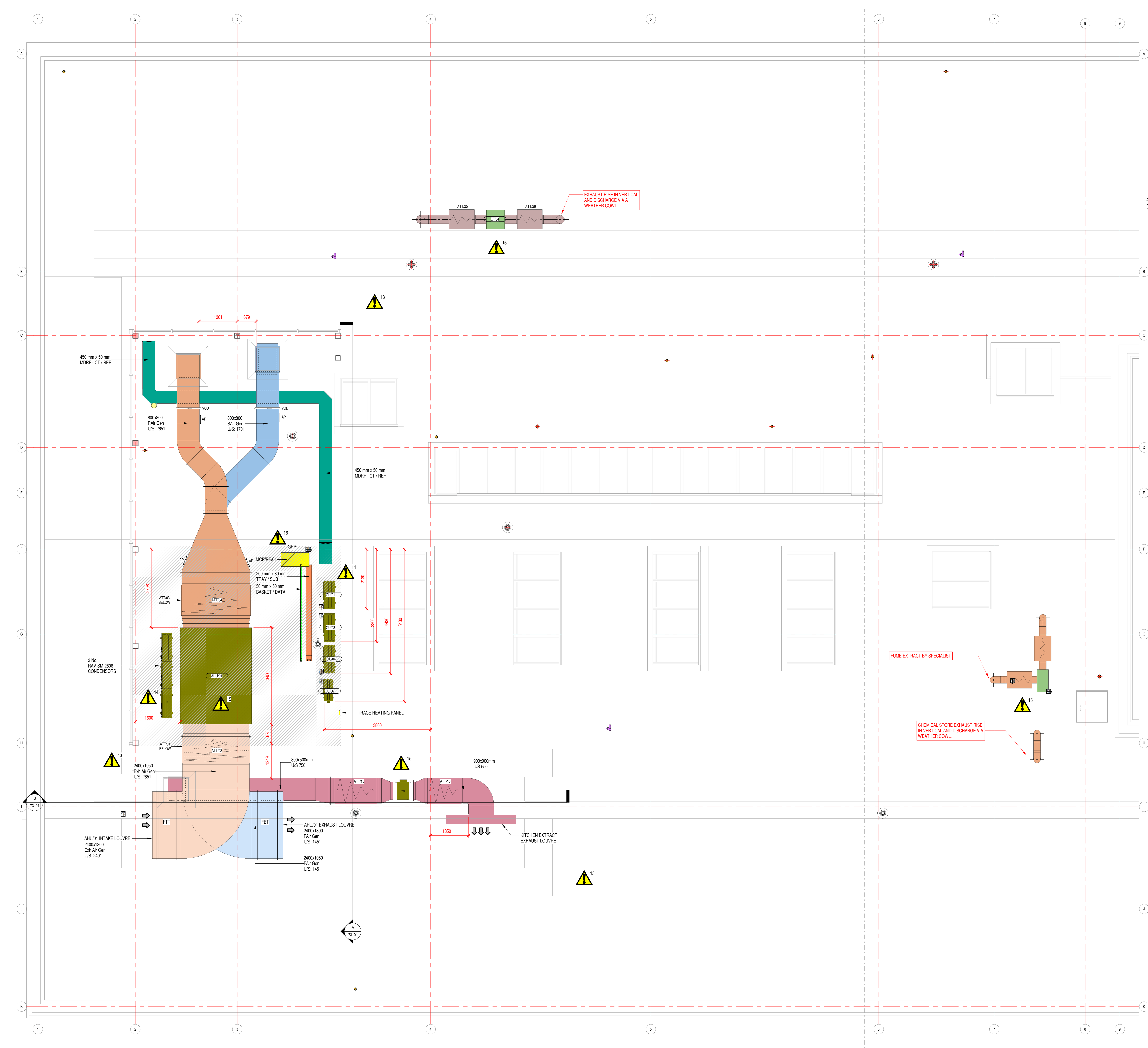
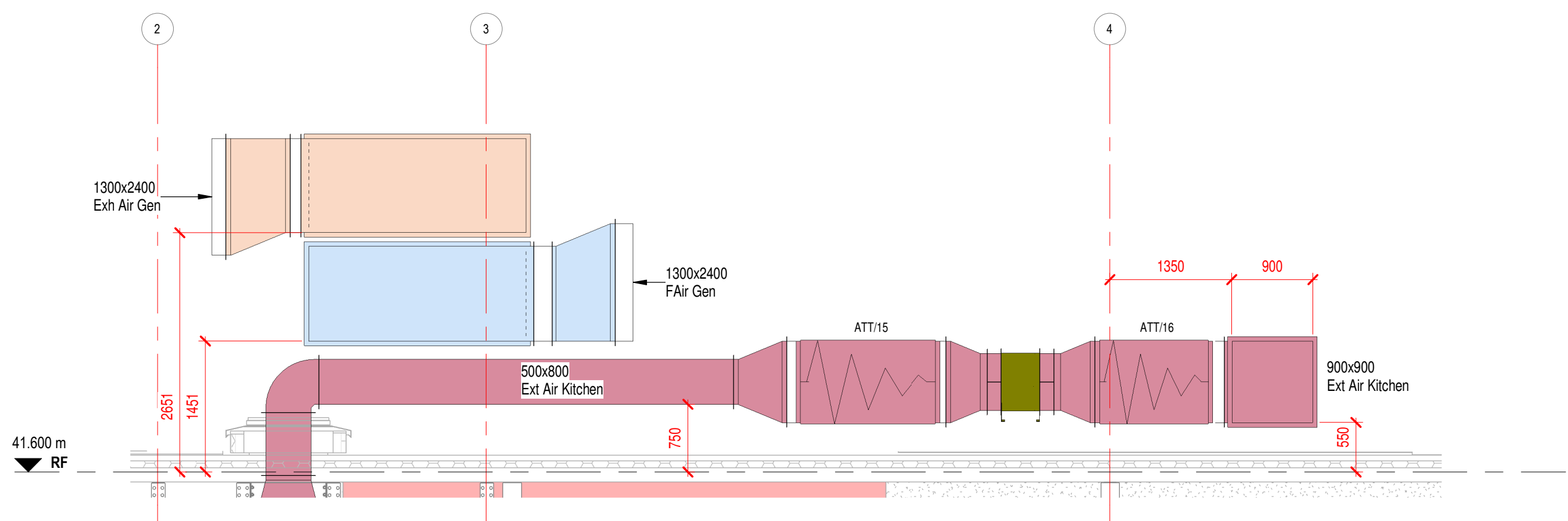
