

UNIT	NAME	AREA (SQ. FT.)	* OF W/R	* OF FOLDER	SIZE (T)	FIXTURE UNITS	BR	SQ. FT/IT
1301	1A-MR	525	1	0	1	10	1	525
1305	3A1	870	2	0	2	16	3	435
1308	3AR3	870	2	0	2	16	3	435
1311	1C-D	590	2	0	1	16	1	590
1312	1C-D3	590	2	0	1	16	1	590
1319	2LT	755	2	0	15	16	2	503
1320	2HT	740	2	0	15	16	2	493
1321	2LR	755	2	0	15	16	2	503
1329	1A-MR	500	1	0	1	10	1	500

GRILLE SIZING TABLE

DESIGNATION	SIZE	L/S (BASED ON SPECIFIED PRESSURE)
SG-A	300x1000	41-10
SG-B	300x150	71-93
SG-C	400x150	94-140
SG-D	450x150	141-180
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.

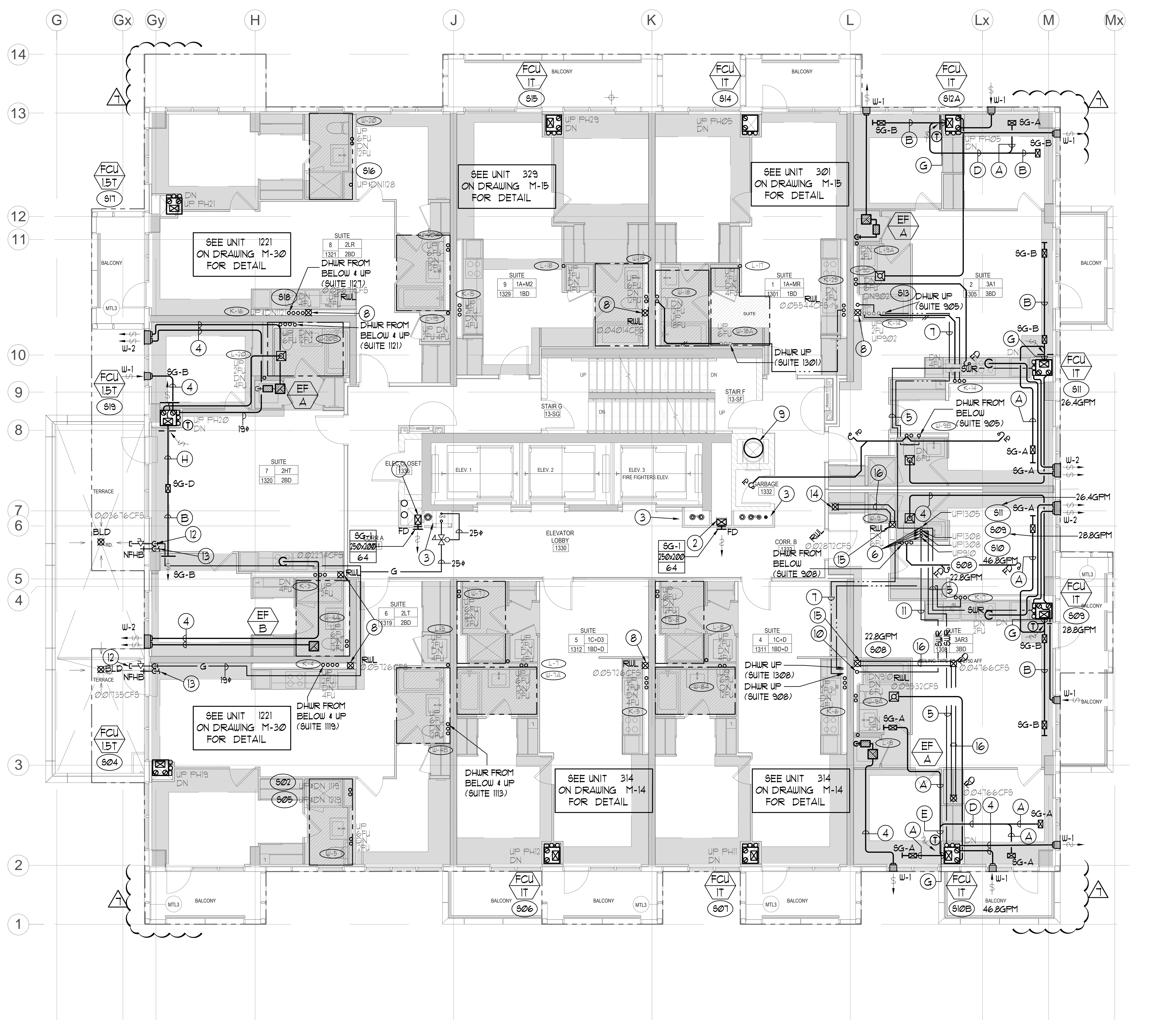
DUCT SIZING TABLE (4.06 m/s, 200 FPM)

