

SCHEDULE OF EQUIPMENT			
OUTDOOR UNITS (Standard VRV)			
OUU-1	TYPE	VRV HEAT RECOVERY	QTY
2	Cooling Capacity	kW	78.5
	Index Capacity	—	750
	Power Supply	V/Ph/Hz/kW	380-415/3/50/21.9
	Dimension (DxHxD)	mm	1,657x830x765
	Unit Weight	kg	230x310
2	TYPE	VRV HEAT RECOVERY	
	Cooling Capacity	kW	78.5
	Index Capacity	—	700
	Power Supply	V/Ph/Hz/kW	380-415/3/50/21.9
	Dimension (DxHxD)	mm	1,657x830x765
1	TYPE	VRV HEAT RECOVERY	
	Cooling Capacity	kW	500
	Index Capacity	—	500
	Power Supply	V/Ph/Hz/kW	380-415/3/50/18.5
	Dimension (DxHxD)	mm	1,657x1,246x765
2	TYPE	VRV HEAT RECOVERY	
	Cooling Capacity	kW	101
	Index Capacity	—	900
	Power Supply	V/Ph/Hz/kW	380-415/3/50/31
	Dimension (DxHxD)	mm	1,657x1,246x765

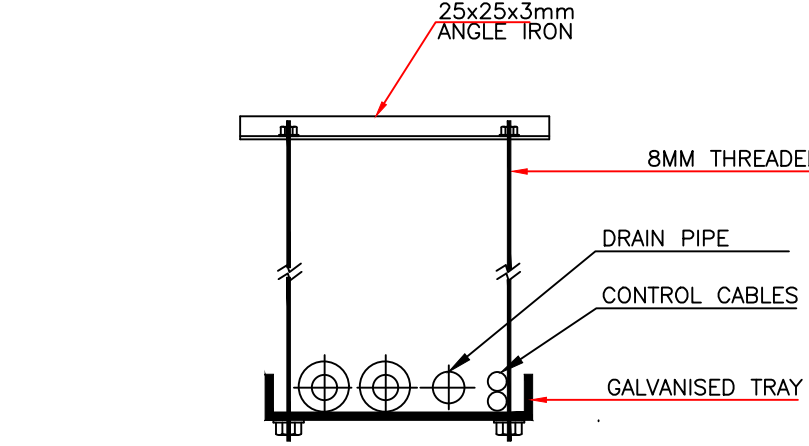
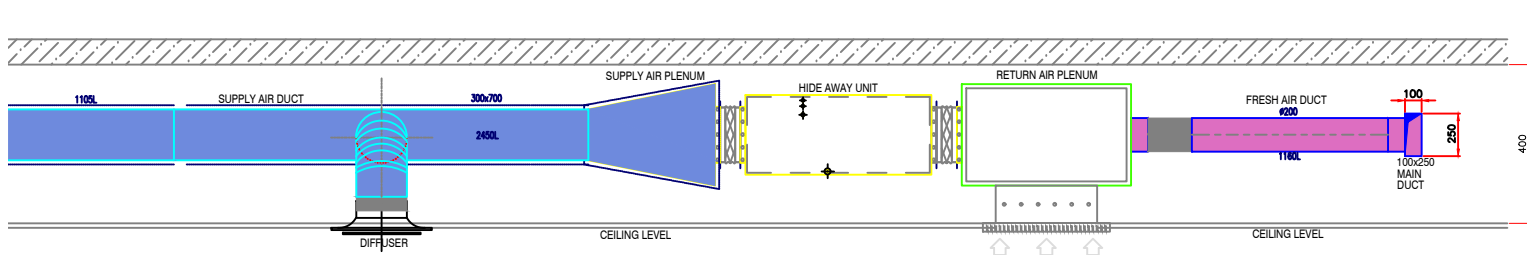
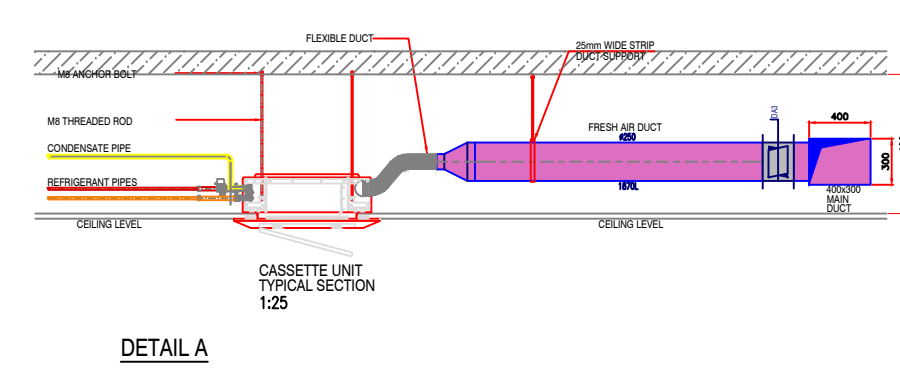
SCHEDULE OF EQUIPMENT			
EXTRACTION FAN			
EF-01	EXTRACTION C/W MATCHING SOUND ATTENUATORS		QTY
4	NOMINAL SIZE	mm	310
	FLOW RATES	L/s	150-350
	WALL MOUNTED FAN		
3	NOMINAL SIZE	mm	400
	FLOW RATES	L/s	400-600
	WALL MOUNTED FAN		
4	NOMINAL SIZE	mm	100
	FLOW RATES	L/s	100
	CEILING MOUNTED FAN		
0	NOMINAL SIZE	mm	100
	FLOW RATES	L/s	100
	CEILING MOUNTED FAN		
IN-LINE DUCT FAN-FRESH AIR			
FAF-01	In-line duct fan with matching sound attenuators		QTY
1	AIR FLOW RATES	L/s	634
	POWER INPUT	kW	0.37
	DIAMETER	mm	500
1	POWER SUPPLY	V/Ph/Hz	415/3/50
	WEIGHT	kg	---
1	AIR FLOW RATES	L/s	843
	POWER INPUT	kW	0.37
	DIAMETER	mm	500
1	POWER SUPPLY	V/Ph/Hz	415/3/50
	WEIGHT	kg	---

