



NOTES:
 CHILLED WATER PIPE SIZES ARE GIVEN FOR PPR-80 (COMPOSITE) PIPE.
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 ALL MAIN FRESH AIR DUCT BRANCHES TO HAVE PRESET AUTOFLOW DAMPERS (CAV)
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- EXAMPLE HATCH
 * LABORATORY *
- CAPPED-OFF DUCTWORK AND PIPEWORK TO BE INSTALLED INTO THE LABORATORIES (INCLUDING ANY FIRE DAMPERS WHERE PASSING FIRE WALL) READY FOR FUTURE CONNECTION (BY OTHERS)
- PROVIDE ADDITIONAL ISOALATION VALVES FOR ALL CHW PIPE BRANCHES TO LABORATORIES
- THE VAV BOXES ARE PART OF A FUTURE FIT-OUT AND AS SUCH NOT INCLUDED IN THIS TENDER.
- LEGEND:
- FAN COIL UNIT (SIZE 5)
 - CONSTANT AIR VOLUME UNIT (AIR FLOW 10l/s)
 - VARIABLE AIR VOLUME BOX (AIR FLOW 376l/s)
 - AIR HANDLING UNIT (REF 1)
 - HEAT RECOVERY VENTILATION UNIT (REF 1)
 - EXHAUST FAN (AIR FLOW 100l/s)
 - SWIRL DIFFUSER (NECK SIZE Ø250)
 - CIRCULAR PERFORATED FACE DIFFUSER (NECK SIZE Ø100)
 - EXHAUST VALVE (NECK SIZE Ø125)

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 CONSTRUCTION COST CONSULTANTS

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Rev	Modifications	CHK	Date

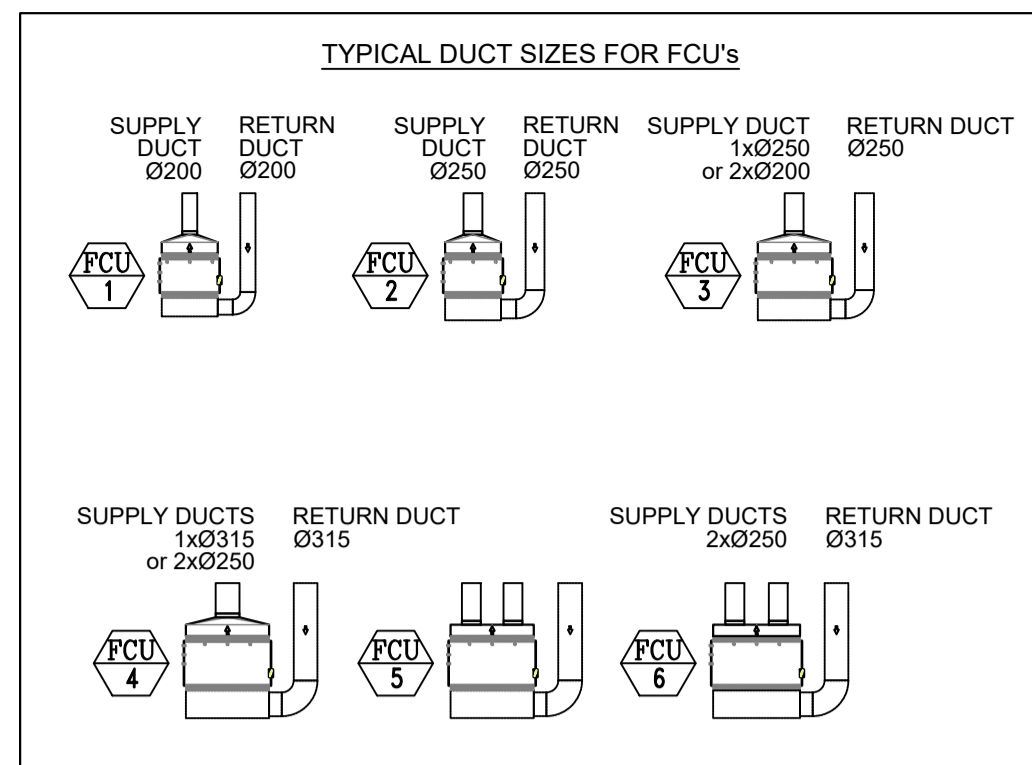
Stamp

Project: **EMME - CARE**

Drawing Title:
BASEMENT AC DUCTWORK

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	200

Scale: 1:100 (A1) | Rev: -



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 - VAV 376 VARIABLE AIR VOLUME BOX (AIR FLOW 376l/s)
 - AHU 1 AIR HANDLING UNIT (REF 1)
 - HRV 1 HEAT RECOVERY VENTILATION UNIT (REF 1)
 - EF 100 EXHAUST FAN (AIR FLOW 100l/s)
 - SWR 250 SWIRL DIFFUSER (NECK SIZE Ø250)
 - CPD 100 CIRCULAR PERFORATED FACE DIFFUSER (NECK SIZE Ø100)
 - EV 125 EXHAUST VALVE (NECK SIZE Ø125)

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Rev	Modifications	CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title:
**GROUND FLOOR
 AC DUCTWORK**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	201

Scale: 1:100 (A1) | Rev: | -



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Rev	Modifications	CHK	DATE

Stamp

Project: **EMME - CARE**

Drawing Title:
**2ND FLOOR
 AC DUCTWORK**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	203

Scale: 1:100 (A1) | Rev: | -



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Rev	Modifications	CHK	Date

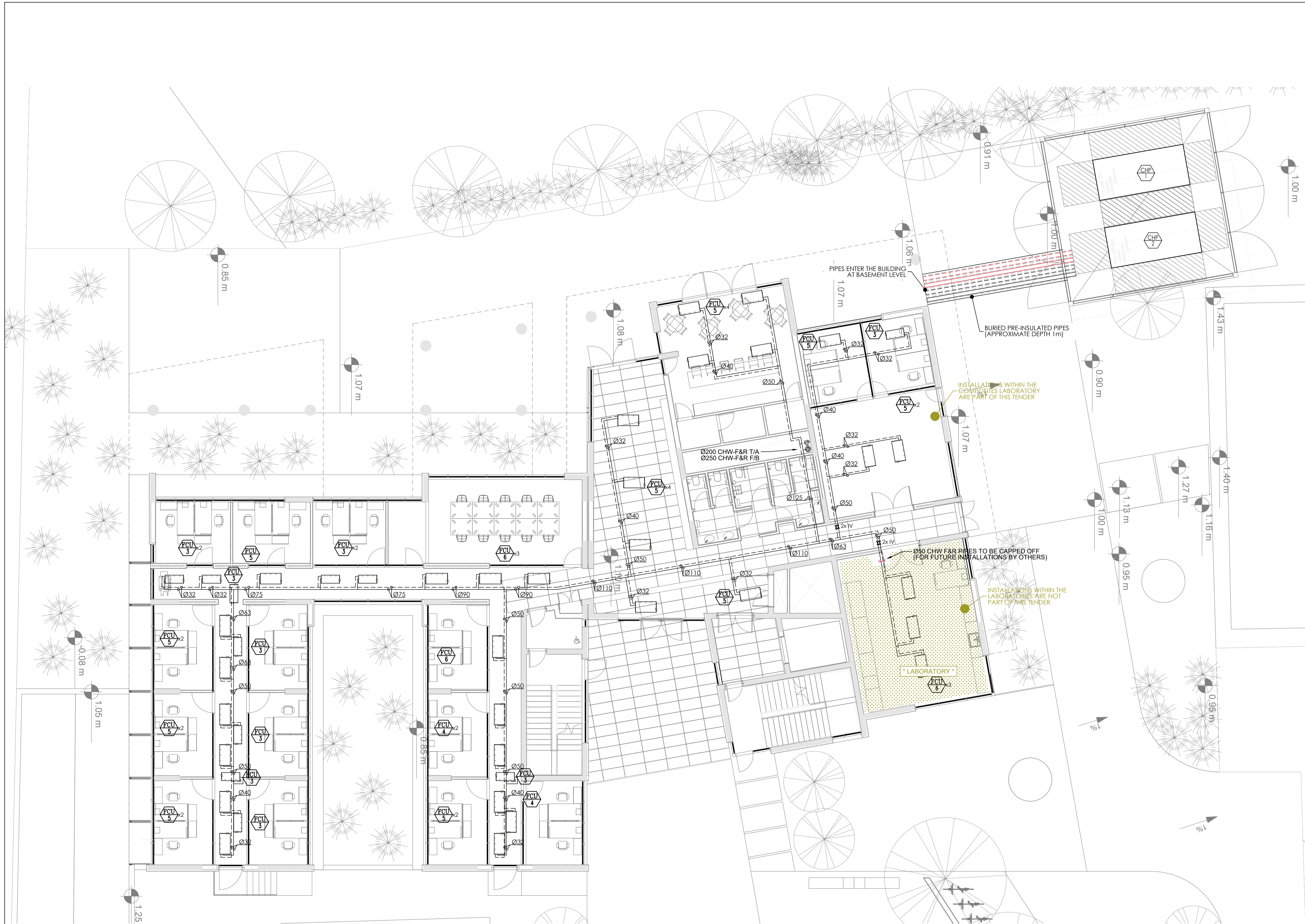
Stamp

Project: **EMME - CARE**

Drawing Title:
**BASEMENT
 AC PIPEWORK**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	210