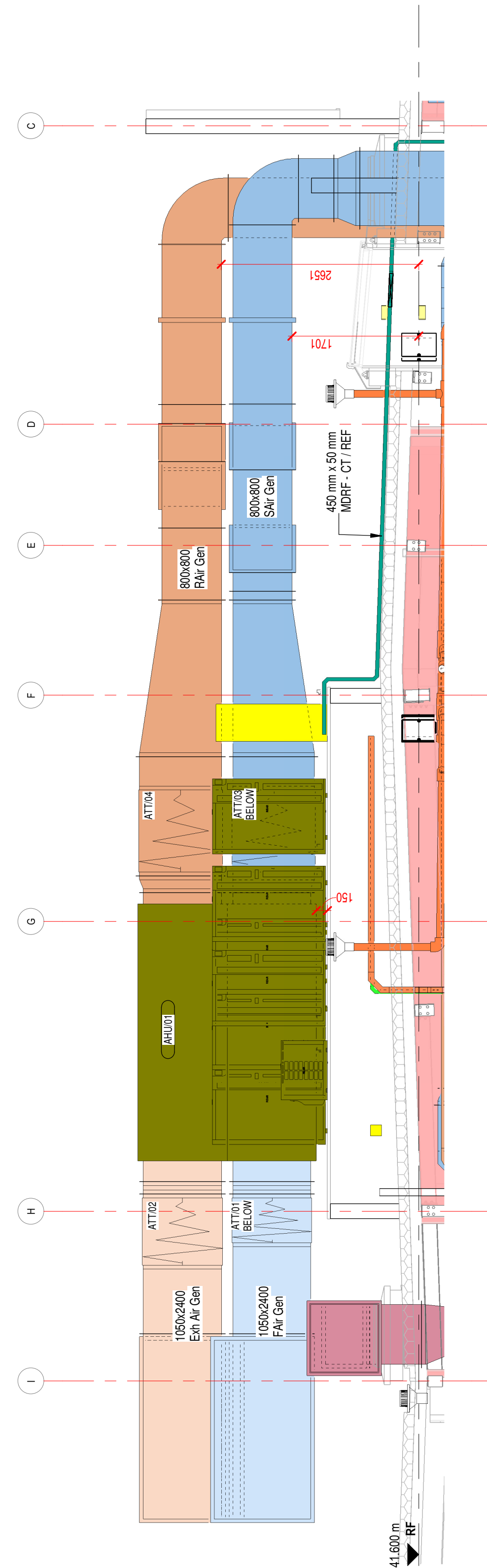




