

UNIT	NAME	AREA (SQ. FT.)	# OF UR	# OF POWDER	SIZE (T)	FIXTURE UNITS	BR	SQ. FT./T
301	1A-MR	525	1	0	1	10	1	525
302	1D-M	640	1	0	15	10	1	427
303	1L	615	1	0	15	10	1	410
304	1Lb5	615	1	0	15	10	1	410
305	2MR	715	2	0	15	16	2	511
306	1B	490	1	0	1	10	1	490
307	1BR	490	1	0	1	10	1	490
308	2M	715	2	0	15	16	2	511
309	1E	480	1	0	1	10	1	480
310	1C-D4	590	2	0	1	16	1	590
311	1C-D	590	2	0	1	16	1	590
312	1C-D	590	2	0	1	16	1	590
313	1C-D1	590	2	0	1	16	1	590
328	2F-M	705	2	0	15	16	2	410
329	1B-D	580	1	0	1	10	1	580

GRILLE SIZING TABLE		
DESIGNATION	SIZE	L/S (UNLESS OTHERWISE SPECIFIED)
SG-A	300x100	41-70
SG-B	300x150	71-93
SG-C	400x150	94-140
SG-D	450x150	141-188
SG-A	150x150	35
W-1	225x200	210mm(L)
W-2	475x200	INSULATED
W-3	675x200	WALL BOX

VERTICAL FAN COIL SIZE		
DESIGNATION	MODEL	W x D
FCU-IT	450	500x660
FCU-15T	600	500x660
FCU-2T	800	500x660
FCU-2.5T	1000	500x660
FCU-3T	1200	500x660

