

UNIT	NAME	AREA (SQ. FT.)	# OF UR	# OF POWDER	SIZE (T)	FIXTURE UNITS	BR	SQ. FT./T
PH05	3C	930	2	0	2	16	3	495
PH11	1C-D1	530	2	0	1	16	1	530
PH12	1C-D1	530	2	0	1	16	1	530
PH19	2L	155	2	0	15	16	2	503
PH20	2H	140	2	0	15	16	2	493
PH21	2LR2	155	2	0	15	16	2	503
PH29	1A*13	500	1	0	1	10	1	500

GRILLE SIZING TABLE

DESIGNATION	SIZE	L/S (UNLESS SPECIFIED OTHERWISE)
SG-A	300x100	41-10
SG-B	300x150	11-93
SG-C	400x150	94-140
SG-D	450x150	141-188
EG-A	150x150	35
W-1	225x200	210mm(L)
W-2	425x200	INSULATED
W-3	625x200	WALL BOX

VERTICAL FAN COIL SIZE

DESIGNATION	MODEL	W x D
FCU-IT	450	500x660
FCU-15T	600	500x660
FCU-2T	800	500x660
FCU-25T	1000	550x660
FCU-3T	1200	550x660

NOTE:  
A MIN. OF 125mm IS REQUIRED ON THE SIDE OF PIPE RISER.

DUCT SIZING TABLE (4.06 m/s, 800 FPM)

DESIGNATION	L/S	DUCT SIZE	DESIGNATION	L/S	DUCT SIZE
A	41	100x150	G	189	350x150
B	11	150x150	H	236	450x150
C	94	200x150	J	283	500x150
D	118	200x150	K	330	600x150
E	141	250x150	L	377	500x200
F	165	300x150			

- GENERAL NOTES:
- CONTRACTOR SHALL CO-ORDINATE ARCHITECTURAL, STRUCTURAL, LIGHTING, HVAC, SPRINKLER DRAWINGS TO AVOID AREAS OF CONFLICT AND TO MAINTAIN CEILING HEIGHTS.
  - CONTRACTOR SHALL REPORT ALL DISCREPANCIES AND AREA OF CONFLICTS TO THE ENGINEER PRIOR TO WORK BEGINS.
  - PROVIDE EXPANSION CHAMBERS FOR ALL KITCHEN SINKS.
  - SEE INSTALLATION DETAILS DRAWING FOR WASHER, DOM. H/C WATER, SANITARY CONNECTION DETAILS.
  - SUPPLY AND INSTALL COMPLETE DOMESTIC HOT AND COLD WATER LINES, SANITARY AND VENT LINES TO EACH FIXTURE/EQUIPMENT INCLUDING WATER CLOSETS, LAVATORIES, BATHS, SHOWERS, KITCHEN SINK, WASHING MACHINES, DISHWASHERS, AND FLOOR DRAINS. KITCHEN SINK, LAVATORIES, WATER CLOSETS AND WASHING MACHINE TO BE C/W LOCALIZED SHUT-OFF VALVES.
  - ALL VENT PIPE INSTALLATION TO COMPLY WITH PLUMBING CODES.
  - FOR D.H.C. W. RISER SIZES, REFER TO RISER DIAGRAM
  - FIRE DAMPERS ARE REQUIRED TO BE LISTED AND ARE TO HAVE FIRE PROTECTION RATING OF THE PENETRATED FIRE SEPARATION.
  - THE PIPING PENETRATING THE VARIOUS FIRE SEPARATION IS REQUIRED TO BE FIRESTOPPED WITH A LISTED FIRESTOPPING MATERIAL IN ACCORDANCE WITH OBC ARTICLE 3.1.1.
  - THE FIRE HOSE CABINET THAT ARE RECESSED INTO THE EXIT STAIR SHAFTS ARE REQUIRED TO BE SEPARATED FROM THE EXIT STAIR BY A 2 HR FIRE SEPARATION.
  - NO FLEXIBLE DUCT SHALL BE USED FOR ANY IN-SUITE DUCTWORK.
  - PROVIDE 25MM EXTERNAL INSULATION TO ENTIRE FRESH AIR DUCT FROM EXTERIOR WALL TO ERY FAN COIL UNIT.
  - DRYER EXHAUST DUCT SHALL BE SMOOTH AND CORROSION-RESISTANT MATERIAL (FLEXIBLE CONNECTION IS NOT ACCEPTABLE).

