

MECHANICAL LEGEND AND SYMBOLS

PLUMBING & DRAINAGE	FIRE PROTECTION	MECHANICAL PIPING	VALVES, FITTINGS AND SPECIALTIES	VALVES, FITTINGS AND SPECIALTIES
<p>DCW ——— DOMESTIC COLD WATER</p> <p>DHW ——— DOMESTIC HOT WATER</p> <p>DHWR ——— DOMESTIC HOT WATER RECIRCULATION</p> <p>NPW ——— NON-POTABLE WATER</p> <p>TW ——— TEMPERED HOT WATER</p> <p>IW ——— IRRIGATION WATER</p> <p>BRIN ——— BRINE WATER</p> <p>CHEM ——— CHEMICAL WATER</p> <p>SW ——— SOFT WATER</p> <p>SAN ——— SANITARY DRAIN - ABOVE GRADE</p> <p>SAN ——— SANITARY DRAIN - BELOW GRADE</p> <p>SAN-P ——— PUMPED SANITARY DRAIN</p> <p>STM ——— STORM DRAIN - ABOVE GRADE</p> <p>STM ——— STORM DRAIN - BELOW GRADE</p> <p>STM-P ——— PUMPED STORM DRAIN</p> <p>PW ——— PROCESS DRAIN - ABOVE GRADE</p> <p>PW ——— PROCESS DRAIN - BELOW GRADE</p> <p>PW-P ——— PUMPED PROCESS DRAIN</p> <p>WP ——— WEEPER DRAIN (SUB-DRAIN)</p> <p>V ——— VENT</p> <p>COND ——— CONDENSATE DRAIN</p> <p>DL ——— OVERFLOW DRAIN</p> <p>FD-A ——— FLOOR DRAIN (LETTER INDICATES TYPE SEE SPECIFICATION)</p> <p>RD ——— ROOF DRAIN (CONVENTIONAL)</p> <p>RD-1 ——— CONTROL FLOW ROOF DRAIN (NUMBER INDICATES NOTCHES)</p> <p>Y ——— FUNNEL DRAIN - ELEVATION</p> <p>HB ——— HOSE BIBB</p> <p>NFWH ——— HYDRANT - NON-FREEZE</p> <p>SH ——— SHOWER HEAD</p> <p>—% ——— PITCH-INDICATES DOWN SLOPE</p> <p>— CO ——— CLEANOUT - ABOVE GRADE</p> <p>— CO ——— CLEANOUT - ABOVE GRADE</p> <p>— CO ——— CLEANOUT - BELOW GRADE</p> <p>— CO ——— CLEANOUT - BELOW GRADE</p> <p>RT ——— RUNNING TRAP</p> <p>BFP ——— BACKFLOW PREVENTOR</p> <p>— ——— BACK WATER VALVE (FOR SEWAGE)</p> <p>— ——— BACKFLOW PREVENTER (RP TYPE)</p> <p>— ——— BACKFLOW PREVENTER (DCVA)</p> <p>WC ——— WATER CLOSET (WALL HUNG, FLUSH VALVE)</p> <p>WC ——— WATER CLOSET (FLOOR MOUNTED, FLUSH TANK)</p> <p>UR ——— URINAL (WALL HUNG, FLUSH VALVE)</p> <p>LV ——— LAVATORY (WALL HUNG)</p> <p>LV ——— LAVATORY (COUNTER TOP)</p> <p>SS ——— SERVICE SINK</p> <p>GF ——— GROUP WASHFOUNTAIN</p> <p>M2 ——— MOP SINK / JANITOR SINK</p> <p>DFC-1 ——— DRINKING FOUNTAIN COOLER (NUMBER INDICATES TYPE - SEE SPECS.)</p> <p>ESS ——— SAFETY SHOWER & EYE WASH STATION</p> <p>EW ——— EYE WASH STATION</p> <p>VM ——— VENDING MACHINE</p> <p>CB1 ——— 600 X 600 X 700 (H) CATCH BASIN</p> <p>CB2 ——— IN LINE C.B.</p> <p>TD ——— TRENCH DRAIN WITH CONTINUOUS SLOPE</p>	<p>F ——— FIRE MAINS</p> <p>STP ——— FIRE STANDPIPE</p> <p>SP ——— SPRINKLER PIPE</p> <p>DSTP ——— DRY FIRE STANDPIPE</p> <p>DSP ——— DRY SPRINKLER PIPE</p> <p>PS ——— PRE-ACTION PIPE</p> <p>DELUGE ——— DELUGE PIPE</p> <p>CAG ——— CLEAN AGENT GAS</p> <p>⊗ ——— PENDENT SPRINKLER HEAD</p> <p>○ ——— UPRIGHT SPRINKLER HEAD</p> <p>● ——— CONCEALED SPRINKLER HEAD</p> <p>▽ ——— SIDEWALL SPRINKLER HEAD</p> <p>FE ——— FIRE EXTINGUISHER</p> <p>FE ——— FIRE EXTINGUISHER WITH CABINET</p> <p>FHC ——— FIRE HOSE CABINET</p> <p>FHVC ——— FIRE HOSE VALVE CABINET</p> <p>FHV ——— FIRE HOSE VALVE</p> <p>FHR ——— FIRE HOSE REEL</p> <p>FHH ——— FIRE HOSE RACK / FIRE HOSE HANGER</p> <p>——— SURFACE MOUNTED</p> <p>——— SEMI-RECESSED</p> <p>——— RECESSED</p> <p>WH ——— WALL HYDRANT</p> <p>RHH ——— ROOF HOSE HOUSE</p> <p>FH ——— FIRE HYDRANT</p> <p>— ——— FIRE DEPARTMENT CONNECTION</p> <p>S ——— SUPERVISED VALVE</p> <p>FS ——— FLOW SWITCH</p> <p>W ——— WET ALARM VALVE</p> <p>FS ——— FS = FLOW ALARM SWITCH</p> <p>PS ——— PS = LOW PRESSURE SWITCH</p> <p>D ——— DRY ALARM VALVE</p> <p>FS ——— FS = FLOW ALARM SWITCH</p> <p>PS ——— PS = LOW PRESSURE SWITCH</p> <p>PA ——— PREACTION SPRINKLER ALARM CHECK VALVE</p> <p>DL ——— DELUGE SPRINKLER ALARM CHECK VALVE</p> <p>— ——— ALARM GONG</p> <p>— ——— HOSE HEADER 6 x 62Ø c/w HOSE CAP</p> <p>— ——— POST INDICATOR VALVE</p> <p>— ——— O.S. & Y. VALVE</p> <p>— ——— O.S. & Y. VALVE-IN RISER</p> <p>— ——— INSPECTORS TEST CONNECTION</p>	<p>X-YYY ——— "X" PIPE SIZE NPS</p> <p>Y ——— "Y" PIPE SERVICE</p> <p>HWS ——— HEATING WATER SUPPLY</p> <p>HWR ——— HEATING WATER RETURN</p> <p>HCS ——— HEATING / CHILLED WATER SUPPLY</p> <p>HCR ——— HEATING / CHILLED WATER RETURN</p> <p>GLY-HWS ——— GLYCOL HEATING WATER SUPPLY</p> <p>GLY-HWR ——— GLYCOL HEATING WATER RETURN</p> <p>CHWS ——— CHILLED WATER SUPPLY</p> <p>CHWR ——— CHILLED WATER RETURN</p> <p>PCHWS ——— PROCESS CHILLED WATER SUPPLY</p> <p>PCHWR ——— PROCESS CHILLED WATER RETURN</p> <p>CTWS ——— COOLING WATER SUPPLY</p> <p>CTWR ——— COOLING WATER RETURN</p> <p>HPS ——— HIGH PRESSURE STEAM</p> <p>LPS ——— HIGH PRESSURE STEAM</p> <p>S.COND ——— STEAM CONDENSATE</p> <p>S.COND-P ——— PUMPED STEAM CONDENSATE</p> <p>RL ——— REFRIGERANT LIQUID</p> <p>RG ——— REFRIGERANT GAS</p> <p>FUEL ——— FUEL PIPE</p> <p>FOS ——— FUEL OIL SUPPLY</p> <p>FOR ——— FUEL OIL RETURN</p> <p>FOV ——— FUEL OIL VENT</p> <p>H ——— HUMIDIFIER LINE</p> <p>ENGINE OIL ——— ENGINE OIL</p> <p>SOL 'B' ——— SOLUBLE 'B' OIL</p> <p>HONE ——— HONE OIL</p> <p>GASO ——— GASOLINE</p> <p>MCS(LP) ——— MACHINE COOLANT SUPPLY (LOW PRESSURE)</p> <p>MCS(HP) ——— MACHINE COOLANT SUPPLY (HIGH PRESSURE)</p> <p>MCR ——— MACHINE COOLANT RETURN</p> <p>G ——— NATURAL GAS</p> <p>PR ——— PROPANE</p> <p>A ——— COMPRESSED AIR</p> <p>VACU ——— VACUUM PIPE</p> <p>MDG ——— MEDICAL GAS PIPE</p> <p>O2 ——— OXYGEN</p> <p>NO ——— NITROUS OXIDE</p> <p>N ——— NITROGEN</p> <p>CO2 ——— CARBON DIOXIDE</p> <p>CO ——— CARBON MONOXIDE</p> <p>He ——— HELIUM</p> <p>H2 ——— HYDROGEN</p> <p>AR ——— ARGON</p> <p>— ——— DIRECTION OF FLOW</p> <p>— ——— NEW PIPING / DUCTWORK</p> <p>— ——— EXISTING PIPING / DUCTWORK TO REMAIN</p> <p>— ——— EXISTING PIPING / DUCTWORK TO BE REMOVED</p>	<p>— ——— GATE VALVE</p> <p>— ——— GLOBE VALVE</p> <p>— ——— CHECK VALVE</p> <p>— ——— PLUG VALVE</p> <p>— ——— BUTTERFLY VALVE</p> <p>— ——— BALL VALVE</p> <p>— ——— DIAPHRAM VALVE</p> <p>— ——— HOSE END VALVE</p> <p>— ——— BOILER BLOWDOWN VALVE</p> <p>— ——— FIRE STOP VALVE</p> <p>— ——— VALVE IN RISER</p> <p>— ——— PRESSURE REDUCING VALVE</p> <p>— ——— PRESSURE RELIEF VALVE - ELEVATION</p> <p>— ——— PRESSURE RELIEF VALVE</p> <p>— ——— PRESSURE RELIEF VALVE - PLAN</p> <p>— ——— FLOAT ACTIVATED SIGNAL TRANSMITTER</p> <p>— ——— FLOAT OPERATED VALVE</p> <p>— ——— BACK PRESSURE VALVE</p> <p>— ——— DIFFERENTIAL BACK PRESSURE VALVE</p> <p>— ——— NEEDLE VALVE</p> <p>— ——— BALANCING VALVE</p> <p>— ——— FLOW METERING FITTING (UNDER 75mm)</p> <p>— ——— FLOW METERING FITTING (75mm AND LARGER)</p> <p>— ——— CONTROL VALVE - ELECTRIC</p> <p>— ——— CONTROL VALVE - PNEUMATIC</p> <p>— ——— THREE-WAY CONTROL VALVE - ELECTRIC</p> <p>— ——— THREE-WAY CONTROL VALVE - PNEUMATIC</p> <p>— ——— MOTORIZED VALVE</p> <p>— ——— PUMP CONTROL VALVE</p> <p>— ——— GLOBE CONTROL VALVE - PNEUMATIC</p> <p>— ——— BUTTERFLY CONTROL VALVE - PNEUMATIC</p> <p>— ——— PNEUMATIC ACTUATOR</p> <p>— ——— ELECTRIC ACTUATOR</p> <p>— ——— ELECTRIC MOTOR</p> <p>— ——— ELECTRIC SOLENOID</p> <p>— ——— HEAT TRACING</p>	<p>— ——— ELBOW TURNED TOWARD</p> <p>— ——— ELBOW TURNED AWAY</p> <p>— ——— TEE TURNED AWAY</p> <p>— ——— TEE TURNED TOWARD</p> <p>▷ ——— CONCENTRIC REDUCER</p> <p>◁ ——— ECCENTRIC REDUCER</p> <p>— ——— PIPE CAP THREADED</p> <p>— ——— PIPE CAP WELDED</p> <p>— ——— PLUG</p> <p>— ——— FLEXIBLE CONNECTION</p> <p>— ——— UNION</p> <p>— ——— FLANGE CONNECTION</p> <p>— ——— BLIND FLANGE</p> <p>— ——— ORIFICE FLANGES</p> <p>— ——— QUICK CONNECTION FITTING</p> <p>— ——— PIPE ANCHOR</p> <p>— ——— PIPE LINE GUIDE</p> <p>— ——— PIPE LINE TRAPEZE HANGER</p> <p>— ——— PIPE LINE EXPANSION JOINT</p> <p>— ——— EXPANSION LOOP</p> <p>— ——— Y-TYPE STRAINER</p> <p>— ——— BASKET TYPE STRAINER</p> <p>— ——— DUPLEX BASKET TYPE STRAINER</p> <p>— ——— IN-LINE SIGHT GLASS</p> <p>— ——— GAUGE GLASS</p> <p>— ——— DRIP PAN ELBOW</p> <p>— ——— THERMOMETER-STEM TYPE</p> <p>PG ——— PRESSURE GAUGE</p> <p>M ——— METER</p> <p>WM ——— WATER METER</p> <p>GM ——— N.GAS METER</p> <p>CAM ——— COMPRESSED AIR METER</p> <p>— ——— PUMP</p> <p>— ——— STEAM TRAP - FLOAT & THERMOSTATIC</p> <p>— ——— STEAM TRAP - INVERTED BUCKET</p> <p>— ——— STEAM TRAP - THERMOSTATIC</p> <p>— ——— STEAM TRAP - THERMODYNAMIC</p> <p>— ——— AUTOMATIC DRAIN TRAP - COMPRESSED AIR</p> <p>— ——— AIR ELIMINATOR</p> <p>— ——— WATER HAMMER ARRESTOR</p> <p>— ——— HYDRAULIC SEPERATOR</p> <p>— ——— AUTOMATIC AIR VENT</p>

NOTE: THIS LEGEND IS THE STANDARD FORM SHEET. NOT ALL LEGEND ITEMS MAY BE ASSOCIATED WITH THIS PROJECT.