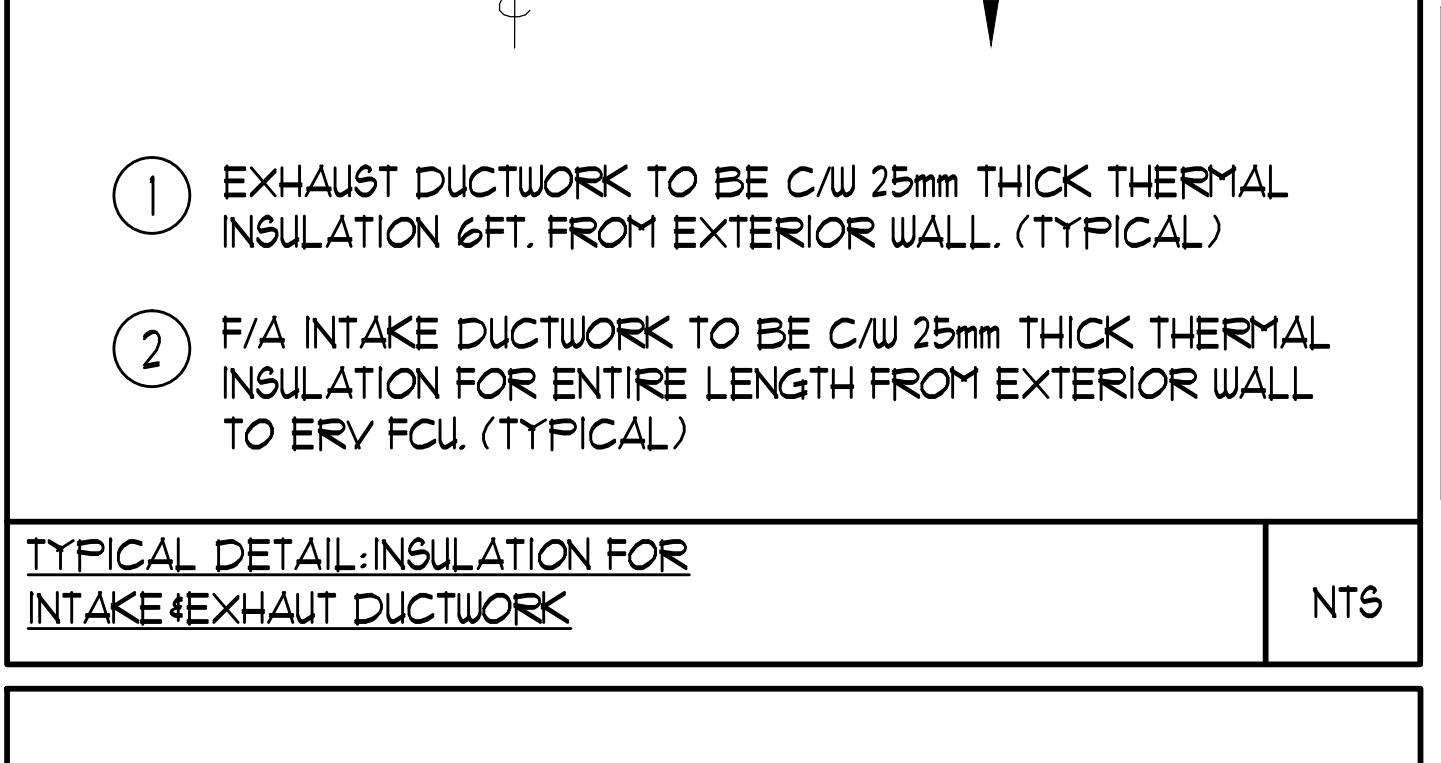
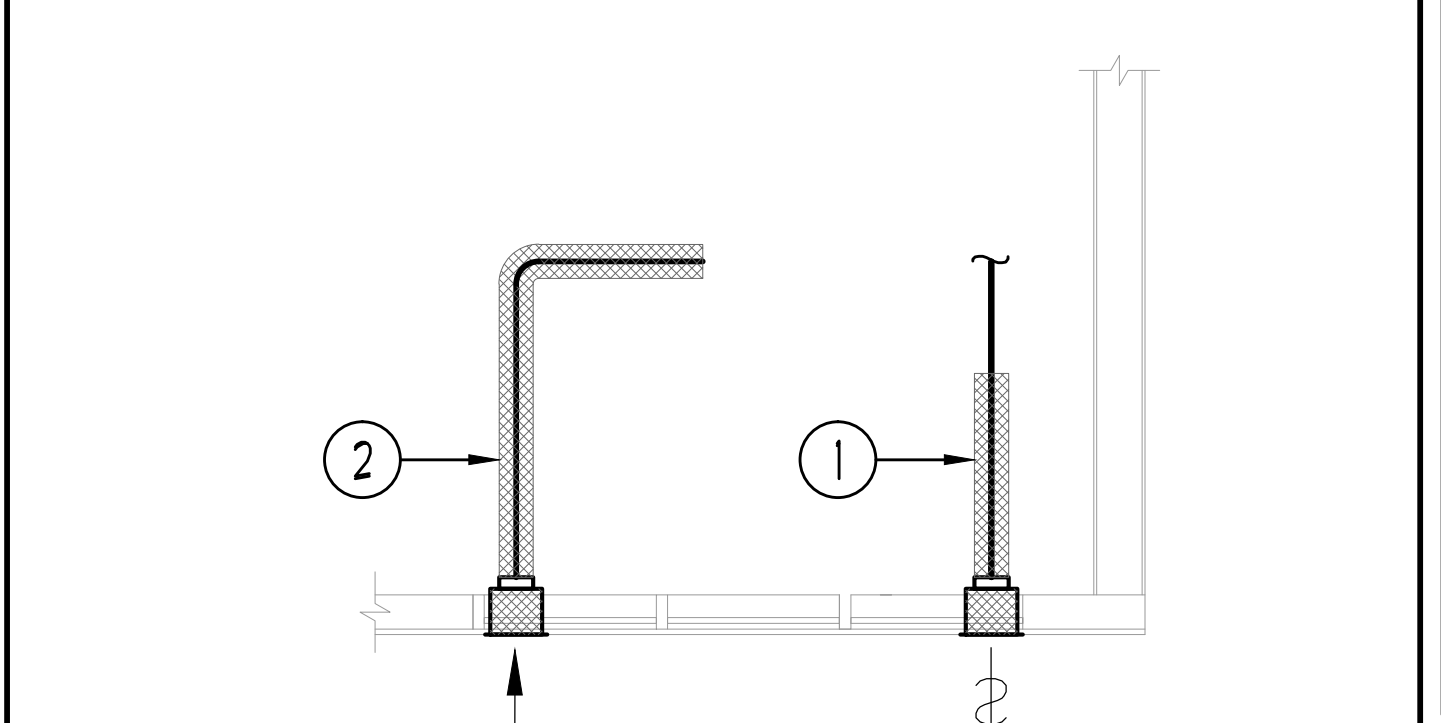
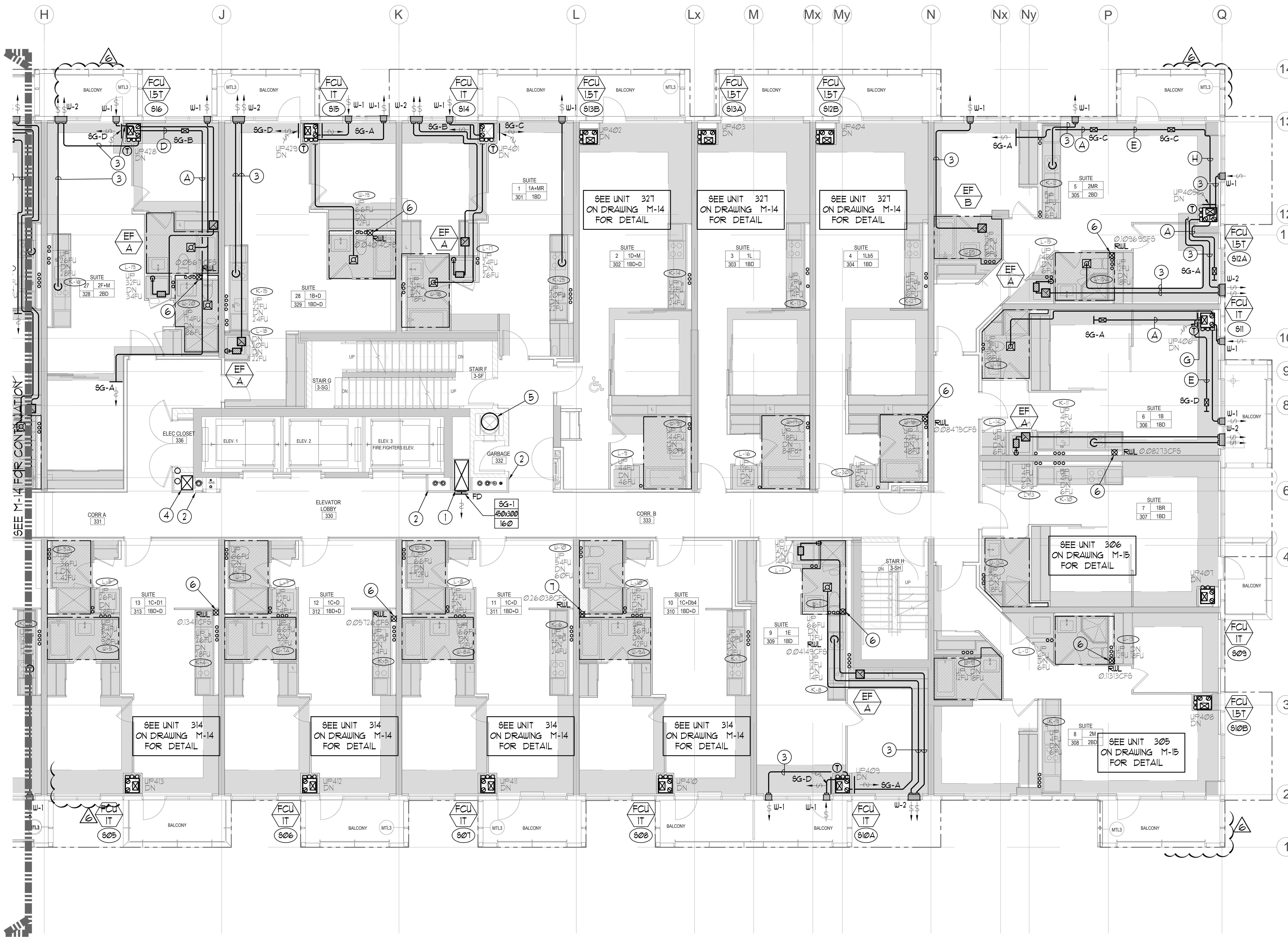
NOTE: A MIN. OF 125mm IS REQUIRED ON THE SIDE OF PIPE RISER.