Scale: 1:100 (A1) | Rev: -



- NOTES:**
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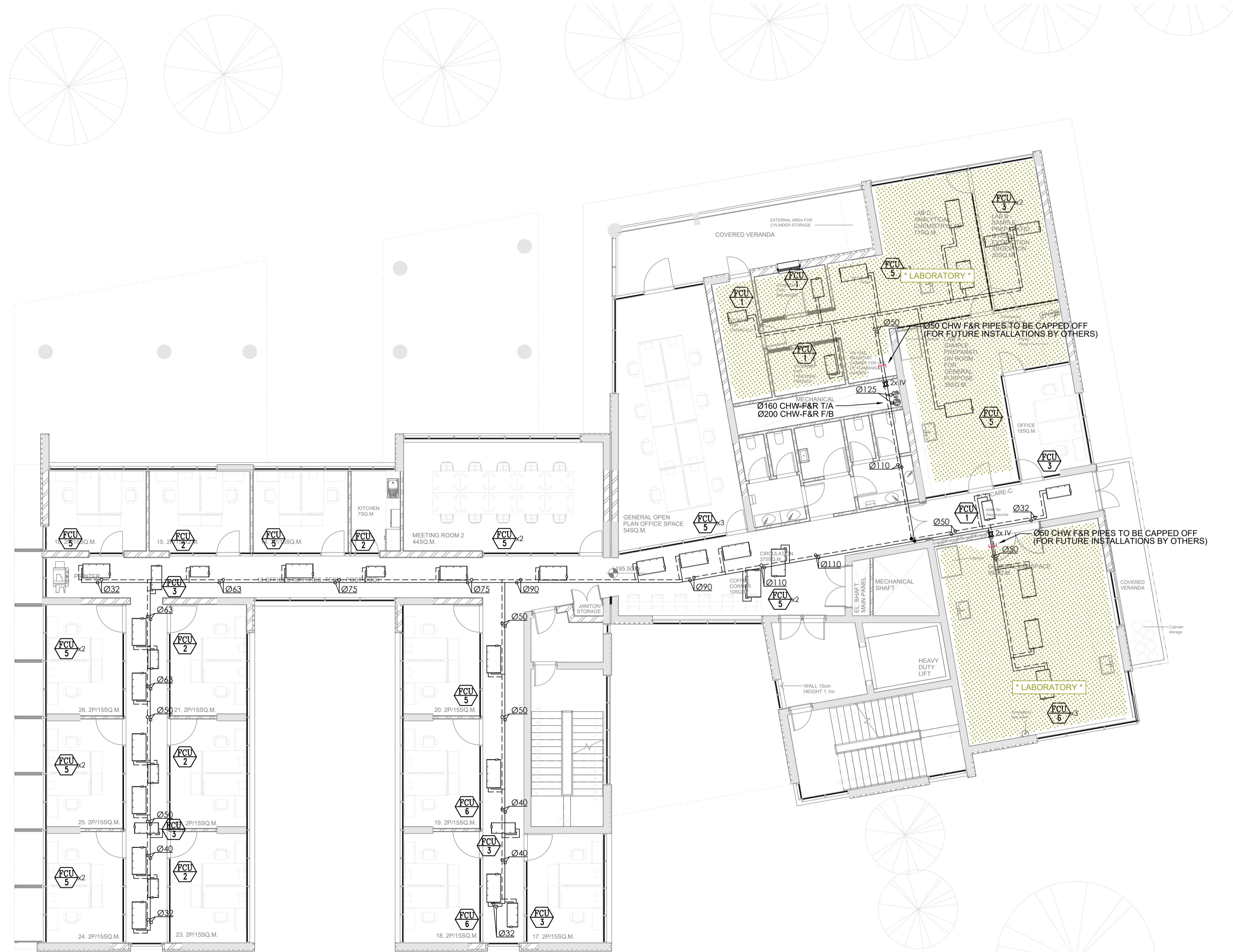
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Project: **EMME - CARE**

Drawing Title:
**GROUND FLOOR
AC PIPEWORK**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	211

Scale: 1:100 (A1) | Rev: -



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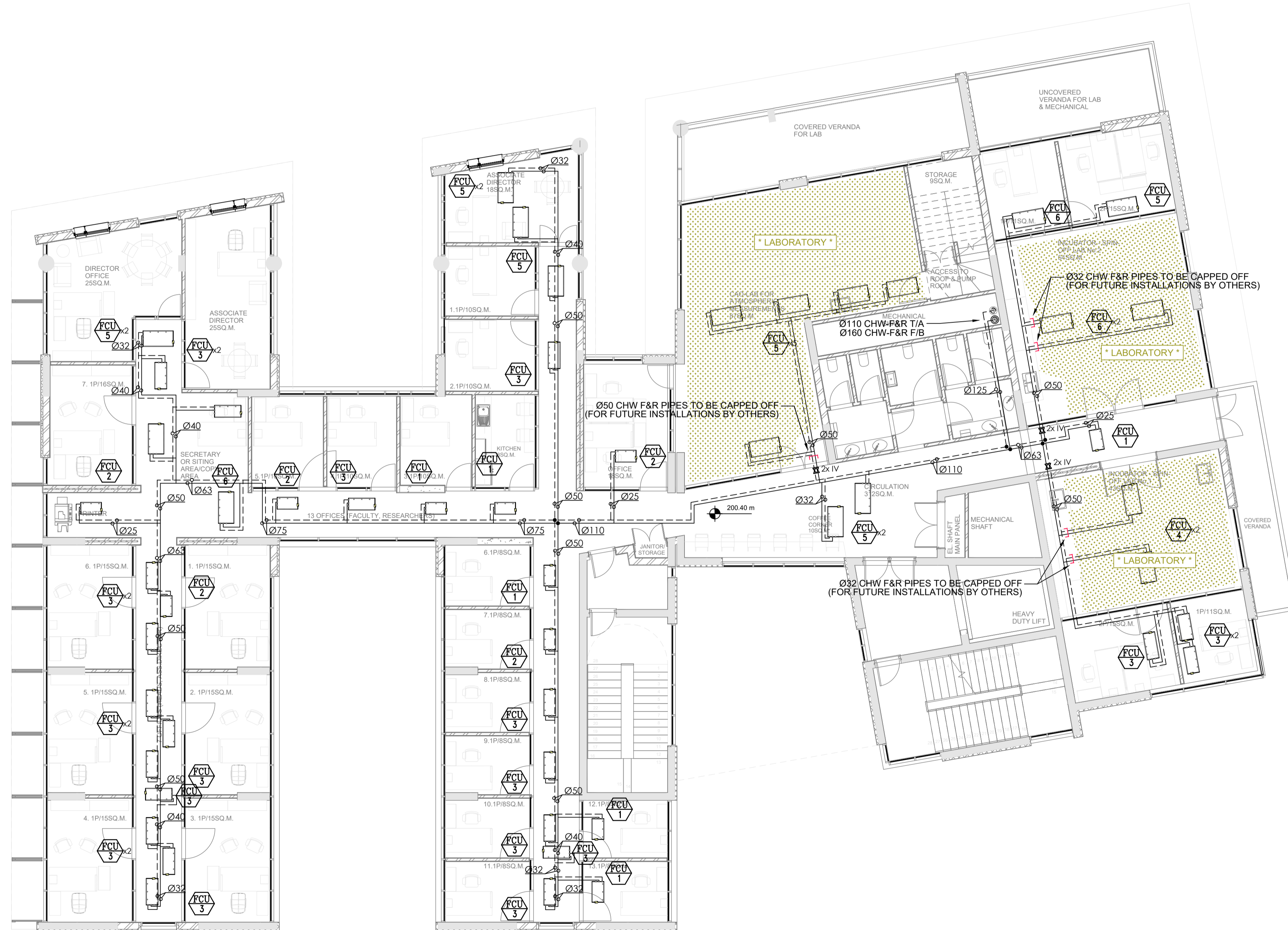
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Project: **EMME - CARE**

