

MECHANICAL PLANS

GENERAL NOTES:

1. ALL EQUIPMENT SHALL BE INSTALLED IN APPROXIMATE LOCATION AS SHOWN ON THE DRAWINGS.
2. CONTRACTOR MUST SUBMIT SHOP DRAWINGS INDICATING ACTUAL EQUIPMENT DIMENSIONS AND OPERATING WEIGHTS. SUFFICIENT CLEARANCES TO FACILITATE NORMAL SERVICE AND MAINTENANCE WORK ARE PROVIDED IN THESE DESIGN PLANS. HOWEVER, SHOULD ACTUAL EQUIPMENT PHYSICAL SIZES DIFFER CONSIDERABLY FROM THOSE SHOWN IN THE PLANS, THE CONTRACTOR SHOULD NOTIFY THE ARCHITECT OR DESIGN ENGINEER IMMEDIATELY IN WRITING.
3. ALL EQUIPMENT SHALL BE SET ON 150MM THICK, LEVEL REINFORCED CONCRETE BASE, UNLESS OTHERWISE SPECIFIED.
4. ALL EQUIPMENT SHALL BE MOUNTED ON OR SUPPORTED BY VIBRATION ISOLATORS.
5. THIS CONTRACTOR SHOULD COORDINATE HIS WORK CLOSELY WITH THE WORK OF OTHER TRADES. PROVISIONS FOR THE PIPE PASSAGES THRU WALLS, FLOORS, AND SLABS SHALL BE COORDINATED IN ADVANCE WITH THE GENERAL CONTRACTOR. FAILURE ON THE PART OF THIS CONTRACTOR TO MAKE SUCH PROVISIONS IN ADVANCE SHALL MEAN PROVIDING THEM LATER AT HIS OWN EXPENSE.
6. PIPES SHALL BE ANCHORED, PLUMB & PARALLEL TO BUILDING LINES. PIPE HANGERS & SUPPORTS SHALL BE INSTALLED AT 1.2 METERS ON CENTER. ALL PENETRATIONS THRU WALLS, FLOORS AND ROOF SHALL BE PROVIDED WITH PIPE SLEEVES. INSTALL 3MM THICK RUBBER BETWEEN PIPES AND SUPPORT TO ELIMINATE METAL TO METAL CONTACT.
7. ALL PIPING SHALL BE LEAK TESTED WITH A PRESSURE OF AT LEAST 1½ TIMES THE DESIGN WORKING PRESSURE.
8. AIR CONDITIONING AND VENTILATION DUCTWORKS SHALL BE FABRICATED AS PER SMACNA STANDARDS. OUTDOOR INSTALLATIONS SHALL BE PROVIDED WITH ALUMINUM SHEET CLADDING.
9. ALL MATERIALS TO BE USED SHALL BE NEW AND CLEAN.
10. ALL WEATHER EXPOSED PIPES SHALL BE INSULATED AND PROVIDED WITH ALUMINUM SHEET CLADDING.
11. ANY DEVIATIONS AND REVISIONS FROM THE PLANS SHALL BE REFERRED TO THE ARCHITECT OR ENGINEER IN CHARGE FOR REVIEW AND APPROVAL.
12. ALL NECESSARY GOVERNMENT PERMITS AND OTHER LOCAL AUTHORITIES SHALL BE SECURED AND BORNE BY THE CONTRACTOR.
13. ALL WORKS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE.

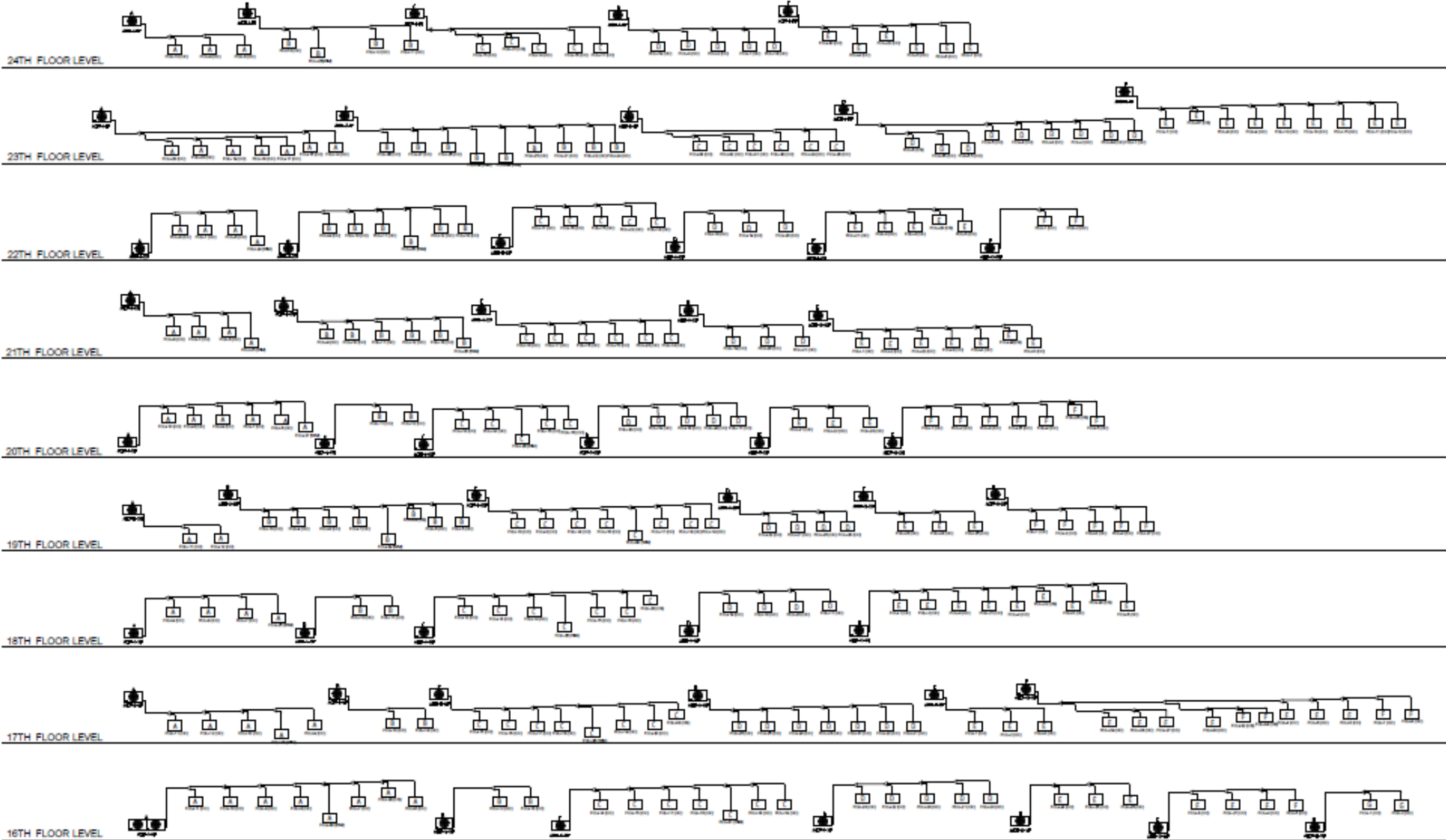
NOTES ON PIPING INSTALLATION:

1. REFRIGERANT PIPES SHALL BE INTERNALLY CLEANED BY SWABBING WITH CLEAN COTTON CLOTH TO REMOVE ALL DUST, BURRS, AND OTHER MISCELLANEOUS DIRT.
2. WHILE SOLDERING JOINTS, A SWEEP OF INERT NITROGEN GAS SHOULD BE PASSED THROUGH PIPES TO PREVENT OXIDATION DEPOSITS INSIDE.
3. FITTINGS:
 - A. USE STANDARD LONG RADIUS COPPER ELBOWS, REDUCERS, ETC. DO NOT USE FIELD-FORMED ELBOWS, REDUCERS ETC.
 - B. JOINTS BETWEEN PIPES SHOULD BE THROUGH STANDARD COPPER COUPLING FORMED FITTING MADE BY SWAGING OR ENLARGING ONE PIPE END TO BE ABLE TO RECEIVE THE OTHER PIPE SECTION WOULD NOT BE ALLOWED.
 - C. JOINTS TO SCREWED ACCESSORIES SUCH AS EXPANSION VALVES, FILTER DRIER, ETC. SHALL BE MADE WITH STANDARD FLARED FITTINGS.
4. THE COMPLETED PIPING INSTALLATION SHOULD BE LEAK TESTED BY SUBJECTING THE SAME (BOTH LIQUID AND SUCTION LINE) TO A PRESSURE OF 3100 P_a USING DRY NITROGEN GAS. THIS PRESSURE SHOULD BE LEFT FOR 24 HOURS AND IF THERE IS NO NOTICEABLE REDUCTION IN PRESSURE WITHIN THE PERIOD. THE NITROGEN CHARGE SHALL BE RELIEVED DOWN TO 140 KPa TO SERVE AS HOLDING CHARGE WHILE WAITING FOR THE EQUIPMENT CONNECTION. IF THERE IS NOTICEABLE REDUCTION IN THE TEST PRESSURE, LEAK SHOULD BE LOCATED AND REPAIRED.
5. PROPERLY TESTED PIPING SHOULD BE SECURELY CAPPED AT BOTH ENDS AND WITH HOLDING CHARGE AS STATED IN ITEM 4 ABOVE WHILE WAITING FOR FINAL CONNECTION TO EQUIPMENT. INSULATE SUCTION PIPING ONLY AFTER PROPER LEAK TESTING.
6. ALL REFRIGERANT PIPES SHALL BE TYPE L.

LEGENDS & SYMBOLS:

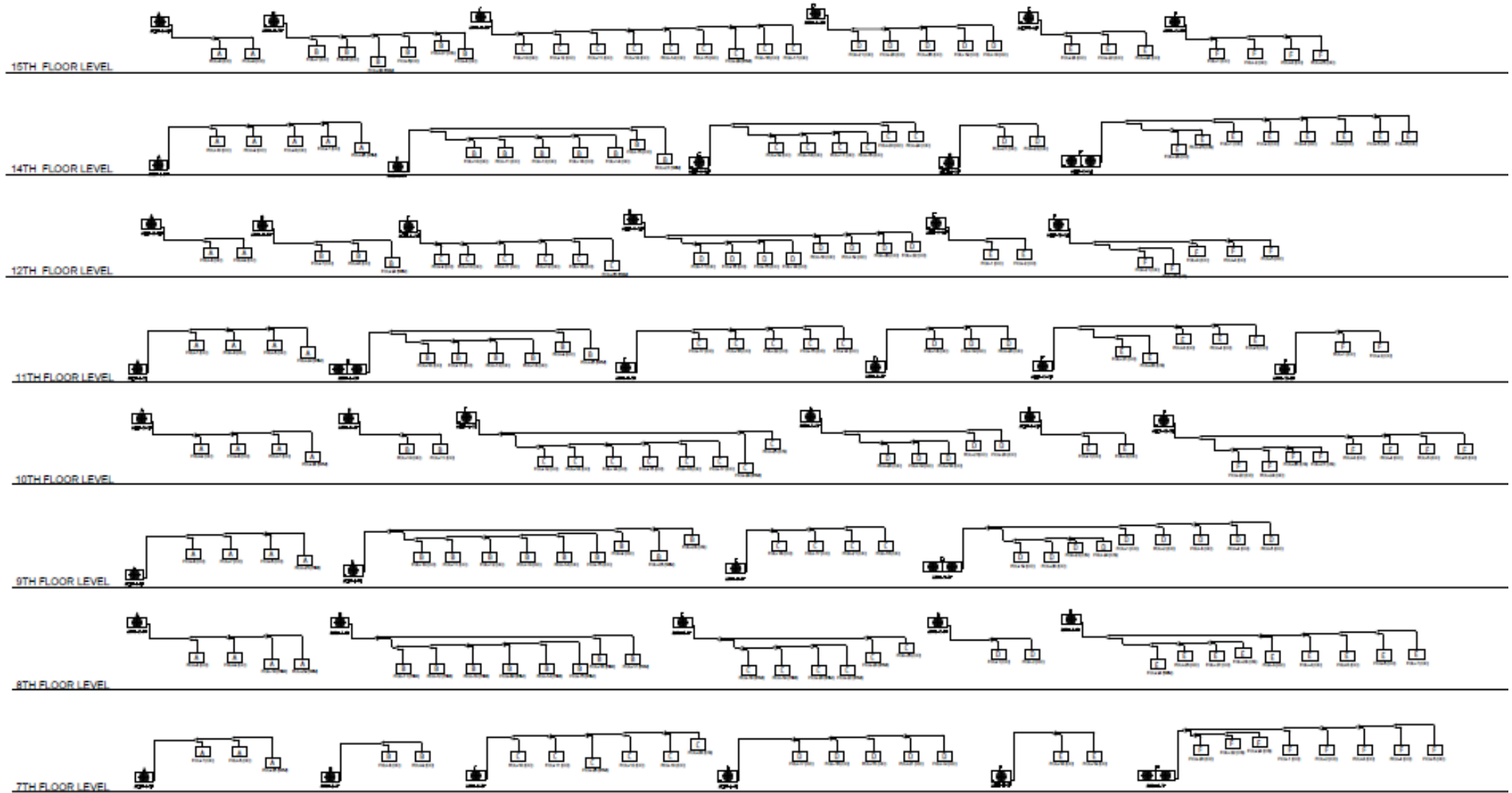
C	DEGREE CELCIUS
EAT	ENTERING AIR TEMP
LAT	LEAVING AIR TEMP
VPHHZ	VOLTS/PHASE/HERTZ
FF	PRESSURIZATION FAN
TEF	TOILET EXHAUST FAN
CFM	CUBIC EXHAUST FAN
FPI	FINS PER INCH
VD	OPPOSED BLADE VOLUME DAMPER
LD	LOUVER DOOR OPENING
QTY	QUANTITY
GPM	GALLONS PER MINUTE
LPM	LITERS PER MINUTE
KPa	KILOPASCAL
HP	HORSE POWER
MM	MILLIMETER
MPS	METER PER SECOND
FPS	FINS PER SECOND
DB	DRY BULBE TEMPERATURE
WB	WET BULB TEMPERATURE
KG	KILOGRAM
KW	KILOWATT
RPM	REVOLUTION PER MINUTE
FAF	FRESH AIR FAN
EF	EXHAUST FAN
ACCU	AIR COOLED CONDENSING UNIT
TR	TONS OF REFRIGERATION
KCAL/HR	KILOCALORIE PER HOUR
LPM	LITERS PER MINUTE
CMH	CUBIC METER PER HOUR
GPM	GALLON PER MINUTE
ESP	EXTERNAL STATIC PRESSURE
EAG	EXHAUST AIR GRILLE
EAL	EXHAUST AIR LOUVER
EAD	EXHAUST AIR DUCT
FAG	FRESH AIR GRILLE
FAL	FRESH AIR LOUVER
FAD	FRESH AIR DUCT
TEAD	TOILET EXHAUST AIR DUCT
TEAG	TOILET EXHAUST AIR GRILLE
TS	THERMOSTAT SENSOR
SE	SMOKE EVACUATION
EF	EXHAUST FAN