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SHEET TITLE
MECHANICAL LEGEND AND SYMBOLS 1 OF 2

SHEET NUMBER
M001

ISSUE
D

MECHANICAL LEGEND AND SYMBOLS

HEATING, VENTILATION AND AIR CONDITIONING

DUCTWORK (RECTANGULAR)
DUCTWORK (ROUND)

MOTORIZED DAMPER
OPPOSED BLADE DAMPER
FIRE DAMPER
VOLUME DAMPER/ BALANCING DAMPER
VOLUME EXTRACTOR
TURNING VANES
TAP-IN FITTING
WYE-TEE
ROUND DUCT TURNING TOWARD
SUPPLY DUCT TURNING TOWARD
SUPPLY DUCT TURNING AWAY
ACUSTIC DUCT INSULATION INTERNAL - SINGLE LINE
FLEXIBLE DUCTWORK
VAV BOX WITH ATTENUATOR
VAV BOX
SUPPLY AIR DIFFUSER (SEE SPECIFICATION FOR TYPE)
DOOR GRILLE
FAN
HUMIDIFIER
AIR FLOW MEASURING STATION

DUCTWORK (ROUND)
ACUSTIC DUCT INSULATION - INTERNAL
PARALLEL BLADE DAMPER
SMOKE DAMPER
COMBINATION FIRE & SMOKE DAMPER
REDUCER
ELBOW
CONICAL TEE FITTING
SPLITTER DAMPER
ROUND DUCT TURNING AWAY
RETURN DUCT TURNING TOWARD
RETURN DUCT TURNING AWAY
SILENCER
FLEXIBLE CONNECTION
VAV BOX WITH RHC & ATTENUATOR
CONSTANT VOLUME BOX
RETURN AIR GRILLE (SEE SPECIFICATION FOR TYPE)
COOLING COIL
PREHEAT COIL
REHEAT COIL

AIR DISTRIBUTION BOXES
AIR DISTRIBUTION BOX (AIR QUANTITIES AS INDICATED)
AIR DISTRIBUTION BOX (AIR QUANTITIES EQUAL IN ALL DIRECTIONS)

REGISTERS AND GRILLES
TYPE (SEE SPEC.) SIZE L/s TOTAL
B-400x500-450

DIFFUSERS
TYPE (SEE SPEC.) THROAT SIZE L/s TOTAL
A-150-450

LINEAR DIFFUSER
LENGTH No OF SLOTS A=1/2" SLOT B=3/4" SLOT PATTERN 1=1 WAY 2=2 WAY D=DOWNBLAST AIR QUANTITY [L/s] PLENUM SIZE
3000-3A-D-250-200X150

FINNED TUBE LINEAR CONNECTORS
TYPE FINNED LENGTH ENCLOSURE HEIGHT KW
A-900-600-0.9

EQUIPMENT IDENTIFICATION

ITEM UNIT COUNTER
SEE ABBREVIATION FOR DETAILS XX-XXX

AC AIR CONDITIONING UNIT
EF EXHAUST FAN
ACCU AIR COOLED CONDENSING UNIT
P PUMP
AHU AIR HANDLING UNIT
SP SEWAGE PUMP

ABBREVIATIONS

AC	- AIR CONDITIONING UNIT	FSD	- FIRE SMOKE DAMPER
ACCU	- AIR COOLED CONDENSING UNITS	FTS	- FLOAT SWITCH
AD	- COMPRESSED AIR DRYER	F.U.	- FIXTURE UNITS
A.F.F.	- ABOVE FINISHED FLOOR	GEN E/A	- GENERAL EXHAUST AIR
AHU	- AIR HANDLING UNIT	GI	- GREASE INTERCEPTOR
AHS	- COMPRESSED AIR HOSE STATION	GM	- GAS METER
AR	- AIR RECEIVER	GV	- GRAVITY VENT
ARS	- COMPRESSED AIR REGULATING STATION	H	- HUMIDIFIER
B	- BOILER	HB	- HOSE BIB
BS	- BOILER (STEAM)	HC	- HEATING COIL
BW	- BOILER (HOT WATER)	HD	- HUB DRAIN
BAS	- BUILDING AUTOMATION SYSTEM	HRV	- HEAT RECOVERY VENTILATOR
BB	- BASEBOARD HEATER	HT	- DOMESTIC HOT WATER HEATER
BFP	- BACKFLOW PREVENTER	HTT	- HEAT TRACING
BMS	- BUILDING MANAGEMENT SYSTEM	HST	- HOISTING EQUIPMENT
B.O.D.EL	- BOTTOM OF DUCT ELEVATION	HW	- HOT WATER (DOMESTIC)
B.O.P.EL	- BOTTOM OF PIPE ELEVATION	HWR	- HOT WATER RETURN
C	- COMPRESSOR	HWT	- HOT WATER TANK
CC	- COOLING COIL	HX	- HEAT EXCHANGER
CF	- DESTRATIFICATION FAN	IH	- INFRARED HEATER
CFRD	- CONTROLLED FLOW ROOF DRAIN	INV. EL.	- INVERT ELEVATION
CH	- CHILLER	JB	- JUNCTION BOX
CL EL	- CENTER LINE OF PIPE ELEVATION	JS	- JANITOR SINK
CO	- CLEAN OUT	KS	- KITCHEN SINK
CP	- CONTROL PANEL	L	- LOUVRE
CR	- CRANE	LAT	- LEAVING AIR TEMPERATURE
CRAC	- COMPUTER ROOM AC UNIT	LAV	- LAVATORY
CT	- COOLING TOWER	LS	- LEVEL SWITCH
CTE	- CONNECT TO EXISTING	LWT	- LEAVING WATER TEMPERATURE
CU	- CONDENSING UNIT	M	- METER
CUH	- CABINET UNIT HEATER	MD	- MOTORIZED DAMPER
CV	- CONTROL VALVE	MDA	- MOTORIZED DAMPER ACTUATOR
CW	- COLD WATER (DOMESTIC)	MS	- MOISTURE SEPARATOR
C/W	- COMPLETE WITH	MUA	- MAKE-UP AIR UNIT
DH	- DOOR HEATER	N.C.	- NORMALLY CLOSED
DTH	- DUCT HEATER	NFGH	- NON-FREEZE GROUND HYDRANT
DP	- DIAPHRAGM PUMP	NFHB	- NON-FREEZE HOSE BIBB
DSN	- DOWNSPOUT NOZZLE	NFRH	- NON-FREEZE ROOF HYDRANT
E/A	- EXHAUST AIR	NFWH	- NON-FREEZE WALL HYDRANT
EAO	- EXHAUST AIR OUTLET	N.I.C.	- NOT IN CONTRACT
EAT	- ENTERING AIR TEMPERATURE	N.O.	- NORMALLY OPENED
EEB	- ELECTRIC BASEBOARD HEATER	O/A	- OUTSIDE AIR
ECU	- ECOLOGY UNIT	O.B.B.	- OPPOSED BLADE BALANCING
EDTH	- ELECTRIC DUCT HEATER	O.E.D.	- OPEN ENDED DUCT
EF	- EXHAUST FAN	OF	- OVERFILL ALARM
EJ	- EXPANSION JOINT	OI	- OIL INTERCEPTOR
EPP	- EXCESS PRESSURE PUMP	P	- PUMP
ESP	- EXTERNAL STATIC PRESSURE	PBS	- PUSH BUTTON STATION
ESS	- EMERGENCY SHOWER & EYE WASH STATION	PHC	- PREHEAT COIL
ET	- EXPANSION TANK	PP	- PISTON PUMP
EUH	- ELECTRIC UNIT HEATER	PRV	- PRESSURE REDUCING VALVE /PRESSURE REGULATING VALVE
EW	- EMERGENCY EYEWASH STATION	PW	- POWER WASHER
EWT	- ENTERING WATER TEMPERATURE	R/A	- RETURN AIR
FA	- FRESH AIR	RC	- REFRIGERATION COMPRESSOR OR CHILLER
FC	- FAN COIL UNIT	RF	- RETURN AIR FAN
FD	- FLOOR DRAIN	RD	- ROOF DRAIN
FFD	- FUNNEL FLOOR DRAIN	RHC	- REHEAT COIL
FFH	- FORCED AIR HEATER / FORCED FLOW HEATER	RP	- RADIANT PANEL
F.F.L.	- FINISHED FLOOR LEVEL	RTU	- ROOFTOP UNIT
FE	- FIRE EXTINGUISHER	RV	- RELIEF VALVE
FEC	- FIRE EXTINGUISHER CABINET	RWL	- RAINWATER LEADER
FHC	- FIRE HOSE CABINET	S	- SILENCER
FHR	- FIRE HOSE REEL	S/A	- SUPPLY AIR
FHV	- FIRE HOSE VALVE	SAN E/A	- SANITARY EXHAUST AIR
FHVC	- FIRE HOSE VALVE CABINET	SDM	- SMOKE DAMPER
FLX	- FLEX. CONNECTOR	SDT	- SMOKE DETECTOR
FM	- FLUID METER	SF	- SUPPLY FAN
F.M.S.	- FLOW MEASURING STATION	SP	- SUMP PUMP / SEWAGE PUMP
FP	- FUEL PUMP	SPW	- STEAM POWER WASHER
FS	- FLOW SWITCH	STP	- STANDPIPE

CONTROLS POINT FUNCTION ABBREVIATION

FIRST LETTER	SECOND LETTER	THIRD LETTER	FOURTH LETTER
A	AIR	A	H-O-A STATUS
C	COMPRESSED GAD	C	CLOSE
D	DAMPER	E	VOLTAGE
E	EQUIPMENT	F	FIRE (ALARM) SMOKE
G	NATURAL GAS	FL	FLOW
L	LIQUID	H	HUMIDITY
S	STEAM	I	CURRENT
V	VALVE	L	LEVEL
M	MISCELLANEOUS	O	OPEN
		OL	OVERLOAD
		OR	OVERRIDE
		P	PRESSURE
		SS	START / STOP
		ST	STATUS
		T	TEMPERATURE
		V	VELOCITY / SPEED
		WT	WINDING TEMPERATURE
		X	POSITION
		Y	SERIAL COMM'S

BMS POINT
NOTE: IF AN INSTRUMENT IS NOT DESIGNATED AS A TRANSMITTER "X" OR AN INDICATING TRANSMITTER "Z", IT IS A SENSOR OR SWITCH, DEPENDING ON POINT TYPE.

ABBREVIATIONS

SVC	- SPRINKLER VALVE CABINET
T	- TANK
TAD	- TRANSFER AIR DUCT
TD	- TRENCH DRAIN
TIH	- TANK IMMERSION HEATER
T.O.D.	- TOP OF DUCT
T.O.P.	- TOP OF PIPE
TP	- TRAP PRIMER
TSP	- TRAP SEAL PRIMER ASSEMBLY
TU	- TERMINAL UNIT
TUF	- TERMINAL UNIT - FAN
TW	- TRACER WIRE
TWB	- TRACER WIRE JUNCTION BOX
U.C.	- UNDER CUT
UH	- UNIT HEATER
U/S	- UNDER SIDE
V	- VENT
VAV	- VARIABLE AIR VOLUME BOX
VFD	- VARIABLE FREQUENCY DRIVE
VH	- VENTILATOR HOOD
VP	- VACUUM PUMP
VU	- VENTILATING UNIT
WF	- WALL FIN RADIATION
WJB	- WALL JIB
WM	- WATER METER
WGD	- WASTE GLYCOL DRUM
WOD	- WASTE OIL DRUM

CONTROLS - GENERAL SYMBOLS

DP	DIFFERENTIAL PRESSURE SENSOR
DEW	DEW POINT SENSOR & TRANSMITTER
T	THERMOSTAT
H	HUMIDISTAT
LS	LEVEL SWITCH
T	TEMPERATURE SENSOR & TRANSMITTER
P	PRESSURE SENSOR / TRANSMITTER / SWITCH
H	HUMIDITY SENSOR & TRANSMITTER
F	FLOW SENSOR & TRANSMITTER
L	LEVEL SENSOR & TRANSMITTER
A XX	ANALYTICAL SENSOR OR TRANSMITTER XX: CO2 = CARBONE DIOXIDE CO = CARBON MONOXIDE NOx = NITROUS OXIDE O2 = OXYGEN H2 = HYDROGEN AM = AMMONIA PH = PH C = CONDUCTIVITY
VOC	VOLATILE ORGANIC COMPOUND SENSOR & TRANSMITTER

POINT FUNCTION ABBREVIATION POINT TYPE
AI: ANALOG INPUT
AO: ANALOG OUTPUT
DI: DIGITAL INPUT
DO: DIGITAL OUTPUT
HW: HARDWIRED
SC: SERIAL COMMUNICATION

e.g. **DO-ESS**
START / STOP EQUIPMENT
DIGITAL OUTPUT

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ISSUE D

EXHAUST FAN SCHEDULE									
TAG NO.	SERVICE	MANUFACTURER & MODEL NO.	FAN CAPACITY (L/s)	FAN S.P. (Pa)	FAN TYPE	MOTOR HP	MOTOR RPM	MOTOR V/Ph/Hz	NOTES
EF-A	KITCHEN	AS PER EXISTING	0	0.0	CENTRIFUGAL, CEILING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE REUSED EQUIPMENT AS PER CLIENT DIRECTION. THE UNIT SHALL BE SUBJECT TO RECALIBRATION AND TESTING FOR FUNCTIONALITY BY THE CONTRACTOR. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE.
EF-B	WASHROOM	AS PER EXISTING	0	0.0	CENTRIFUGAL, CEILING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE REUSED EQUIPMENT AS PER CLIENT DIRECTION. THE UNIT SHALL BE SUBJECT TO RECALIBRATION AND TESTING FOR FUNCTIONALITY BY THE CONTRACTOR. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE.
EF-C	PRINTER AREA	AS PER EXISTING	0	0.0	CENTRIFUGAL, CEILING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE REUSED EQUIPMENT AS PER CLIENT DIRECTION. THE UNIT SHALL BE SUBJECT TO RECALIBRATION AND TESTING FOR FUNCTIONALITY BY THE CONTRACTOR. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE.
EF-D	PRINTER AREA	AS PER EXISTING	0	0.0	CENTRIFUGAL, CEILING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE REUSED EQUIPMENT AS PER CLIENT DIRECTION. THE UNIT SHALL BE SUBJECT TO RECALIBRATION AND TESTING FOR FUNCTIONALITY BY THE CONTRACTOR. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE.
EF-E	UPS/TELECOM ROOM	GREENHECK SQ-120-VG5X-QD	800	100.0	INLINE	1/2	1725	115/1/60	UNIT SHALL BE ENABLED IMMEDIATELY DURING POWER OUTAGE. ITS ACTIVATION AND DEACTIVATION IS INTERLOCKED WITH THE LOUVER/FIRE DAMPERS. CONTRACTOR TO PROVIDE OPTIONAL SOUND ATTENUATION FOR THE UNIT.
KEF-1	KITCHEN	BROAN AVSF1302SS	188	75	CENTRIFUGAL, CEILING	0.65A		230/1/60	SELECTION IS PRELIMINARY. SELECTION SHALL BE FINALIZED USING SAME EQUIPMENT PERFORMANCE, AESTHETIC TO BE COORDINATED WITH ARCHITECT/INTERIOR DESIGNER

