

UPPER GROUND FLOOR AIR CONDITIONING, INDOOR UNIT DETAILS:

- ACU1&2-BR: BRASSERIE VOID MOUNTED VERTICAL CHASSIS UNIT / 1000mm W x 750mm H x 275mm D, 230V-1PH-5A, TOSHIBA UP0301BHP-E, (403/s (HighSpeed.) / 333/s (MidSpeed.) / 267/s (LowSpeed.). (500mm MIN SERVICE SPACE REQUIRED AT SIDE).
- ACU1&2-DA: DINING AREA VOID MOUNTED HORIZONTAL CHASSIS UNIT / 1000mmW x 750mmL x 275mm H, 230V-1PH-5A, TOSHIBA UP0301BHP-E, (403/s (HighSpeed.) / 333/s (MidSpeed.) / 267/s (LowSpeed.). (500mm MIN SERVICE SPACE REQUIRED AT SIDE).
- ACU1-PDR: PRIVATE DINING ROOM VOID MOUNTED VERTICAL CHASSIS UNIT / 700mm W x 750mm H x 275mm D, 230V-1PH-5A, TOSHIBA UP0181BHP-E, (256/s (HighSpeed.) / 183/s (MidSpeed.) / 150/s (LowSpeed.). (500mm MIN SERVICE SPACE REQUIRED AT SIDE).

UPPER GROUND FLOOR AIR CONDITIONING, CONDENSOR (OUTDOOR) UNIT DETAILS:

- CU-ESR: ELECTRIC SWITCH ROOM / COMMS ROOM CONDENSOR UNIT / 780mm W x 550mm H x 290mm D, 230V-1PH-1TBC, TOSHIBA TBC, INTERNALLY POSITIONED ADJACENT EXTERNAL LOUVER.

UPPER GROUND FLOOR OVERDOOR HEATED AIR CURTAIN UNIT DETAILS:

- ODH-EXT: ENTRANCE LOBBY EXPOSED MOUNTED OVERDOOR HEATED LTHW AIR CURTAIN, CASED / EXPOSED MOUNTED ITEM C/W TOP RETURN AIR CONFIGURATION / 16020mm W x 473mm H x 291mm D, 230V-1PH-5A, US AIR CURTAINS ZEN_M_1500-P, (BESPOKE FINISHES AVAILABLE SUBJECT TO CLIENT DESIGNER DEMAL).

UPPER GROUND FLOOR EXTRACT FAN UNIT DETAILS:

- FE-BR: REFUSE ROOM INLINE DUCT MOUNTED EXTRACT FAN C/W AV MOUNTS AND DUCTED ATTENUATION, 350mmL x 200mm x 136mmH, 230V-1PH-1TBC, VENT-AXXA ACM150, 0.06m³/s MECHANICAL, EXTRACT WITH PASSIVE AIR MAKE UP.

UPPER GROUND FLOOR EXTERNAL GRILLE DETAILS:

- EG1-3: EX1. EXTERNAL REFUSE STORE DOOR SIDE PANEL MOUNTED VENTILATION GRILLES - EACH 250mm SQUARE - REFUSE EXHAUST GRILLE / REFUSE PASSIVE MAKE UP AIR GRILLE/ PLANT ROOM PASSIVE VENTILATION GRILLE TYPE / COLOUR FINISH TBC.

UPPER GROUND FLOOR DIFFUSER & GRILLE DETAILS:

- SD1-2-BR: BRASSERIE SUPPLY DIFFUSERS - HIGH LEVEL VERTICAL FACE WALL DIFFUSERS - EACH 0.4m²/s (HighSpeed), 2100mmL (MAX) x 200mmH (TBC), THROW 5.5m.
- SD1-2-BR: MATCHING RETURN AIR GRILLES AT LOW LEVEL.
- EG1-BR: BRASSERIE BAR EXTRACT GRILLE - HIGH LEVEL VERTICAL FACE WALL DIFFUSER - 0.3m³/s, 1000mmL (MAX) x 400mmH (TBC).
- EG2-BR: BRASSERIE EXTRACT GRILLE - HIGH LEVEL VERTICAL FACE BULKHEAD DIFFUSER - 0.3m³/s, 2400mmL (MAX) x 180mmH (TBC).
- SD1-2-BR: BRASSERIE TOILET SUPPLY DIFFUSER - HIGH LEVEL VERTICAL FACE WALL / CEILING DIFFUSER - 0.012m²/s, CEILING VALVE TYPE.
- EG1-2-BR: BRASSERIE TOILET EXTRACT GRILLE - HIGH LEVEL VERTICAL FACE WALL GRILLE - 0.013m²/s, CEILING VALVE TYPE.
- SD1-4-DA: DINING AREA SUPPLY DIFFUSERS - CEILING DIFFUSER MOUNTING HEIGHT 4000mm AFFL - EACH 0.2m²/s (HighSpeed.), TYPE TBC.
- SD1-4-DA: DINING AREA RETURN AIR VIA PERIMETER CEILING SHADOW GAP DETAIL.
- SD-PDR: PRIVATE DINING ROOM SUPPLY DIFFUSER - HIGH LEVEL VERTICAL FACE WALL DIFFUSER - 0.26m³/s (HighSpeed), 2400mmL (MAX) x 150mmH (TBC), THROW 2.9m, RETURN AIR GRILLE AT LOW LEVEL - 1900mmL (MAX) x 150mmH .
- EG-PDR: PRIVATE DINING ROOM EXTRACT GRILLE - HIGH LEVEL VERTICAL FACE WALL DIFFUSER - 0.26m³/s, 2400mmL (MAX) x 150mmH (TBC).
- SD1-6-K: KITCHEN AREA MAKE UP SUPPLY DIFFUSERS - SIDEWALL PLENUM DIFFUSER MOUNTING - EACH 0.23m²/s, TYPE LOW VELOCITY / INTEGRATED VDO.
- EGAL-K: KITCHEN COOKLINE WALL MOUNTED OVERHEAD EXTRACT CANOPY - HALTON SPECIALIST MANUFACTURE IN ACCORDANCE REGRADUATION FILTRATION SYSTEM - 1.52m²/s.
- SD-KA: KITCHEN AREA FRESH AIR SUPPLY DIFFUSER - SIDEWALL PLENUM DIFFUSER - 0.06m²/s, TYPE LOW VELOCITY / INTEGRATED VDO.
- EG-K: KITCHEN POTWASH AREA EXTRACT GRILLE - SIDEWALL PLENUM DIFFUSER - 0.08m²/s, TYPE SINGLE BLADE / INTEGRATED VDO.
- SD-KC: KITCHEN AREA MAKE UP CORRIDOR SUPPLY DIFFUSER - SIDEWALL PLENUM DIFFUSER - 0.16m²/s, TYPE LOW VELOCITY / INTEGRATED VDO.

UPPER GROUND FLOOR 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.

DESIGN PROPOSALS BASED UPON UPPER SOFFIT STEELS OVER KITCHEN / PRIVATE DINING BEING REPOSITIONED TO FIT WITHIN SOFFIT DUE TO EXISTING HEIGHT RESTRICTIONS AS ADVISED BY CLIENT TEAM.

KITCHEN / COOLD PREP / WASH UP EQUIPMENT SUPPLIED AND INSTALLED BY OTHERS, INCLUDING GREASE TRAP / ENZYME WASTE DOSING PROVISION TO MEET BUILDING CONTROL REQUIREMENTS. SERVICES SUBJECT TO RECEIPT OF APPOINTED KITCHEN SPECIALIST CONFIRMED REQUIREMENTS WITH PROVISIONAL ALLOWANCES CURRENTLY INDICATED. TERMINATING TO AN AGREED POINT WITH FINAL CONNECTIONS BY OTHERS UNLESS SEPARATELY INSTRUCTED.

BRASSERIE BAR / SERVERY SERVICES SUBJECT TO APPOINTED KITCHEN SPECIALIST CONFIRMED REQUIREMENTS, 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 DEWIS DRAIN POINTS PROVIDED.

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

600x300 RECIRC. BRANCH SUPPLY DUCT RISE FROM BELOW TO HIGH LEVEL OFFSET TO SERVE KITCHEN, WITH ATTENUATOR IN VERTICAL AND FIRE DAMPER IN FLOOR SLAB.

800x300 KITCHEN EXTRACT DUCT HEADER WITH 2NO 600x200 CANOPY CONNECTIONS DROP FROM HIGH LEVEL OFFSET TO BELOW. NOTE 800x600 ACCESS PANELS REQUIRED AT 1000mm SPACING TO DUCTWORK FOR PERIODIC CLEANING THROUGH WALL.

400mm CLEAR DEPTH SERVICE VOID REQUIRED AT REAR OF KITCHEN DIVING WALL TO ACCOMMODATE KITCHEN EXTRACT AND SUPPLY DUCT HEADERS.

300x200 FIRE RATED PASSIVE VENT SERVING LOWER GROUND PLANT SPACE, CONNECTED TO MID HEIGHT GRILLE IN PANEL.

BALANCED GAS BOILER FLUE RISE FROM BELOW TO TERMINATE THROUGH EXTERNAL SIDE PANEL AT HIGH LEVEL.