MECHANICAL PLANS



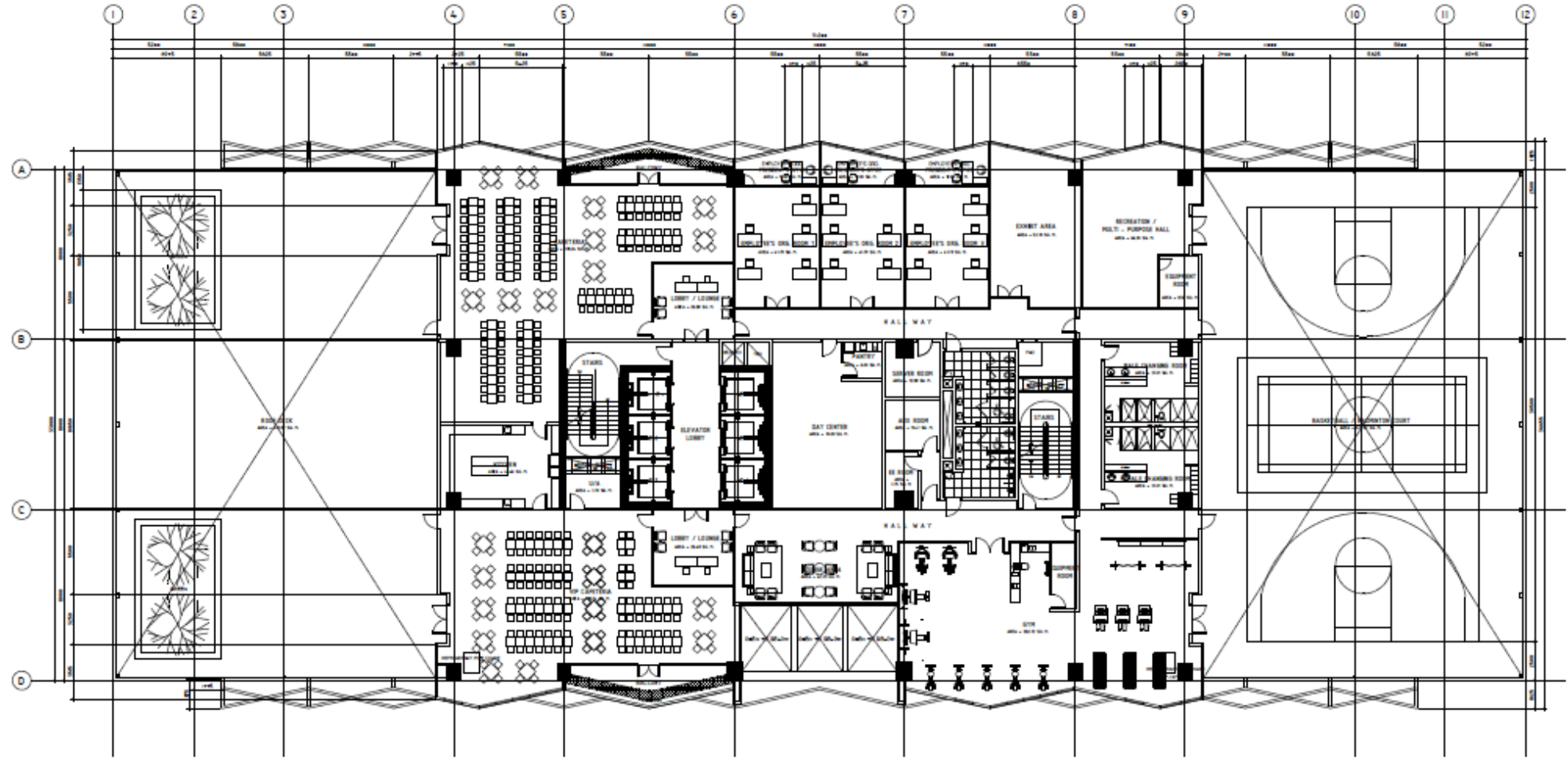
○ REFRIGERANT FLOW RISER DIAGRAM

MECHANICAL PLANS



○ REFRIGERANT FLOW RISER DIAGRAM

MECHANICAL PLANS

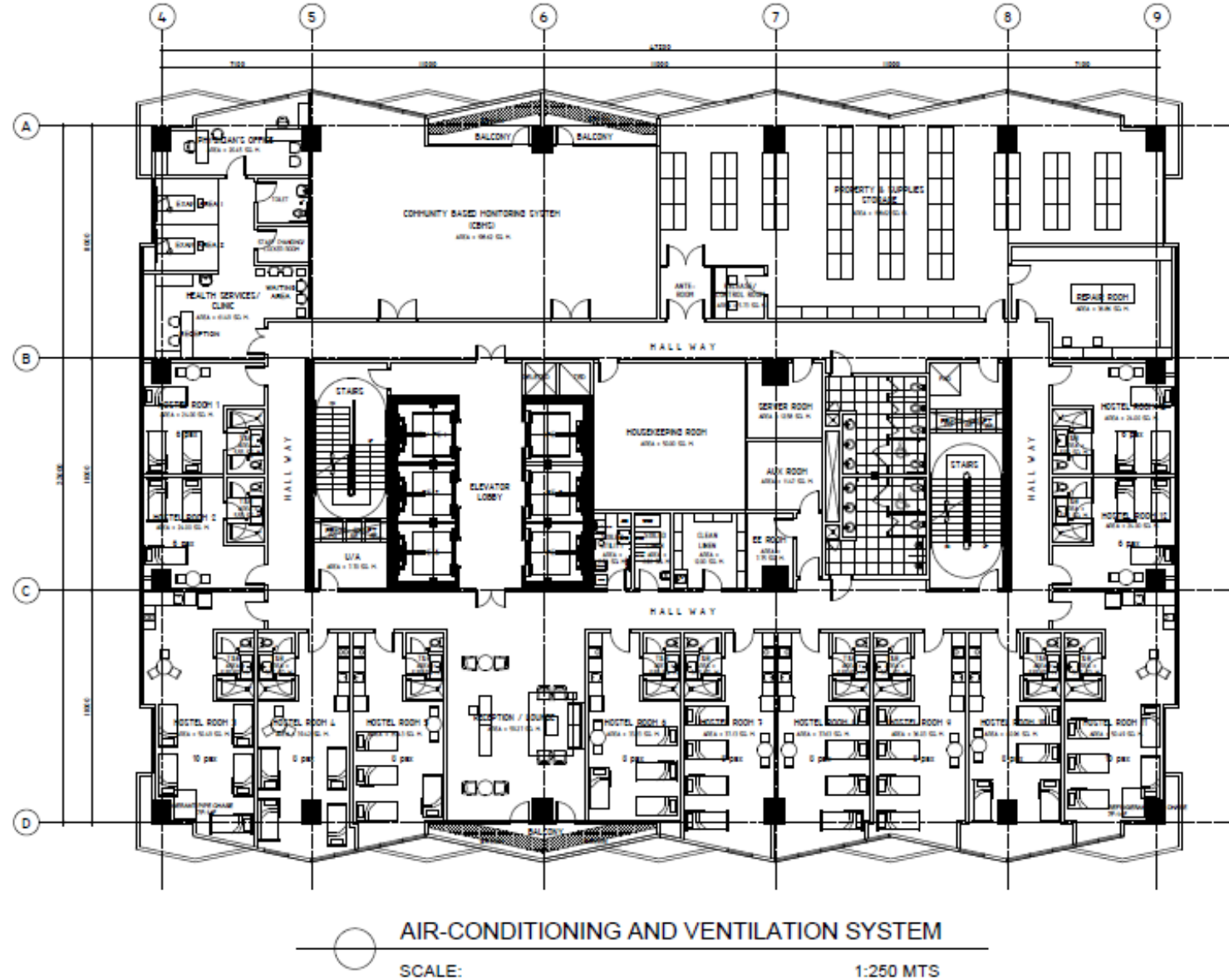


○ AIR-CONDITIONING AND VENTILATION SYSTEM
SCALE: 1:250 MTS

TOTAL FLOOR AREA = 3,009.60 sq.m