SCHEDULE OF AIR TERMINALS			
SUPPLY AIR DIFFUSERS			
SAG-01	Fixed square pattern plastic cone grille		QTY
15	NOMINAL SIZE	mm	#150
	FLOW RATES	L/s	30-50
	WALL MOUNTED FAN		
25	NOMINAL SIZE	mm	#200
	FLOW RATES	L/s	75-100
	WALL MOUNTED FAN		
18	NOMINAL SIZE	mm	#250
	FLOW RATES	L/s	130-200
	WALL MOUNTED FAN		
RETURN AIR GRILLES			
RSG-1	Fixed square pattern plastic cone grille		QTY
2	NOMINAL SIZE	mm	600x600
	FLOW RATES	L/s	100-400
	WALL MOUNTED FAN		
4	NOMINAL SIZE	mm	1200x600
	FLOW RATES	L/s	300-800
	WALL MOUNTED FAN		
FILTER PLENUM WITH FILTERS			
FBI-1	Filter plenum with filters, dirty filter monometer, & access door		QTY
2	AIR FLOW RATES	L/s	600-600
	DIAMETER	mm	600x600
	WEIGHT	kg	625x25

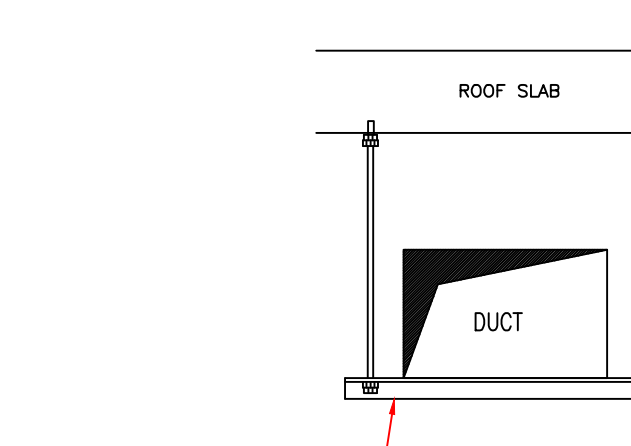
WEATHER LOUVE (WL)					
TAG No.	TYPE	DIMENSIONS (mm)	AIR QTY. (L/s)	SPECIAL REQUIREMENTS	QTY.
WL-01	Splitter or divider	1250x350	LITED	---	3
WL-02	Splitter or divider	630x350	LITED	---	6