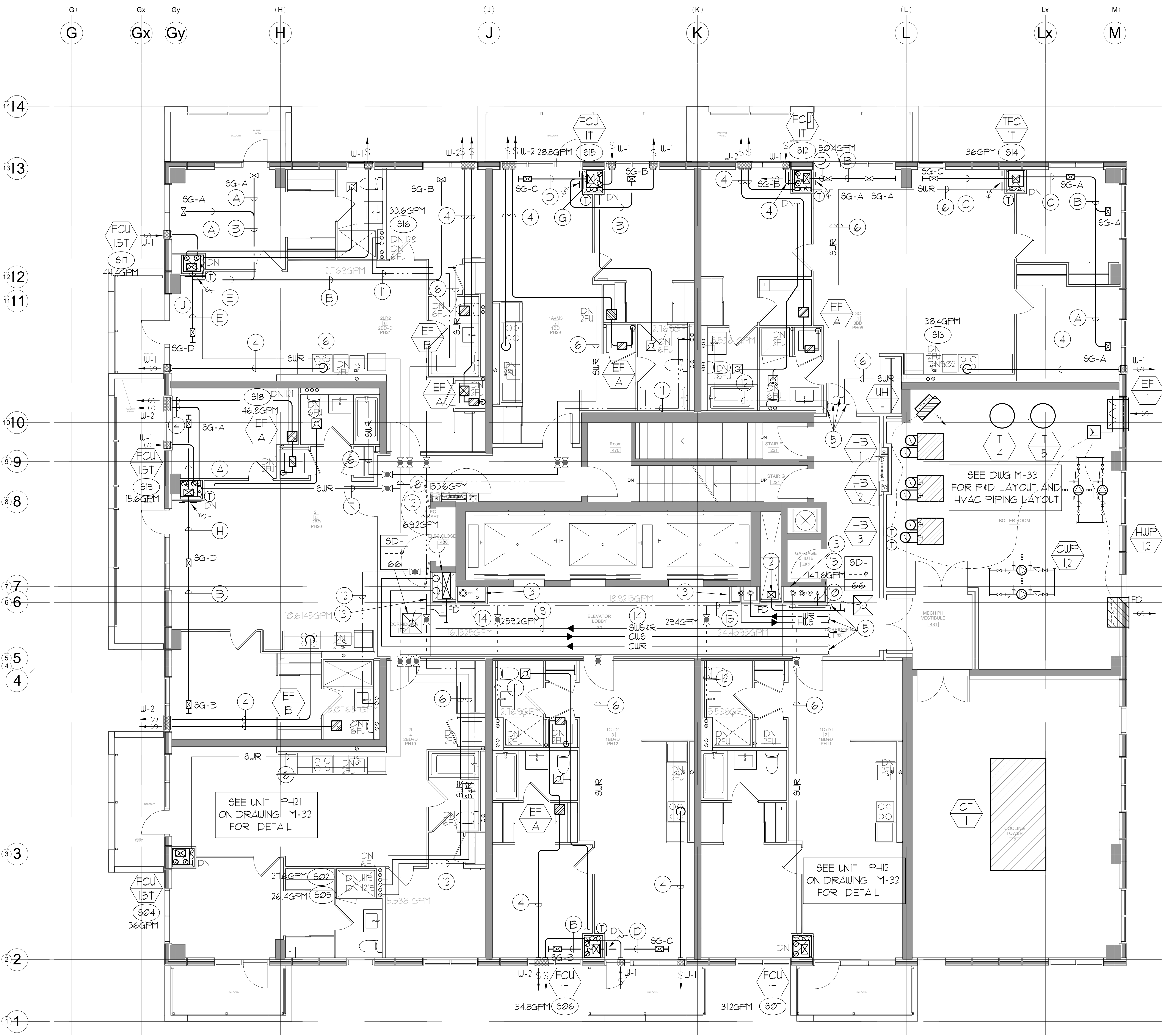
LEGEND MECHANICAL

SYMBOL	DESCRIPTION
[Symbol]	SUPPLY AIR DIFFUSER
[Symbol]	SUPPLY AIR NOZZLE
[Symbol]	LINEAR SUPPLY DIFFUSER
[Symbol]	RETURN AIR GRILLE
[Symbol]	EXHAUST AIR GRILLE
[Symbol]	SUPPLY DUCT UP
[Symbol]	SUPPLY DUCT DOWN
[Symbol]	RETURN DUCT UP
[Symbol]	RETURN DUCT DOWN
[Symbol]	EXHAUST DUCT UP
[Symbol]	EXHAUST DUCT DOWN
[Symbol]	FIRE DAMPER
[Symbol]	BALANCING DAMPER
[Symbol]	HORIZONTAL DAMPER
[Symbol]	MOTORIZED FIRE DAMPER
[Symbol]	BACKDRAFT DAMPER
[Symbol]	SPRINGED BLADE VALVE CONTROL DAMPER
[Symbol]	CALL LOCKING DAMPER
[Symbol]	TUNING VANES
[Symbol]	FLEXIBLE CONNECTION
[Symbol]	ACOUSTIC INSULATION
[Symbol]	TYPE OF EQUIPMENT
[Symbol]	EQUIPMENT IDENTIFICATION
[Symbol]	TYPE OF DIFFUSER OR GRILLE
[Symbol]	SIZE OF DIFFUSER/GRILLE SIZE
[Symbol]	AMPLIFY (DT OR L/S)
[Symbol]	EXHAUST FAN (FAN) (FAN) (FAN)
[Symbol]	IN-SUITE ERY MASTER SWITCH
[Symbol]	FAN SWITCH / IN-SUITE ERY OVERRIDE BUTTON
[Symbol]	CO RISER
[Symbol]	GAS LINE
[Symbol]	GAS TRIM
[Symbol]	GAS DOOR
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	SANITARY ABOVE GRADE
[Symbol]	SANITARY BELOW GRADE
[Symbol]	STONE ABOVE GRADE
[Symbol]	STONE BELOW GRADE
[Symbol]	DOMESTIC COLD WATER
[Symbol]	DOMESTIC HOT WATER
[Symbol]	DOMESTIC HOT WATER REGULATION
[Symbol]	SANITARY VENT
[Symbol]	WATER METER
[Symbol]	FLOOR DRAIN
[Symbol]	PANEL FLOOR DRAIN
[Symbol]	LAIR DRAIN
[Symbol]	ROOF DRAIN
[Symbol]	BLD DRAIN
[Symbol]	AREA DRAIN
[Symbol]	B-LEVEL AREA DRAIN
[Symbol]	GRAB BARN
[Symbol]	SANITARY TRAP
[Symbol]	ELBOW UP
[Symbol]	ELBOW DOWN
[Symbol]	WALL CLEANOUT
[Symbol]	FLOOR CLEANOUT