REFUSE STORE EXTRACT FAN - CONTINUOUS OPERATION LEVEL PANEL EXHAUST DISCHARGE VIA 250x250 HIGH LEVEL PANEL GRILLE. PASSIVE RETURN AIR GRILLE AT LOW LEVEL.

1270x700 ATTENUATED EXHAUST DUCT OFF KITCHEN HEAT PUMP CONDENSER UNIT DISCHARGE BELOW, CONNECT TO STREET LEVEL LOUVER. (45% LOUVER FACE AREA / ALLOCATION) - HEAT REJECTION AIR FLOW 4.42m³/s.

780x1580 ATTENUATED EXHAUST DUCT OFF VRF CONDENSER UNIT DISCHARGE BELOW, CONNECT TO STREET LEVEL LOUVER (45% LOUVER FACE AREA ALLOCATION) HEAT REJECTION AIR FLOW 4.81m³/s.

600x300 RECIRC. SUPPLY DUCT RISE TO HIGH LEVEL OFFSET TO SERVE KITCHEN.

225x100 KITCHEN FRESH AIR BRANCH DUCT FROM BOH DISTRIBUTION BELOW.

COMBINED MAKE UP AIR INTAKE LOUVER OPEN TO RETURN AIR PLENUM OPERATION SEALED PLANT SPACE. PEAK SIMULTANEOUS MAKE UP AIR FLOW 9.22m³/s.

UPPER WALL MOUNTED CONDENSOR SERVING ELECTRICAL CURBOARD / COMMS ROOM AIR CONDITIONING.

750x325 SUPPLY DUCT RISER OFFSET FROM BELOW TO HIGH LEVEL.

EXHAUST PLENUM (SPILT EQUALLY WITH INTAKE ACROSS WHOLE OF REAR LOUVER) WITH CONNECTED EXHAUST DUCTWORK OFFSET BELOW LANDLORD HIGH LEVEL SERVICES AND DROP TO LOW LEVEL. TOTAL INTAKE AIR VOLUME 2.2m³/s (1.6m³/s + 0.6m³/s).

750x450 FRESH AIR DUCT DROP TO BELOW FROM LOUVER PLENUM.

750x325 FRESH AIR DUCT DROP TO BELOW FROM LOUVER PLENUM (TRANSITION DETAIL PAST MEZZ SLAB).

750x450 FRESH AIR DUCT DROP TO BELOW FROM LOUVER PLENUM.

TEMPERED FRESH AIR SUPPLY TERMINATION WITHIN ACU VOID RECESS.

750x325 EXTRACT DUCT DROP OFFSET FROM HIGH LEVEL TO BELOW.

VERTICAL CHASSIS AIR CONDITIONING UNIT LOCATED IN WALL RECESS, INCORPORATING FRESH AIR SUPPLY TERMINATION WITHIN RECESS, REQUIRES REMOVABLE ROOM SIDE PANEL ACCESS FOR MAINTENANCE / FILTER CHANGES.

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 INDUSTRIAL STANDARD REGULATIONS.

4. THE MECHANICAL DUCTWORK SERVICES INSTALLATION WORKS SHALL BE CO-ORDINATED WITH THE BUILDING STRUCTURE, FINISHES AND ALL OTHER SERVICES RADIIUS BENUS TO BE UTILISED ON KITCHEN EXTRACT DUCT DIRECTION CHANGES WHEREVER POSSIBLE.

5. ALL HEAT RECOVERY AND COMPONED AIR DUCTWORK SHALL BE THERMALLY INSULATED. EXTERNAL DUCTWORK TO BE WEATHERPROOF WRAPPED / SEALED.

6. ALL DUCTWORK PENETRATING FIRE COMPARTMENT PARTS SHALL INAPPROPRIATE CERTIFIED FIRE DAMPERS TO MATCH THE PARTER RATING TOGETHER WITH ACCESS PANELS. KITCHEN EXTRACT FIRE RATED DUCTWORK WHERE EXTING 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 BRANCH LES AND DIFFUSER / GRILLE TERMINALS TO FACILITATE COMMISSIONING

8. ATTENUATION AND ANTI-VIBRATION MEASURES SHALL BE INCORPORATED ON ALL PLANT AND DUCTWORK SUPPORTS IN ACCORDANCE WITH ACOUSTIC CONSULTANTS SPECIFICATION.

9. ACCESS PANELS TO BE PROVIDED BY MAIN CONTRACTORS IN ANY SOLID CEILINGS WHERE FINAL REQUIREMENTS INDICATED BY MECHANICAL INSTALLATION CONTRACTOR.