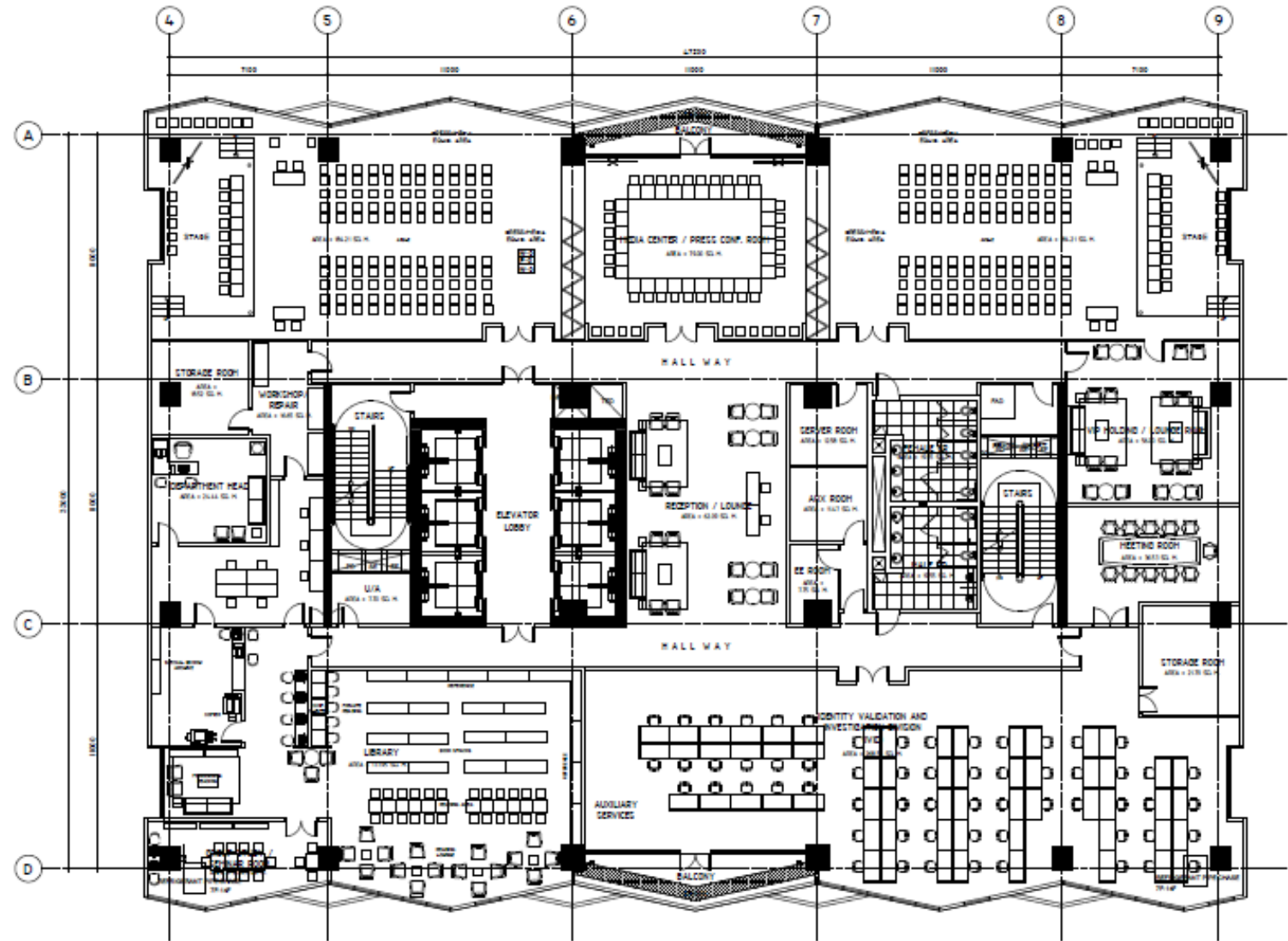
7th FLOOR

MECHANICAL PLANS



TOTAL FLOOR AREA = 3,009.60 sq.m.
8th FLOOR

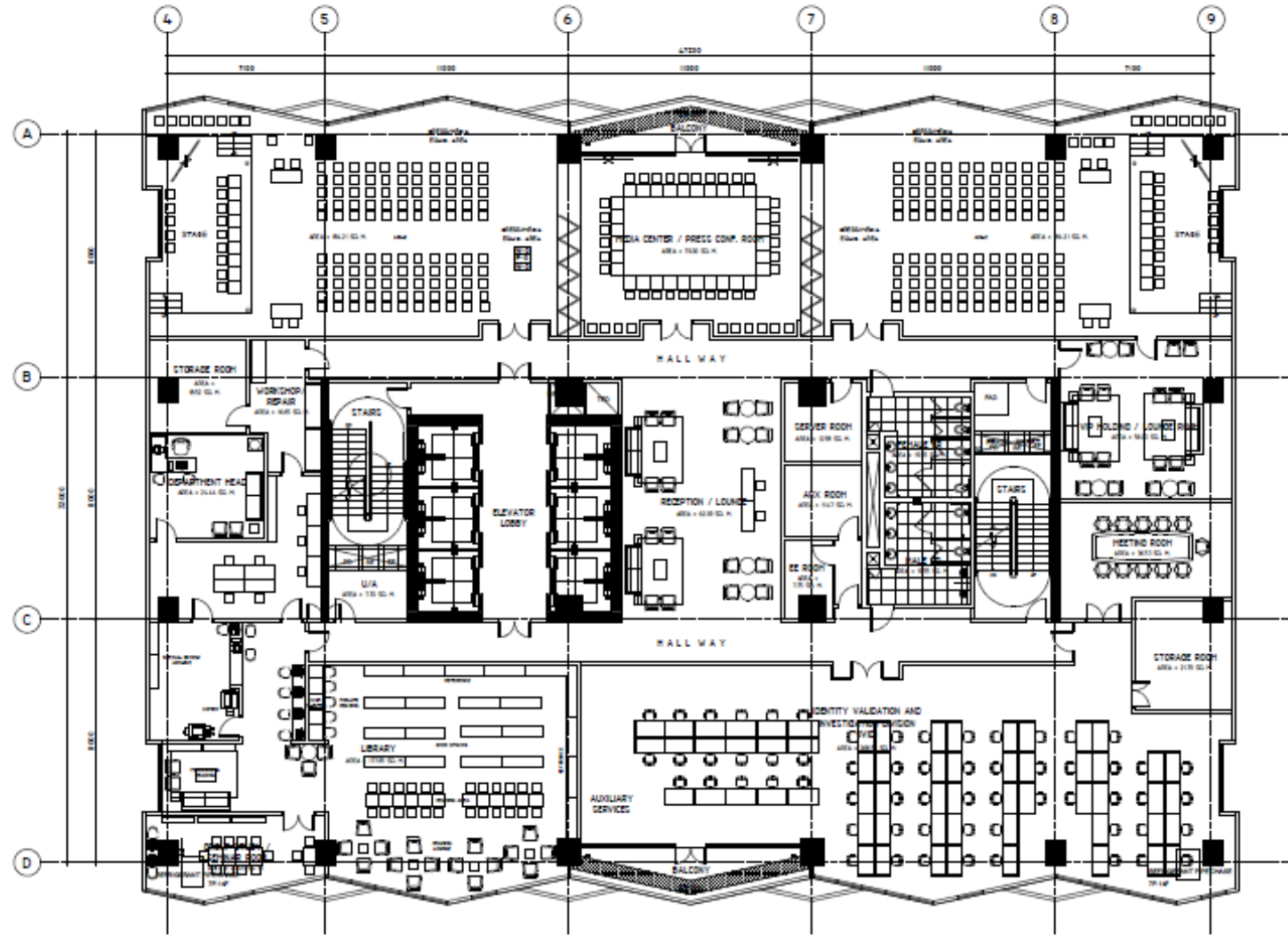
MECHANICAL PLANS



○ AIR-CONDITIONING AND VENTILATION SYSTEM
 SCALE: 1:250 MTS

TOTAL FLOOR AREA = 3,009.60 sq.m
 9th FLOOR