SCHEDULE OF EQUIPMENT			
HIDEAWAY UNITS (Slim type)			
HD-71-GF	TYPE	VRV HEAT RECOVERY	QTY
3	Cooling Capacity	kW	7.1
	Sound Pressure	dB(A)	36
	Air flowrate	L/s	305
	Power Supply	V/Ph/Hz/kW	220-240/1/50/0.5
	Dimension (DxHxD)	mm	245x500x80
4	Cooling Capacity	kW	11.2
	Sound Pressure	dB(A)	36
	Air flowrate	L/s	533
	Power Supply	V/Ph/Hz/kW	220-240/1/50/0.5
	Dimension (DxHxD)	mm	245x1000x80
1	Cooling Capacity	kW	4.3
	Sound Pressure	dB(A)	33
	Air flowrate	L/s	130
	Power Supply	V/Ph/Hz/kW	220-240/1/50/0.25
	Dimension (DxHxD)	mm	245x500x80
3	Cooling Capacity	kW	22.5
	Sound Pressure	dB(A)	44
	Air flowrate	L/s	1128
	Power Supply	V/Ph/Hz/kW	220-240/1/50/1.1
	Dimension (DxHxD)	mm	470x1133x819
1	Cooling Capacity	kW	5.8
	Sound Pressure	dB(A)	33
	Air flowrate	L/s	130
	Power Supply	V/Ph/Hz/kW	220-240/1/50/0.25
	Dimension (DxHxD)	mm	245x500x80

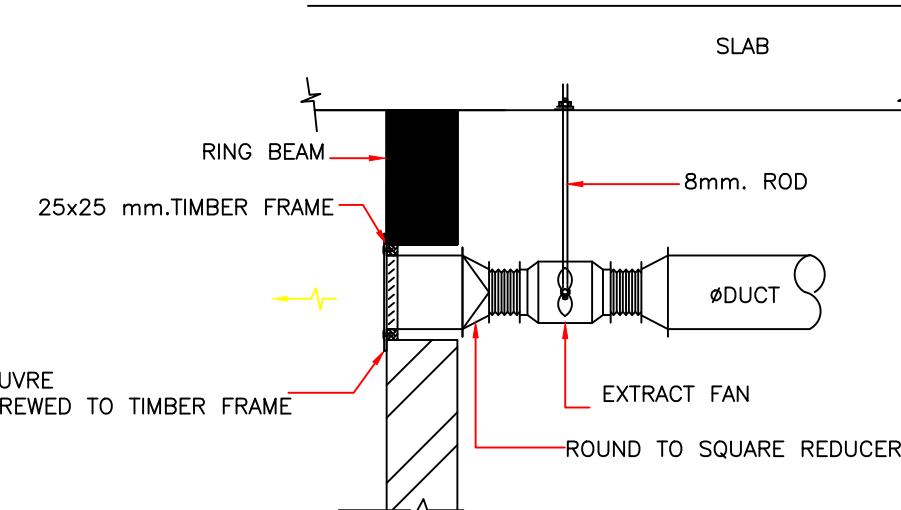
CASSETTE UNITS					QTY
CAS-39-GF	TYPE	VRV HEAT RECOVERY			
3	Cooling Capacity	kW	3.9		
	Sound Pressure	dB	43		
	Air flowrate	L/s	300		
	Power Supply	V/ph/Hz/kW	220-240/1/50/0.09		
	Weight	kg	18		
DOOR GRILLES (DG) – OFFICES					
DG-01	TYPE	DIMENSIONS (mm)	SPECIAL REQUIREMENTS	QTY	
	Splitter or divider	400x600	LISTED	-	38
SCHEDULE OF EQUIPMENT					
BS UNITS (CENTRALIZED)					Q
BS-03	TYPE	VRV HEAT RECOVERY			
	Min. capacity index of indoor units	-	400		
	No. of Branches	No.	4		
	Power Supply	V/ph/Hz	220-240/1/50		
	Dimension (DxHxD)	mm	286x370x430		
BS-01	TYPE	VRV HEAT RECOVERY			
	Min. capacity index of indoor units	-	750		
	No. of Branches	No.	16		
	Power Supply	V/ph/Hz	220-240/1/50		
	Dimension (DxHxD)	mm	286x1060x430		