Drawing Title:
**1ST FLOOR
 AC PIPEWORK**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	212

Scale: 1:100 (A1) | Rev: | -



NOTES:
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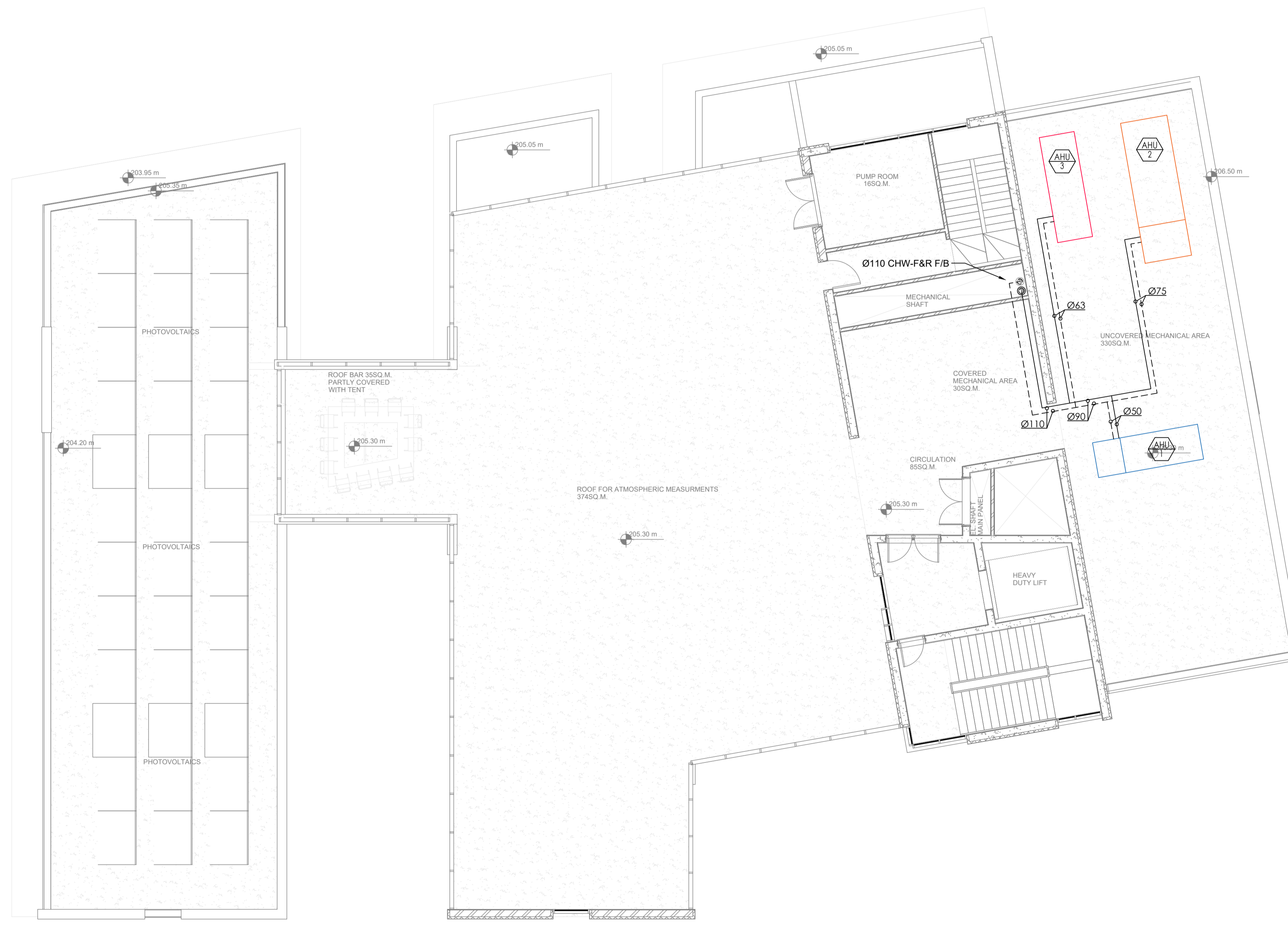
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Rev	Modifications	CHK	DATE

Stamp
 Project: **EMME - CARE**
 Drawing Title:
**2ND FLOOR
 AC PIPEWORK**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	213

Scale: 1:100 (A1) | Rev: | -



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Rev	Modifications	CHK	Date

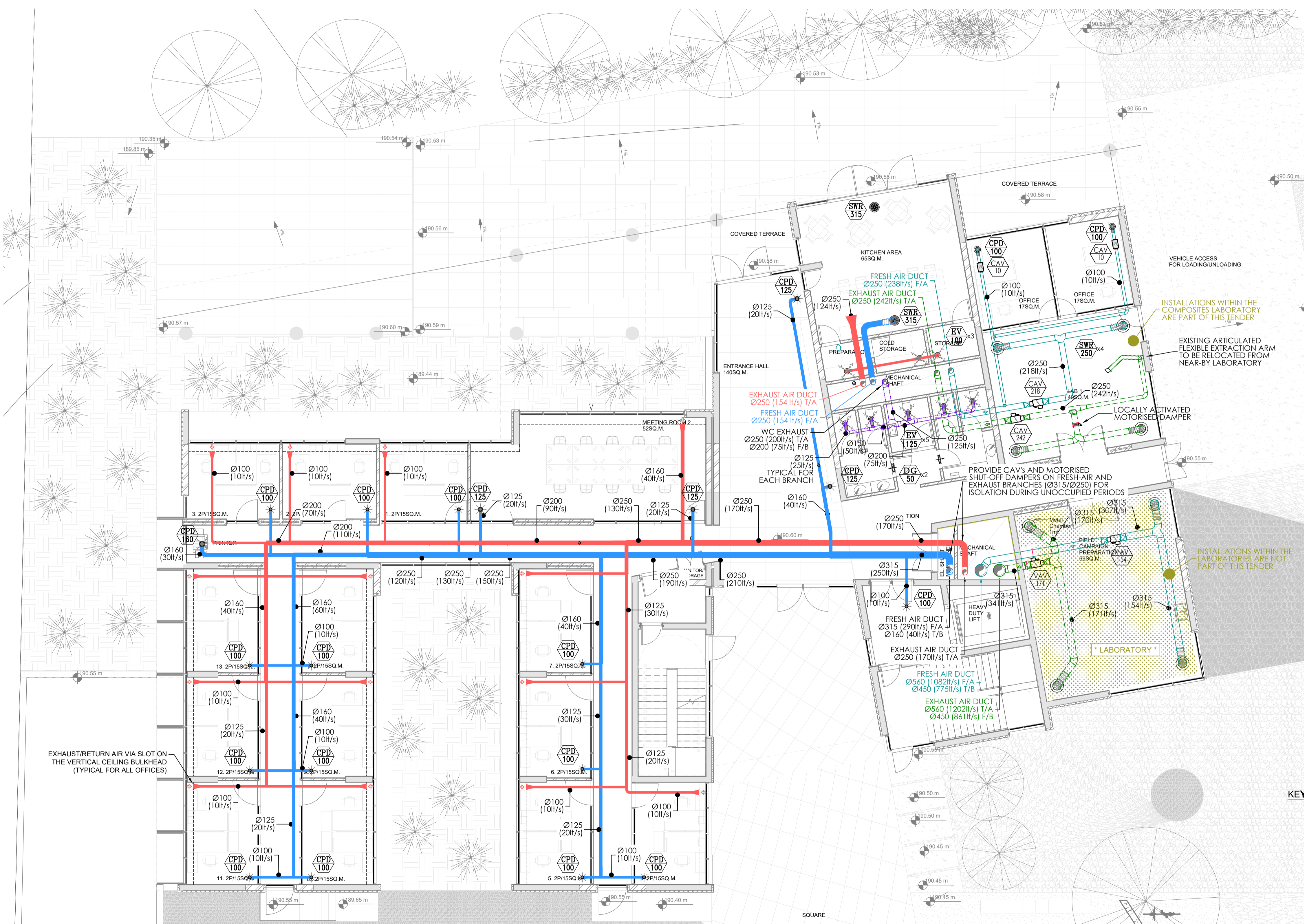
Stamp

Project: **EMME - CARE**

Drawing Title:
**ROOF
 AC PIPEWORK**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MH	214