[Symbol]	HOSE BIBS
[Symbol]	NON-FREEZE HOSE BIBS
[Symbol]	DOOR VALVE
[Symbol]	GATE VALVE
[Symbol]	BALL VALVE
[Symbol]	BUTTERFLY VALVE
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	CHECK VALVE
[Symbol]	CAP
[Symbol]	COMPRESSED AIR OUTLET
[Symbol]	BACKFLOW PREVENTER
[Symbol]	ISOLATED BALANCING VALVE
[Symbol]	TRIPLE PIPES
[Symbol]	CONNECTION
[Symbol]	TEMPERATURE SENSOR
[Symbol]	TEMPERATURE
[Symbol]	2-WAY MODULATING VALVE
[Symbol]	3-WAY MODULATING VALVE
[Symbol]	12" (4" V) THERMOSTAT
[Symbol]	FLOOR ELEVATION ABOVE GRADE
[Symbol]	CU 17' FINISH + 12" PLUG
[Symbol]	FLOOR ELEVATION THIS LEVEL
[Symbol]	ROOFTOP FLOOR TO US (Venti)

REFER TO DWG. M-X FOR ACOUSTIC NOTES

CLEAR FLOOR TO UNDERSLAB = 3210mm  
CLEAR PRODUCT = 2100mm  
COMPLETE DROP CEILING = 510mm

- NOTES:
- SOUTH F/A SHAFT B FROM G/F TO 14/F DUCT SERVING CORRIDOR FROM G/F TO 14/F. SEE VENTILATION RISER DIAGRAM FOR DETAILS.
  - NORTH F/A SERVING FROM G/F TO 14/F. F/A DUCT SERVING CORRIDOR FROM G/F TO 14/F. SEE VENTILATION RISER DIAGRAM FOR DETAILS.
  - PIPE SHAFT - REFER TO PIPE DIAGRAM FOR DETAILS.
  - 150# KITCHEN / DRYER / W/R / FCU INTAKE / FCU EXHAUST DUCT. (TYPICAL UNLESS OTHERWISE NOTED)
  - SEE DWG. M-33 FOR PIPING CONNECTION DETAIL.
  - 50# SUR
  - 32# SUR
  - 100# SUR
  - 150# SUR
  - 75# SUR
  - 19# DHUR
  - 25# DHUR
  - 32# DHUR
  - 38# DHUR
  - 50# DHUR



REVISIONS

NO.	DESCRIPTION	DATE

NOVA  
MECHANICAL  
ENGINEERING

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PROJECT TITLE: ALEXANDRA PARK  
DRAWING TITLE: 14/F MECHANICAL LAYOUT  
DATE: FEB, 13  
SCALE: 1:50  
DRAWING NUMBER: M-32 OF 33