DESIGNATION	L/S	DUCT SIZE	DESIGNATION	L/S	DUCT SIZE
A	47	100x150	G	109	350x150
B	71	150x150	H	236	450x150
C	94	200x150	J	283	500x150
D	118	250x150	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, D.O.M, 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/A 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 3.13.1
 - 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 ERV FAN COIL UNIT.
 - DRYER EXHAUST DUCT SHALL BE SMOOTH AND CORROSION-RESISTANT MATERIAL (FLEXIBLE CONNECTION IS NOT ACCEPTABLE).

- ### ACOUSTIC NOTES:
- ALL SYSTEM/DOMESTIC PIPE LOOPS OR OFFSETS WHICH ARE 50MM DIA. AND LARGER SHALL BE ISOLATED USING NEOPRENE-IN-SHEAR HANGERS, AND ADDITIONAL 25 MM THICK RIBBED OR WAFFLED NEOPRENE PADS IN THE SADDLES OF CLEVIS HANGERS.
 - ALL PIPES SMALLER THAN 50MM DIA. SHALL BE ISOLATED WITH 5MM THICK RIBBED OR WAFFLED RUBBER PADS IN HANGER SADDLES.
- CLEAR FLOOR TO UNDERLAB = 3050mm
 ALL UNITS CLEAR PRODUCT = 3000mm
 EXCEPT UNITS: 1305/1308 CLEAR PRODUCT = 2700mm
 UNITS 1305/1308 COMPLETE DROP CEILING = 3500mm

- ### NOTES:
- NORTH F/A SHAFT B FROM G/F TO 14/F DUCT SERVING CORRIDOR FROM 9/F TO 14/F. SEE PRESSURIZATION / VENTILATION RISER DIAGRAM FOR DETAILS.
 - NORTH F/A SHAFT A SERVING FROM G/F TO 14/F. DUCT SERVING CORRIDOR FROM G/F TO 14/F. SEE PRESSURIZATION / 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)
 - 50+ SUR.
 - 50+ SUR UP.
 - 19+ DHUR.
 - 100+ RUL FROM ABOVE AND DOWN.
 - 600+ GARBAGE CHUTE.
 - 30+ SUR FROM BELOW.
 - 30+ SUR UP.
 - 19+ GAS PIPE C/W VALVE AND CAP FOR BBQ.
 - 19+ DCW FOR NFHB TO BE CONNECTED TO SUITE'S MAIN DCW LINE.
 - 100+ RUL FROM ABOVE.
 - 100+ RUL DOWN.
 - 100+ STM 61%.