Scale: 1:100 (A1) | Rev: | -



- NOTES:**
- CHILLED WATER PIPE SIZES ARE GIVEN FOR PPR-80 (COMPOSITE) PIPE.
 - ALL PIPING BRANCHES TO FANCOIL UNITS TO HAVE PRESET AUTOFLOW VALVES
 - ALL MAIN FRESH AIR DUCT BRANCHES TO HAVE PRESET AUTOFLOW DAMPERS (CAV)
 - INSTALLATIONS WITHIN THE (HATCHED) LABORATORIES ARE NOT PART OF THIS TENDER.
- EXAMPLE HATCH**
- LABORATORY
- CAPPED-OFF DUCTWORK AND PIPEWORK TO BE INSTALLED INTO THE LABORATORIES (INCLUDING ANY FIRE DAMPERS WHERE PASSING FIRE WALL) READY FOR FUTURE CONNECTION (BY OTHERS)
- PROVIDE ADDITIONAL ISOLATION VALVES FOR ALL CHW PIPE BRANCHES TO LABORATORIES
- THE VAV BOXES ARE PART OF A FUTURE FIT-OUT AND AS SUCH NOT INCLUDED IN THIS TENDER.
- LEGEND:**
- FCU 5 FAN COIL UNIT (SIZE 5)
 - CAV 10 CONSTANT AIR VOLUME UNIT (AIR FLOW 10l/s)
 - VAV 376 VARIABLE AIR VOLUME BOX (AIR FLOW 376l/s)
 - AHU 1 AIR HANDLING UNIT (REF 1)
 - HRV 1 HEAT RECOVERY VENTILATION UNIT (REF 1)
 - EF 100 EXHAUST FAN (AIR FLOW 100l/s)
 - SWR 250 SWIRL DIFFUSER (NECK SIZE Ø250)
 - CPD 100 CIRCULAR PERFORATED FACE DIFFUSER (NECK SIZE Ø100)
 - EV 125 EXHAUST VALVE (NECK SIZE Ø125)

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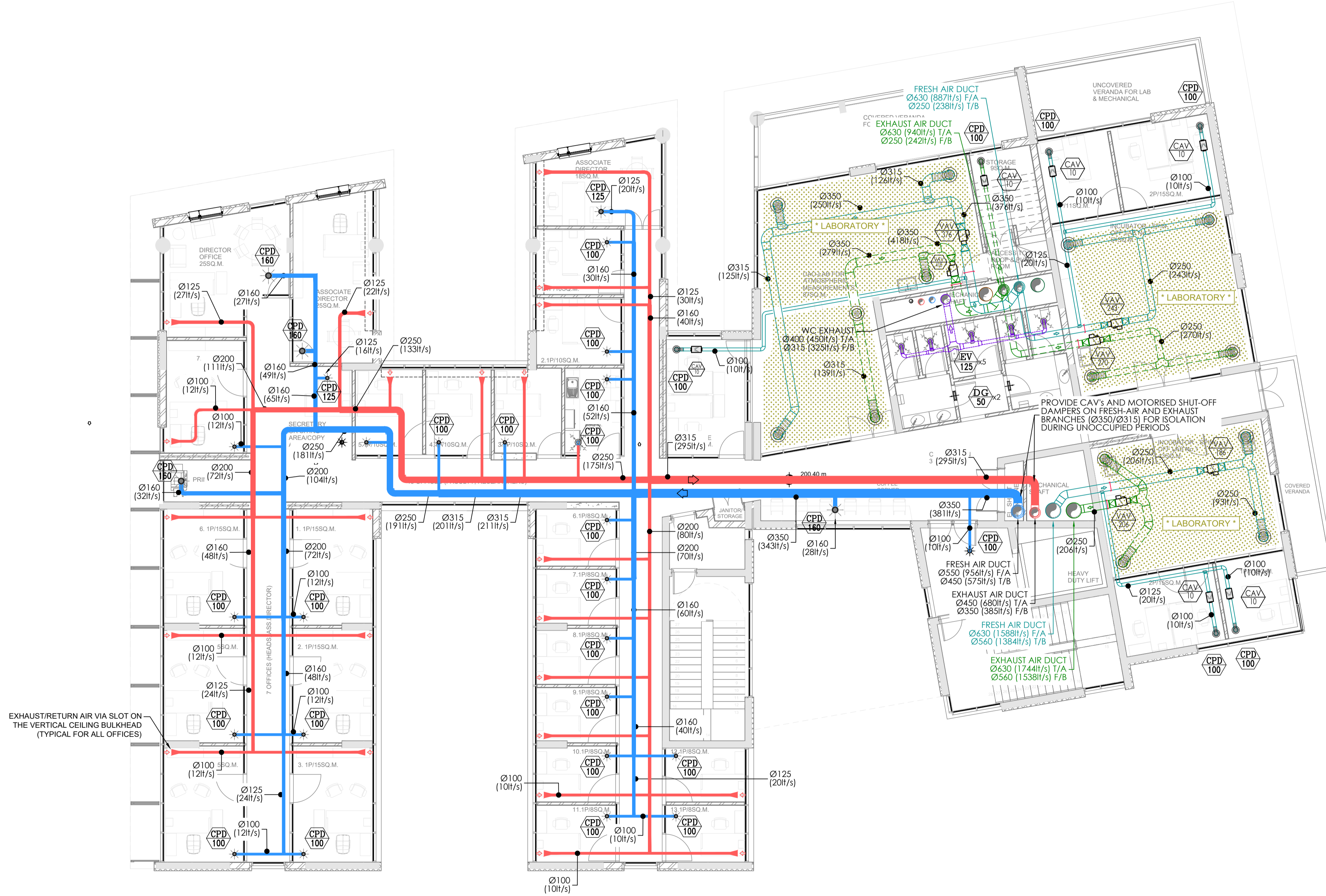
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Project: **EMME - CARE**

Drawing Title:
GROUND FLOOR VENTILATION

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MV	221

Scale: 1:100 (A1) | Rev: -



NOTES:
 CHILLED WATER PIPE SIZES ARE GIVEN FOR PPR-80 (COMPOSITE) PIPE.
 ALL PIPING BRANCHES TO FANCOIL UNITS TO HAVE PRESET AUTOFLOW VALVES
 ALL MAIN FRESH AIR DUCT BRANCHES TO HAVE PRESET AUTOFLOW DAMPERS (CAV)
 LABORATORIES ARE NOT PART OF THIS TENDER.
 INSTALLATIONS WITHIN THE (HATCHED) LABORATORIES ARE NOT PART OF THIS TENDER.



CAPPED-OFF DUCTWORK AND PIPEWORK TO BE INSTALLED INTO THE LABORATORIES (INCLUDING ANY FIRE DAMPERS WHERE PASSING FIRE WALL) READY FOR FUTURE CONNECTION (BY OTHERS)
 PROVIDE ADDITIONAL ISOLATION VALVES FOR ALL CHW PIPE BRANCHES TO LABORATORIES
 THE VAV BOXES ARE PART OF A FUTURE FIT-OUT AND AS SUCH NOT INCLUDED IN THIS TENDER.