MECHANICAL PLANS



AIR-CONDITIONING AND VENTILATION SYSTEM

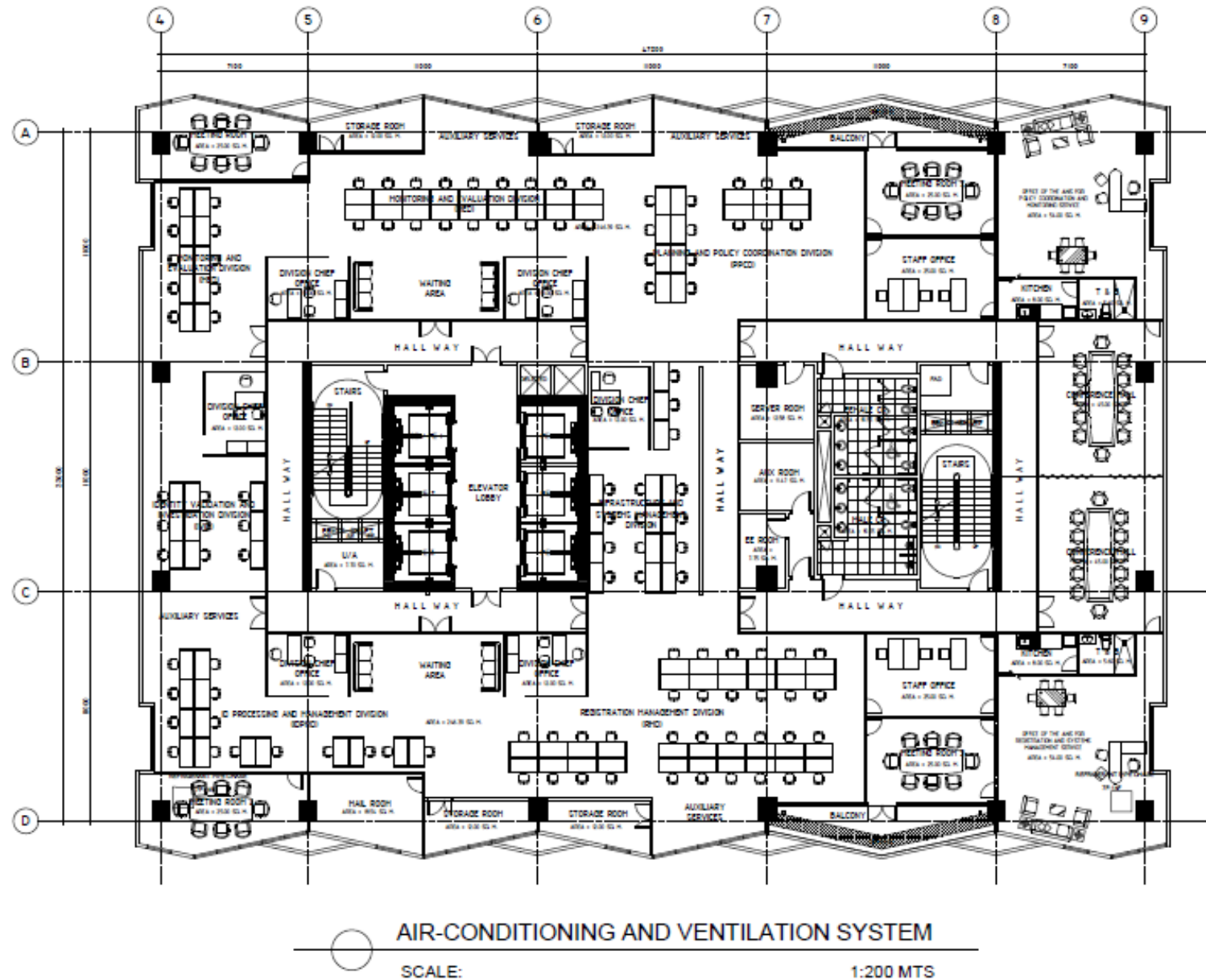
SCALE:

1:250 MTS

TOTAL FLOOR AREA = 3,009.60 sq.m.

10th FLOOR

MECHANICAL PLANS

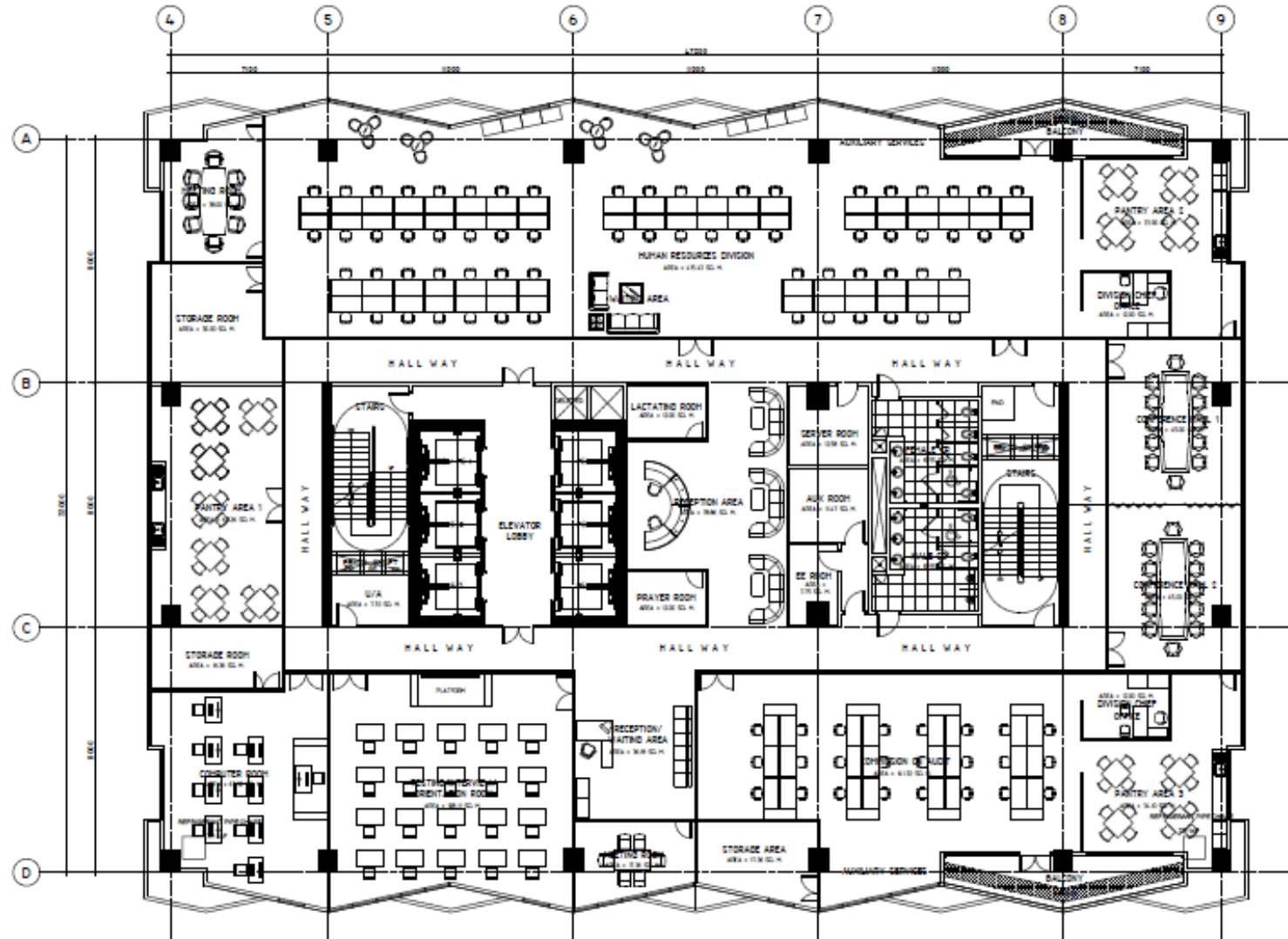


PHILSYS REGISTRATION OFFICE

TOTAL FLOOR AREA = 1,557.60 sq.m.