INSULATED REFRIGERANT PIPES, DRAIN & POWER CABLES, RUN IN CEILING VOID ON PERFORATED GALVANISED TRAY



TYP. CEILING VOID DUCTWORK SUPPORT DETAIL



SCALE 1:1.5

DUCTING & EQUIPMENT LEGEND

- SPRINKLING ROUNDED DUCTING
- 125 SQUARE SUPPLY AIR DUCTING
- 125 SQUARE RETURN AIR DUCTING
- 125 SQUARE EXTRACT AIR DUCTING
- 125 SQUARE FRESH AIR DUCTING
- VRV CONDENSER
- DX-SPLIT UNIT CONDENSER
- FRESH AIR GRILLE
- SQUARE SUPPLY AIR DIFFUSER
- ROUND SUPPLY AIR DIFFUSER
- EXTRACT DISC VALVE
- SUPPLY / FRESH AIR DISC VALVE
- BUTTERFLY DAMPER
- FRESH AIR GRILLE
- EXTRACT AIR GRILLE
- CEILING CASSETTE
- CX10 CEILING FAN OR EQUAL
- DOOR GRILLE
- EXTRACT WEATHER LOUVE
- FRESH AIR WEATHER LOUVE
- DUCT DROPPER
- DUCT RISER
- REFRIGERANT PIPING - VRV
- REFRIGERANT PIPING - DX SPLIT UNITS
- CONDENSATE DRAIN PIPING
- HARD-WIRED WALL MOUNTED CONTROLLER
- ELECTRICAL WIRE
- FAN CONTROL PANEL
- BC BOX

- #### NOTES AND SPECIFICATIONS
- ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE N.B.R. STANDARDS 10400 AND LOCAL AUTHORITY REGULATIONS.
 - THIS DRAWING IS NOT TO BE SCALED.
 - ANY DISCREPANCIES ARE TO BE IMMEDIATELY REPORTED TO THE ARCHITECT.
 - ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION.

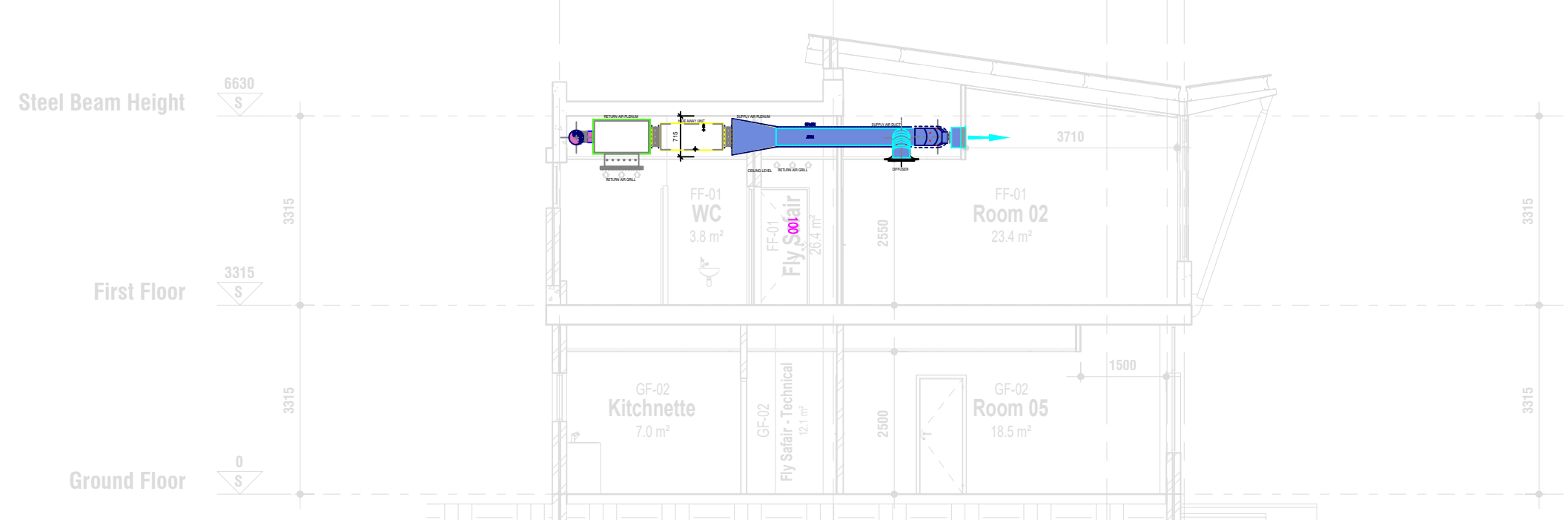
- #### HVAC NOTES:
- CONTRACTOR TO COORDINATE WITH ALL OTHER DISCIPLINES TO ENSURE NO CLASHES ARE ENCOUNTERED DURING CONSTRUCTION.
 - THIS DRAWING IS MERELY A GUIDE AND NO DIMENSIONS SHOULD BE TAKEN DIRECTLY FROM IT. ALL DIMENSIONS TO BE VERIFIED ON SITE.
 - ALL WORK TO BE DONE IN ACCORDANCE WITH NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS ACT (ACT 107 OF 1977).
 - DUCTING INSTALLATION IN ACCORDANCE TO SANS 1238