DUCT SIZING TABLE					
(4.06 m/s, 800 FPM)					
DESIGNATION	L/S	DUCT SIZE	DESIGNATION	L/S	DUCT SIZE
(A)	41	100x150	(G)	109	350x150
(B)	71	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, 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/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 3.13.1
 - THE FIRE HOSE CABINET THAT ARE RECEDED 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 DRAINER
(Symbol)	SUPPLY AIR TRAP
(Symbol)	LINEAR SUPPLY DIFFUSER
(Symbol)	TEMPERATURE
(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)	INSULATED 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)	TYPE OF CONNECTION
(Symbol)	TYPE OF DAMPER OR GRILLE
(Symbol)	SMALL SIZE OR OFFSHORE WORK SIZE
(Symbol)	ANGLE (ON OR LA)
(Symbol)	SEWER (3 PHASE / PHASE)
(Symbol)	FAN SWITCH / FAN-SUITE ERY OVERRIDE BUTTON
(Symbol)	CO SENSOR
(Symbol)	GAS LINE
(Symbol)	GAS METER
(Symbol)	GAS SOCK
(Symbol)	PRESSURE REDUCING VALVE
(Symbol)	SANITARY ABOVE GRADE
(Symbol)	SANITARY BELOW GRADE
(Symbol)	OTHER ABOVE GRADE
(Symbol)	OTHER BELOW GRADE
(Symbol)	DOMESTIC HOT WATER
(Symbol)	DOMESTIC HOT WATER REGULATION
(Symbol)	SANITARY VENT
(Symbol)	WATER PIPES
(Symbol)	COORSE VALVE
(Symbol)	GATE VALVE
(Symbol)	BALL VALVE
(Symbol)	BUTTERFLY VALVE
(Symbol)	PRESSURE REDUCING VALVE
(Symbol)	CHECK VALVE
(Symbol)	CAP
(Symbol)	COMPRESSED AIR OUTLET
(Symbol)	NON-FREEZE HOSE BIBBS
(Symbol)	CIRCUIT BALANCING VALVE
(Symbol)	MULTIPLE PIPES
(Symbol)	DENOTES NO. OF PIPES
(Symbol)	TEMPERATURE SENSOR
(Symbol)	TEMPERATURE
(Symbol)	3-WAY MODULATING VALVE
(Symbol)	3-WAY MODULATING VALVE
(Symbol)	3-WAY MODULATING VALVE
(Symbol)	COU 1/2" BUSHING 4 1/2" PLUGS
(Symbol)	FLOOR ELEVATION ABOVE LEVEL
(Symbol)	HEADROOM FLOOR TO CEILING