11th FLOOR

MECHANICAL PLANS

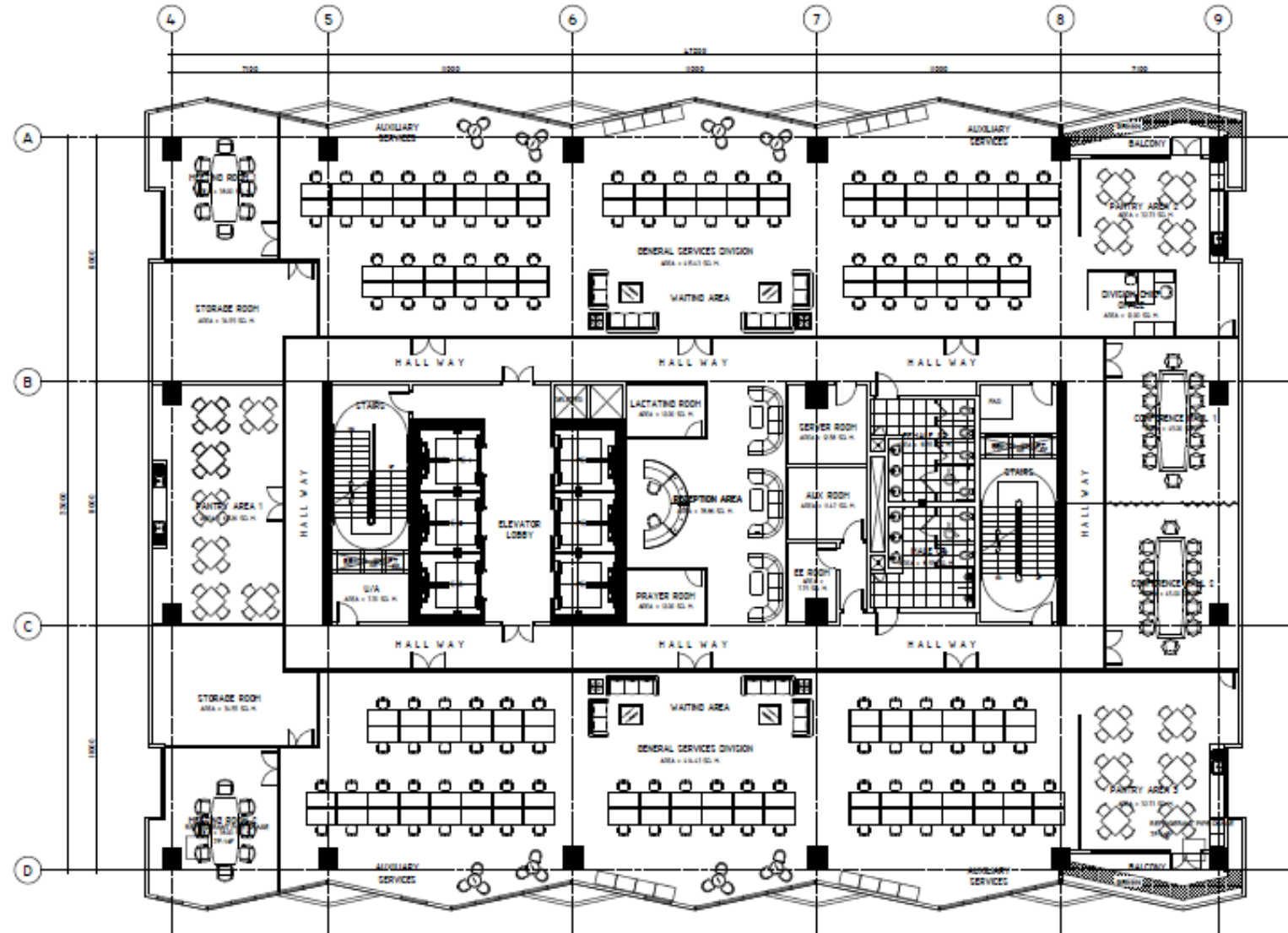


○ AIR-CONDITIONING AND VENTILATION SYSTEM
 SCALE: 1:200 MTS

HUMAN RESOURCES DIVISION &
 COMMISSION ON AUDIT

TOTAL FLOOR AREA = 1,557.60 sq.m.
 12th FLOOR

MECHANICAL PLANS



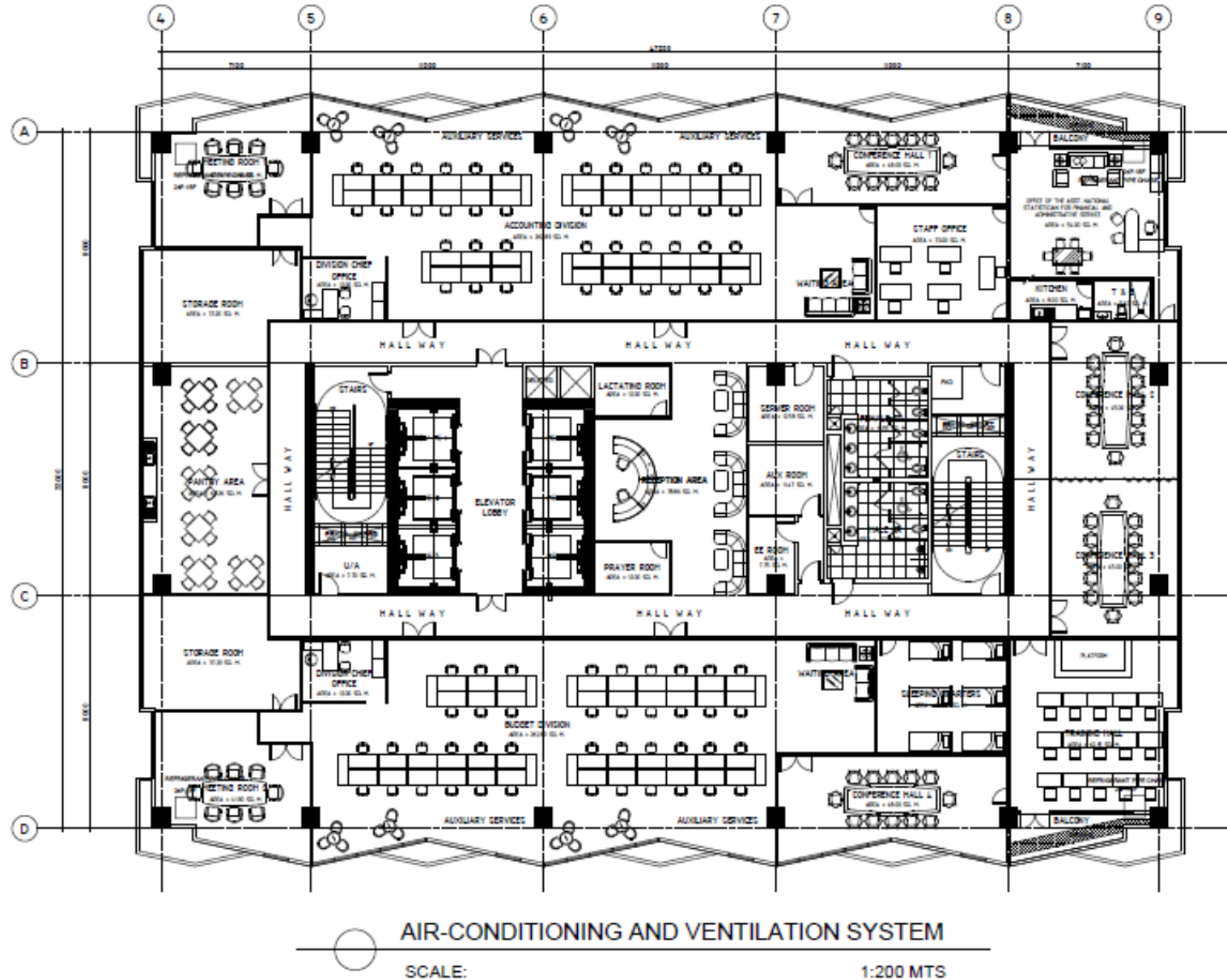
○ AIR-CONDITIONING AND VENTILATION SYSTEM
 SCALE: 1:200 MTS

GENERAL SERVICES DIVISION

TOTAL FLOOR AREA = 1,557.60 sq.m.

