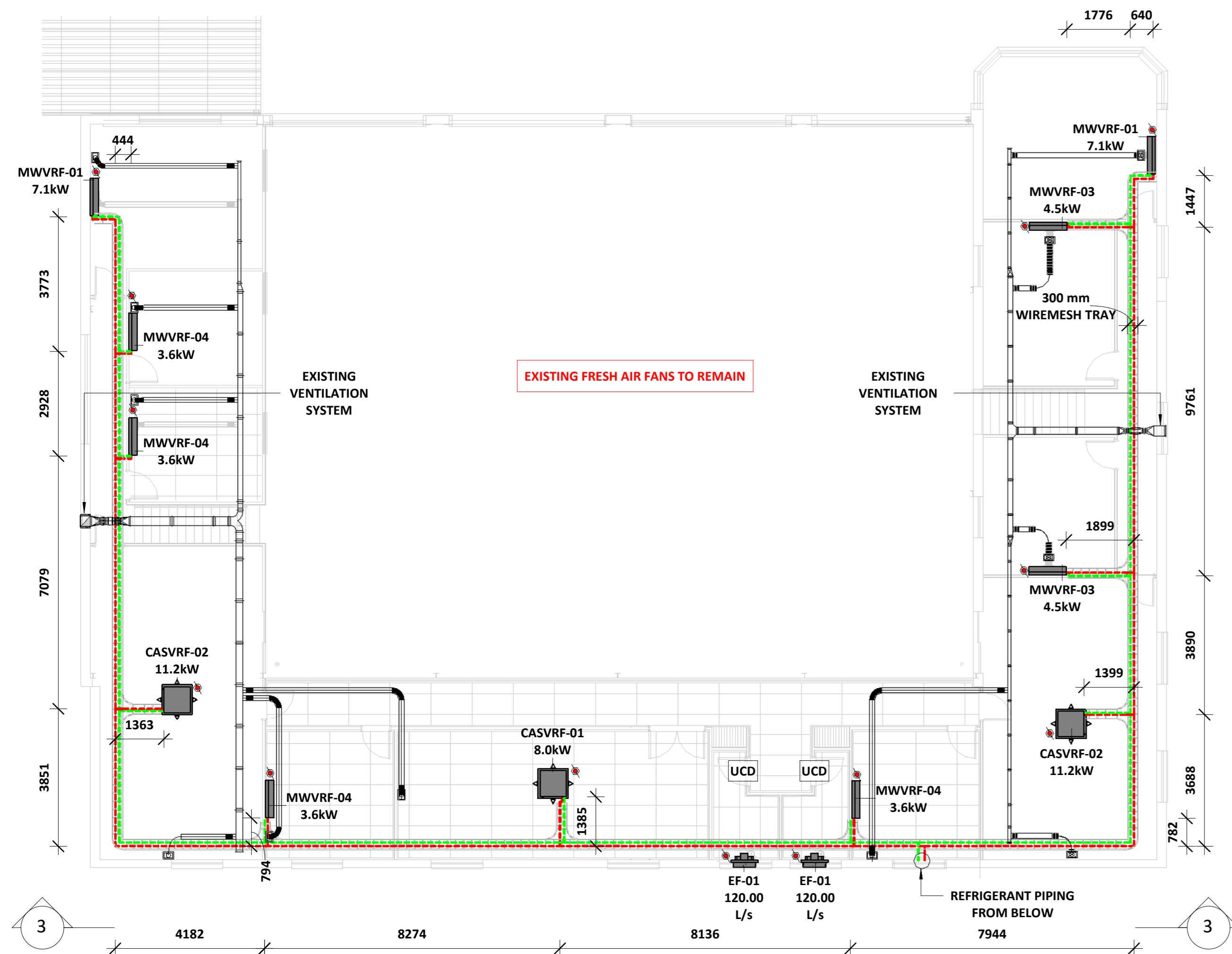


Note: Condensate to be piped to nearest waste water connection point



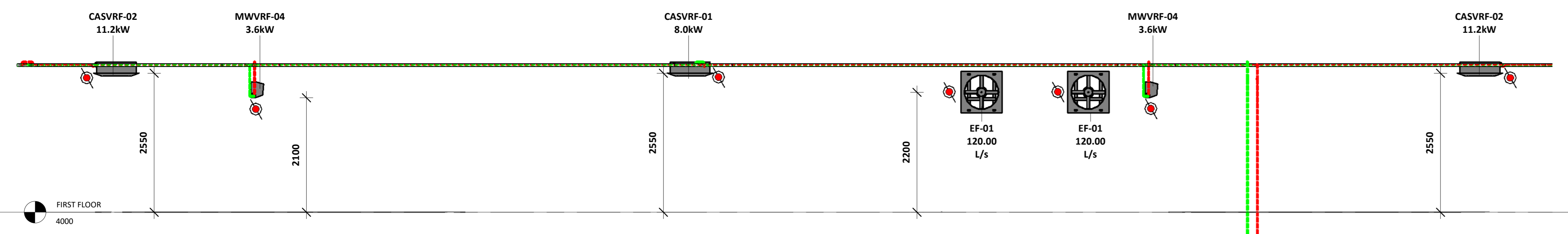
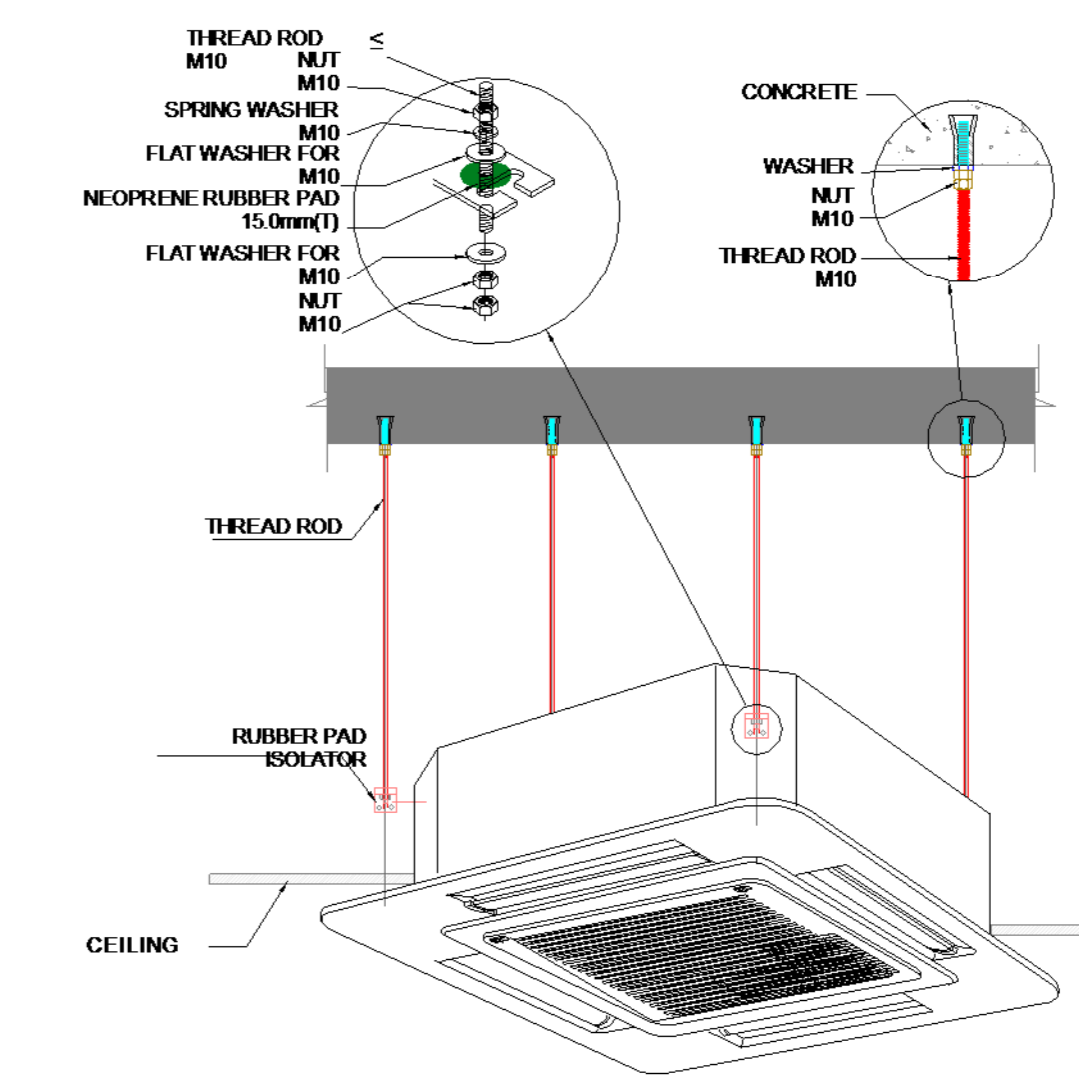
LEGEND	
GENERAL	ISOLATOR ( 3 PHASE )
	ISOLATOR ( 1 PHASE )
AIR TERMINALS	DISC VALVE (EXHAUST)
	WEATHER LOUVER
	Ø250mm CRD SUPPLY DIFFUSER
	RETURN GRILLE
MECHANICAL EQUIPMENT	ODU (CONDENSOR UNIT)
	ODU (VRF UNIT)
	AXIAL FAN
	MIDWALL SPLIT UNIT
	CEILING CASSETTE UNIT
	THERMOSTAT (AC UNIT)
REFRIGERANT PIPING	GAS LINE
	LIQUID LINE
	CONDENSATE
DUCTING	SUPPLY AIR
	RETURN AIR
	FRESH AIR
	EXHAUST AIR
	INDICATES EXISTING DUCTS & TO BE RETAINED