- #### CONDENSATE PIPING NOTES:
- ALL CONDENSATE PIPING CONNECTIONS TO DRAINAGE TO INCLUDE Ø50mm P-TRAP & ONE-WAY VALVE BEFORE STACK.

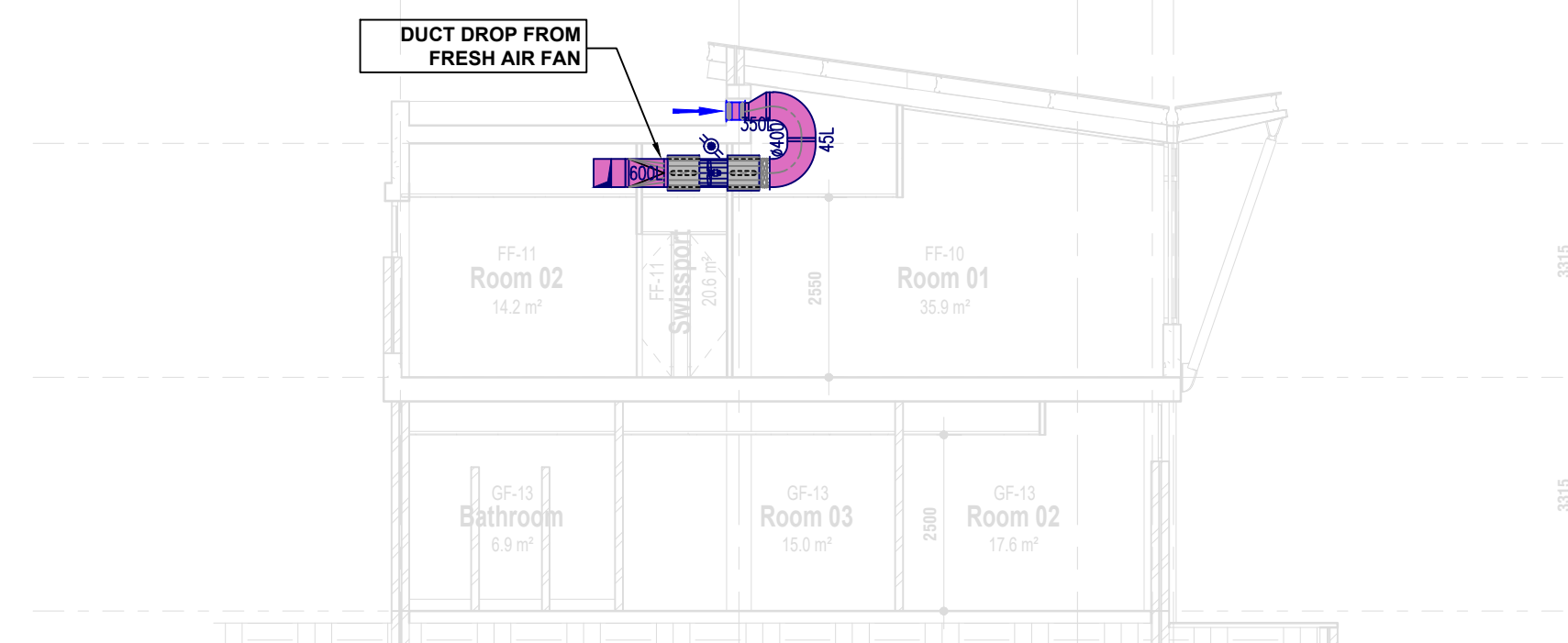
DUCTING NOTES:

- ALL NEW DUCTING TO BE MANUFACTURED TO SMACNA HVAC DUCT SPECIFICATION.
- DUCT METHOD:
 - LONGEST SIDE 0-400 S & D
 - LONGEST SIDE 601-1200 MEZZ FLANGE
- DUCT SUPPORTS:
 - LONGEST SIDE 300x300
 - LONGEST SIDE 600x600
 - LONGEST SIDE 600x1200
 - SUPPORT MATERIAL 0.8 G.S.M. CHANNEL
 - SUPPORT MATERIAL 0.8 G.S.M. CHANNEL
 - SUPPORT MATERIAL 1.0 G.S.M. CHANNEL
 - SPACING 3000
 - SPACING 1800
 - SPACING 1200

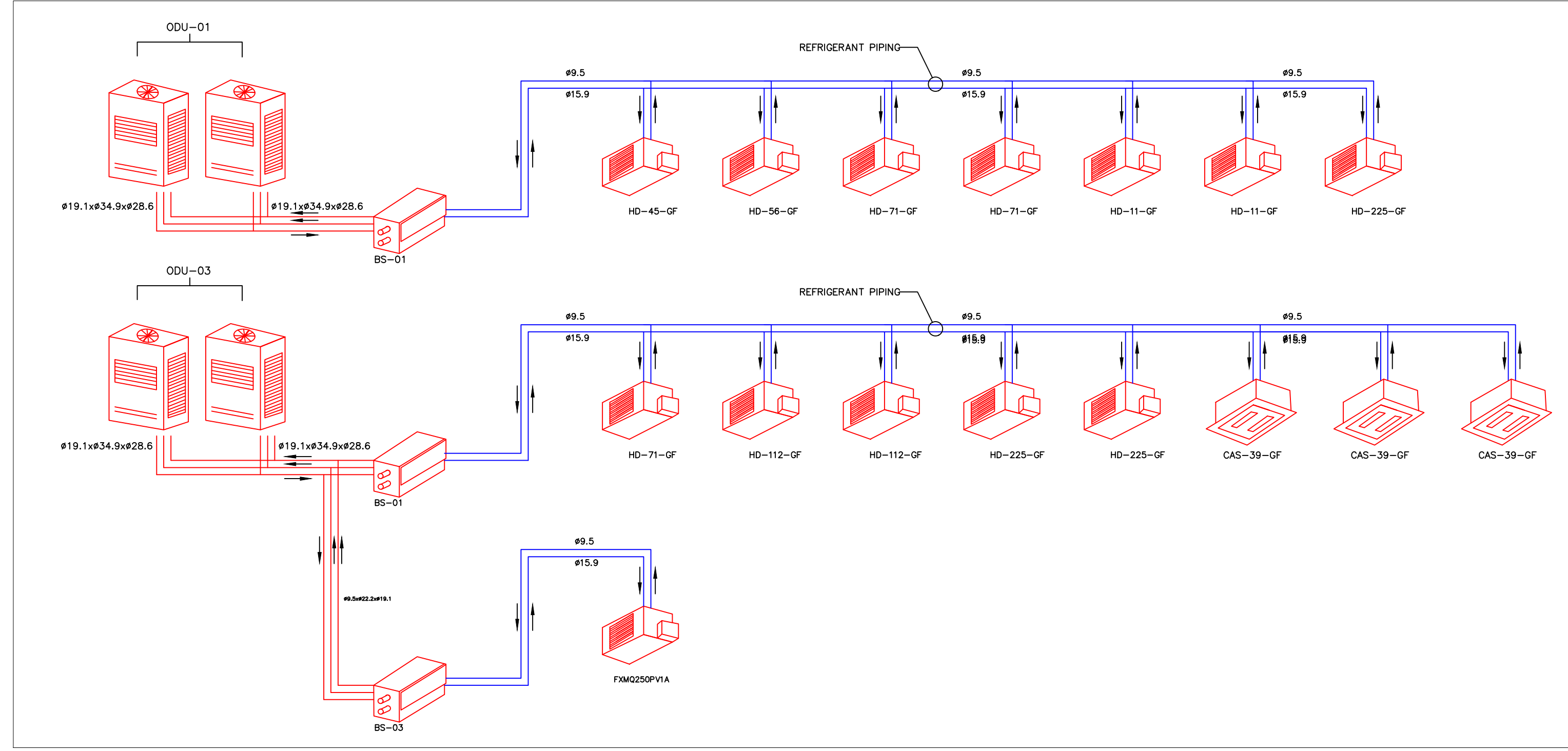
Approvals (Sign Off)			
Name	Company	Date	Signature
Vuyolwethu Ndondana	ACSA	17-09-24	
Karabo Thebe	ACSA		
Jennifer Smith	ACSA		
Gareth Muedi	ACSA		
Ntombonke Dandl	ACSA	21/11/2024	
Mark Madiran	ACSA		
Seloko Mokoko	ACSA		
Mariette Modiba	2BLN	12/07/2024	
Thumeleng Moshokoa	2BLN	12/07/2024	