14th FLOOR

MECHANICAL PLANS

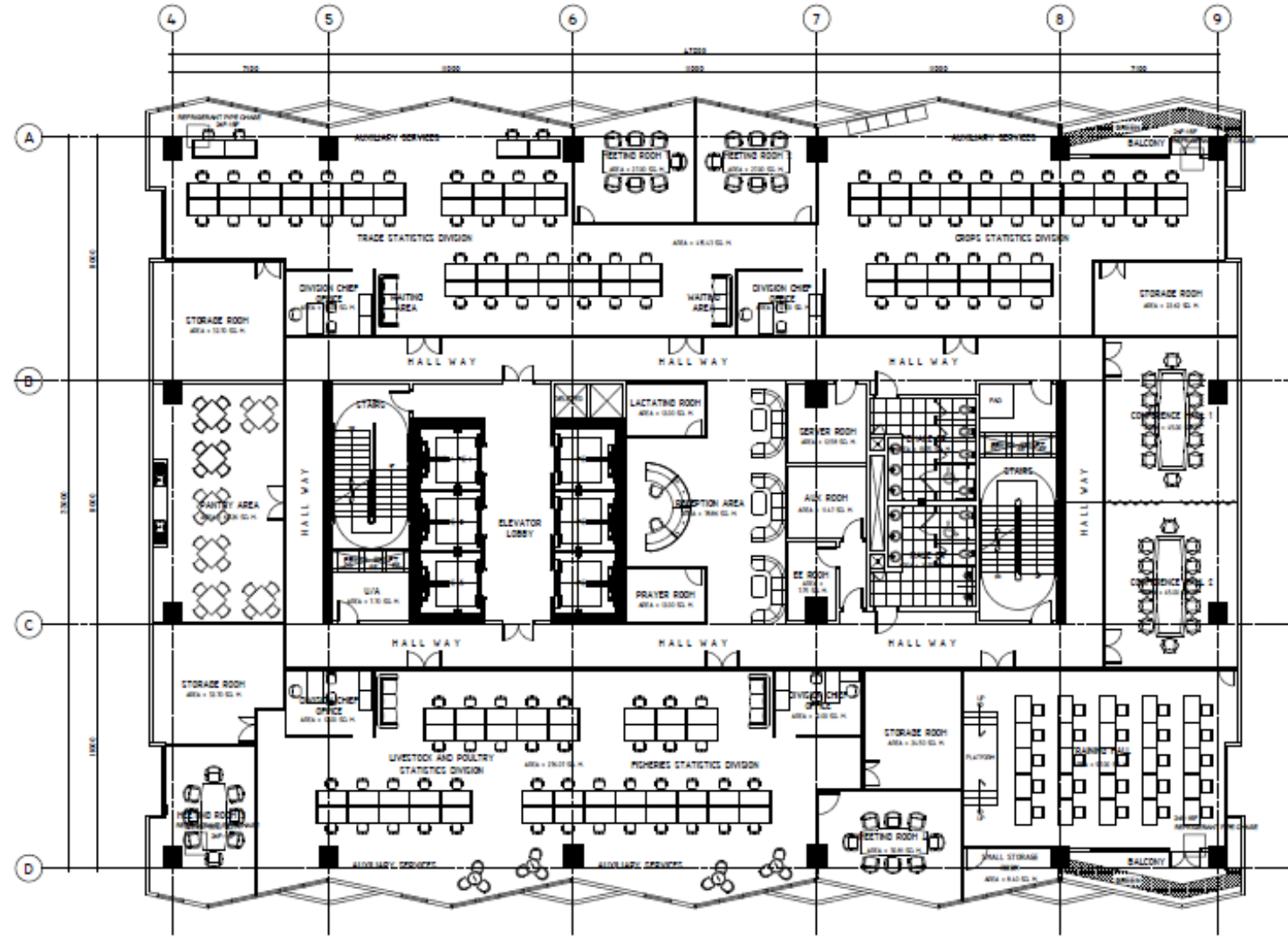


FINANCIAL AND ADMINISTRATIVE SERVICE

TOTAL FLOOR AREA = 1,557.60 sq.m.