- NOTES:**
- ALL WORKS TO BE EXECUTED STRICTLY IN ACCORDANCE WITH THE HEALTH AND SAFETY ACT, ACT 85 OF 1993 AS AMENDED.
  - THE CONSTRUCTION REGULATIONS SHALL BE ADHERED TO IN THE EXECUTION AND PLANNING OF WORKS
  - WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPROVED SHOP DRAWINGS
  - SHOP DRAWINGS SHALL BE ISSUED FOR APPROVAL A MINIMUM OF 14 DAYS PRIOR TO CONSTRUCTION COMMENCEMENT, SUCH SHOP DRAWINGS SHALL BE COMPLETED WITH THE ASSISTANCE OF THE MAIN CONTRACTOR AND VARIOUS TRADES AS REQUIRED TO ENSURE CO-ORDINATION PROVISIONS ARE MADE.
  - THIS DRAWING SHALL NOT BE SCALED, FIGURED DIMENSIONS ONLY SHALL BE USED.
  - THE PROVISION OF SIGNAGE AND INSTALLATION OF EXPOSED SERVICES SHALL BE IN ACCORDANCE WITH ARCHITECTS DRAWINGS.
  - EXPOSED SERVICES COLORS SHALL BE TO ARCHITECTS SPECIFICATION, CLIENT SPECIFICATION AND NATIONAL STANDARDS.
  - THIS DRAWING IS TO BE READ AND WORKS ARE TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT PROJECT SPECIFICATIONS, ENGINEERING CODES AND GOOD ENGINEERING PRACTICE.
  - PIPING SHALL BE SIZED TO MEDIUM WEIGHT. PIPING DIAMETER 200 AND LARGER MAY BE SABS 719 4.5L.
  - PIPING Ø65mm AND ABOVE SHALL BE WELDED, FLANGED OR CLAMRON COUPLED. PIPING BELOW Ø65mm SHALL BE BS SCREWED; ALL IN ACCORDANCE WITH PROJECT SPECIFICATIONS, NATIONAL REGULATIONS AND GOOD ENGINEERING PRACTICE.
  - PIPING INSULATION ON PIPING Ø200mm AND ABOVE SHALL BE HIGH DENSITY POLYSTYRENE, 30mm THICK. PIPING INSULATION ON PIPING BELOW Ø200mm SHALL BE HIGH DENSITY POLYSTYRENE, 25mm THICK.
  - MYLAR SHEATH VAPOUR BARRIER TO BE EMPLOYED.
  - ALL CHILLED PIPING IN ACCESS FLOOR VOID AND CEILING VOID TO BE INSULATED AND CLAD IN GALVANISED SHEET 0.6mm t
  - ALL EXPOSED CHILLED WATER PIPE AND CONDENSATE DRAINS IN CORRIDORS AND PASSAGES TO BE IN A BRUSHED STAINLESS STEEL CONDUIT
  - ALL PIPING AND TO BE INSULATED AND CLAD IN SHINY STAINLESS STEEL 0.6mm t
  - PIPING SUPPORTS SHALL BE PROVIDED AT ALL CHANGES IN PIPING DIRECTION AND AT A MAXIMUM SPACING AS INDICATED IN THE PIPING SUPPORT TABLE BELOW.
  - "ROUGH-IN" (TACK AND LOOSELY SUPPORT) ALL PIPING AND FITTINGS FOR THE APPROVAL OF THE ENGINEER PRIOR TO FULL WELDING AND FIRM FIXING.
  - ALL DISCREPANCIES BETWEEN THIS DRAWING AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE RESPONSIBLE ENGINEER.
  - FIRE STOPPING SHALL BE PROVIDED AT ALL FIRE BARRIERS AND FIRE WALLS BY THE RESPONSIBLE FIRE PROOFING CONTRACTOR.
  - THE APPROVAL OF THE STRUCTURAL ENGINEER SHALL BE SOUGHT FOR ALL PIPING SUPPORT METHODS WHERE STRUCTURAL FIXING IS EMPLOYED.

