List - Mechanical Sheets Phase 2

DWG No.	DRAWING NAME	REVISION	DESCRIPTION	DATE
M-000	LEAD SHEET (DRAWING LIST, LEGEND & NOTES)	2	Issued for 90% CD SET	2026-03-06
M-001	MECHANICAL KEY PLAN	2	Issued for 90% CD SET	2026-03-06
M-100	LEVEL 2 - PLUMBING PLAN	2	Issued for 90% CD SET	2026-03-06
M-101	LEVEL 1 - PROPOSED CONDENSATE	2	Issued for 90% CD SET	2026-03-06
M-200	LEVEL 2 - FIRE PROTECTION PLAN	2	Issued for 90% CD SET	2026-03-06
M-201	LEVEL 1 - FIRE PROTECTION PLAN	2	Issued for 90% CD SET	2026-03-06
M-300	LEVEL 1 HVAC DEMOLITION PLAN	1	Issued for 50% CD SET	2026-02-18
M-301	LEVEL 1 HVAC PROPOSED PLAN	2	Issued for 90% CD SET	2026-03-06
M-302	LEVEL 2 HVAC DEMOLITION PLAN	1	Issued for 50% CD SET	2026-02-18
M-303	LEVEL 2 HVAC PROPOSED PLAN	2	Issued for 90% CD SET	2026-03-06
M-400	MECHANICAL DETAILS AND SECTIONS	2	Issued for 90% CD SET	2026-03-06
M-401	MECHANICAL DETAILS AND SECTIONS	2	Issued for 90% CD SET	2026-03-06
M-403	MECHANICAL DETAILS AND SECTIONS	2	Issued for 90% CD SET	2026-03-06
M-404	CONDENSING UNIT & VRF PIPING SCHEMATICS	2	Issued for 90% CD SET	2026-03-06
M-500	MECHANICAL EQUIPMENT CONTROLS FLOOR PLAN	2	Issued for 90% CD SET	2026-03-06
M-501	MECHANICAL EQUIPMENT CONTROLS	2	Issued for 90% CD SET	2026-03-06
M-600	MECHANICAL EQUIPMENT SCHEDULE	2	Issued for 90% CD SET	2026-03-06

LEGEND - HVAC

THIS LEGEND OF SYMBOLS REPRESENTS
MANTECON PARTNERS INC.,
STANDARD/GENERIC LEGEND.
ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.

REFER	DESCRIPTION
	POSITIVE PRESSURE (SUPPLY) DUCT UP
	POSITIVE PRESSURE (SUPPLY) DUCT UP
	NEGATIVE PRESSURE (RETURN) DUCT UP
	POSITIVE PRESSURE (SUPPLY) DUCT DOWN
	POSITIVE PRESSURE (SUPPLY) DUCT DOWN
	NEGATIVE PRESSURE (RETURN) DUCT DOWN
	EXISTING DUCTWORK TO BE REMOVED
	EXISTING DUCTWORK TO REMAIN
	NEW DUCTWORK
	FLEXIBLE DUCTWORK APPROVAL REQ. FOR USE (5'-0" MAX)
	CROSSHATCHING ON DUCTWORK INDICATES 1"(25mm) DUCT
	DUCTWORK WITH INSULATION
	DUCT IN FIREPROOF ENCLOSURE
	SUPPLY AIR DIFFUSER (SQUARE)
	LINEAR OR SLOT DIFFUSER WITH PLENUM LINING AS SPECIFIED.
	SUPPLY AIR DIFFUSER (ROUND)
	SIDEWALL GRILLE
	RETURN/EXHAUST GRILLE
	FULL RADIUS DUCT CONNECTION
	TAP-IN DUCT CONNECTION
	ROUND DUCT CONNECTION
	TURNING VANES
FD	FIRE DAMPER
EXFD	EXISTING FIRE DAMPER
RFD	REMOVE FIRE DAMPER
FD/SD	FIRE DAMPER/SMOKE DAMPER
MD	MOTORIZED DAMPER
EXMD	EXISTING MOTORIZED DAMPER
BD	BALANCING DAMPER
OED	OPEN ENDED DUCT
T	THERMOSTAT
UC	U/C UNDERCUT
CAP	CAP
	SILENCER

LEGEND - PLUMBING

THIS LEGEND OF SYMBOLS REPRESENTS
MANTECON PARTNERS INC.,
STANDARD/GENERIC LEGEND.
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REFER	DESCRIPTION
DCW	DOMESTIC COLD WATER PIPING
DHW	DOMESTIC HOT WATER PIPING
DTW	DOMESTIC TEMPERED WATER
HHWS	HYDRONIC HOT WATER SUPPLY PIPING
HHWR	HYDRONIC HOT WATER RETURN PIPING
VENT	VENT PIPING
SAN	SANITARY PIPING ABOVE FLOOR
SAN	SANITARY PIPING BELOW GRADE OR FLOOR
S	STORM PIPING ABOVE FLOOR
STM	STORM PIPING BELOW GRADE OR FLOOR
T	TEMPERED WATER PIPING
ROS	REVERSE OSMOSIS SUPPLY PIPING
A	AIR PIPING
V	VACUUM PIPING
G	GAS PIPING
CA	COMPRESSED AIR PIPING
	PIPING TO BE REMOVED
	CAPPED PIPE
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
HD	HUB DRAIN
AD	AREA DRAIN
FS	FLOOR SINK DRAIN
RD	ROOF DRAIN
CD	CANOPY DRAIN
BD	BALCONY DRAIN
	ELEVATOR PIT DRAIN C/W BACK WATER VALVE
CO	CLEANOUT IN FLOOR
CO	CLEANOUT IN LINE OR STACK
M	WATER METER
M	GAS METER
	ISOLATION/GATE VALVE
	THROTTLING VALVE
	BACKFLOW PREVENTER
	CHECK VALVE c/w BALL DRIP VALVE
	STRAINER
	GAS VALVE
	REDUCED PRESSURE BACKFLOW PREVENTER
	DUAL CHECK W/ ATMOSPHERIC PORT BACKFLOW PREVENTER
	BACKFLOW PREVENTER
	PRESSURE REDUCING VALVE (WATER)
	VENT THROUGH ROOF
	3-WAY VALVE
	TEMPERATURE & PRESSURE RELIEF VALVE