LEGEND MECHANICAL

SYMBOL	DESCRIPTION
[Symbol]	SUPPLY AIR DIFFUSER
[Symbol]	RETURN AIR DIFFUSER
[Symbol]	LINEAR SUPPLY DIFFUSER
[Symbol]	FAN MOTOR
[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]	MOTORIZED DAMPER
[Symbol]	MOTORIZED FIRE DAMPER
[Symbol]	BACKDRIFT DAMPER
[Symbol]	OPPOSED BLADE VOLUME CONTROL DAMPER
[Symbol]	CO2 SENSING DAMPER
[Symbol]	TURNS VAVES
[Symbol]	FLEXIBLE CONNECTION
[Symbol]	ACOUSTIC INSULATION
[Symbol]	TYPE OF EQUIPMENT
[Symbol]	EQUIPMENT IDENTIFICATION
[Symbol]	TYPE OF DAMPER OR GRILLE
[Symbol]	SHALL BE ON OFFER WORK SIZE
[Symbol]	MINIMUM (CM OR L)
[Symbol]	SEWER / 3 PHASE / INUSE /
[Symbol]	FAN MOTOR / IN-SUITE ERV OVERSIDE EXHAUST
[Symbol]	CO SENSOR
[Symbol]	GAS LINE
[Symbol]	GAS METER
[Symbol]	GAS SOLE
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	BANITARY ABOVE GRADE
[Symbol]	BANITARY BELOW GRADE
[Symbol]	ROOF DRAIN
[Symbol]	AREA DRAIN
[Symbol]	BI-LEVEL AREA DRAIN
[Symbol]	CATCH BASIN
[Symbol]	BANITARY TRAP
[Symbol]	ELBOW UP
[Symbol]	ELBOW DOWN
[Symbol]	WALL CLEANOUT
[Symbol]	FLOOR CLEANOUT
[Symbol]	NON-PRESSURE HOSE BIBBS
[Symbol]	CO-CORE VALVE
[Symbol]	GATE VALVE
[Symbol]	BALL VALVE
[Symbol]	BUTTERFLY VALVE
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	CAP
[Symbol]	COMPRESSED AIR OUTLET
[Symbol]	BACKFLOW PREVENTER
[Symbol]	CIRCUIT BALANCING VALVE
[Symbol]	MULTIPLE PIPES
[Symbol]	DENOTES NO. OF PIPES
[Symbol]	TEMPERATURE SENSOR
[Symbol]	TEMPERATURE
[Symbol]	2-WAY MODULATING VALVE
[Symbol]	3-WAY MODULATING VALVE
[Symbol]	17-1/2" HATTED THERMOWEL
[Symbol]	COU 1/2" BURSHING 4 1/2" PILES
[Symbol]	FLOOR ELEVATION ABOVE LEVEL
[Symbol]	HEADROOM FLOOR TO US LEVEL

NO.	DATE	DESCRIPTION	BY
1		BASED FOR SITE INSTRUCTION #1-6	EP
2		BASED FOR SITE INSTRUCTION #1-6	EP
3		BASED FOR GFI CORRECT	EP
4		BASED FOR SITE INSTRUCTION #1-6	EP
5		BASED FOR SINK	EP
6		RE-BASED FOR PERMIT	EP
7		BASED FOR PERMIT	EP
8		DESCRIPTION	BT

MARK VOID ALL PERMITS DATED PREVIOUS TO FINAL DATE ABOVE

REVISIONS

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB AND REPORT DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS THE PROPERTY OF THE ENGINEER AND MUST BE RETURNED UPON COMPLETION OF THE WORK. DRAWINGS ARE NOT TO BE SCALED.

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DRAWN BY: G.S.
 CHECKED BY: E.P.
 PROJECT NUMBER: 1313
 DRAWING NUMBER: M-31

DATE: FEB 13 2013
 SCALE: 1:50
 OF 43

Drawing name: \\2020000000\General\1313\1313 - Alexandra Park\1313-1113F PLAN - MECHANICAL_LAYOUT.rvt
 Project: 1313 - 1113F PLAN - MECHANICAL_LAYOUT.rvt
 Date: 2013-02-13 10:50:00 AM