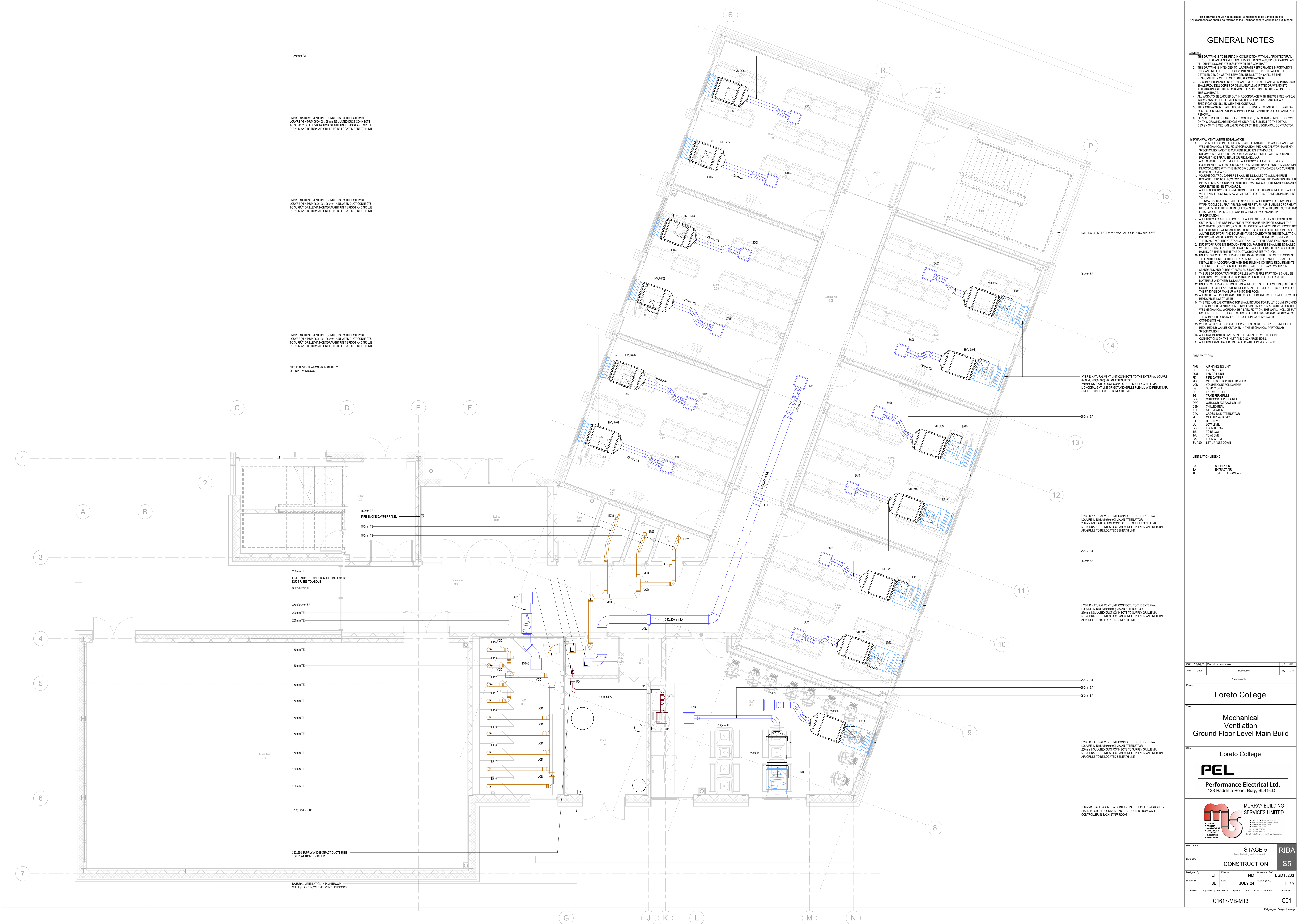




This drawing should not be scaled. Dimensions to be verified on site. Any discrepancies should be referred to the Engineer prior to work being put in hand.