TAG SYMBOLS

DUCT

FOT/FOB/SU/SD/=	DUCT SET - SU/SD FROM TOP
System Abb. 300 x 400mm	DUCT SIZE - SIZE, ABBREVIATION
300 ø	FLEX DUCT SIZE - DIAMETER

MECHANICAL EQUIPMENT

1i	MECHANICAL EQUIPMENT - MARK
1@ 1i / 100 L/s / Size	DIFFUSER - FLOW & SIZE
Type Mark	PLUMBING FIXTURE - TYPE MARK
S1	SPRINKLER SYSTEM - SYSTEM CLASSIFICATION

PLUMBING

Mark	PLUMBING EQUIPMENT - MARK
Type Mark	PLUMBING FIXTURE - TYPE MARK

PIPING

System Abb.- Size - Slope	PIPING SYSTEM - ABBREVIATION, SIZE & SLOPE
Size	PIPE FITTING - SIZE
Diameter ø	PIPING (FLEX) - SIZE

SPACES & ZONES

Space Name 101 / 150 m2	SPACE TAG - NAME, NUMBER, AREA, VOLUME
Zone Name	SPACE TAG - NAME, NUMBER, AREA, VOLUME

VALVE SYMBOLS

	GATE VALVE
	GLOBE VALVE
	GATE VALVE WITH 3/4 " HOSE ADAPTER
	BACKFLOW PREVENTER
	ANGLE GLOBE VALVE (Schematic Only)
	BUTTERFLY VALVE
	BALL VALVE
	CIRCUIT SETTER
	STRAIGHT-THRU MODULATING CONTROL VALVE
	STRAIGHT-THRU TWO POSITION CONTROL VALVE
	THERMOSTATIC MIXING VALVE
	AUTOMATIC FLOW CONTROL VALVE (Schematic)
	SAFETY OR PRESSURE RELIEF VALVE (Schematic)
	PRESSURE REDUCING VALVE
	MANUAL AIR VENT (Schematic)
	TEST PLUG (PRESSURE/TEMPERATURE)(Schematic)
	SAFETY VALVE (Schematic)
	RELIEF VALVE

LEGEND - FIRE SUPRESSION

THIS LEGEND OF SYMBOLS REPRESENTS
MANTECON PARTNERS INC.,
STANDARD/GENERIC LEGEND
ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS

REFER	DESCRIPTION
E	EXISTING PIPING
F	STANDPIPE PIPING (WET)
SP	SPRINKLER PIPING (WET)
DF	STANDPIPE PIPING (DRY)
DSP	SPRINKLER PIPING (DRY)
F-FDC	STANDPIPE FIRE DEPARTMENT CONNECTION PIPING
SP-FDC	SPRINKLER FIRE DEPARTMENT CONNECTION PIPING
FSV	ELECTRICALLY SUPERVISED VALVE
D/T	DRAIN/TEST VALVE
FS	FLOW SWITCH
FH	FIRE HYDRANT
	FIRE DEPARTMENT PUMPER CONNECTION
FEX	FIRE EXTINGUISHER - SURFACE MOUNTED
FEC	FIRE EXTINGUISHER CABINET
SFEC	FIRE EXTINGUISHER CABINET - SECURE
	FIRE HOSE CABINET - SURFACE
	FIRE HOSE CABINET - RECESSED
	SPRINKLER CONTROL CABINET
	SPRINKLER HEAD - PENDENT
	SPRINKLER HEAD - UPRIGHT
	SPRINKLER HEAD - CONCEALED
	SPRINKLER HEAD - UPRIGHT c/w WIRE GUARD
	SPRINKLER HEAD - SIDEWALL PENDENT
	SPRINKLER HEAD - SIDEWALL c/w GUARD
	SPRINKLER HEAD - DRY PENDENT

DIFFUSER LEGEND

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MANTECON PARTNERS INC.,
STANDARD/GENERIC LEGEND
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	SUPPLY DIFFUSER
	RETURN DIFFUSER
	EXHAUST DIFFUSER
	EXHAUST GRILLE
	RETURN GRILLE
	ROUND CIRCLE DIFFUSER

GOW HASTINGS ARCHITECTS

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CentenniaL Story Arts Centre Relocation