- LEGEND:
- FAN COIL UNIT (SIZE 5)
 - CONSTANT AIR VOLUME UNIT (AIR FLOW 10l/s)
 - VARIABLE AIR VOLUME BOX (AIR FLOW 376l/s)
 - AIR HANDLING UNIT (REF 1)
 - HEAT RECOVERY VENTILATION UNIT (REF 1)
 - EXHAUST FAN (AIR FLOW 100l/s)
 - SWIRL DIFFUSER (NECK SIZE Ø250)
 - CIRCULAR PERFORATED FACE DIFFUSER (NECK SIZE Ø100)
 - EXHAUST VALVE (NECK SIZE Ø125)

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Rev	Modifications	CHK	Date

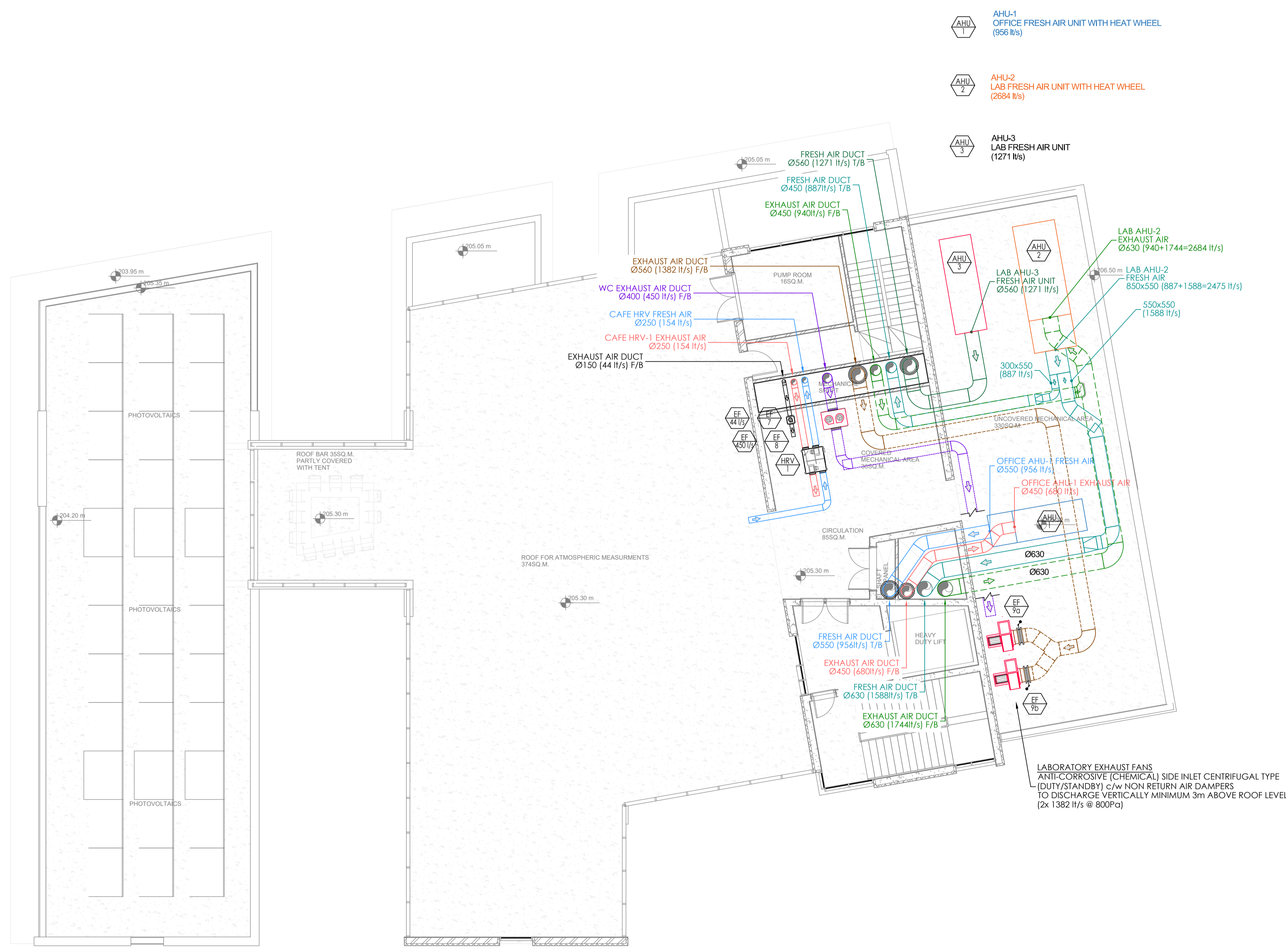
Stamp

Project: **EMME - CARE**

Drawing Title:
2ND FLOOR VENTILATION

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MV	223

Scale: 1:100 (A1) | Rev: -



- AHU-1 OFFICE FRESH AIR UNIT WITH HEAT WHEEL (956 l/s)
- AHU-2 LAB FRESH AIR UNIT WITH HEAT WHEEL (2684 l/s)
- AHU-3 LAB FRESH AIR UNIT (1271 l/s)
- AHU-1 OFFICE FRESH AIR UNIT WITH HEAT WHEEL (956 l/s)
- AHU-2 LAB FRESH AIR UNIT WITH HEAT WHEEL (2704 l/s)
- AHU-3 LAB FRESH AIR UNIT (1382 l/s)

NOTES:

CHILLED WATER PIPE SIZES ARE GIVEN FOR PPR-80 (COMPOSITE) PIPE.

ALL PIPING BRANCHES TO FANCOIL UNITS TO HAVE PRESET AUTOFLOW VALVES

ALL MAIN FRESH AIR DUCT BRANCHES TO HAVE PRESET AUTOFLOW DAMPERS (CAV)

INSTALLATIONS WITHIN THE (HATCHED) LABORATORIES ARE NOT PART OF THIS TENDER.

EXAMPLE HATCH
 LABORATORY

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PROVIDE ADDITIONAL ISOLATION VALVES FOR ALL CHW PIPE BRANCHES TO LABORATORIES

THE VAV BOXES ARE PART OF A FUTURE FIT-OUT AND AS SUCH NOT INCLUDED IN THIS TENDER.

LEGEND:

- FAN COIL UNIT (SIZE 5)
- CONSTANT AIR VOLUME UNIT (AIR FLOW 10l/s)
- VARIABLE AIR VOLUME BOX (AIR FLOW 376l/s)
- AIR HANDLING UNIT (REF 1)
- HEAT RECOVERY VENTILATION UNIT (REF 1)
- EXHAUST FAN (AIR FLOW 100m³/s)
- SWIRL DIFFUSER (NECK SIZE Ø250)
- CIRCULAR PERFORATED FACE DIFFUSER (NECK SIZE Ø100)
- EXHAUST VALVE (NECK SIZE Ø125)