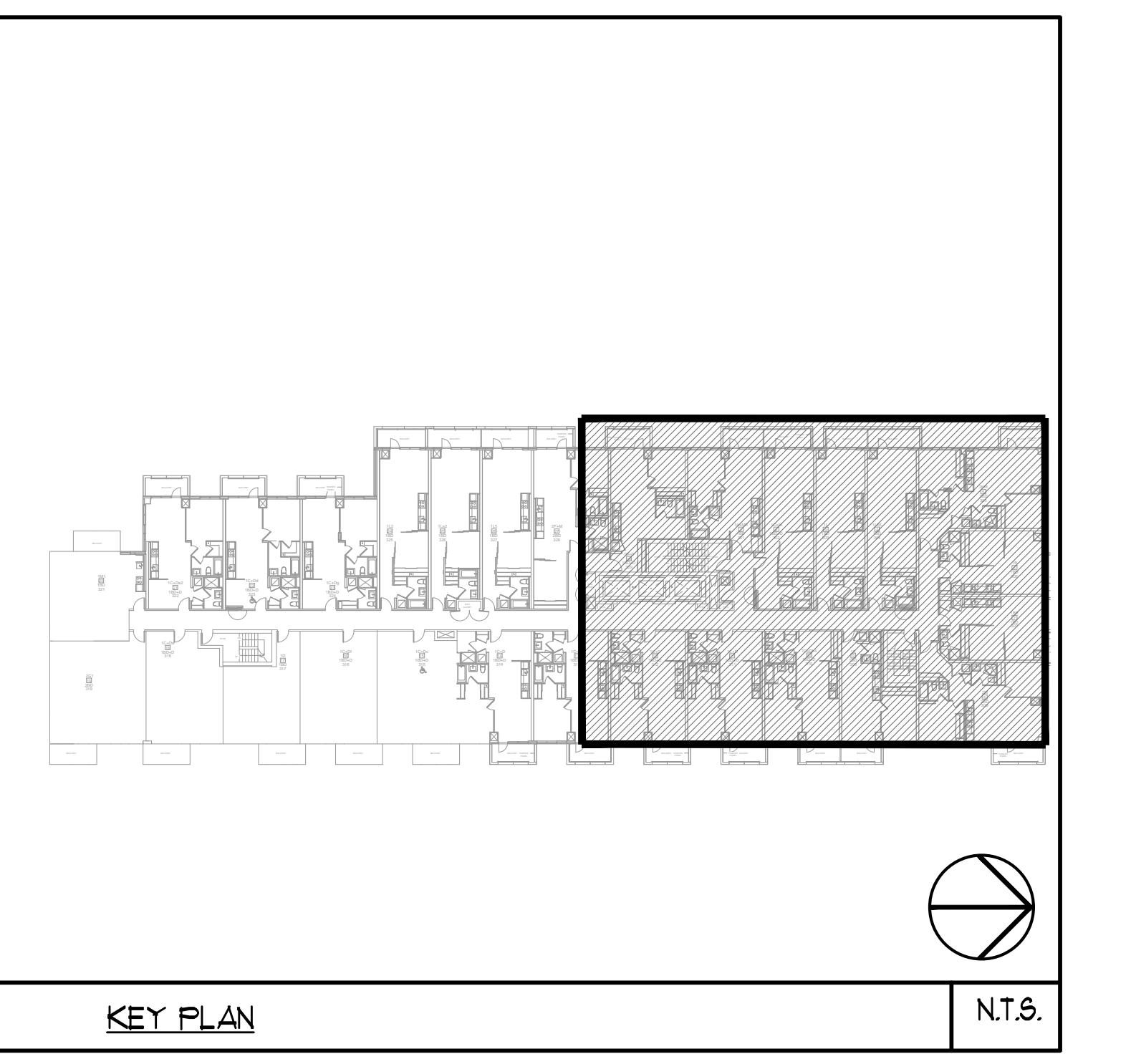
- ACOUSTIC NOTES:
- ALL SYSTEM/DOMESTIC PIPE LOOPS OR OFFSETS WHICH ARE 50MM DIA AND LARGER SHALL BE ISOLATED USING NEOPRENE-N-SHEAR HANGERS, AND ADDITIONAL 25 MM THICK RIBBED OR WAFFLED NEOPRENE PADS IN THE SADDLES OF CLEVIS HANGERS.
 - ALL PIPES SMALLER THAN 50MM DIA. SHALL BE ISOLATED WITH 5MM THICK RIBBED OR WAFFLED RUBBER PADS IN HANGER SADDLES.