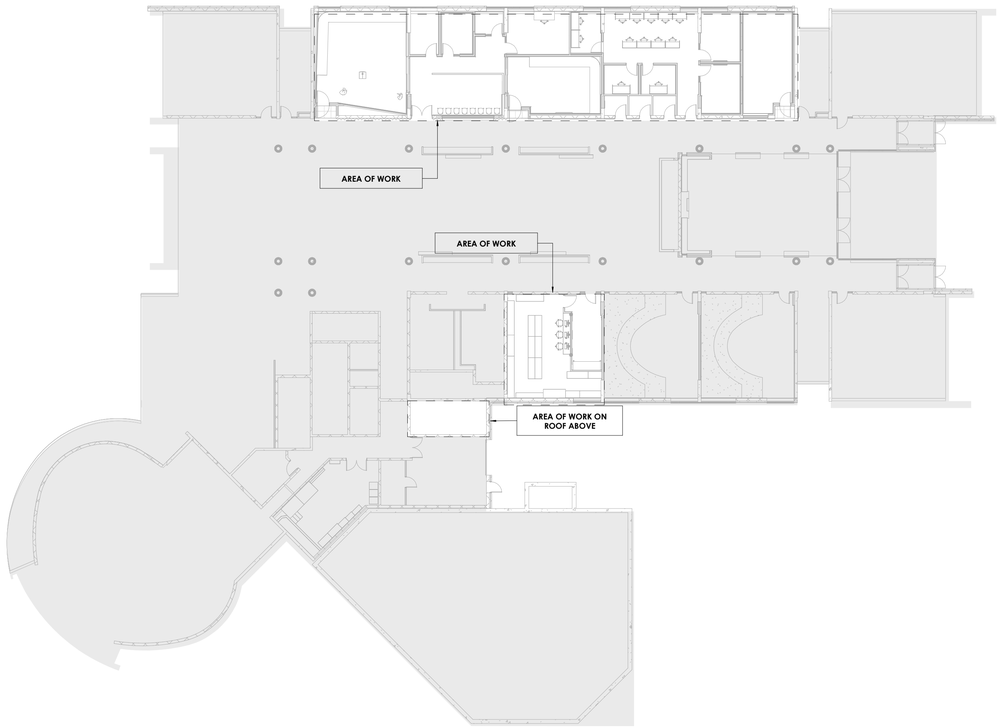
941 PROGRESS AVENUE
SCARBOUROUGH, ONTARIO M1G 3T8

LEAD SHEET (DRAWING LIST, LEGEND & NOTES)

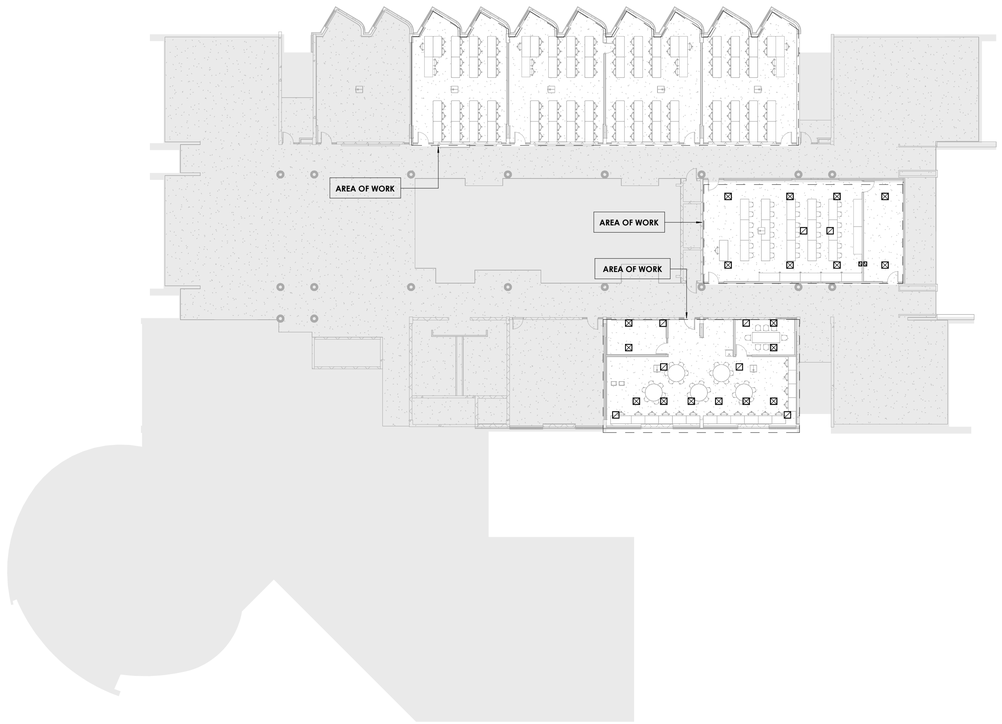
Scale: NTS

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-000



1 M-001 LEVEL 1 KEY PLAN
1 : 250



2 M-001 LEVEL 2 KEY PLAN
1 : 250

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941 PROGRESS AVENUE
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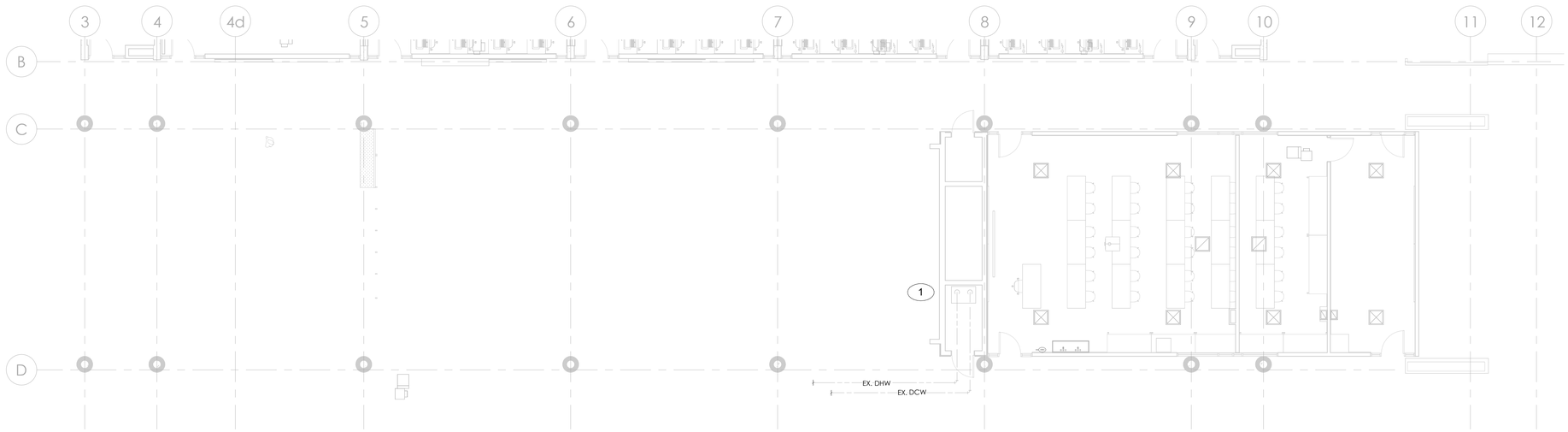
MECHANICAL KEY PLAN