4 PIPE HYDRONIC FAN COIL UNITS SCHEDULE										
TAG NO.	SERVICE	MANUFACTURER & MODEL NO.	FAN CAPACITY (L/s)	EXTERNAL STATIC PRESSURE (Pa)	AIR SIDE TOTAL CAPACITY (kW)	AIR SIDE DB EAT (°C)	AIR SIDE WB EAT (°C)	AIR SIDE DB LAT (°C)	AIR SIDE WB LAT (°C)	NOTES
FCU-A	CLIENT INTAKE	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-B	CLIENT INTAKE	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-C	KITCHEN	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-D	KITCHEN	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-E	MEETING ROOM 1	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-F	MEETING ROOM 2	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-G	FOCUS ROOM 2	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-H	MEETING ROOM 3	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-I	LARGE MEETING ROOM	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-J	LARGE MEETING ROOM/BREAK OUT ROOM	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-K	LARGE MEETING ROOM	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE
FCU-L	CLIENT INTAKE	DAIKIN F.TSH.2.S06.A.A.00.B.0 0.AX.20.Z.Z.A.1	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	AS PER EXISTING	UNIT SHALL BE A REUSED EQUIPMENT AS PER CLIENT DIRECTION. IT SHALL BE SUBJECT TO CONTRACTOR'S RECALIBRATION AND TESTING FOR ITS FUNCTIONALITY. COORDINATE WITH EQUIPMENT SUPPLIER/MANUFACTURER WHERE REQUIRED TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS SHOWN ON NAMEPLATE

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D	ISSUED FOR 100%/PERMIT	2025-2-10

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PROJECT
95 The Esplanade
 95 The Esplanade
 Toronto, ON
 M5E 1Y8

PROJECT NO:
148121
 DRAWN BY:
C. SU
 CHECKED BY:
E. HADDAD
 PROJECT MGR:
F. BOLOURIAN
 APPROVED BY:
R. BARROSO

SHEET TITLE
MECHANICAL EQUIPMENT SCHEDULES 1 OF 2

SHEET NUMBER
M003
 ISSUE
D

2/10/2025 7:26:51 PM

Autodesk Docs: /ACA-00148121-Cor-95 The Esplanade/148121-ARC-95ESPL-ND-BLDG-MR24.rvt 1/10mm SCALE CHECK

SPLIT HEAT PUMP FAN COIL UNITS SCHEDULE

TAG NO.	SERVICE	MANUFACTURER & MODEL NO.	FAN CAPACITY (L/s)	FAN EXTERNAL STATIC PRESSURE (Pa)	SENSIBLE COOLING CAPACITY (kW)	TOTAL CAPACITY (kW)	EVAPORATOR DB EAT (°C)	EVAPORATOR WB EAT (°C)	EVAPORATOR DB LAT (°C)	EVAPORATOR WB LAT (°C)	CONDENSER DB EAT (°C)	HEATING CAPACITY (kW)	HEATING EAT (°C)	FILTER TYPE	MERV RATING	MCA (A)	V/Ph/Hz
FC-9	SERVER ROOM	CARRIER 40MAHBQ18XA3	250	FREE BLOW	5.27	5.27	23.80	16.90	10.27	10.11	50.00	5.27	19.40		--	3	208/1/60
FC-10	UPS ROOM	CARRIER 40MAHBQ18XA3	250	FREE BLOW	5.27	5.27	23.80	16.90	10.27	10.11	50.00	5.27	19.40		--	3	208/1/60

NOTES:
SEE DRAWINGS FOR LOCATION AND TYPE OF FAN COIL UNIT. FCUS SHALL BE INSTALLED AS PER MANUFACTURER RECOMMENDATION INCLUDING REFRIGERANT PIPING AND CONDENSATE DRAINS. FCUS SHALL BE INDIVIDUALLY CONTROLLED THROUGH A THERMOSTAT. CONTROL WIRING TO BE PROVIDED BY MECHANICAL CONTRACTOR. WIRED THERMOSTAT TO BE INCLUDED AS ACCESSORY

SPLIT HEAT PUMP AIR COOLED CONDENSING UNITS SCHEDULE

TAG NO.	SERVICE	MANUFACTURER & MODEL NO.	CAPACITY (kW)	REFRIGERANT TYPE	AMBIENT AIR TEMPERATURE (°C)	CONDENSER COIL HEAT REJECTION (kW)	CONDENSER COIL EAT (°C)	NUMBER OF CONDENSER FANS	DISCHARGE POSITION	MCA	V/Ph/Hz	NOTES
ACC-9	SERVER ROOM	CARRIER 38MARBQ18AA3	5.28	R410A	-22, 50	7.62	50	1	HORIZONTAL	16	208/1/60	WIRED THERMOSTAT TO BE INCLUDED AS ACCESSORY
ACC-10	UPS ROOM	CARRIER 38MARBQ18AA3	5.28	R410A	-22, 50	7.62	50	1	HORIZONTAL	16	208/1/60	WIRED THERMOSTAT TO BE INCLUDED AS ACCESSORY

GRILLES AND DIFFUSERS SCHEDULE

SYMBOL	TYPE	MANUFACTURER & MODEL NO.	LOCATION	MATERIAL	FACE SIZE (IN)	NECK SIZE (IN)	COMMENTS
B	RETURN LOUVERED GRILLE	EH PRICE 630	SEE DRAWING	ALUMINUM	SEE DRAWING	N/A	45° DEFLECTION, 3/4 IN BLADE SPACING
A	SUPPLY AIR SQUARE CONE DIFFUSER	EH PRICE ASCDA	SEE DRAWING	ALUMINUM	24 x 24	SEE DRAWING	4 CONE, NECK SIZE AS SHOWN ON DWG C/W BALANCING DAMPER
C	SUPPLY LOUVERED GRILLE	EH PRICE 610	SEE DRAWING	ALUMINUM	SEE DRAWING	N/A	

NOTES:
1. SUBMIT COLOUR AND FINISH FOR ARCH REVIEW.
2. REFER TO ARCH DWG FOR CEILING TYPE.

DRINKING FOUNTAIN SCHEDULE

TAG NO.	SERVICE	MANUFACTURER & MODEL NO.	L x W x H (MM)	MOUNTING TYPE	APPROX. SHIPPING WEIGHT (LBS)	RATED WATTS	FLA	V/Ph/Hz	NOTES
DF-1	HALLWAY	ELKAY EZSDWSLK	467 x 483 x 993	WALL	52	15	1.1	115/1/60	SEE DRAWINGS FOR LOCATION OF DRINKING FOUNTAIN. BRAND SHALL BE ELKAY OR APPROVED EQUAL.

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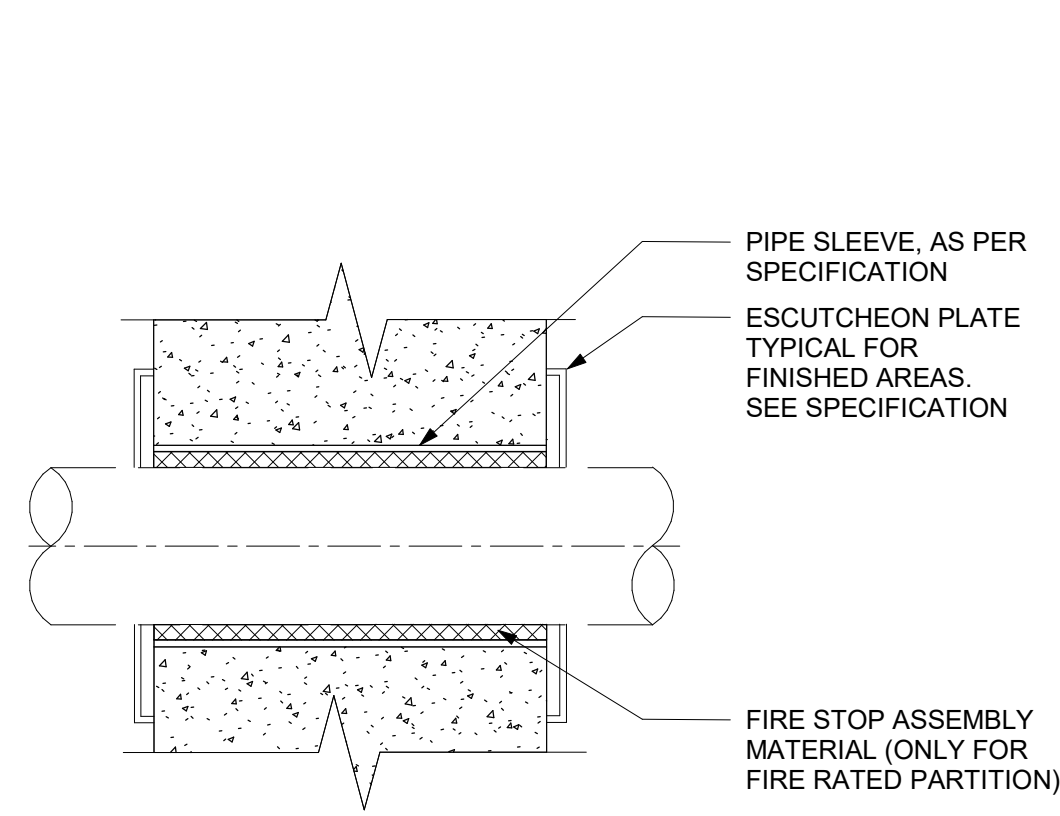
PROJECT NO:
148121

DRAWN BY: C. SU	CHECKED BY: E. HADDAD
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PROJECT MGR: F. BOLOURIAN	APPROVED BY: R. BARROSO
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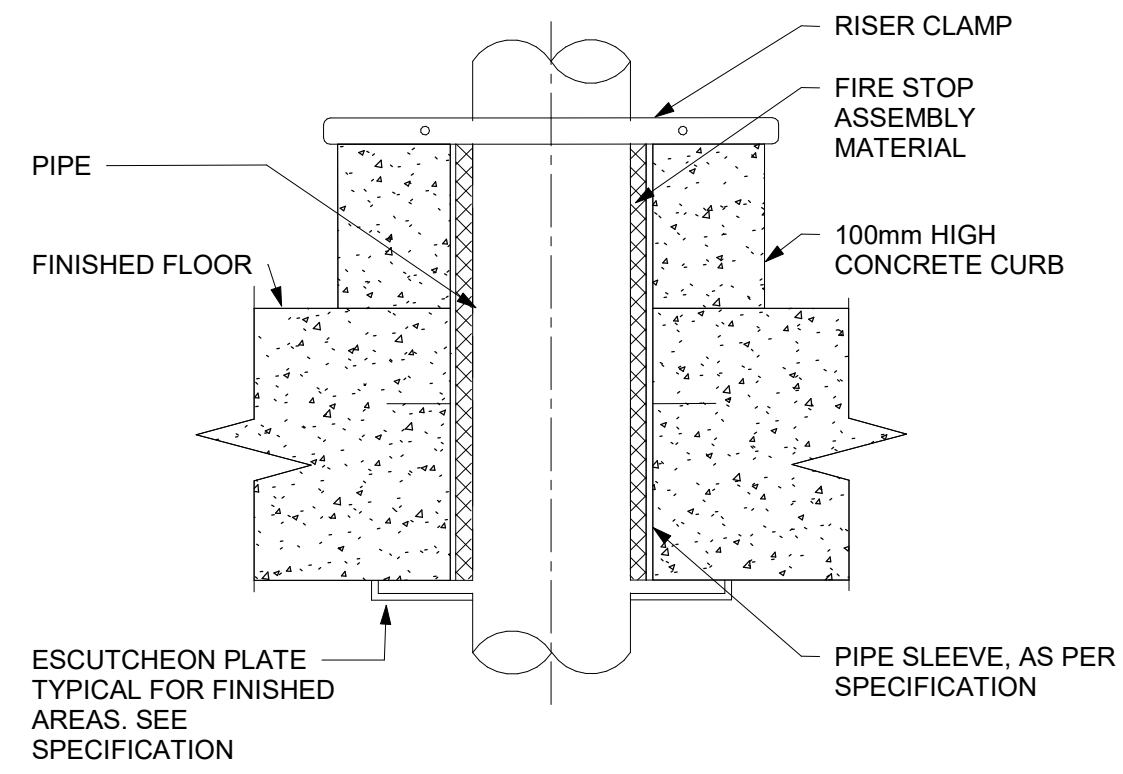
SHEET TITLE
MECHANICAL EQUIPMENT SCHEDULES 2 OF 2