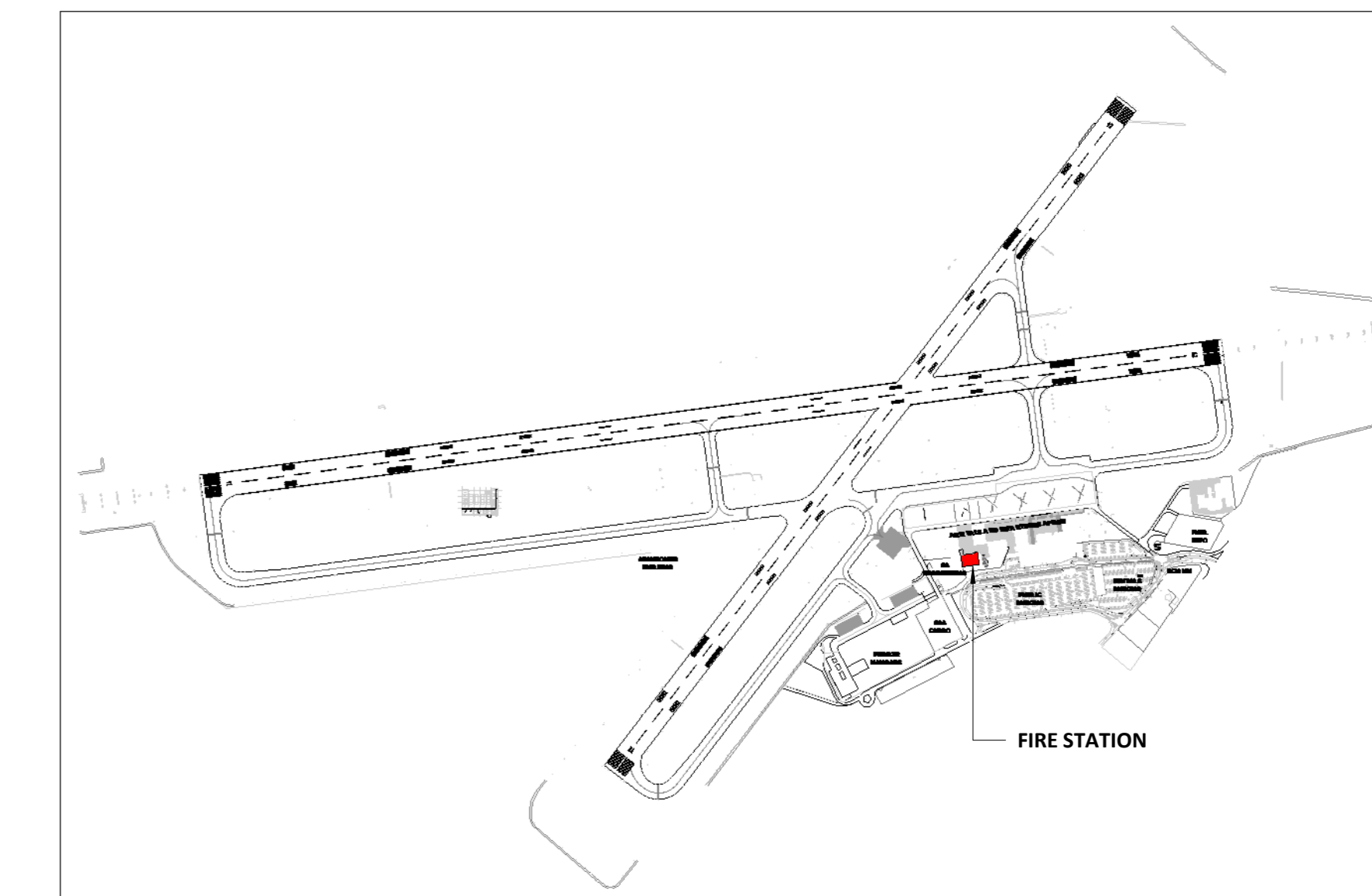
1 FIRST FLOOR SCALE 1 : 100

2 FIRST FLOOR 3D VIEW SCALE

TYPICAL CEILING CASSETTE UNIT MOUNT DETAIL



3 Section-1 SCALE 1 : 50



4 KEY-PLAN SCALE 1 : 5000

Mechanical Equipment Schedule					
ITEM	DESCRIPTION	COOLING CAPACITY	INPUT POWER	POWER SUPPLY	QTY
CASVRF-01	MIDWALL UNIT	8000 W	0.10 kW	230V/1Ph/50Hz	2
CASVRF-02	MIDWALL UNIT	11200 W	0.20 kW	230V/1Ph/50Hz	2
MWVRF-01	MIDWALL UNIT	7100 W	0.10 kW	230V/1Ph/50Hz	3
MWVRF-02	MIDWALL UNIT	5500 W	0.10 kW	230V/1Ph/50Hz	1
MWVRF-03	MIDWALL UNIT	4500 W	0.10 kW	230V/1Ph/50Hz	3
MWVRF-04	MIDWALL UNIT	3600 W	0.10 kW	230V/1Ph/50Hz	4
ODU-01	VRF	80340 W	7.60 kW	400V/3Ph/50Hz	1
SF-01	Fan Kit (WJ-200) Fan and Circular Silencer				1
Grand total: 17					

Fan Schedule					
ITEM	DESCRIPTION	AIR FLOW	INPUT POWER	POWER SUPPLY	QTY
EF-01	Propeller Wall Fan, Fixed Blades	120.0 L/s	0.30 kW	230V/1Ph/50Hz	3
