMATION.

REFRIGERATION PIPEWORK / CONTROLS / POWER PIPING CONDENSATE DISCHARGE ROUTED VIA DEDICATED VERTICAL DRAIN SERVING BELOW STAGE HORIZONTAL CHASSIS AIR CONDITIONING UNITS.

BELOW STAGE VOID MOUNTED HORIZONTAL CHASSIS AIR CONDITIONING UNITS – REQUIRES REMOVABLE STAGE FLOOR PANEL ACCESS FOR MAINTENANCE / FILTER CHANGES.

3No. 350x150 SUPPLY BRANCH DUCTS FROM BAR AIR CONDITIONING UNIT TO CONNECT TO UNDERSIDE OF VERTICAL SUPPLY DIFFUSER. PLENUMS LOCATED WITHIN WALL. FACIA PATTERN DETAIL (REFER TO INTERIOR DESIGNER DETAIL FOR FINALISED CONFIGURATION). COLOUR FINISH SUBJECT TO CONFIRMATION.

1No. VRF ZONING FLOW SELECTOR BOX (FSB3) POSITIONED IN CEILING VOID SERVING BASEMENT AREA UNITS. 730mmL x 567mmW x 215mmH.