GENERAL NOTES

- GENERAL**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, STRUCTURAL AND ENGINEERING SERVICES DRAWINGS, SPECIFICATIONS AND ALL OTHER DOCUMENTS ISSUED WITH THIS CONTRACT.
 - THIS DRAWING IS INTENDED TO ILLUSTRATE PERFORMANCE INFORMATION ONLY AND REFLECTS THE DESIGN INTENT OF THE INSTALLATION. THE DETAILED DESIGN OF THE SERVICES INSTALLATION SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
 - ON COMPLETION AND PRIOR TO HANDOVER, THE MECHANICAL CONTRACTOR SHALL PROVIDE 1 COPIES OF OAM MANUALS AS FITTED DRAWINGS ETC. ILLUSTRATING ALL THE MECHANICAL SERVICES UNDERTAKEN AS PART OF THIS CONTRACT.
 - ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE VBS MECHANICAL WORKMANSHIP SPECIFICATION AND THE MECHANICAL PARTICULAR SPECIFICATION ISSUED WITH THIS CONTRACT.
 - THE CONTRACTOR SHALL ENSURE ALL EQUIPMENT IS INSTALLED TO ALLOW ACCESS FOR INSTALLATION, COMMISSIONING, MAINTENANCE, CLEANING AND REMOVAL.
 - SERVICES ROUTES, FINAL PLANT LOCATIONS, SIZES AND NUMBERS SHOWN ON THIS DRAWING ARE INDICATIVE ONLY AND SUBJECT TO THE DETAIL DESIGN OF THE MECHANICAL SERVICES BY THE MECHANICAL CONTRACTOR.