SHEET NUMBER M004	ISSUE D
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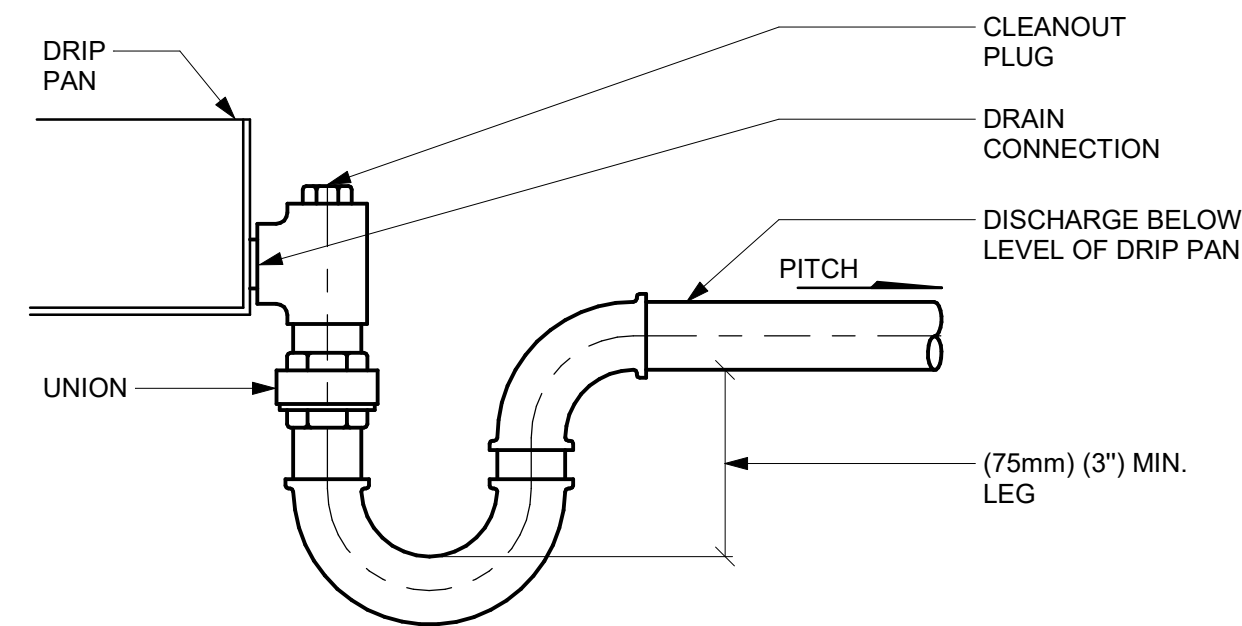
1 PIPE SLEEVE THROUGH INTERIOR WALL