15th FLOOR

MECHANICAL PLANS

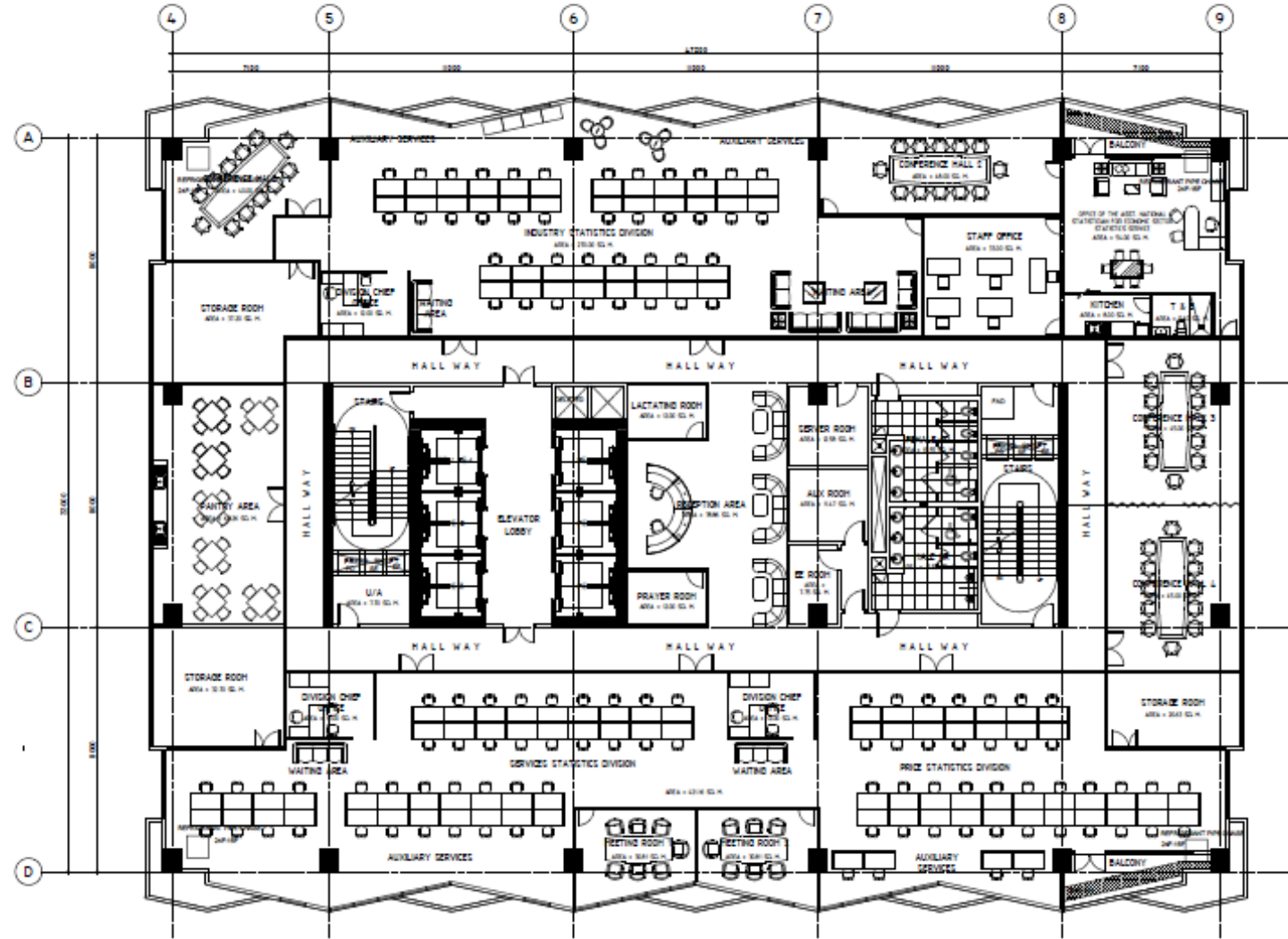


○ AIR-CONDITIONING AND VENTILATION SYSTEM
 SCALE: 1:200 MTS

ECONOMIC SECTOR STATISTICS SERVICE

TOTAL FLOOR AREA = 1,557.60 sq.m.
 16th FLOOR

MECHANICAL PLANS

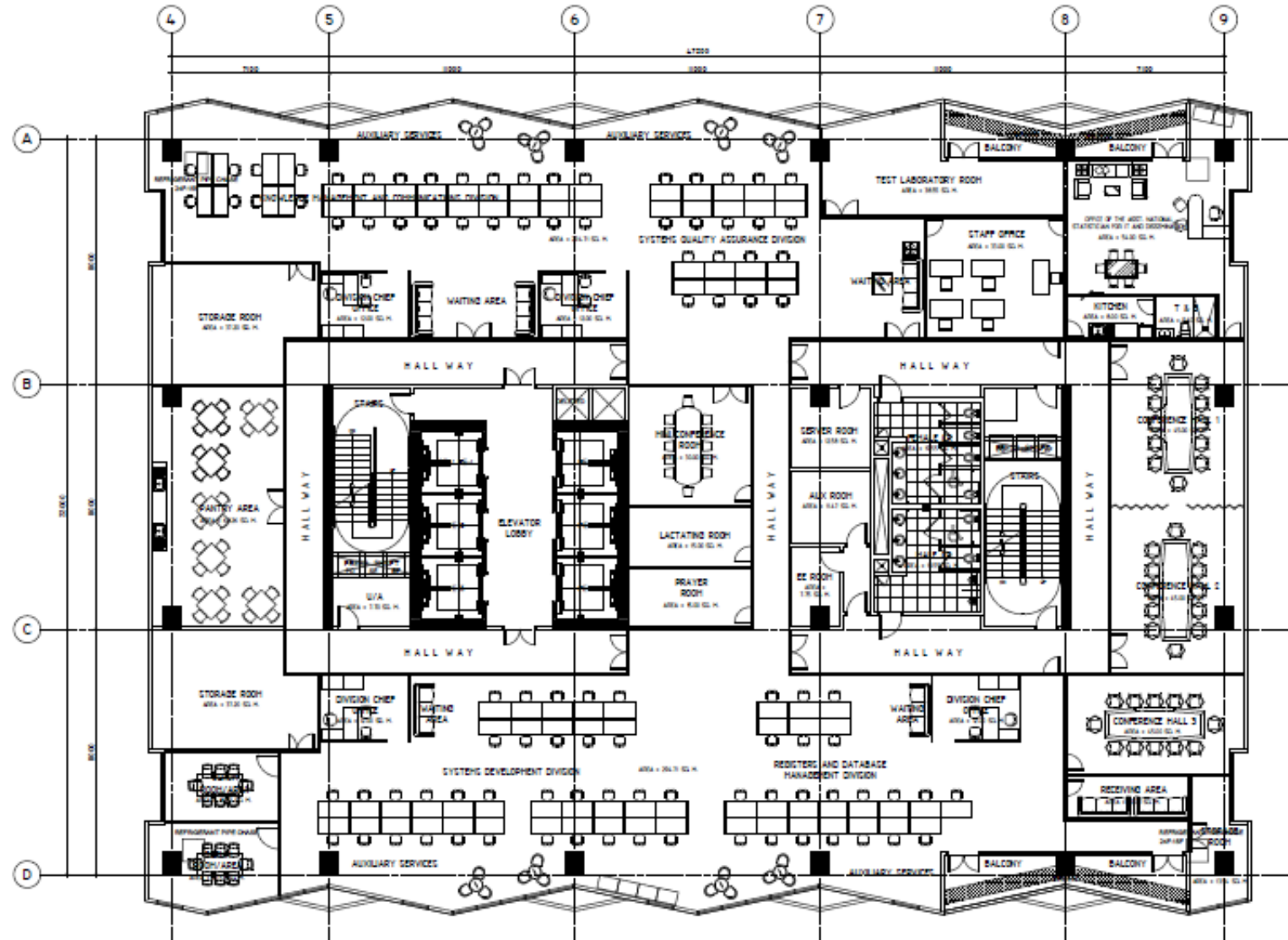


○ AIR-CONDITIONING AND VENTILATION SYSTEM
 SCALE: 1:200 MTS

ECONOMIC SECTOR STATISTICS SERVICE

TOTAL FLOOR AREA = 1,557.60 sq.m
 17th FLOOR

MECHANICAL PLANS



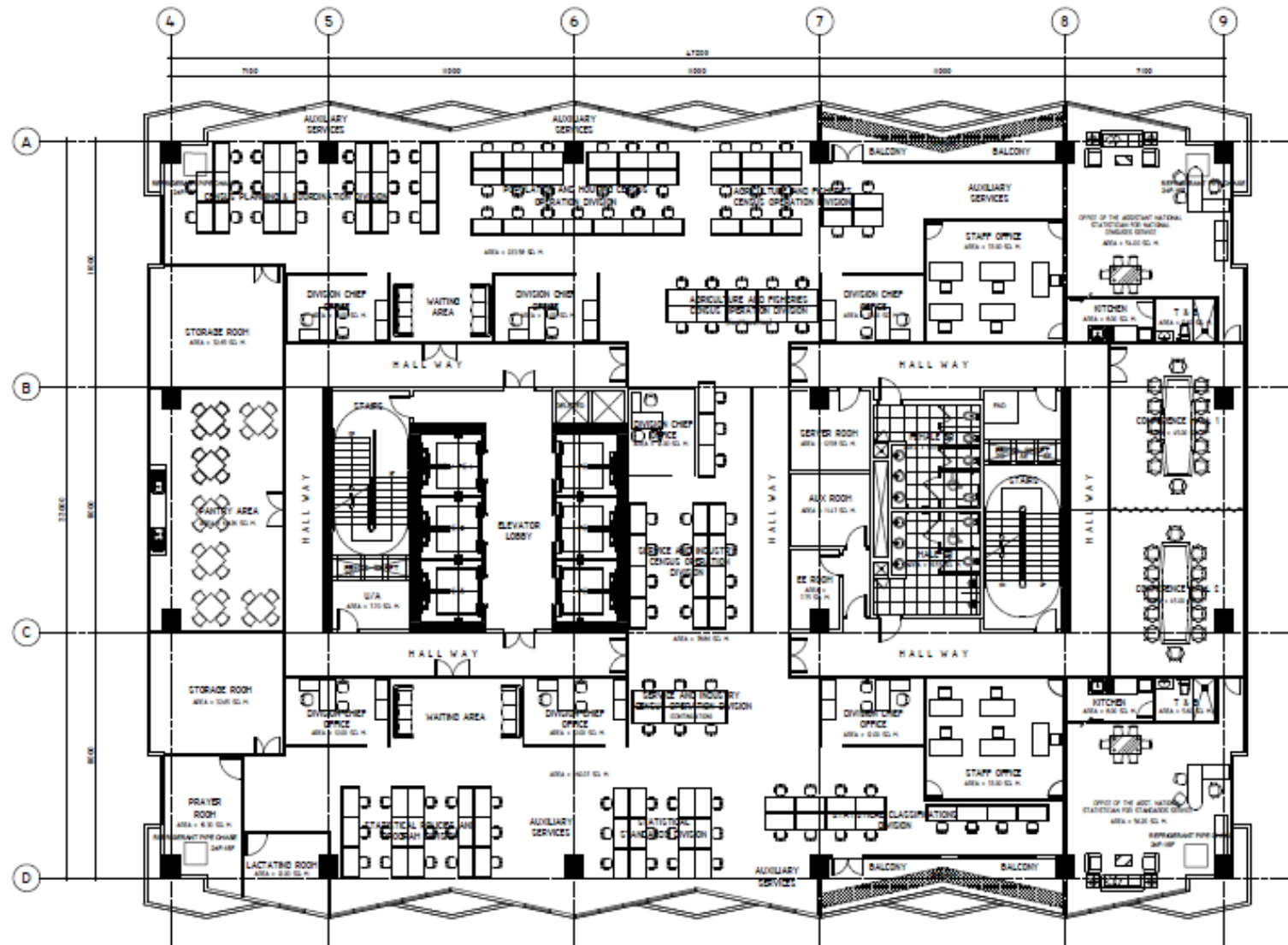
AIR-CONDITIONING AND VENTILATION SYSTEM

SCALE: 1:200 MTS

I.T. AND DISSEMINATION SERVICE

TOTAL FLOOR AREA = 1,557.60 sq.m.
18th FLOOR

MECHANICAL PLANS



AIR-CONDITIONING AND VENTILATION SYSTEM

SCALE:

1:200 MTS

NATIONAL CENSUSES SERVICE &
STANDARDS SERVICE

TOTAL FLOOR AREA = 1,557.60 sq.m.

19th FLOOR