Project North

Scale: 1 : 250

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-001



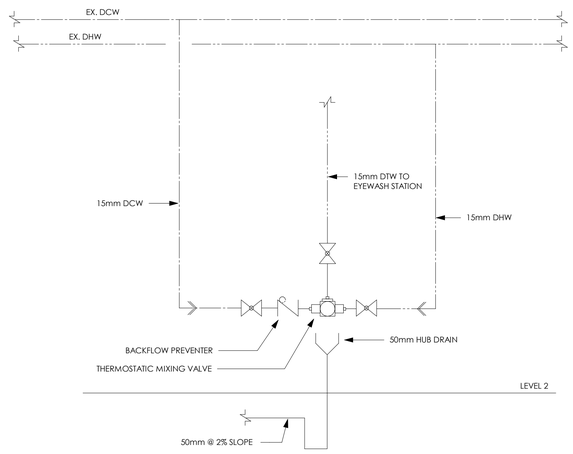
DRAWING NOTES - PLUMBING

(1) EXISTING 25 DIA. DCW / DHW TO JANITORY CLOSET TO REMAIN

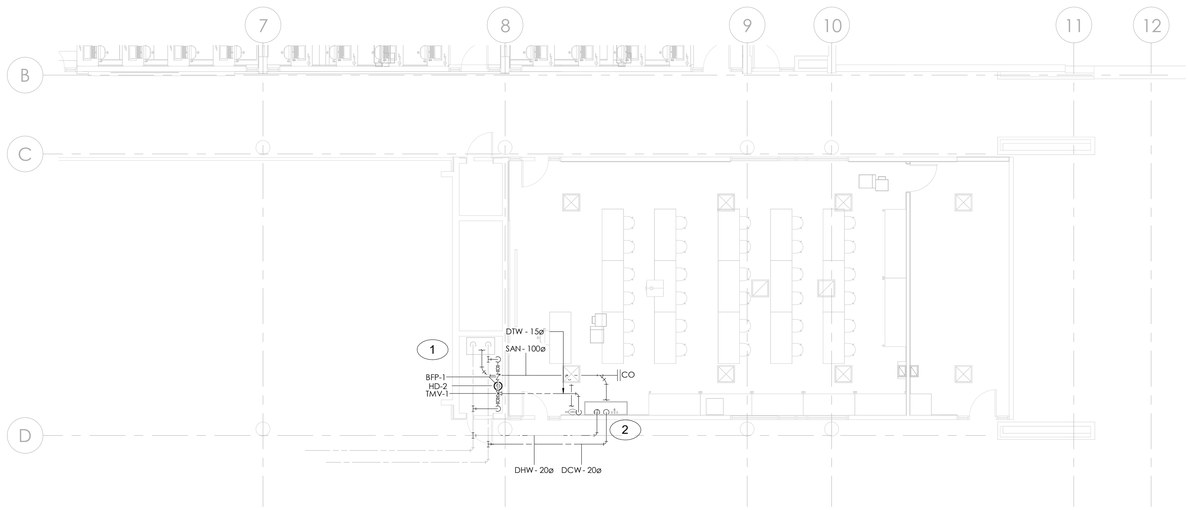
GENERAL NOTES - PLUMBING

1. THIS DRAWING INDICATES FOCUS AREA OF VIEW. PLUMBING CONTRACTOR TO VERIFY SITE CONDITION BEFORE COMMENCING WORK. REPORT TO ENGINEER ANY DISCREPANCIES BETWEEN EXISTING AND PROPOSED DESIGN INTENT.
2. REMOVE ALL DEBRIS AND RUBBISH DAILY AND ONCE WORK IS COMPLETE.
3. COORDINATE ALL REQUIREMENTS WITH GENERAL TRADE ON SITE.
4. ALL EXISTING PIPING AND VALVES AROUND WORK AREA TO BE INSPECTED, SECURED AND SHUT OFF BEFORE COMMENCING WORK.
5. CLEAR EXISTING DUCTWORK WHEN INSTALLING NEW PIPING.
6. PROVIDE CLEANOUT AT BOTTOM OF EVERY SOIL AND WASTE STACK CONNECTED TO HORIZONTAL DRAINAGE PIPE.
7. PROVIDE CLEANOUTS AT PLUMBING FIXTURES AS REQUIRED BY ONTARIO BUILDING CODE PART 7.
8. ALL PLUMBING FIXTURES INCLUDING FLOOR DRAINS TO BE TRAPPED AND VENTED AS REQUIRED BY CODE.
9. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING HEIGHTS.
10. PROVIDE ACCESS DOORS FOR CLEANOUTS ABOVE DRYWALL CEILINGS.
11. REMOVE OBSOLETE PIPING WHERE POSSIBLE.
12. ENSURE EXISTING PIPING REMAINS IN SERVICE UNTIL RECONNECTED TO NEW SERVICES.
13. RECONNECT VENTS FROM EXISTING EQUIPMENT AND FIXTURES TO NEW VENTS AS REQUIRED.
14. INSTALL UNDER COUNTER WATER PIPING TIGHT TO UNDERSIDE OF COUNTER.
15. ALL WATER, SANITARY, SEWER AND VENT COPPER PIPING WITH SOLDER JOINTS SHALL BE LEAD FREE. DO NOT INSTALL WATER LINES IN EXTERIOR WALLS UNLESS PROPERLY INSULATED.
16. INSTALL SHUT OFF VALVES AT EACH PLUMBING FIXTURE.
17. DEMOLITION PIPING SHALL BE TAKEN BACK TO NEAREST WORKING MAIN AND CAPPED TO AVOID DEAD LEG LENGTHS. REFER TO CSA CODE Z317 SPECIAL REQUIREMENTS FOR PLUMBING INSTALLATIONS IN HEALTH CARE FACILITIES 6.4.1.3.