M005 Scale : NTS



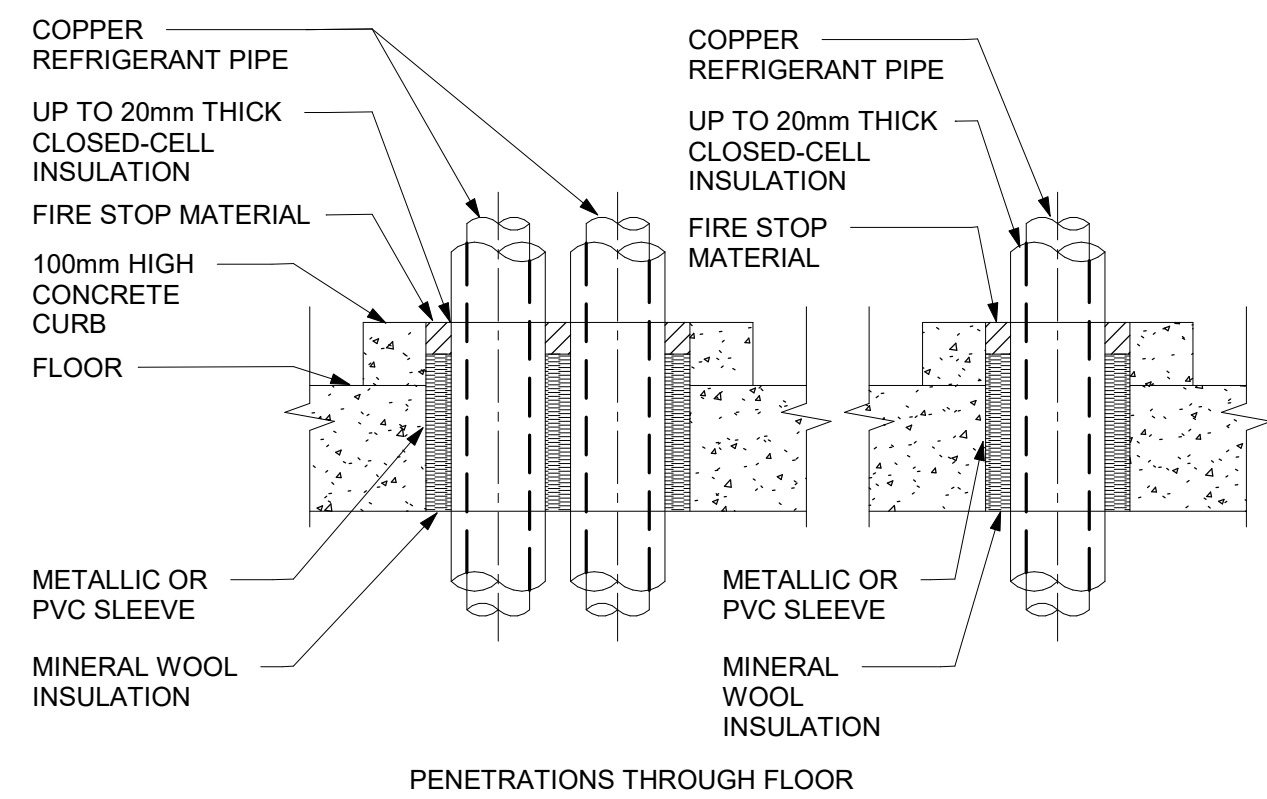
2 PIPE SLEEVE THROUGH FLOORS

M005 Scale : NTS



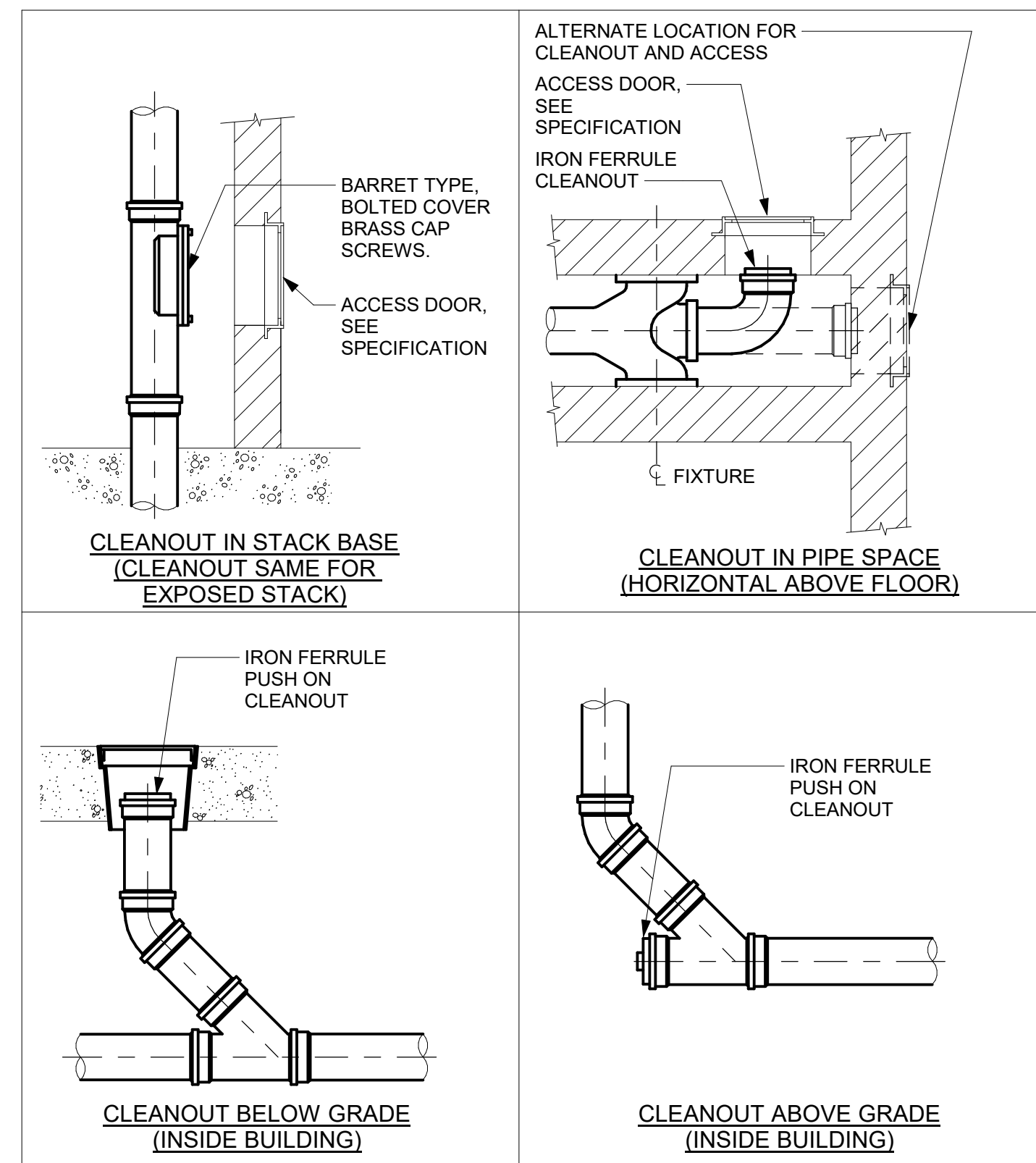
3 DRIP PAN TRAP INSTALLATION

M005 Scale : NTS



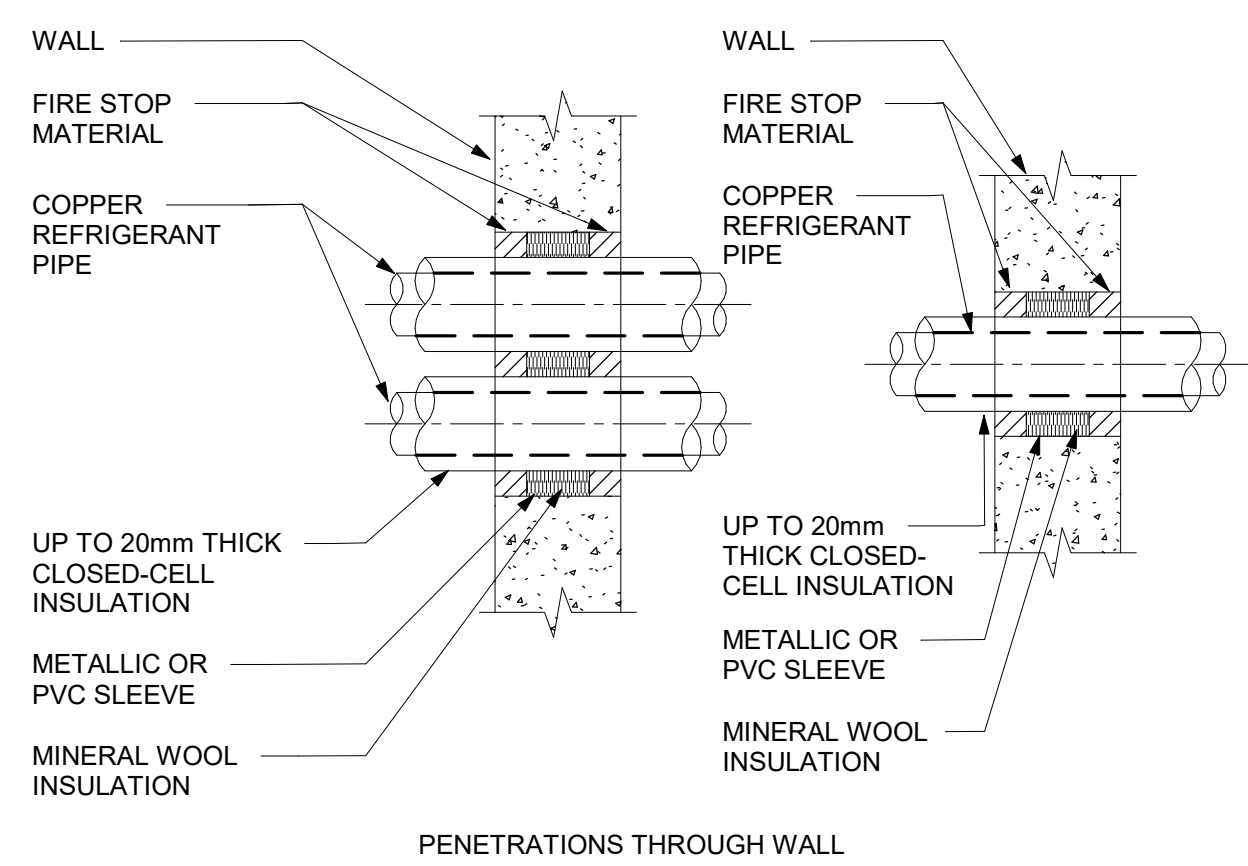
4 REFRIGERANT PIPING PENETRATION

M005 Scale : NTS



5 DRAINAGE CLEANOUT DETAIL INTERIOR

M005 Scale : NTS



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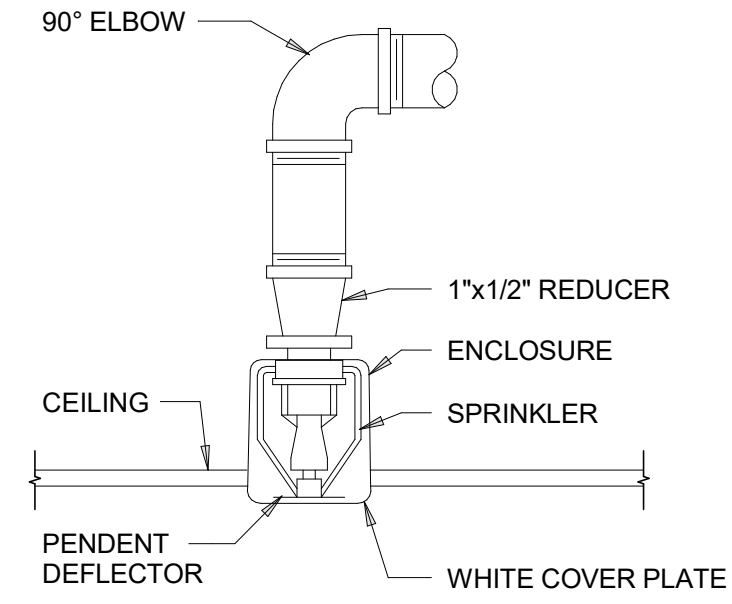
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DRAWN BY: C. SU	CHECKED BY: E. HADDAD
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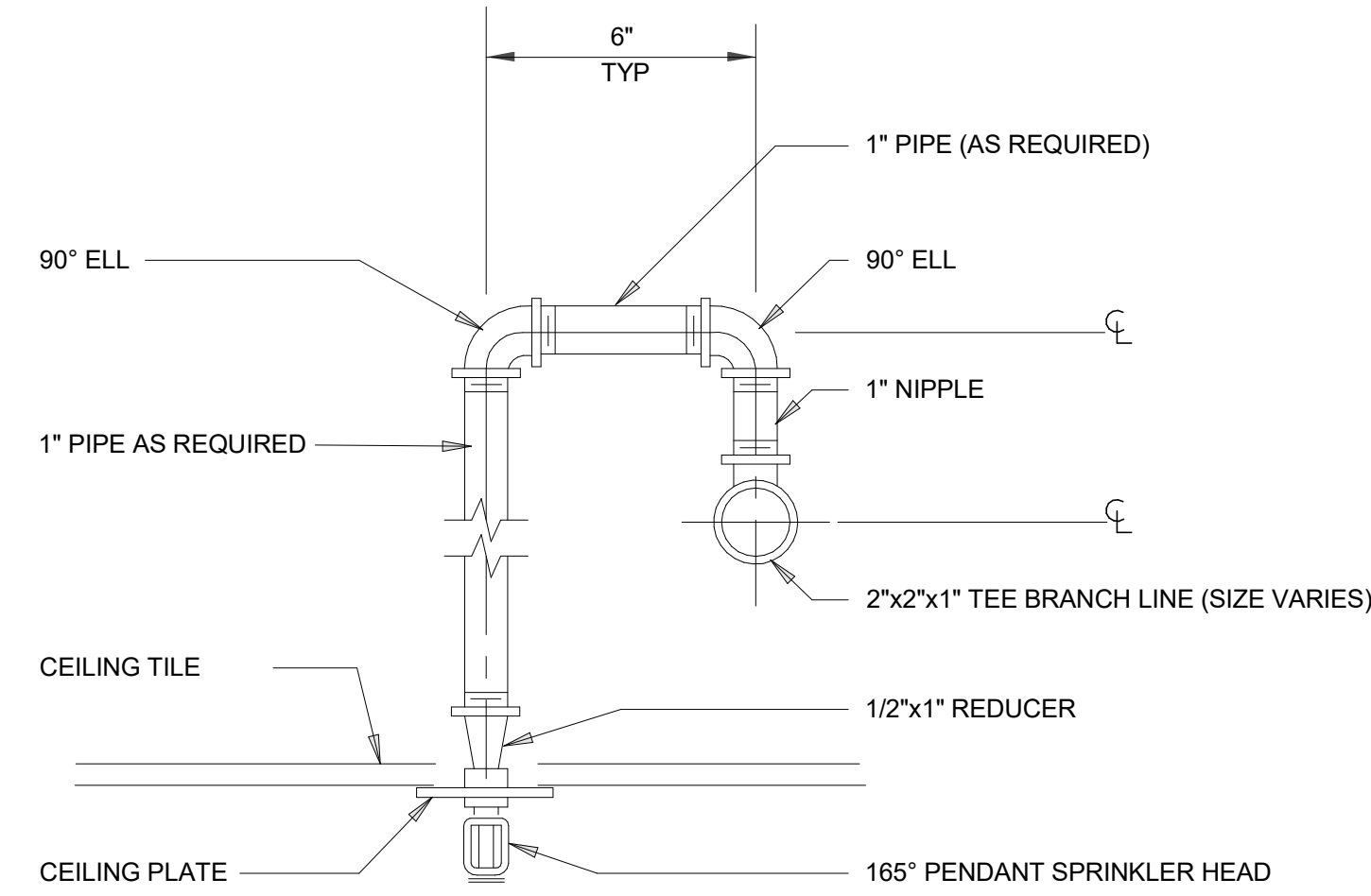
PROJECT MGR: F. BOLOURIAN	APPROVED BY: R. BARROSO
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SHEET TITLE
MECHANICAL DETAILS 1 OF 2

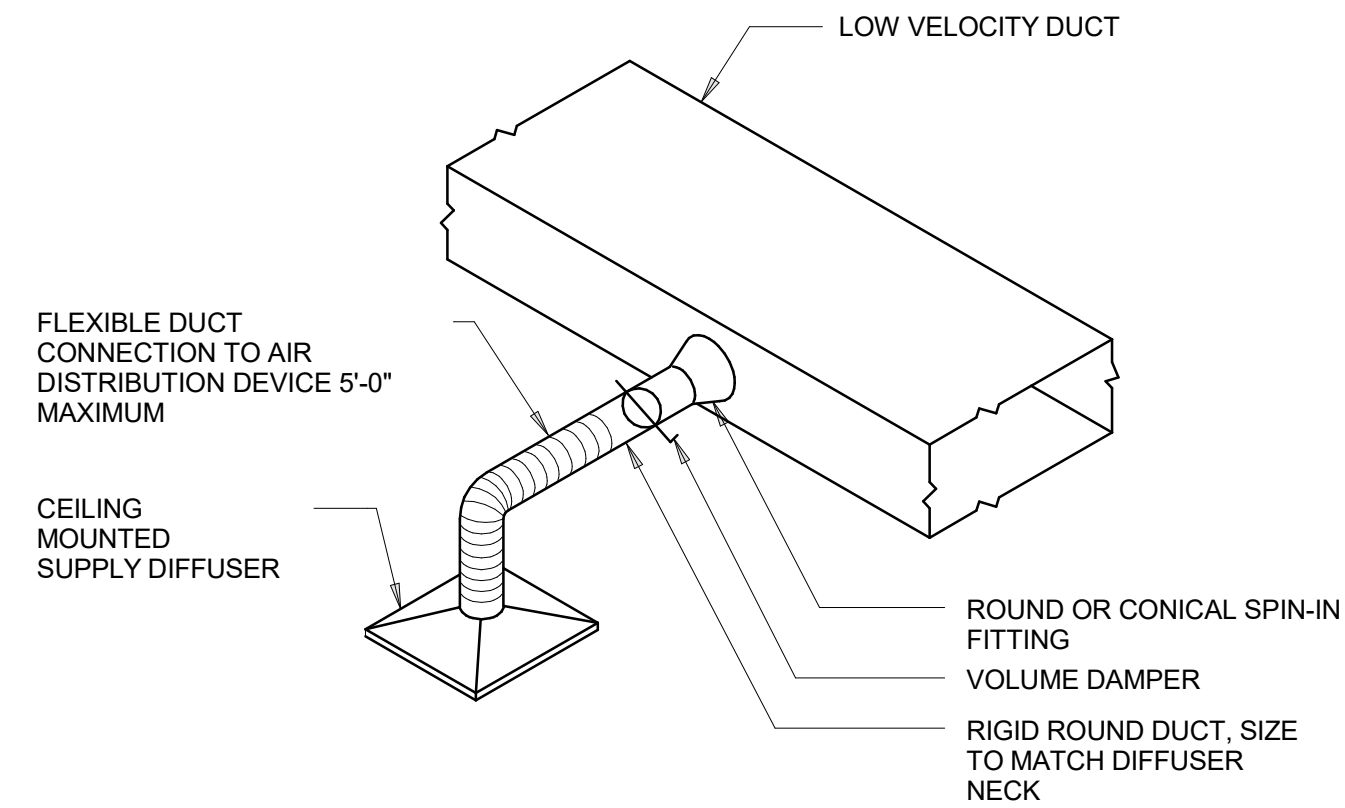
SHEET NUMBER M005	ISSUE D
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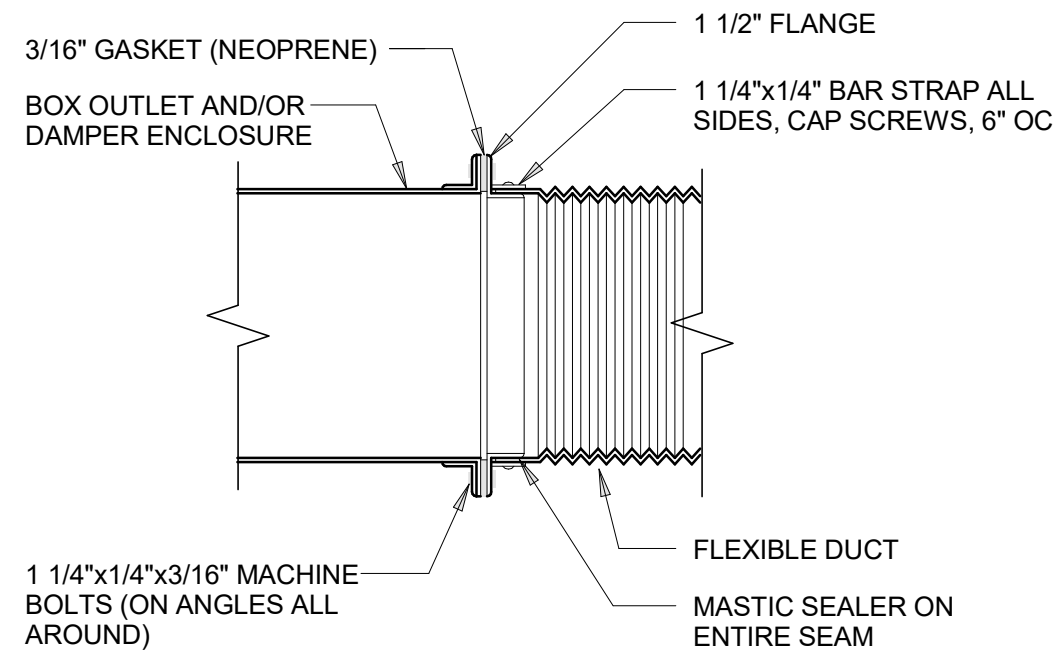
1 CONCEALED PENDANT SPRINKLER
M006 Scale : NTS