FOR CONTINUATION SEE DRG No.73102



B Section B-B Roof Plant Sht 1 of 2
1:50



A Section A-A Roof Plant Sht 1 of 2
1:50

Notes:

1. This drawing is to be read in conjunction with all mechanical, electrical, architectural and structural drawings, contract documentation and specifications.
2. Refer to equipment schedules for details of attenuators, grilles, diffusers, dampers etc.
3. All dimensions are in millimetres unless otherwise stated. Under no circumstances should dimensions be scaled from this drawing.
4. Level levels are from finished floor level to centreline of spiral duct and the underside of square / rectangular duct.
5. A galvanneal steel ductwork distribution system shall be manufactured and installed in accordance with DW144.
6. Volume control dampers (VCDs) shall be fitted on all main, sub main and final duct branches (whether indicated on the drawing or not) to allow the system to be proportionally balanced on completion.
7. Fire rated ductwork, manufactured and installed in accordance with DW172, shall be employed to the kitchen extract ductwork as it routes through the kitchen and rising to building exit at roof level.
8. Fire dampers shall be provided where ventilation ductwork passes between fire compartment walls. The ductwork Specialist shall consult the building fire strategy prior to the installation of fire / smoke dampers and ensure that all non fire rated ductwork crossing compartment walls and are inclusive of suitable dampers.
9. Fire dampers shall be independently supported to the building fabric and complete with installation frames in accordance with DW 145 and with manufacturers approved installation methods.
10. All fire dampers shall have visual indication status and fitted access doors either side for reset/maintenance.
11. Ductwork installation shall be installed in accordance with T19/TM2 intermediate level with all open ends (horizontal & vertical) bagged at the end of day or completion of works.
12. Access doors shall be fitted in accordance with T19 PD level 2, adjacent all Fire dampers, volume control dampers and Header batteries, either side of air turns & at Least 4m intervals on duct routes. All access doors on supply and heat recovery systems shall be insulated type.
13. Duct access panels shall be provided at a size to suit access requirements.
14. Installation of external ductwork / plant, outside of the provided secondary steel supports, shall be on Big foot / roof runner none fixed supports (or equal and approved alternative none fixed supports).
15. All external louvres and external duct terminations (such as fresh air inlets) for ventilation purposes, require bird mesh, no coarser than 12mm, as indicated within the mechanical specification.
16. All grille / diffuser plenum boxes shall be independently supported to building structure.
17. All plenum boxes shall be internally lined with acoustic insulation.
18. Grille / diffuser flexible connections on supply and heat recovery systems are to be fully insulated and of the acoustic flex type (500mm max).
19. All intake and supply ventilation ductwork shall be insulated throughout the installation with Metal mesh faced mineral wool mattresses. Return air (except from where it runs external), exhaust or extract only ductwork shall not be insulated.
20. Cladding shall be applied to all exposed ventilation ductwork insulation where it routes externally from the building. Seagull resistant cladding should be provided to all external ductwork sections.
21. All ductwork, insulated or not, shall be identified in accordance with BS1710.