1 M-100 LEVEL 2 PLUMBING EXISTING PLAN PHASE 2
1 : 100



3 M-100 SCHEMATIC DOMESTIC EYEWASH
1 : 20



DRAWING NOTES - PLUMBING

(1) REFER TO DETAIL SCHEMATIC 1/M-100 FOR DOMESTIC PIPING TO EYEWASH

(2) CONNECT 20 DIA. DCW / DHW FROM EXISTING DOMESTIC PIPING. PROVIDE SHUT OFF BALL VALVE PRIOR TO CONNECTION TO DOMESTIC FIXTURES. PROVIDE 100 DIA. SANITARY PIPING C/W P-TRAP TO DRAINAGE, AS SHOWN

2 M-100 LEVEL 2 PLUMBING PROPOSED PLAN PHASE 2
1 : 100

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Centennial Story Arts Centre Relocation

941 PROGRESS AVENUE
SCARBOUROUGH, ONTARIO M1G 3T8

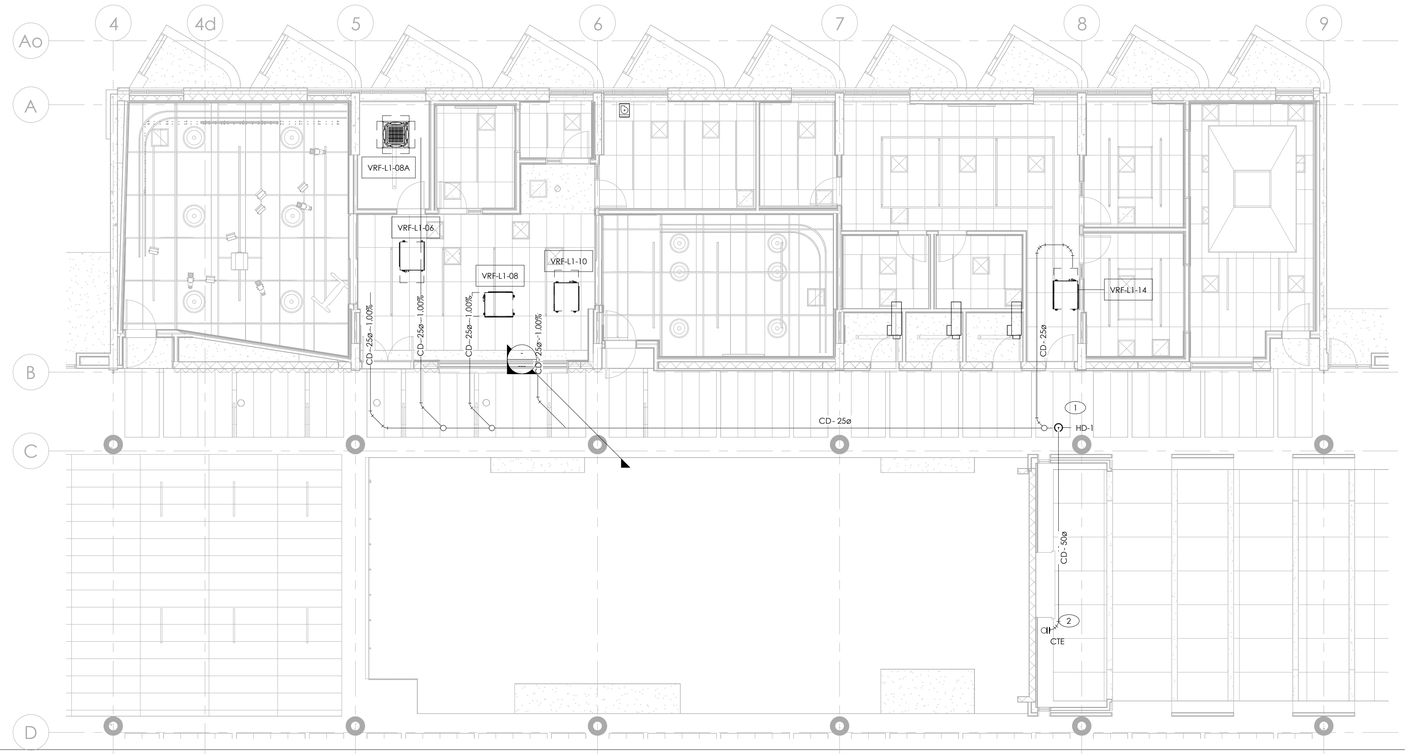
LEVEL 2 - PLUMBING PLAN

Project North

Scale: As indicated

Project Number: 25-120	
Drawn By: M.V	
Checked By: N.O	

M-100