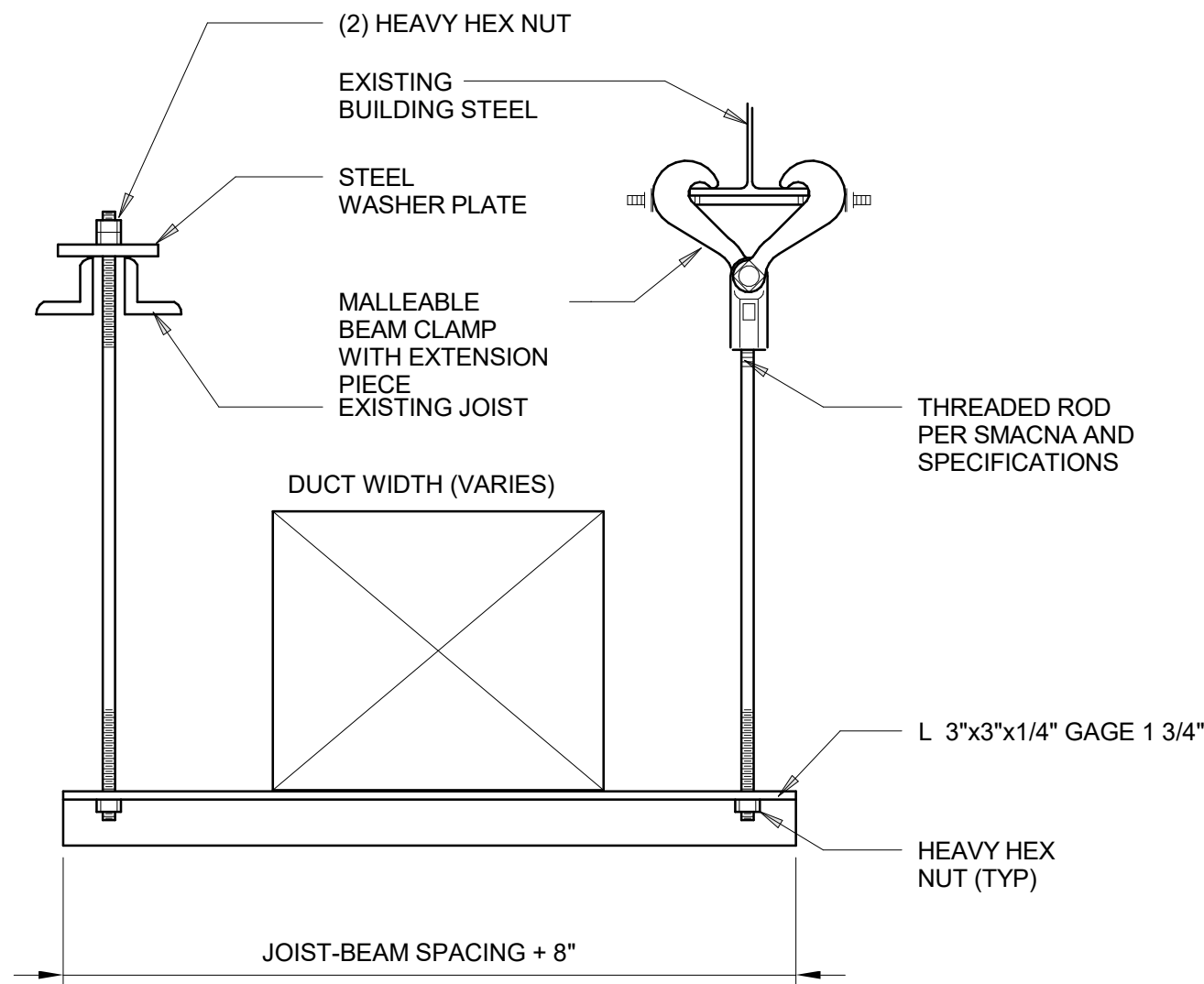
2 SPRINKLER DROP
M006 Scale : NTS



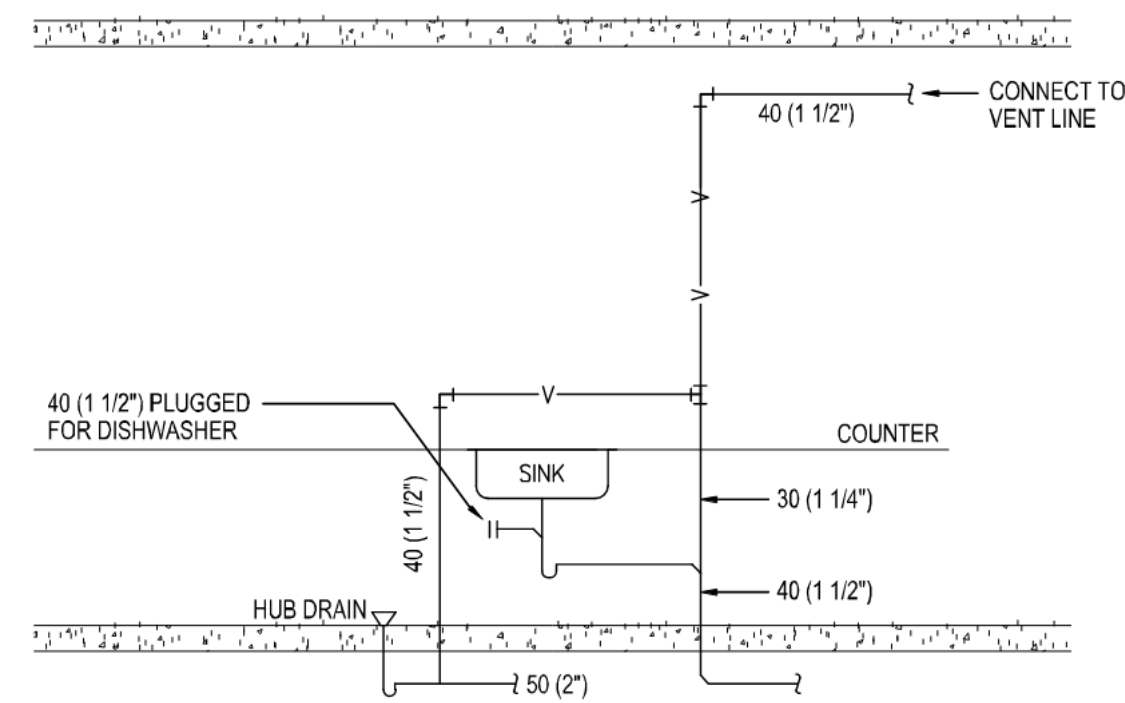
3 DIFFUSER CONNECTION
M006 Scale : NTS



4 FLEXIBLE DUCT TO EQUIPMENT
M006 Scale : NTS

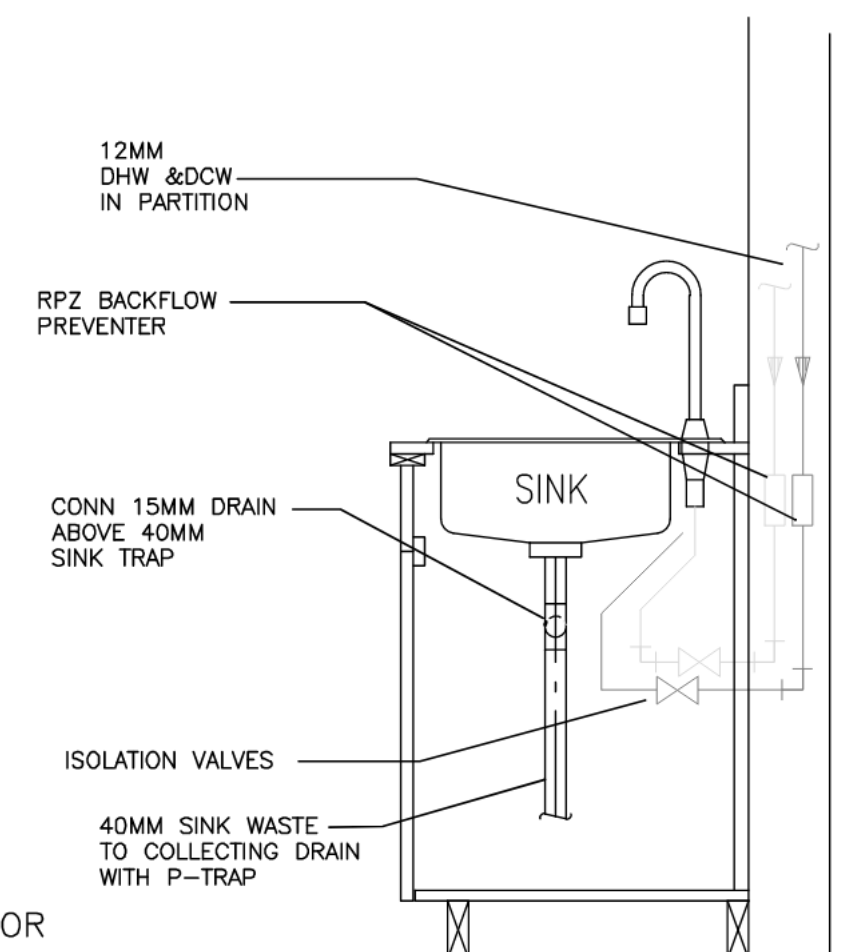


5 DUCT HANGER
M006 Scale : 1 : 100

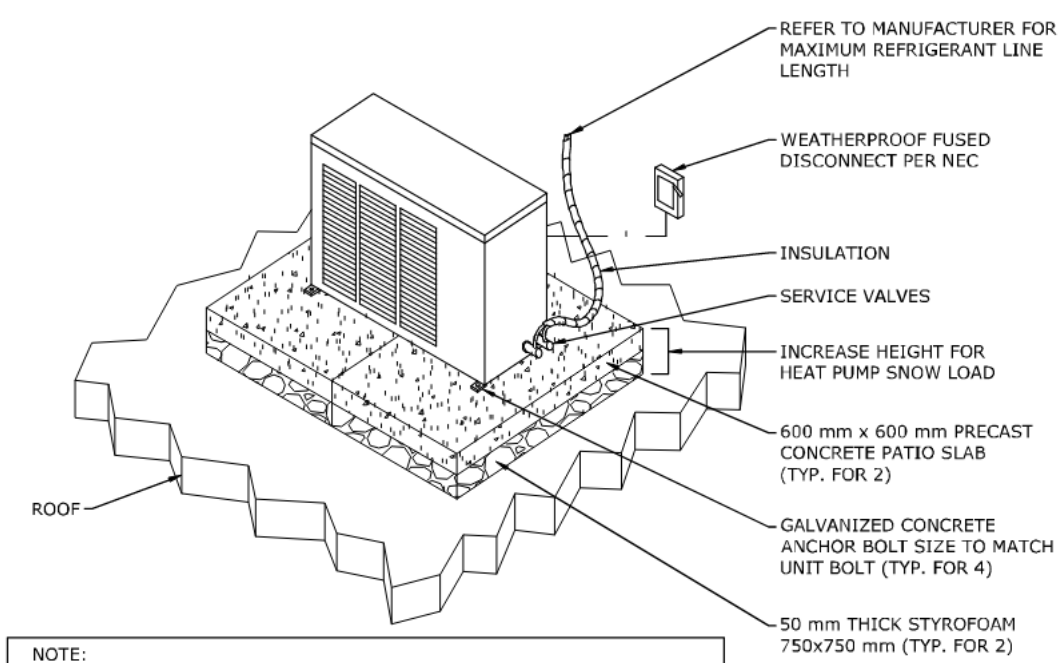


NOTES:
1. REQUIREMENTS AND MINIMUM DRAIN AND VENT CONNECTION SIZES SHALL BE AS PER OBC SECTION 7.4 AND 7.5 OR AS PER MANUFACTURER'S FIXTURE REQUIREMENT.

6 TYPICAL FIXTURE DRAIN VENT
M006 Scale : NTS

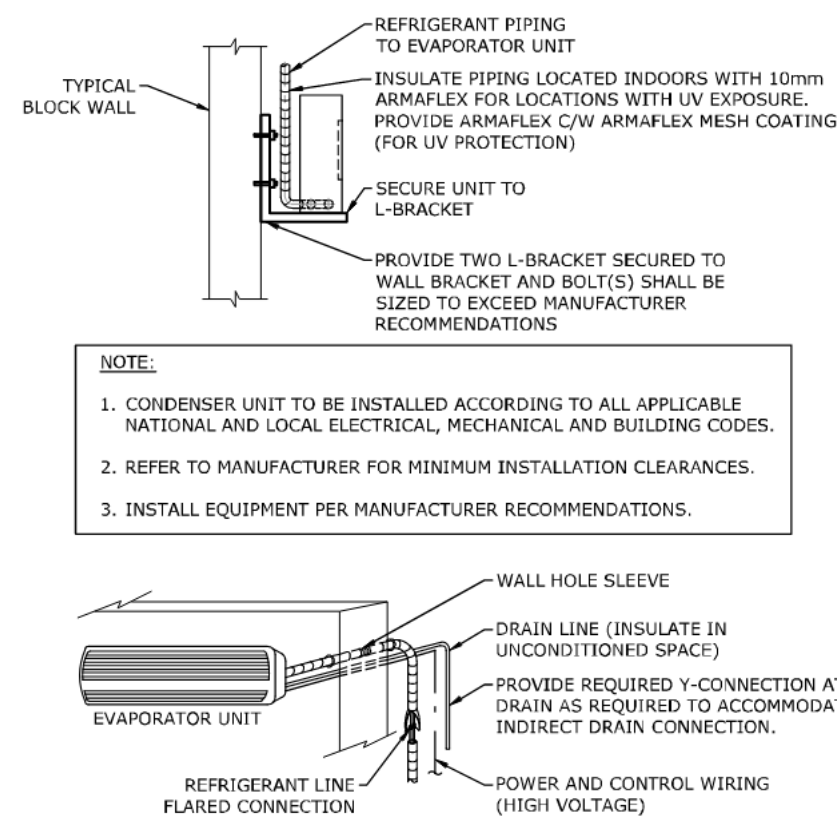


7 TYPICAL SINK INSTALLATION
M006 Scale : NTS



NOTE:
1. MINI SPLIT DX SYSTEM TO BE INSTALLED ACCORDING TO ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL, MECHANICAL AND BUILDING CODES.
2. REFER TO MANUFACTURER FOR MINIMUM INSTALLATION CLEARANCES.
3. INSTALL EQUIPMENT PER MANUFACTURER RECOMMENDATIONS.

8 WALL MOUNT SPLIT DX SYSTEM INSTALLATION
M006 Scale : NTS



NOTE:
1. CONDENSER UNIT TO BE INSTALLED ACCORDING TO ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL, MECHANICAL AND BUILDING CODES.
2. REFER TO MANUFACTURER FOR MINIMUM INSTALLATION CLEARANCES.
3. INSTALL EQUIPMENT PER MANUFACTURER RECOMMENDATIONS.

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PROJECT NO:
148121

DRAWN BY:
C. SU

CHECKED BY:
E. HADDAD

PROJECT MGR:
F. BOLOURIAN

APPROVED BY:
R. BARROSO

SHEET TITLE
MECHANICAL DETAILS 2 OF 2

SHEET NUMBER
M006

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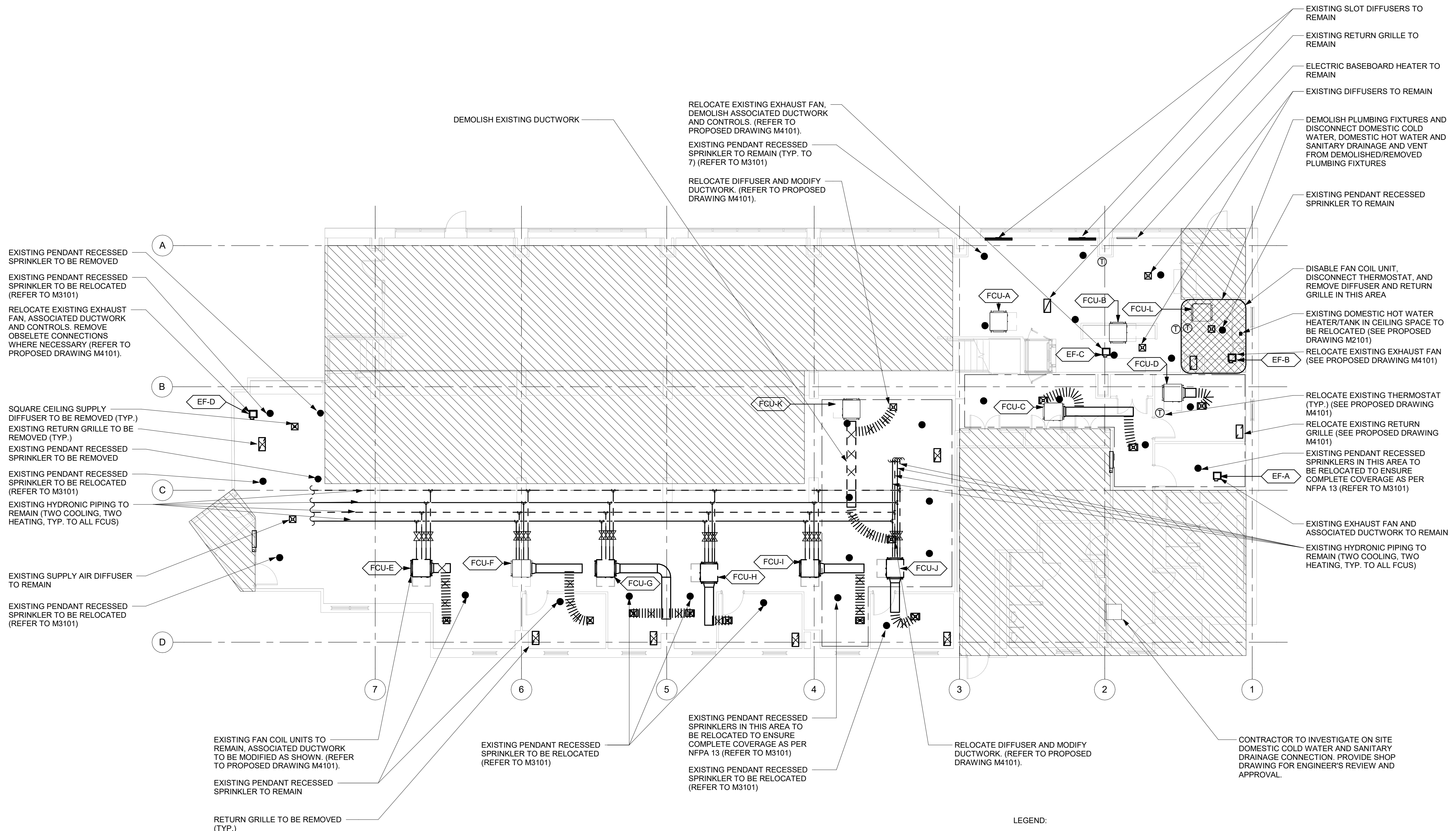
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CHECKED BY: E. HADDAD
PROJECT MGR: F. BOLOURIAN
APPROVED BY: R. BARROSO

SHEET TITLE
 DEMOLITION GROUND FLOOR PLAN

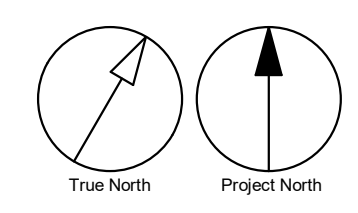
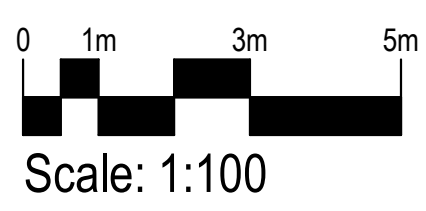
SHEET NUMBER M1101
ISSUE D



LEGEND:
 NOT IN SCOPE: [Hatched Box]
 TO BE DEMOLISHED: [Box with X]

NOTES:
 1. MECHANICAL EQUIPMENT, DUCT AND PIPE LAYOUTS SHOWN ARE FOR DRAWING REFERENCE ONLY. CONTRACTOR TO VERIFY ACTUAL LAYOUTS ON SITE PRIOR TO PROCEEDING WITH THE WORK. NOTIFY ENGINEER FOR GUIDANCE FOR DISCREPANCIES FOUND WITH ACTUAL RETROFIT WORK REQUIRED.