EF-02	Propeller Wall Fan, Fixed Blades	100.0 L/s	0.30 kW	230V/1Ph/50Hz	3
EF-03	Propeller Wall Fan, Fixed Blades	140.0 L/s	0.30 kW	230V/1Ph/50Hz	4
Grand total: 10					

Air Terminal Schedule			
MARK	DESCRIPTION	SIZE	QTY
UCD	UNDER CUT DOOR	22mm	12

NO.	DATE	BY	DESCRIPTION

**CARIFRO** GREEN BUILDING COUNCIL  
**CESA** GREEN BUILDING COUNCIL  
 101 MANDELO STREET, PORT ELIZABETH, EAST LONDON  
 TEL: 031-300 8000, TEL: 031-743 7000  
 E-MAIL: PEG@CARIFRO.COM, E-MAIL: EL@CESA.CO.ZA

**KING PHALO AIRPORT**  
 AIRPORTS COMPANY SOUTH AFRICA

PROJECT TITLE: **ACSA EAST LONDON HVAC**

DISCIPLINE: **MECHANICAL**

DRAWING TITLE: **FIRE STATION: FIRST FLOOR HVAC LAYOUT**

DESIGNED	DRAWN	APPROVED
PG	HK	PG
SCALE: As indicated	COPYRIGHT PROTECTED	DATE: 2024-06-18
Drawing number: 2413-M-HVAC-FS-02		REV: T

PROJECT STATUS: **TENDER**