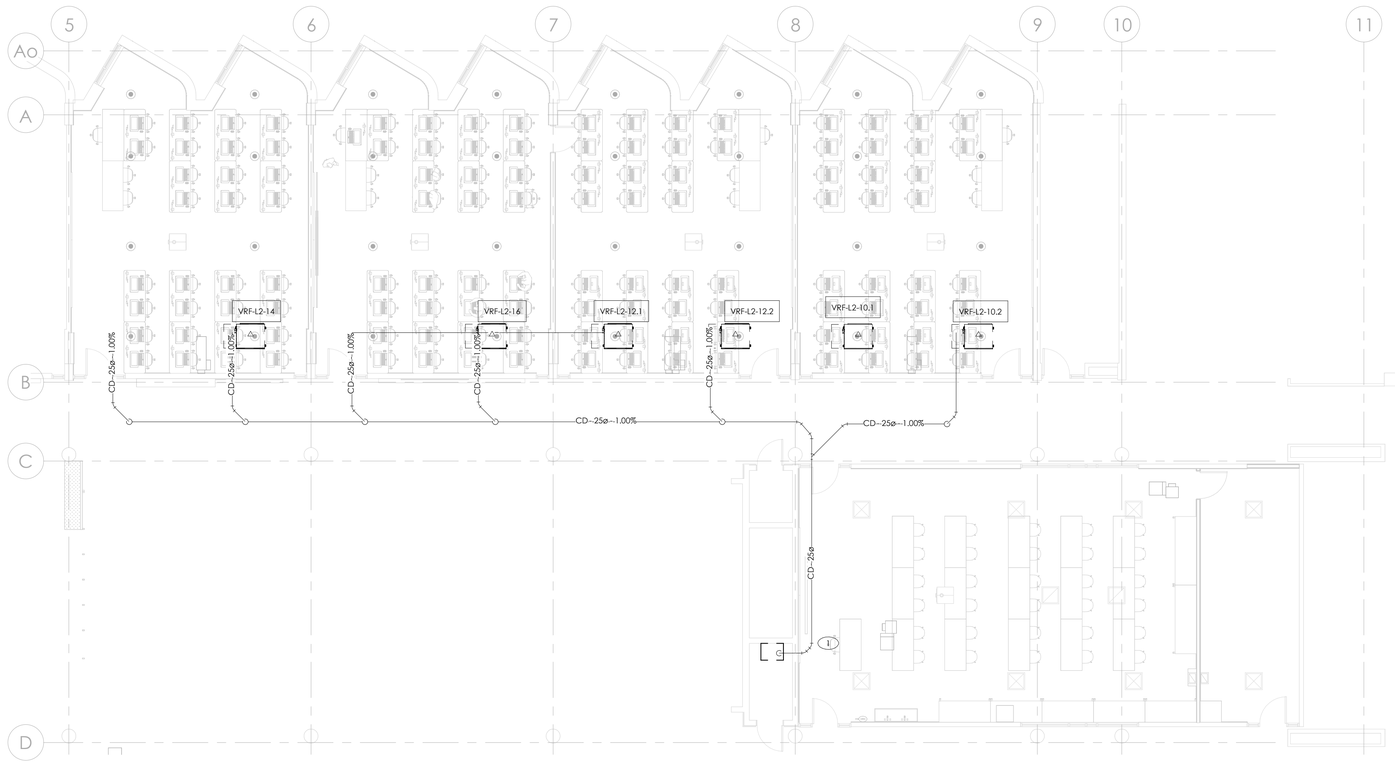
1 LEVEL 1 PROPOSED CONDENSATE FLOOR PLAN
M-101 1 : 100

DRAWING NOTES - DRAINAGE

1. PROVIDE CONDENSATE DRAINAGE FROM VRF TO NEW HUB DRAIN, C/W P-TRAP LOCATED IN CEILING SPACE.
2. CONNECT CONDENSATE DRAINAGE TO EXISTING SANITARY RISER.

GENERAL NOTES - CONDENSATE

1. REFER TO MECHANICAL DETAILS FOR CONDENSATE PIPING DETAIL.



DRAWING NOTES - DRAINAGE

1. PROVIDE CONDENSATE DRAINAGE FROM VRF TO EXISTING MOP SINK IN AN INDIRECT CONNECTION AS SHOWN

2 LEVEL 2 PROPOSED CONDENSATE FLOOR PLAN
M-101 1 : 100

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LEVEL 1 - PROPOSED CONDENSATE

Project North

Scale: As indicated

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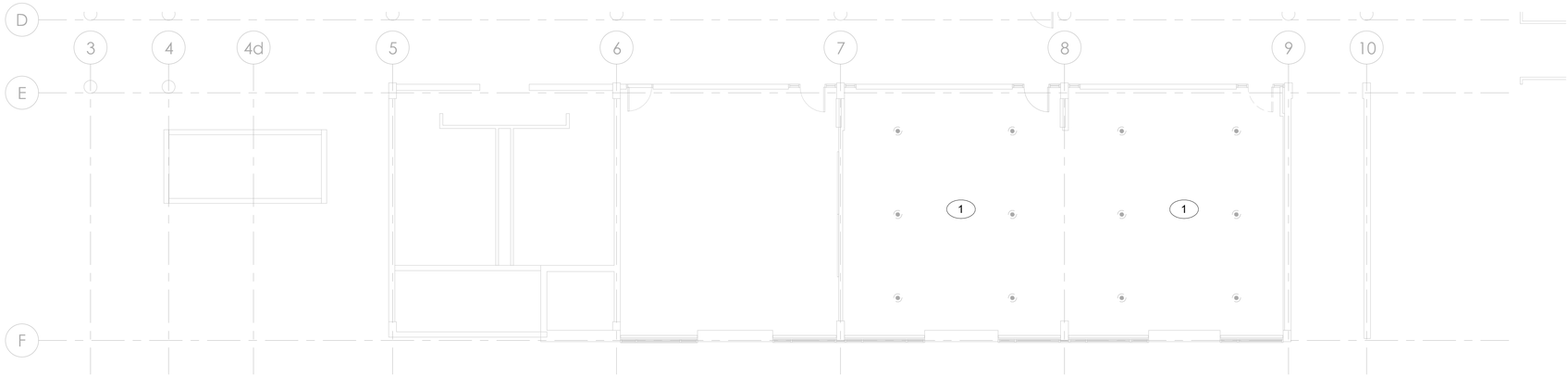
Checked By: N.O	