1 DEMOLITION GROUND FLOOR
 M1101 Scale: 1 : 100



City of Toronto



Toronto, Canada, M9N 1J6

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C	ISSUED FOR 95% SUBMISSION	2025-2-3
D	ISSUED FOR 100%/PERMIT	2025-2-10

CONSULTANTS

SEAL



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www.arcadis.com

PROJECT
95 The Esplanade
95 The Esplanade
Toronto, ON
M5E 1Y8

PROJECT NO:
148121

DRAWN BY:
C. SU

CHECKED BY:
E. HADDAD

PROJECT MGR:
F. BOLOURIAN

APPROVED BY:
R. BARROSO

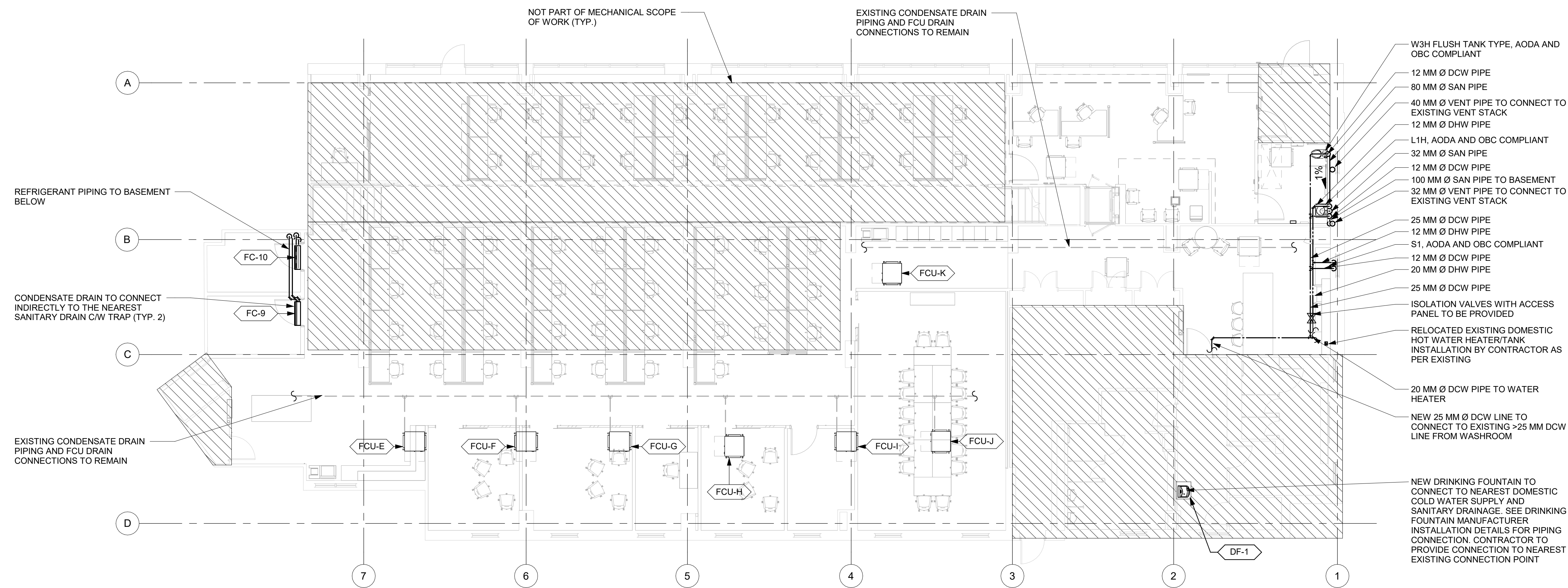
SHEET TITLE
**PLUMBING AND DRAINAGE
GROUND FLOOR PLAN**

SHEET NUMBER

M2101

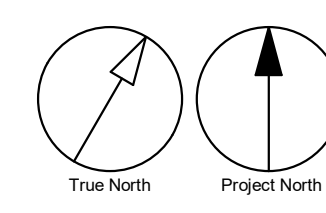
ISSUE

D



1 PLUMBING AND DRAINAGE GROUND FLOOR
M2101 Scale: 1:100

- NOTES:**
- CONTRACTOR TO INVESTIGATE ON SITE FOR WASHROOM DRAINAGE PIPE ROUTING TO MINIMIZE TRENCHING REQUIRED.
 - PIPING LAYOUT IS SCHEMATIC TO SHOW SYSTEM ARRANGEMENT WHICH DOES NOT NECESSARILY SHOW ALL FITTINGS, SUPPORTS, HANGERS, INSULATIONS AND OTHER REQUIREMENTS. CONTRACTOR SHALL REVIEW DETAILS, OTHER DISCIPLINE DRAWINGS, SPECIFICATIONS AND EQUIPMENT INSTALLATION INSTRUCTIONS AND PROVIDE A COMPLETE SYSTEM.
 - SANITARY VENT PIPING AND VENT PIPE ROUTING IS NOT SHOWN ON THE DRAWING FOR CLARITY. NEW SANITARY VENTING SYSTEM TO BE SIZED, PROVIDED AND INSTALLED BY THE CONTRACTOR AS PER OBC REQUIREMENTS.
 - EXISTING MECHANICAL EQUIPMENT AND PIPE LAYOUTS SHOWN ARE FOR DRAWING REFERENCE ONLY. CONTRACTOR TO VERIFY ACTUAL LAYOUTS ON SITE PRIOR TO PROCEEDING WITH THE WORK. NOTIFY ENGINEER FOR GUIDANCE FOR DISCREPANCIES FOUND WITH ACTUAL RETROFIT WORK REQUIRED FOR GUIDANCE.



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D	ISSUED FOR 100%/PERMIT	2025-2-10

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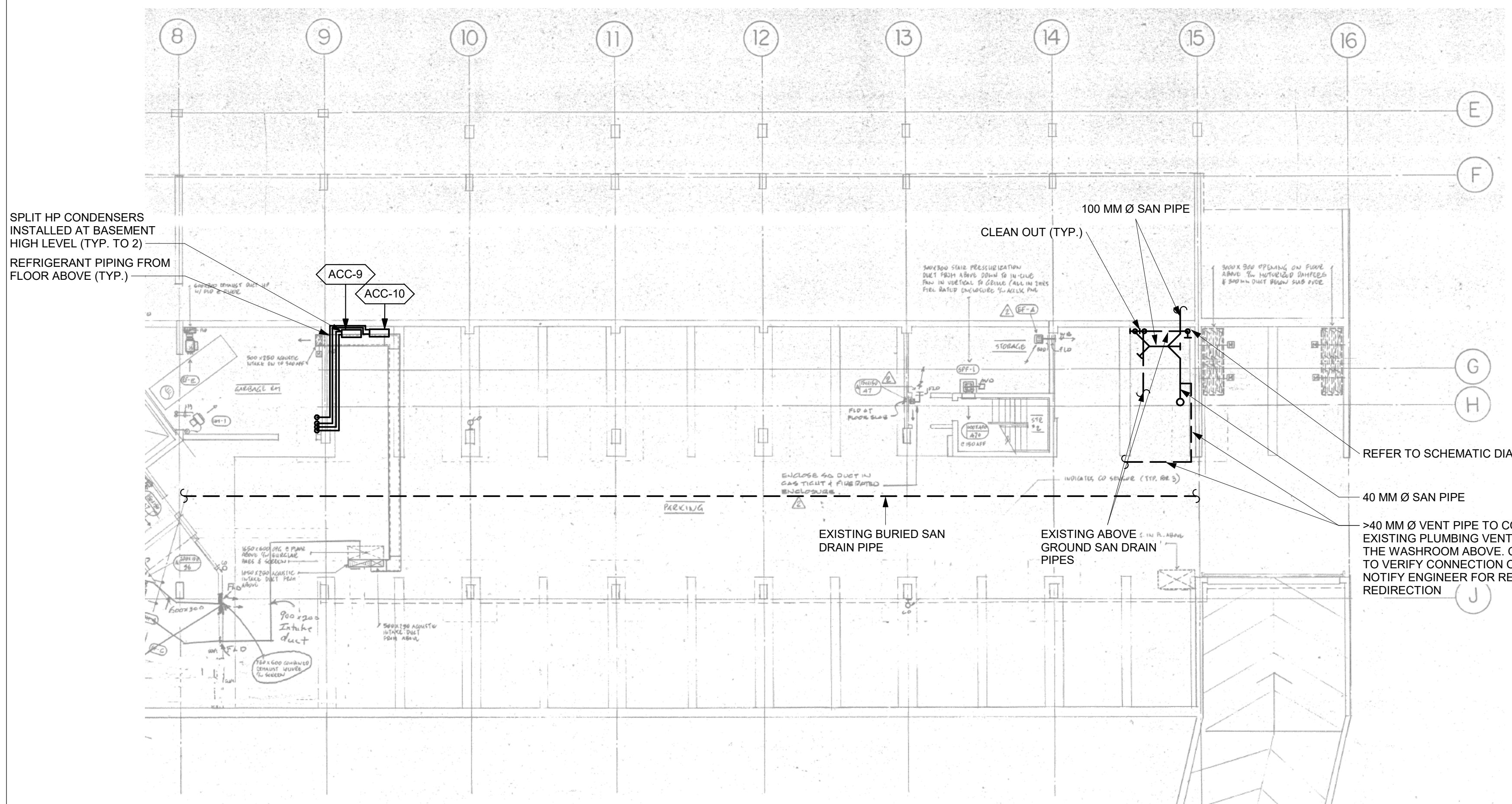
PROJECT
95 The Esplanade
 95 The Esplanade
 Toronto, ON
 M5E 1Y8

PROJECT NO:
 148121

DRAWN BY: C. SU	CHECKED BY: E. HADDAD
PROJECT MGR: F. BOLOURIAN	APPROVED BY: R. BARROSO

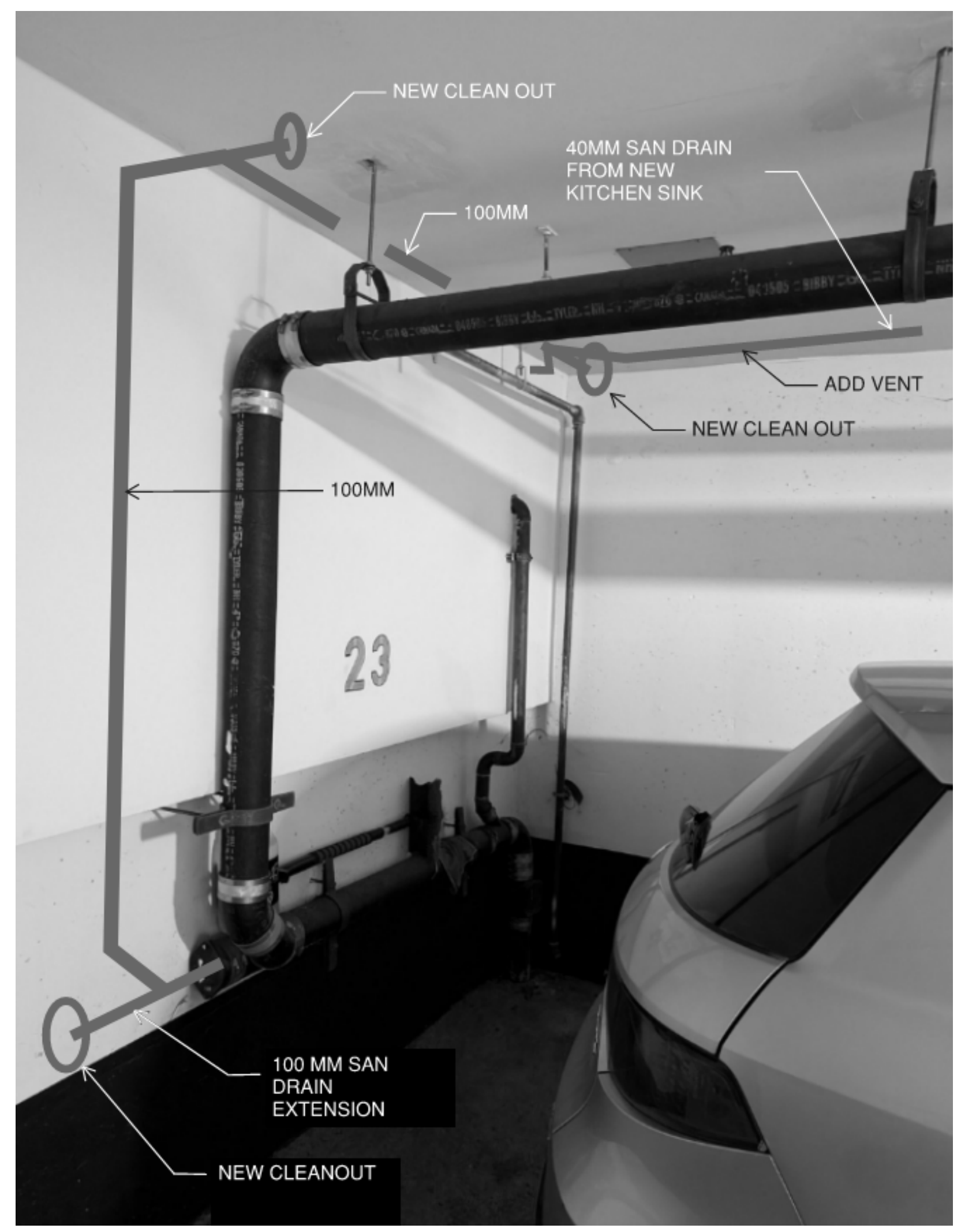
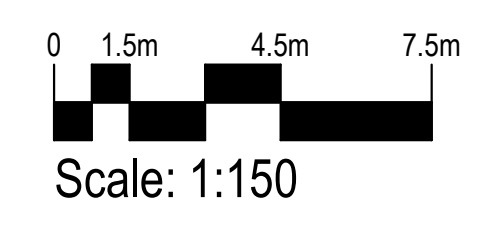
SHEET TITLE
PLUMBING AND DRAINAGE BASEMENT PLAN