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Rev	Modifications	CHK	DATE

Stamp

Project: **EMME - CARE**

Drawing Title:
ROOF VENTILATION

Issue	Design Stage	Design Discipline	Drawing Number
MSA	T	MV	224

Scale: 1:100 (A1) | Rev: -



FOR CONTINUATION REFER TO SITE PLAN
DRAINAGE DRAWING MSA/BP/MD/305

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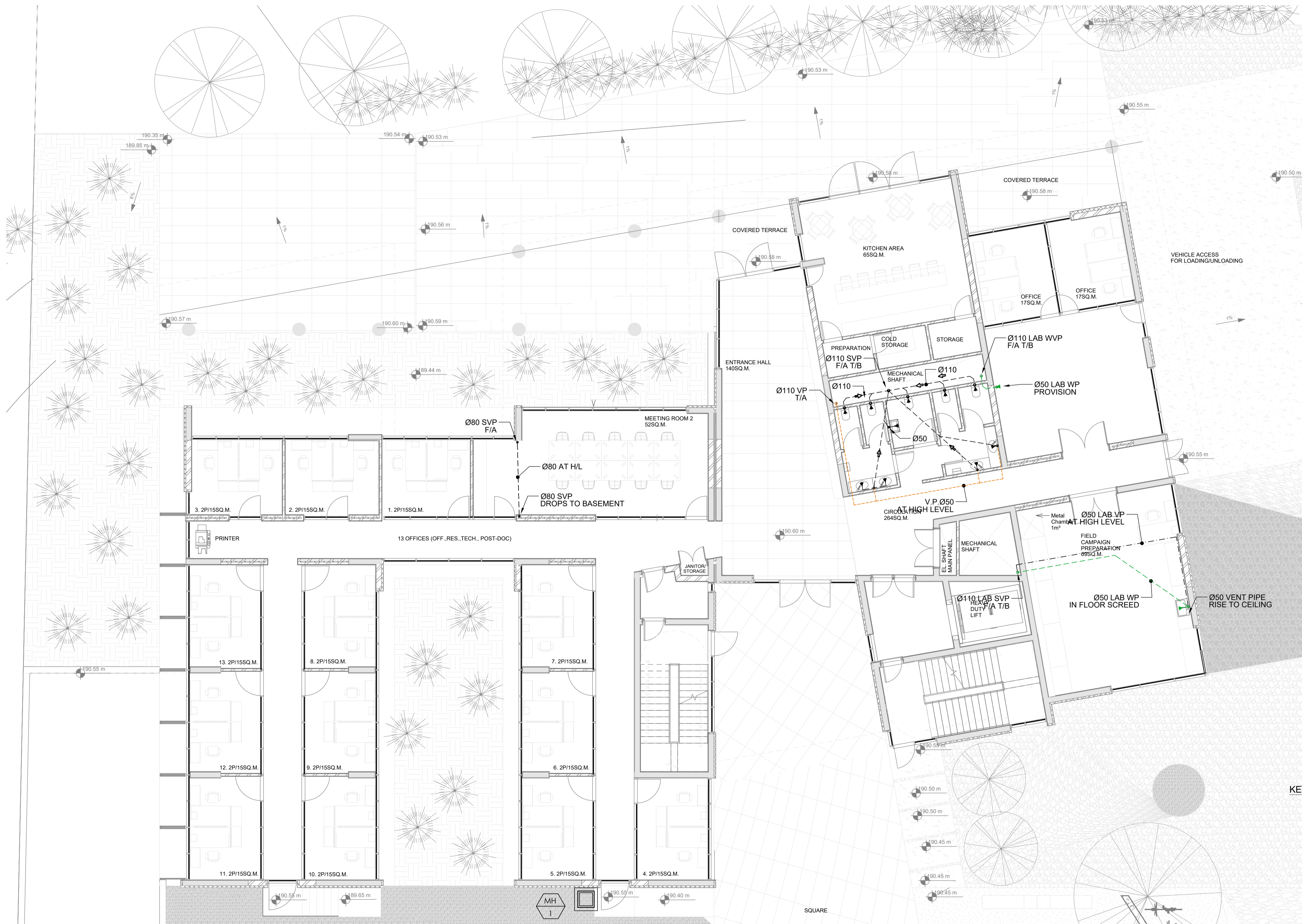
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Project: **EMME - CARE**

Drawing Title:
BASEMENT DRAINAGE

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MD	300

Scale: 1:100 (A1) | Rev: -



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Rev	Modifications	CHK	Date

Stamp

Project: **EMME - CARE**
 Drawing Title: **GROUND FLOOR DRAINAGE**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MD	301

Scale: 1:100 (A1) | Rev: | -



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Rev.	Modifications	CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title:
1ST FLOOR DRAINAGE

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MD	302

Scale: 1:100 (A1) | Rev: | -



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Rev.	Modifications	CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title:
2ND FLOOR DRAINAGE

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MD	303

Scale: 1:100 (A1) | Rev: | -



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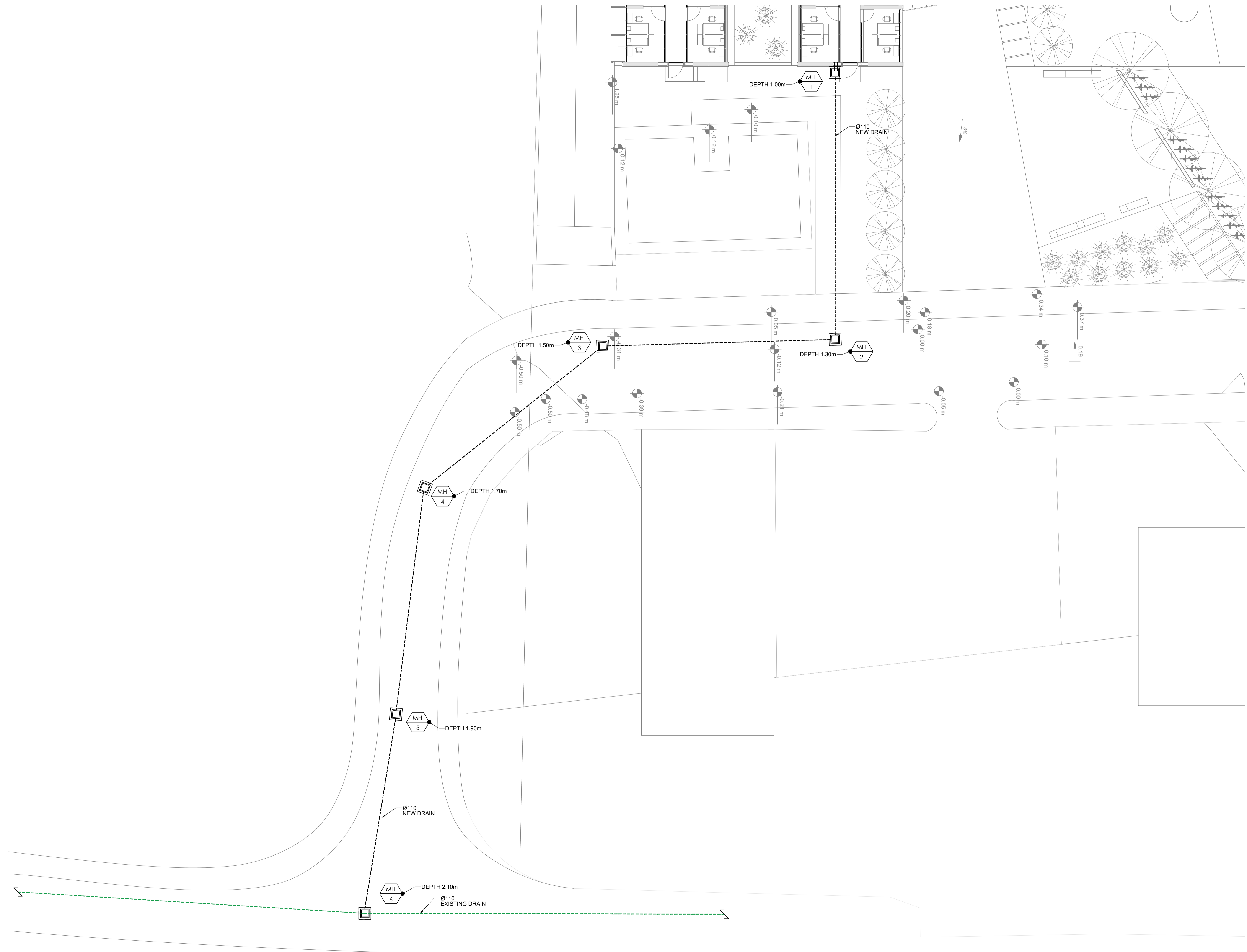
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Project: **EMME - CARE**