- NOTES:
- NORTH F/A SHAFT B 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 RISER DETAIL ON THIS DRAWING FOR DETAILS.
 - 150mm KITCHEN / DRYER / W/R / FCU INTAKE / FCU EXHAUST DUCT. (TYPICAL UNLESS OTHERWISE NOTED)
 - NORTH F/A SHAFT A FROM G/F TO 14/F. DUCT SERVING CORRIDOR FROM 9/F TO 14/F. SEE PRESSURIZATION / VENTILATION RISER DIAGRAM FOR DETAILS.
 - 600mm GARBAGE CHUTE.
 - 100mm RULL FROM ABOVE AND DOWN.
 - 150mm RULL FROM ABOVE AND DOWN.

REVISIONS

NO.	DESCRIPTION	DATE
1	BASED FOR SITE INSPECTION #1	EP
2	BASED FOR GFI CORRECT	EP
3	BASED FOR SITE INSPECTION #1	EP
4	BASED FOR REVISION	EP
5	RE-BASED FOR PERMIT	EP
6	BASED FOR PERMIT	EP
7	BASED FOR PERMIT	EP

MARK VOID ALL PRINTS DATED PREVIOUS TO FINAL DATE ABOVE



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PROJECT TITLE: 3/F NORTH MECHANICAL LAYOUT

DATE: FEB 13 2013

SCALE: 1:50

PROJECT NUMBER: M-15

DRAWING NUMBER: 05