M-101



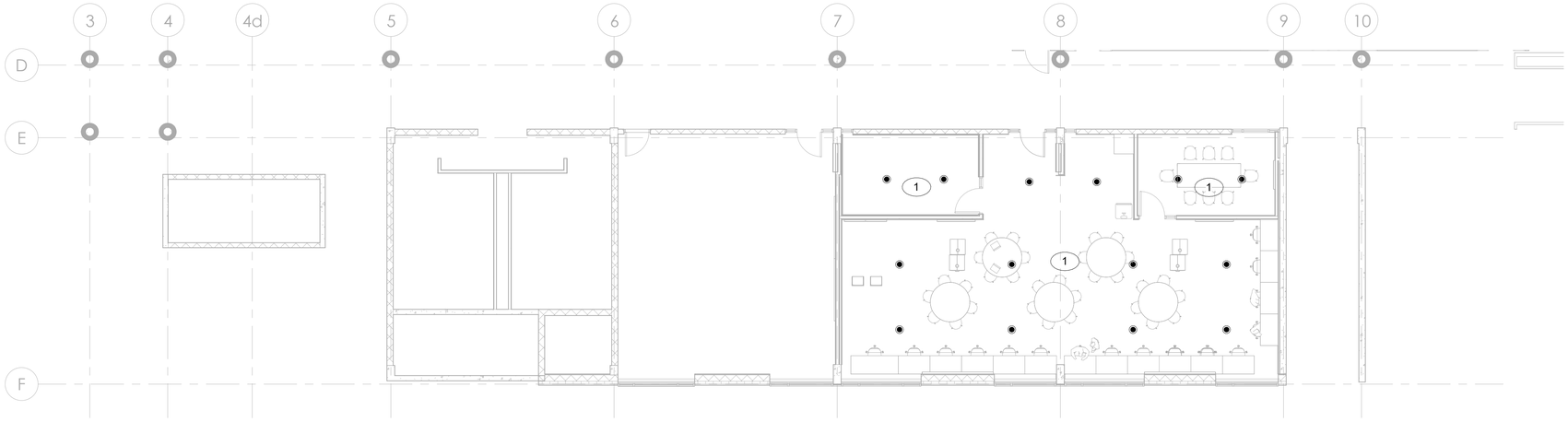
DRAWING NOTES - FIRE PROTECTION

1	DEMOLISH AND REMOVE EXISTING SPRINKLER HEAD AND REPLACE AS SHOWN IN PROPOSED PLAN.

GENERAL NOTES - FIRE PROTECTION

1. SPRINKLER CONTRACTOR IS RESPONSIBLE FOR DESIGN OF SPRINKLER SYSTEM IN STRICT ACCORDANCE WITH THE ONTARIO BUILDING CODE, ALL APPLICABLE NFPA STANDARDS, THE REQUIREMENTS OF THE OWNER'S INSURANCE UNDERWRITERS ENGINEERING AUTHORITY AND AUTHORITIES HAVING JURISDICTION.
2. THE CONTRACTOR SHALL COORDINATE INSTALLATION WITH THE WORK OF OTHER TRADES. PROVIDE HORIZONTAL AND OR VERTICAL OFFSETS AS REQUIRED.
3. PROVIDE ADDITIONAL SPRINKLER HEADS AS REQUIRED TO SUIT OBSTRUCTIONS GREATER THAN 1200MM 48 INCHES SUCH AS DUCTWORK AND BULKHEADS.
4. CONTRACTOR SHALL PAY ALL FEES, CHARGES AND COSTS REQUIRED FOR REVIEWS, INSPECTIONS, TESTS OR COMMENTS.
5. SPRINKLER LAYOUT SHOWN SERVES AS GENERAL SCOPE OF WORK. CONTRACTOR SHALL MODIFY DESIGN TO COMPLY WITH AUTHORITIES AND ARCHITECT APPROVAL. HEADS MAY BE ADDED OR DELETED AT NO EXTRA COST PROVIDED APPROVALS ARE MET AND COORDINATION WITH MECHANICAL, ELECTRICAL, STRUCTURAL AND ARCHITECTURAL ELEMENTS IS MAINTAINED.
6. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR FINAL COORDINATION OF SPRINKLER LAYOUT.
7. SUBMIT SPRINKLER HEAD LAYOUT TO ARCHITECT AND CONSULTANTS FOR REVIEW.
8. IN T BAR CEILINGS LOCATE SPRINKLERS CENTERED LENGTHWISE WITH TILE, AT LEAST 6 INCHES FROM T.
9. PROVIDE WIRE GUARDS ON ALL SPRINKLERS IN MECHANICAL AND ELECTRICAL ROOMS.

1 / M-200 LEVEL 2 FIRE PROTECTION EXISTING PLAN
1 : 100



DRAWING NOTES - FIRE PROTECTION

1	PROVIDE AND INSTALL 15mm UPRIGHT HEAD IN LOCATION AS SHOWN.
2	PROVIDE AND INSTALL 15mm CONCEALED PENDENT HEAD IN LOCATION AS SHOWN.

2 / M-200 LEVEL 2 FIRE PROTECTION PROPOSED PLAN
1 : 100

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LEVEL 2 - FIRE PROTECTION PLAN