Drawing Title:
ROOF DRAINAGE

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MD	304

Scale: 1:100 (A1) | Rev: -



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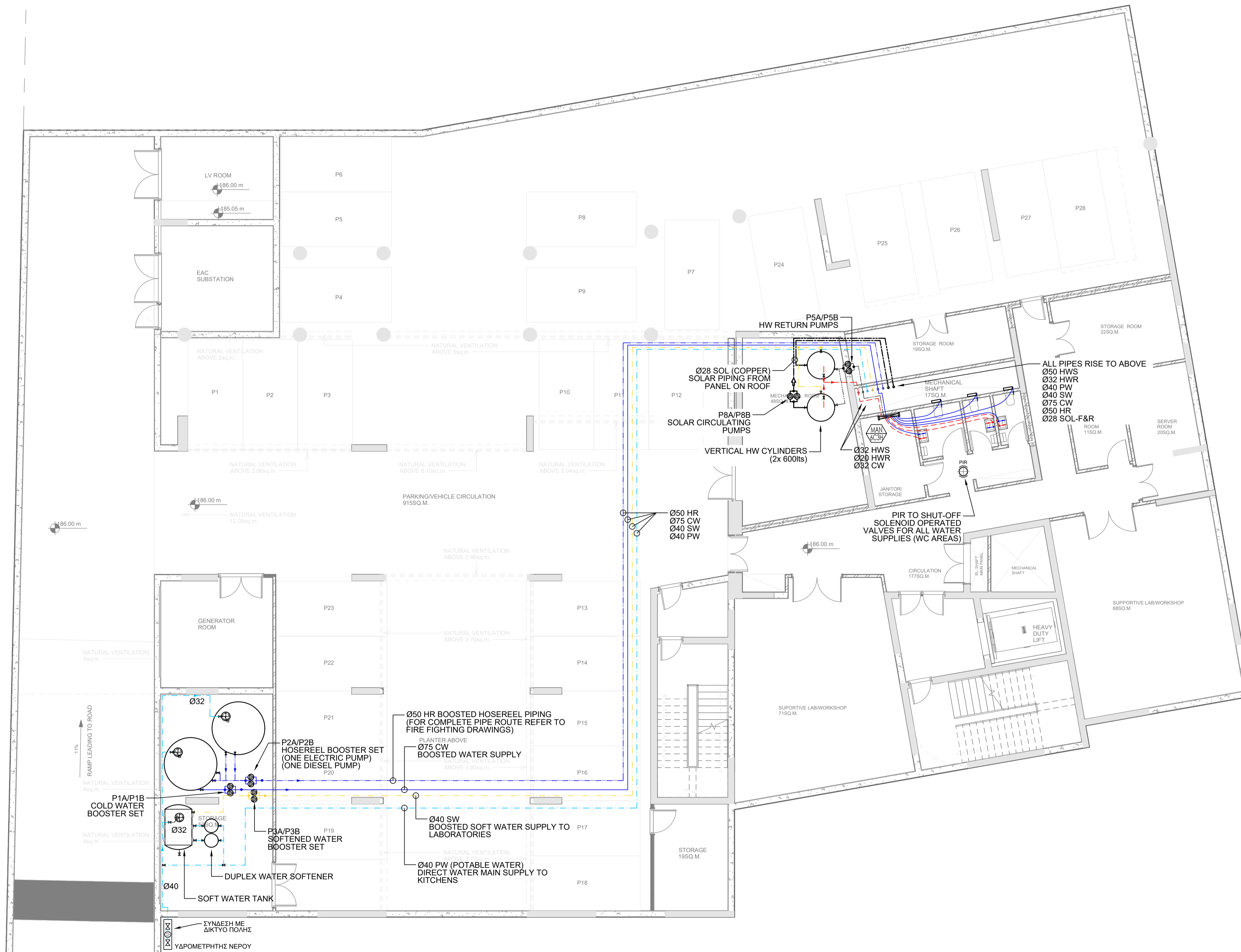
Stamp

Project: **EMME - CARE**

Drawing Title:
SITE PLAN DRAINAGE

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MD	305

Scale: 1:150 (A1) | Rev: -



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Rev.	Modifications	CHK	DATE

Stamp

Project: **EMME - CARE**
 Drawing Title: **BASEMENT PLUMBING**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MP	400

Scale: 1:100 (A1) | Rev: -



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Rev.	Modifications	CHK	DATE

Stamp

Project: **EMME - CARE**

Drawing Title: **GROUND FLOOR PLUMBING**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MP	401

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Rev.	Modifications	CHK	DATE

Stamp

Project: **EMME - CARE**

Drawing Title:
1ST FLOOR PLUMBING

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MP	402

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Rev.	Modifications	CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title:
2ND FLOOR PLUMBING

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MP	403

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Rev.	Modifications	CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title:
ROOF PLUMBING

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MP	404

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Rev	Modifications	CHK	CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title: **BASEMENT LEVEL FIRE FIGHTING**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MF	500

Scale: 1:100 (A1) | Rev: -



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Rev	Modifications	DRW/CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title:
**2ND FLOOR
 FIRE FIGHTING**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	MF	503

Scale: 1:100 (A1) | Rev: -

ΠΙΝΑΚΑΣ ΚΕΝΤΡΙΚΩΝ ΚΛΙΜΑΤΙΣΤΙΚΩΝ ΜΟΝΑΔΩΝ (AIR HANDLING UNITS)

A/A	Ροή Αέρα (l/s (m³/hr))	Φρέσκο Αέρα (l/s)	Ε Α Α		Κινητήρας Αεριστήρα			Ροή Νερού (l/s)	Θερμοκρ. Εισόδου Αέρα (DBIWB (°C))	Θερμοκρ. Εξόδου Αέρα (DB/WB (°C))	Στοιχ. Ψύξης (kW)	Στοιχ. Θέρμ. (kW)	Παρατηρήσεις COMMENTS / AREA SERVED	UNIT LOCATION [building] (level)
			Παρ.	Επι.	Παρ.	Επι.	V-Φ -Hz							
			(Pa)		Ισχύς (kW)									
AHU-1-OFF	956 (3442)	956 (100%)	240	240	1.5	0.9	400-3-50	1.01 (0.47)	35.5 / 22.8	23.0 / 16.1	25.4	19.4	Fresh Air Unit c/w Heat Exchanger Serving Office Areas (all levels)	Roof Level
AHU-2-LAB	2683 (9659)	2683 (100%)	200	200	4.1	2.2	400-3-50	2.83 (1.3)	35.5 / 22.8	23.0 / 16.1	71.2	54.4	Fresh Air Unit c/w Heat Exchanger Serving Laboratories with HE	Roof Level
AHU-3-LAB	1271 (4576)	1271 (100%)	140	-	1.2	-	400-3-50	1.86 (1.01)	40.0 / 25.0	23.0 / 16.1	46.8	42.3	AC Unit (100%FA) Serving Laboratories without HE	Roof Level

Σημειώσεις:

- Η Μέγιστη Πίεση πίεσης στα στοιχεία (Αντίσταση Νερού) θα είναι 3.5m (35 kPa)
- Η Μέγιστη Μετωπική Ταχύτητα Αέρα στα στοιχεία θα είναι 2.5m/s.
- Η εξωτερική αντίσταση αέρα θα επιβεβαιωθεί από τον υπεργολάβο μηχανολογικών εγκαταστάσεων σύμφωνα με τις τελικές εγκρίσεις μηχανημάτων, υλικών και κατασκευαστικών σχεδίων.
- Η ανεμιστήρας παροχής/επιστροφής θα είναι του τύπου με μετατροπέα συχνότητας (inverter controlled) επιλεγμένα με ελάχιστη απόδοση 60%.
- Για όλες τις μονάδες με ενσωματωμένους εναλλάκτες θερμότητας (Heat Wheel), η ελάχιστη απόδοση πρέπει να είναι 71% τόσο για εισαγωγή όσο και για λαθάνουσα ενέργεια.
- Η δεδομένη Ροή Νερού βασίζεται σε θερμοκρασίες εισόδου / εξόδου νερού 6.5°C / 12.5°C (48°C / 38°C).
- Οι ΚΚΜ θα έχουν πιστοποίηση EUROVENT.
- Οι ΚΚΜ θα εγκατασταθούν πάνω σε κατάλληλα αντισεισμικά στηρίγματα

Εξωτερικές συνθήκες:

Καλοκαίρι : 40°C και 30% σχετική υγρασία
Χειμώνας : 0.5°C και 95% σχετική υγρασία

Συντομίες:

ΕΑΑ Εξωτερική Αντίσταση Αέρα
Παρ. Παροχή
Επι. Επιστροφή

ΠΙΝΑΚΑΣ ΑΕΡΟΨΥΚΤΩΣΩΝ ΨΥΚΤΩΝ-ΑΝΤΛΙΑΣ ΘΕΡΜΟΤΗΤΑΣ (AIR COOLED CHILLER / HEAT PUMPS)

Ref.	Cooling Capacity (KW)	CHILLER DATA				ELECTRICAL DATA		REMARKS
		L/S	E.W.T °C	L.W.T °C	P.D. (Kpa)	MAX. POWER (KW)	V-Φ -Hz	
CHP1	320	19,2	11,0	7,0	60	126	400/3/50	
CHP2	320	19,2	11,0	7,0	60	126	400/3/50	

Notes:

- The cooling capacity is based on design conditions of:
(a) ambient air temperature of 40°C.
(b) Supply / Return Chilled water temperature of 7°C/11°C.
Units to be suitable for operation up to 45°C.
- Heating capacity to be at least equal to 90% of cooling capacities based on nominal conditions of:
(a) ambient air temperature 7°Cdb /6°Cwb.
(b) heating water supply - return temperature 45°C / 40°C.
- Maximum acceptable noise level at full load shall be limited to 62 dB (A scale overall sound pressure) measured at a distance of 1 meter in front of the unit and at a height of 1.5 meters.
- Chiller / heat pumps to have 25% heat recovery facility to produce domestic hot water at 60°C.
- Refrigerant must be environment friendly with ODP less than 1 and GWP lower than 80