- MECHANICAL VENTILATION INSTALLATION**
- THE VENTILATION INSTALLATION SHALL BE INSTALLED IN ACCORDANCE WITH VBS MECHANICAL SPECIFICATION, MECHANICAL WORKMANSHIP SPECIFICATION AND THE CURRENT BS88 EN STANDARDS.
 - DUCTWORK SHALL GENERALLY BE GALVANIZED STEEL WITH CIRCULAR PROFILE AND SPIRAL SEAMS OR RECTANGULAR.
 - ACCESS SHALL BE PROVIDED TO ALL DUCTWORK AND DUCT MOUNTED EQUIPMENT TO ALLOW FOR INSPECTION, MAINTENANCE AND COMMISSIONING IN ACCORDANCE WITH THE HVAC ON CURRENT STANDARDS AND CURRENT BS88 EN STANDARDS.
 - VOLUME CONTROLS DAMPERS SHALL BE INSTALLED TO ALL MAIN RUNS, BRANCHES ETC TO ALLOW FOR SYSTEM BALANCING. THE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE HVAC ON CURRENT STANDARDS AND CURRENT BS88 EN STANDARDS.
 - ALL FINAL ELECTRIC CONNECTIONS TO DIFFUSERS AND GRILLES SHALL BE VIA FLEXIBLE DUCTING. MAXIMUM LENGTH FOR THIS CONNECTION SHALL BE 300MM.
 - THERMAL INSULATION SHALL BE APPLIED TO ALL DUCTWORK SERVING WARM COOLED SUPPLY AIRS AND WHERE RETURN AIR IS UTILISED FOR HEAT RECOVERY. THE THERMAL INSULATION SHALL BE OF A THICKNESS, TYPE AND FINISH AS OUTLINED IN THE VBS MECHANICAL WORKMANSHIP SPECIFICATION.
 - ALL DUCTWORK AND EQUIPMENT SHALL BE ADEQUATELY SUPPORTED AS OUTLINED IN THE VBS MECHANICAL WORKMANSHIP SPECIFICATION. THE MECHANICAL CONTRACTOR SHALL ALLOW FOR ALL NECESSARY SECONDARY SUPPORT STEEL WORK AND BRACKETS ETC REQUIRED TO FULLY INSTALL ALL DUCTWORK AND EQUIPMENT ASSOCIATED WITH THE INSTALLATION.
 - DUCTWORK INSTALLATIONS SERVING THE KITCHEN ARE TO COMPLY WITH THE HVAC ON CURRENT STANDARDS AND CURRENT BS88 EN STANDARDS.
 - DUCTWORK PASSING THROUGH FIRE COMPARTMENTS SHALL BE INSTALLED WITH FIRE DAMPER. THE FIRE DAMPER SHALL BE EQUAL TO OR EXCEED THE RATING OF THE ELEMENT THE DUCTWORK PASSES THROUGH.
 - UNLESS SPECIFIED OTHERWISE FIRE DAMPERS SHALL BE OF THE PORTTYPE TYPE WITH A LINK TO THE FIRE ALARM SYSTEM. THE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE BUILDING CONTROL REQUIREMENTS, THE FIRE STRATEGY FOR THE BUILDING, WITH THE HVAC ON CURRENT STANDARDS AND CURRENT BS88 EN STANDARDS.
 - THE USE OF DOOR TRANSFER GRILLES WITHIN FIRE PARTITIONS SHALL BE CONFIRMED WITH BUILDING CONTROL PRIOR TO THE ORDERING OF MATERIALS AND THEIR INSTALLATION.
 - UNLESS OTHERWISE INDICATED IN WORK FIRE RATED ELEMENTS GENERALLY DOORS TO TOILET AND STORE ROOM SHALL BE UNDERCUT TO ALLOW FOR THE PASSAGE OF MAKE-UP AIR INTO THE ROOM.
 - ALL INTAKE AIRLETS AND EXHAUST OUTLETS ARE TO BE COMPLETE WITH A REMOVABLE INSECT MESH.
 - THE MECHANICAL CONTRACTOR SHALL INCLUDE FOR FULLY COMMISSIONING THE COMPLETE VENTILATION SERVICES INSTALLATION AS OUTLINED IN THE VBS MECHANICAL WORKMANSHIP SPECIFICATION. THIS SHALL INCLUDE BUT NOT LIMITED TO THE LEAK TESTING OF ALL DUCTWORK AND BALANCING OF THE COMPLETED INSTALLATION, INCLUDING A SEASONAL RE-COMMISSIONING.
 - WHERE ATTENUATORS ARE SHOWN THESE SHALL BE SIZED TO MEET THE REQUIRED NR VALUES OUTLINED IN THE MECHANICAL PARTICULAR SPECIFICATION.
 - ALL DUCT MOUNTED FANS SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS ON THE INLET AND DISCHARGE SIDES.
 - ALL DUCT FANS SHALL BE INSTALLED WITH RAY MOUNTINGS.

ABBREVIATIONS

AHU	AIR HANDLING UNIT
EF	EXTRACT FAN
FCU	FAN COIL UNIT
FD	FIRE DAMPER
MCD	MOTORISED CONTROL DAMPER
VCD	VOLUME CONTROL DAMPER
SG	SUPPLY GRILLE
EG	EXTRACT GRILLE
TD	TRANSFER GRILLE
OSG	OUTDOOR SUPPLY GRILLE
OSD	OUTDOOR EXTRACT GRILLE
CBM	CHILLED BEAM
ATT	ATTENUATOR
CTA	CROSS TALK ATTENUATOR
MSD	MEASURING DEVICE
HL	HIGH LEVEL
LL	LOW LEVEL
FB	FROM BELOW
TB	TO BELOW
T/A	TO ABOVE
FA	FROM ABOVE
SU/SD	SET UP / SET DOWN

VENTILATION LEGEND

SA	SUPPLY AIR
EA	EXTRACT AIR
TE	TOILET EXTRACT AIR

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