10. AIR CONDITIONING CASSETTE UNITS TO BE FITTED WITH CONDENSATE PUMP WHERE GRANTY FALL 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
Refer to survey to construction
Report all discrepancies immediately
This drawing is to be read in conjunction with all relevant documents and drawings

Client Project

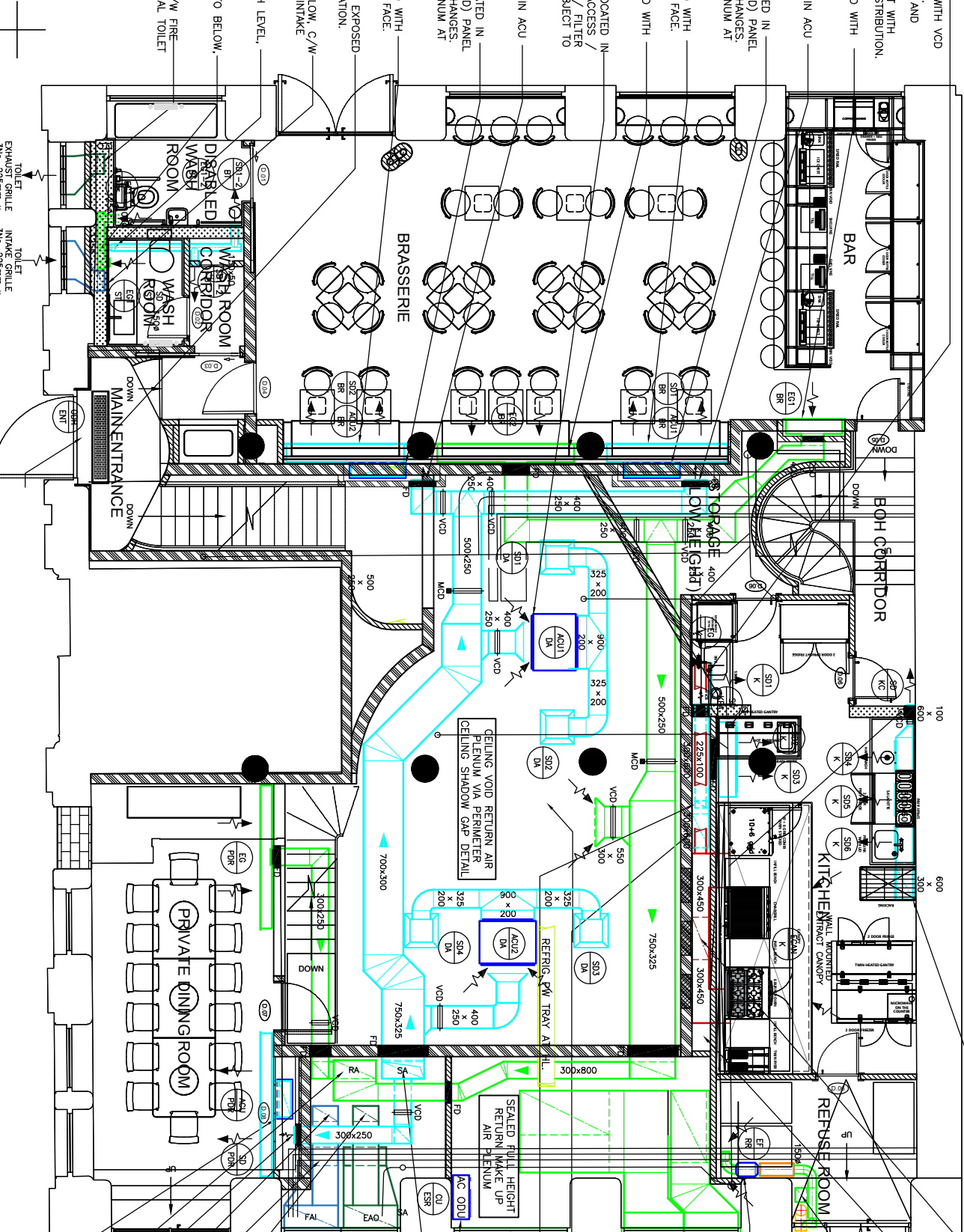
Maya
40 Chorlton Street
Manchester

Revisions

Drawing Status			
INFORMATION ISSUE			
Project Code	Scale: 1:300(A1)1:100(A3)	Date/drawn	May 23
TS_M_CSM		Drawn by:	MJD
		Reviewed by:	

UPPER GROUND LEVEL
HVAC MECHANICAL SERVICES
LAYOUT

Drawing Number
M_04



TOILET
EXHAUST GRILLE
140mm Air Bricks
140mm Air Bricks