ΠΙΝΑΚΑΣ ΕΞΑΕΡΙΣΤΗΡΩΝ (SUPPLY/EXHAUST FANS)

A/A	Ροή Αέρα (l/s)	Εξω.τερ. Αντίστ. Αέρα (Pa)	Κινητήρας Αεριστήρα	Στροφές ανά λεπτό		Επίπεδο Θορύβου (dB(A))	Τύπος	Παρατηρήσεις
				Ισχύς (kW)	V-Φ -Hz			
EF/1a	4700	200	2.200	230-1-50	1446	70	IN-LINE AXIAL INVERTER	CAR PARK EXTRACTOR
EF/1b	4700	200	2.200	230-1-50	1446	70	IN-LINE AXIAL INVERTER	CAR PARK EXTRACTOR
EF/2a	4700	200	2.200	230-1-50	1446	70	IN-LINE AXIAL INVERTER	CAR PARK EXTRACTOR
EF/2b	4700	200	2.200	230-1-50	1446	70	IN-LINE AXIAL INVERTER	CAR PARK EXTRACTOR
EF/3	10	30	0.050	230-1-50	2200	36	WALL FAN	c/w NON-RETURN SHUTTERS
EF/4	28	30	0.100	230-1-50	2300	38	WALL FAN	c/w NON-RETURN SHUTTERS
EF/5	10	30	0.050	230-1-50	2200	36	WALL FAN	c/w NON-RETURN SHUTTERS
EF/6	12	30	0.050	230-1-50	2200	36	WALL FAN	c/w NON-RETURN SHUTTERS
EF/7	44	90	0.030	230-1-50	-	-	In-line mixed flow fan	Εντός Ψευδοροφής
EF/8	450	140	1.320	230-1-50	1400	47	Δίδυμος σε σειρά	
EF/9a	1382	300	2.200	400-3-50	720	76	Centrifugal Single Inlet	Chemically Anti-Corrosive
EF/9b	1382	300	2.200	400-3-50	720	76	Centrifugal Single Inlet	Chemically Anti-Corrosive

Σημειώσεις:

- Το επίπεδο θορύβου για τους εξεριστήρες αναφέρεται σε ηχητική πίεση (Lp) σε απόσταση 3 μέτρων από τον εξεριστήρα.
- Οι εξεριστήρες EF-1a/b και EF-2a/b να είναι "SMOKE EXTRACT CERTIFIED F200". (Given Noise levels are at maximum flow).
- Οι διπλοί/δίδυμοι εξεριστήρες των αποχωρητήριων να λειτουργούν με τον έναν εξεριστήρα εφεδρικό.
- Οι εξεριστήρες απαγωγής σε σειρά να λειτουργούν με ηλεκτρικό διακόπτη / ρυθμιστή στρωφών.
- Η εξωτερική αντίσταση αέρα θα επιβεβαιωθεί από τον υπεργολάβο μηχανολογικών εγκαταστάσεων σύμφωνα με τις τελικές εγκρίσεις μηχανημάτων, υλικών και κατασκευαστικών σχεδίων.

ΠΙΝΑΚΑΣ ΤΟΠΙΚΩΝ ΚΛΙΜΑΤΙΣΤΙΚΩΝ ΣΥΣΚΕΥΩΝ (FAN COIL UNITS)

UNIT REF.	AIR FLOW @50 Pa (l/s)	SENSIBLE COOLING (kW)	TOTAL COOLING (kW)	CHW FLOW (l/s)	MAXIMUM SOUND POWER AT MEDIUM SPEED [dB(A)]	REMARKS
FCU-1	88	1.31	1.65	0.10	48	CEILING CONCEALED TYPE
FCU-2	105	1.65	2.15	0.13	51	CEILING CONCEALED TYPE
FCU-3	132	2.07	2.73	0.16	54	CEILING CONCEALED TYPE
FCU-4	172	2.29	2.85	0.17	53	CEILING CONCEALED TYPE
FCU-5	192	3.02	3.83	0.23	55	CEILING CONCEALED TYPE
FCU-6	202	3.44	4.93	0.29	57	CEILING CONCEALED TYPE

NOTES:

- COOLING CAPACITIES ARE BASED ON:
(a) ENTERING AIR TEMPERATURE: 24°C DB / 50%RH
(b) ENTERING WATER TEMPERATURE: 7°C
(c) LEAVING WATER TEMPERATURE: 11°C
- UNITS SELECTED AT MED SPEED, AND THE SENSIBLE COOLING LOAD SHALL BE AS SHOWN ABOVE, OR GREATER
- MAXIMUM COIL PRESSURE DROP 22kPa

ΠΙΝΑΚΑΣ ΑΝΤΛΙΩΝ (PUMP SCHEDULE)

REF.	SERVICE	WATER FLOW (L/S)	HEAD (M)	RPM Min ⁻¹	MOTOR		REMARKS
					Power (KW)	V-Φ-HZ	
P1A	WATER BOOSTER	1.7	40	2900	2.2	400-3-50	DUTY INVERTER TYPE
P1B	WATER BOOSTER	1.7	40	2900	2.2	400-3-50	STAND-BY/ASSIST INVERTER TYPE
P2A	HOSEREEL BOOSTER SET	2.3	43	2900	1.50	400-3-50	FIXED SPEED ELECTRIC
P2B	HOSEREEL BOOSTER SET	2.3	43	2900			DIEZEL DRIVEN
P3A	SOFT WATER BOOSTER	0.7	30	2900	0.75	400-3-50	DUTY INVERTER TYPE
P3B	SOFT WATER BOOSTER	0.7	30	2900	0.75	400-3-50	STAND-BY/ASSIST INVERTER TYPE
P4A	CHILLED /HEATING	38.2	28	2900	12.5	400-3-50	DUTY INVERTER TYPE
P4B	CHILLED /HEATING	38.2	28	2900	12.5	400-3-50	STAND-BY INVERTER TYPE
P5A	H WATER RETURN	0.15	6	2900	0.10	240-1-50	IN-LINE CIRCULATOR
P5B	H WATER RETURN	0.15	6	2900	0.10	240-1-50	IN-LINE CIRCULATOR
P6A	PRIMARY HOT WATER	0.9	12	2900	0.75	240-1-50	IN-LINE CIRCULATOR
P6B	PRIMARY HOT WATER	0.9	12	2900	0.75	240-1-50	IN-LINE CIRCULATOR
P7A	WASTE WATER	0.5	7	2900	1.00	400-3-50	SUBMERSIBLE TYPE WITH GRINDING DEVICE
P7B	WASTE WATER	0.5	7	2900	1.00	400-3-50	SUBMERSIBLE TYPE WITH GRINDING DEVICE
P8A	SOLAR	0.3	6	2900	0.15	240-1-50	IN-LINE CIRCULATOR
P8B	SOLAR	0.3	6	2900	0.15	240-1-50	IN-LINE CIRCULATOR

Notes:

- The manometric heads specified are approximate and shall be confirmed by the sub-contractor before ordering and after equipment has been selected and shop drawings of piping have been approved
- P1A & P1B and P3A & P3B are complete booster sets which include 2 frequency inverter pumps (1 duty, 1 stand-by/assist), inlet/outlet manifolds, distribution and control panel, etc. everything on a common baseframe as one unit as specified in the specifications. The required duty is to be satisfied by each pump.

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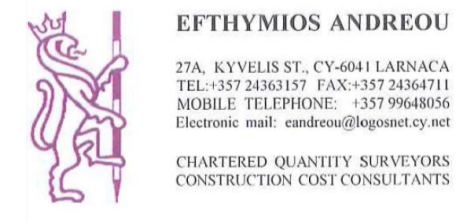
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Rev.	Modifications	BY	CHK	Date

Stamp

Project: **EMME - CARE**

Drawing Title: **MECHANICAL SCHEDULES**

Issuer	Design Stage	Design Discipline	Drawing Number
MSA	T	M	600

Scale: NTS (A1) | Rev: | -