SHEET NUMBER M2102	ISSUE D
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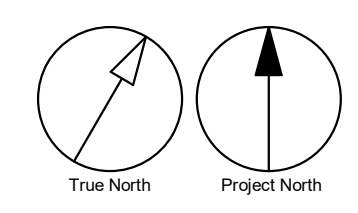


1 PLUMBING AND DRAINAGE BASEMENT
 Scale: 1 : 150

- NOTES:**
- CONTRACTOR TO INVESTIGATE ON SITE FOR WASHROOM DRAINAGE PIPE ROUTING TO MINIMIZE TRENCHING REQUIRED.
 - PIPING LAYOUT IS SCHEMATIC TO SHOW SYSTEM ARRANGEMENT WHICH DOES NOT NECESSARILY SHOW ALL FITTINGS, SUPPORTS, HANGERS, INSULATIONS AND OTHER REQUIREMENTS. CONTRACTOR SHALL REVIEW DETAILS, OTHER DISCIPLINE DRAWINGS, SPECIFICATIONS AND EQUIPMENT INSTALLATION INSTRUCTIONS AND PROVIDE A COMPLETE SYSTEM.



2 BASEMENT PLUMBING AND DRAINAGE PIPING
 Scale : NTS



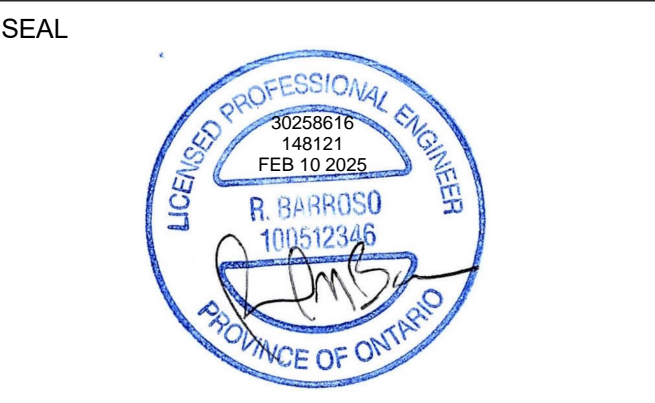
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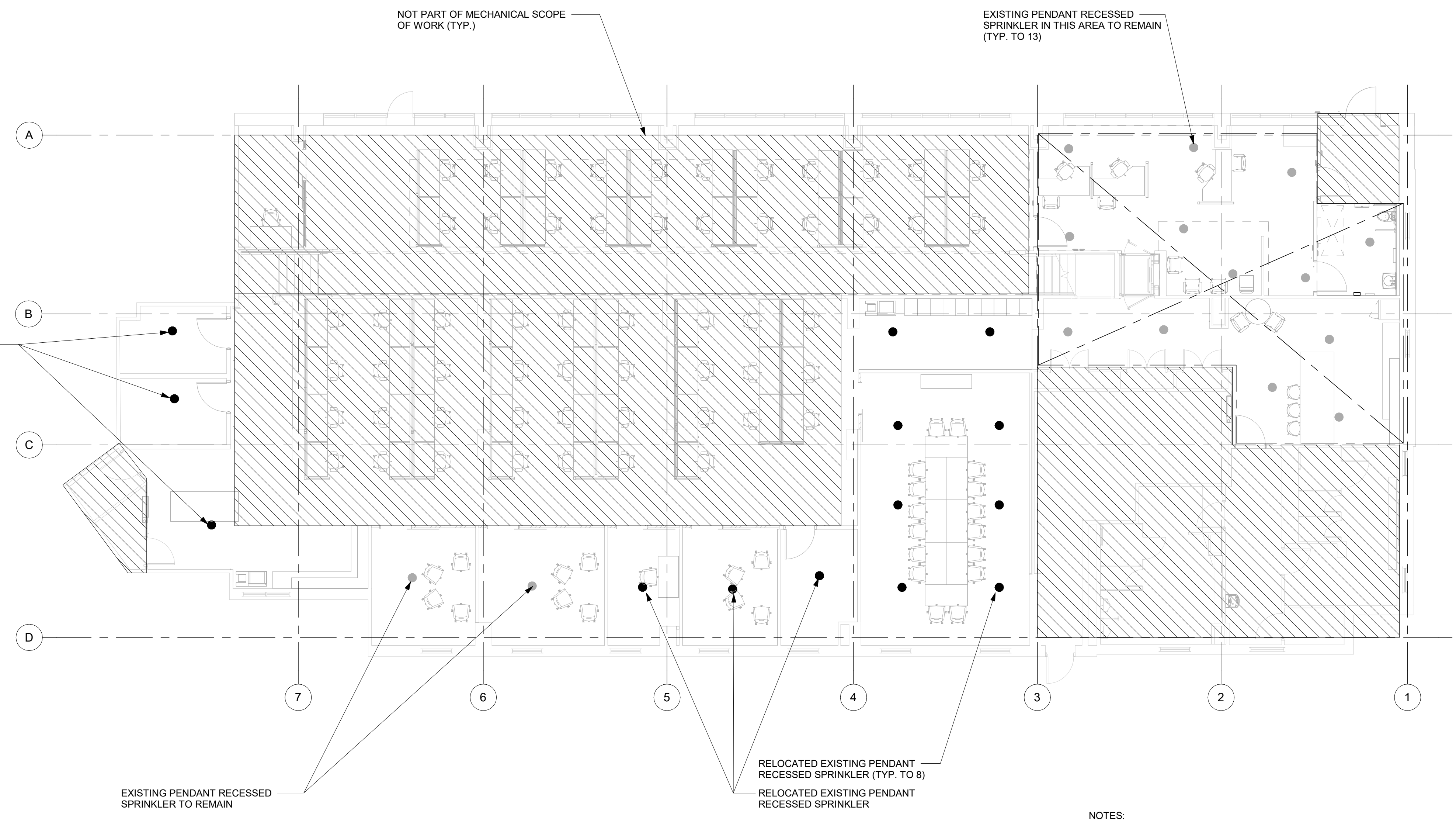
PROJECT
95 The Esplanade
 95 The Esplanade
 Toronto, ON
 M5E 1Y8

PROJECT NO:
 148121

DRAWN BY: C. SU	CHECKED BY: E. HADDAD
PROJECT MGR: F. BOLOURIAN	APPROVED BY: R. BARROSO

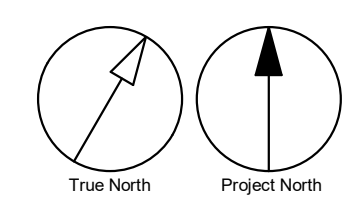
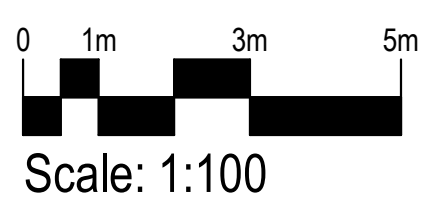
SHEET TITLE
FIRE PROTECTION GROUND FLOOR PLAN

SHEET NUMBER M3101	ISSUE D
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- NOTES:
- FIRE EXTINGUISHER LOCATIONS SHALL REMAIN AS EXISTING.
 - ALL RELOCATED SPRINKLERS SHALL COMPLY WITH OBC AND NFPA 13.

1 FIRE PROTECTION GROUND FLOOR
 M3101 Scale: 1 : 100



CLIENT

City of Toronto



Toronto, Canada, M9N 1J6

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PROJECT

95 The Esplanade

95 The Esplanade
Toronto, ON
M5E 1Y8

PROJECT NO:

148121

DRAWN BY:

C. SU

CHECKED BY:

E. HADDAD

PROJECT MGR:

F. BOLOURIAN

APPROVED BY:

R. BARROSO

SHEET TITLE

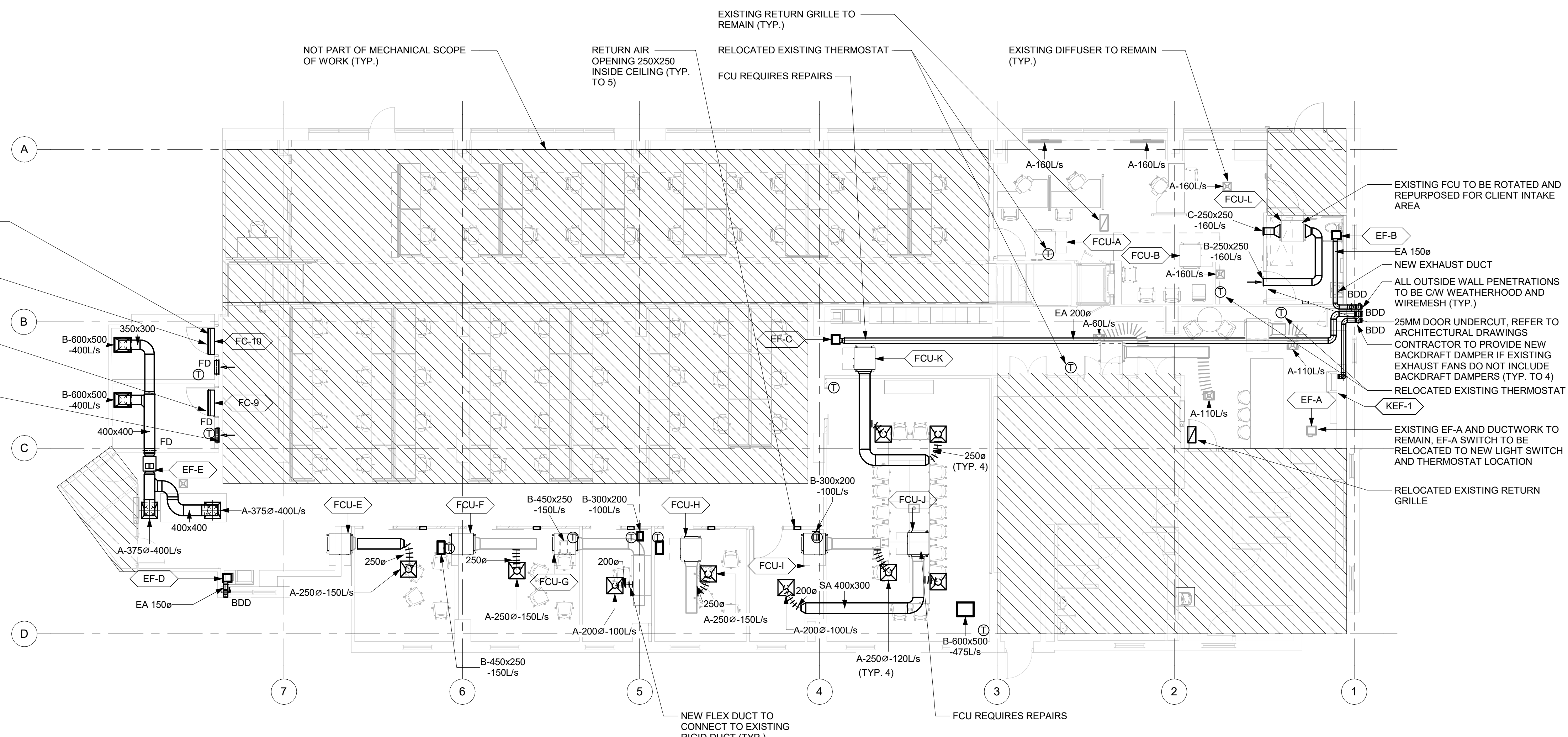
HVAC GROUND FLOOR PLAN

SHEET NUMBER

M4101

ISSUE

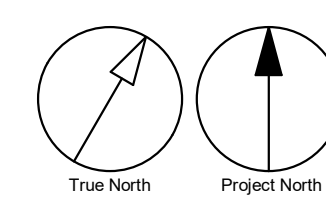
D



1 HVAC GROUND FLOOR
M4101 Scale: 1 : 100

NOTES:

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- EXISTING MECHANICAL EQUIPMENT TO BE TESTED AND COMMISSIONED BY MECHANICAL CONTRACTOR TO THE EQUIPMENT'S CAPACITY PERFORMANCE AS PER ITS NAMEPLATE. INCLUDE REPAIR SCOPE FOR EQUIPMENT THAT IS NOT OPERATIONAL. SUPPLY AIR SHALL BE RE-BALANCED AS SHOWN AND PROVIDE A REPORT FOR ENGINEER'S REVIEW AND APPROVAL.
- THERMOSTATS SHALL BE PROGRAMMABLE WITH SETPOINTS WHICH CAN BE PROGRAMMED WITH OCCUPANCY SCHEDULES. THERMOSTATS SHALL ALSO BE LINE-POWERED. LOCATION SHALL BE COORDINATED WITH ARCHITECTURAL LAYOUT. SUBMIT SHOP DRAWING FOR REVIEW AND APPROVAL.
- CONTRACTOR TO INCLUDE DUCT CLEANING AND DISINFECTING OF NEW AND EXISTING EQUIPMENT, DUCTWORKS AND ITS ACCESSORIES UNDER THIS SCOPE OF WORK.
- CONTRACTOR TO CONDUCT AIR BALANCING TO MEET THE REQUIRED AIRFLOW AS SHOWN IN THE DRAWINGS. IT SHALL INCLUDE BOTH NEW AND EXISTING DIFFUSERS AND GRILLES.



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