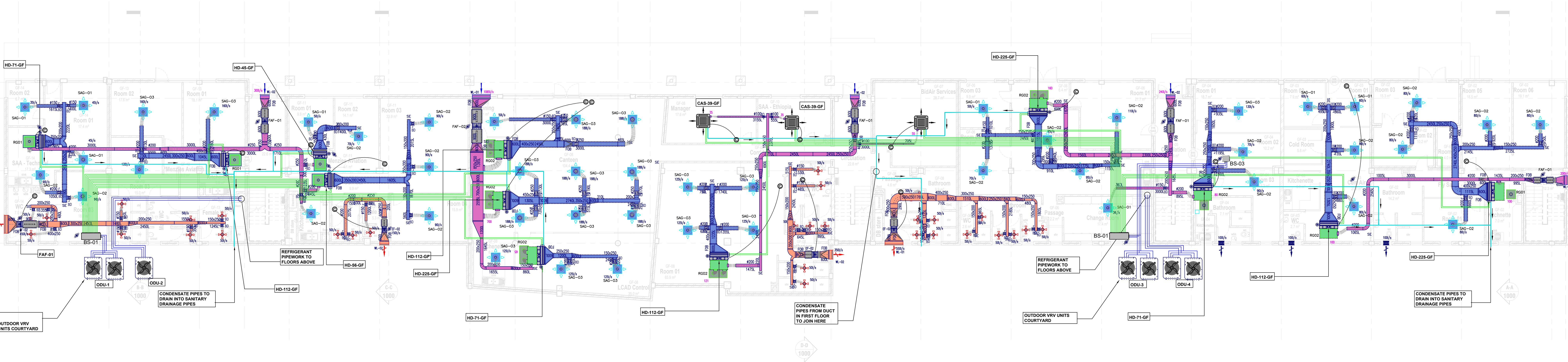
SECTION A-A
SCALE 1:100



SECTION B-B
SCALE 1:100



GROUND FLOOR: VRV HEAT RECOVERY SYSTEM SCHEMATIC
SCALE: NTS



GROUND FLOOR
SCALE 1:100

FOR DOOR GRILLE LAYOUT
REFER TO DRAWING
JD-2302-M-MA-101-A



DETAILED DESIGN

REVISION			
No.	DESCRIPTION	DATE	BY
A	DETAILED DESIGN LAYOUT	10/06/24	LM
CLIENT			
ACSA - CAPE TOWN			
AIRPORTS COMPANY SOUTH AFRICA			
CONSULTANT			
2BLN (PTY) LTD			
80 Mustang Avenue Pretoria 0001, The Reeds Centurion, 0158			
Tel: 086 177 7719 E-Mail: info@2bln.co.za			
PROJECT			
CAPE TOWN AIRPORT: AIR SIDE OFFICE BUILDING			
DRAWING TITLE			
GROUND FLOOR PLAN: HEATING, VENTILATION, AIRCONDITIONING LAYOUT			
DATE	SCALE	DRAWN	APPROVED
04/06/2024	1:100	I.MOSHOKOA	I.MOSHOKOA
DESIGN	CHECKED	DATE	DATE
I.MOSHOKOA	L.PEKECHE	12/07/2024	12/07/2024
DESIGN ENGINEER APPROVAL	PROJECT ENGINEER APPROVAL	DATE	DATE
I.MOSHOKOA	M.MODIBA	12/07/2024	12/07/2024
CLIENT APPROVAL	DATE	DATE	DATE
REVISION			
JD-2302-M-MA-101	A		