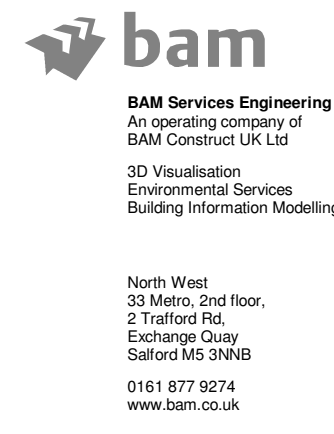
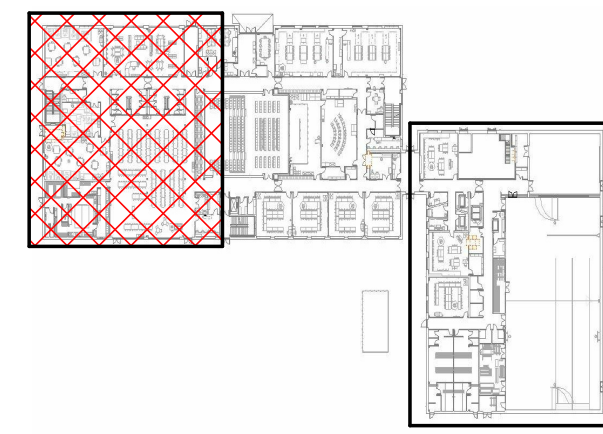
Key Hazard	Risk	Safety Measures
	13 Working On Roofs	Environment Working on roofs can cause heat related illnesses and possible dehydration due to exposure to the elements and the radiant temperature of surroundings when working externally on a roof. Wettery weather conditions may lead to dangerous conditions on roof, these additional risks may include high winds and surfaces that become extra slippery when covered in rain, ice or snow.
	14 AC Condensor	Refrigerant Refrigerant can cause severe burns, only qualified service personnel are allowed to perform install or perform maintenance.
	15 AHU & Fans	Moving Parts Do not run the units with guards removed. A minimum period of 2 minutes should be allowed after electrical disconnection before access panels are removed. This will allow the impellers enough time to cease rotating. Care should be taken, even if the fan has stopped and is electrically isolated as airflow can cause the impeller to windmill.
	16 LV Panels	Electricity Electricity at Work Regulations prohibits work on or near live conductors unless stringent conditions are met. This regulation states 'No person shall be engaged in any work activity on or so near any live conductor (other than one suitably covered with insulating material so as to prevent danger) that danger may arise unless:' • it is unreasonable in all circumstances for it to be 'dead' • it is reasonable in all circumstances for him/her to be at work on or near it when it is live; and suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury.

Status Code (as defined in BS1192).

Shared	
S0 - Work In Progress	S1 - Suitable for Co-ordination
S2 - Suitable for Information	S3 - Suitable for Review
S4 - Suitable for Stage Approval	S5 - Suitable for manufacture
S6 - Suitable for PM Authorisation	S7 - Suitable for AM Authorisation
Documentation (Pre-construction)	
D1 - Suitable for Costing	D2 - Suitable for Tender
D3 - Suitable for Contractor Design	D4 - Suitable for manufacture/procurement
Documentation (Contractual)	
A - Issued for construction	CR - As Construction Record Documentation
B - Issued for construction but with comments	

1. Condensate raised floor gullies provided below each AHU support frame.
2. AHU coil drip tray to be provided with glass trap, sized to match AHU static pressure. Associated condensate drainage to run to raised floor gully.
3. AC Condensers to be provided with drip trays, with condensate drainage run to raised floor gullies.

C01 RUH AB 08-01-2021 INTERNAL COMMENTS ADDED AND ISSUED FOR CONSTRUCTION
P01 RUH AB 25-10-2020 ISSUE FOR APPROVAL COMMENT



CHS South
M&E COMBINED SERVICES & ROOF PLANT LAYOUT
SHEET 1 OF 2
CONSTRUCTION
FS0765-BAM-Z1-RF-DR-ME-73101 C01