Project North

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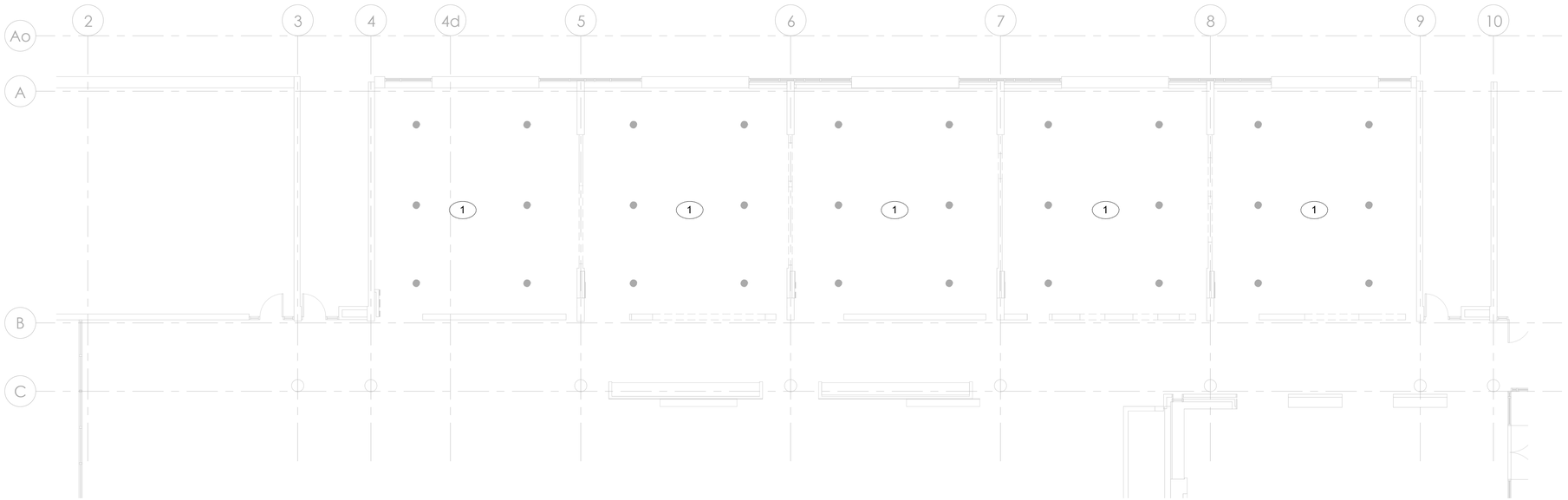
M-200



DRAWING NOTES - FIRE PROTECTION

(1) DEMOLISH AND REMOVE EXISTING SPRINKLER HEAD AND REPLACE AS SHOWN IN PROPOSED PLAN.

GENERAL NOTES - FIRE PROTECTION

1. SPRINKLER CONTRACTOR IS RESPONSIBLE FOR DESIGN OF SPRINKLER SYSTEM IN STRICT ACCORDANCE WITH THE ONTARIO BUILDING CODE, ALL APPLICABLE NFPA STANDARDS, THE REQUIREMENTS OF THE OWNER'S INSURANCE UNDERWRITERS ENGINEERING AUTHORITY AND AUTHORITIES HAVING JURISDICTION.
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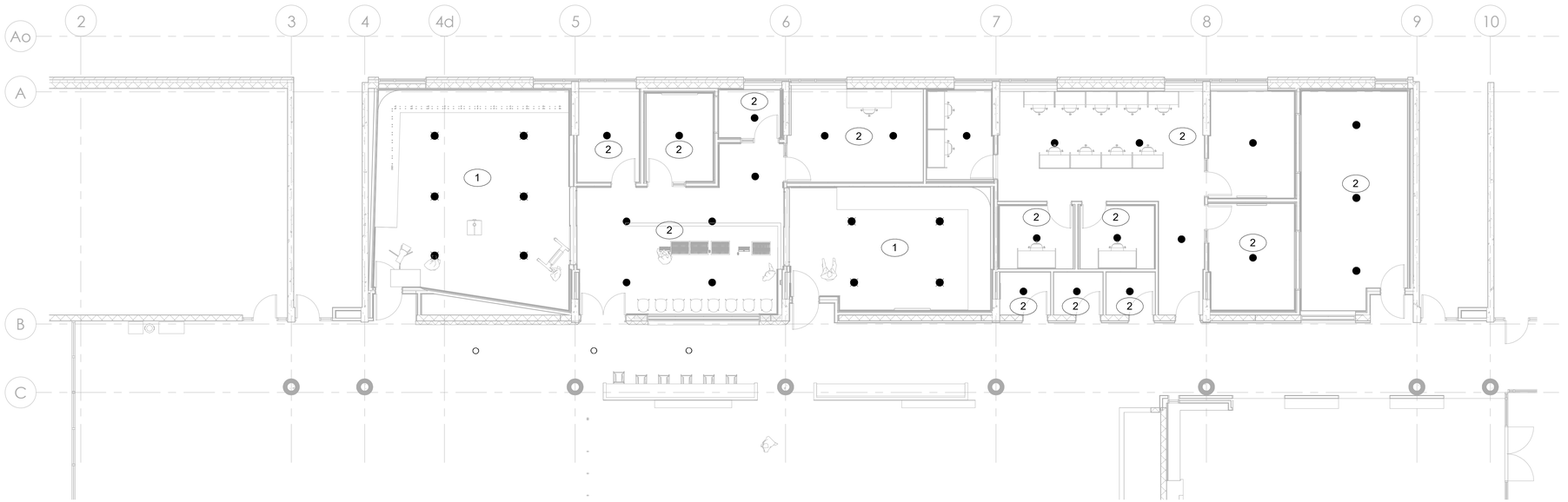
7. SUBMIT SPRINKLER HEAD LAYOUT TO ARCHITECT AND CONSULTANTS FOR REVIEW.
8. IN T BAR CEILINGS LOCATE SPRINKLERS CENTERED LENGTHWISE WITH TILE, AT LEAST 6 INCHES FROM T.
9. PROVIDE WIRE GUARDS ON ALL SPRINKLERS IN MECHANICAL AND ELECTRICAL ROOMS.

1 M-201 LEVEL 1 FIRE PROTECTION DEMOLITION PLAN

1 : 100



DRAWING NOTES - FIRE PROTECTION

(1) PROVIDE AND INSTALL 15mm UPRIGHT HEAD IN LOCATION AS SHOWN.

(2) PROVIDE AND INSTALL 15mm CONCEALED PENDENT HEAD IN LOCATION AS SHOWN.

2 M-201 LEVEL 1 FIRE PROTECTION PROPOSED PLAN

1 : 100

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CentenniaL Story Arts Centre Relocation

941 PROGRESS AVENUE
SCARBOUROUGH, ONTARIO M1G 3T8

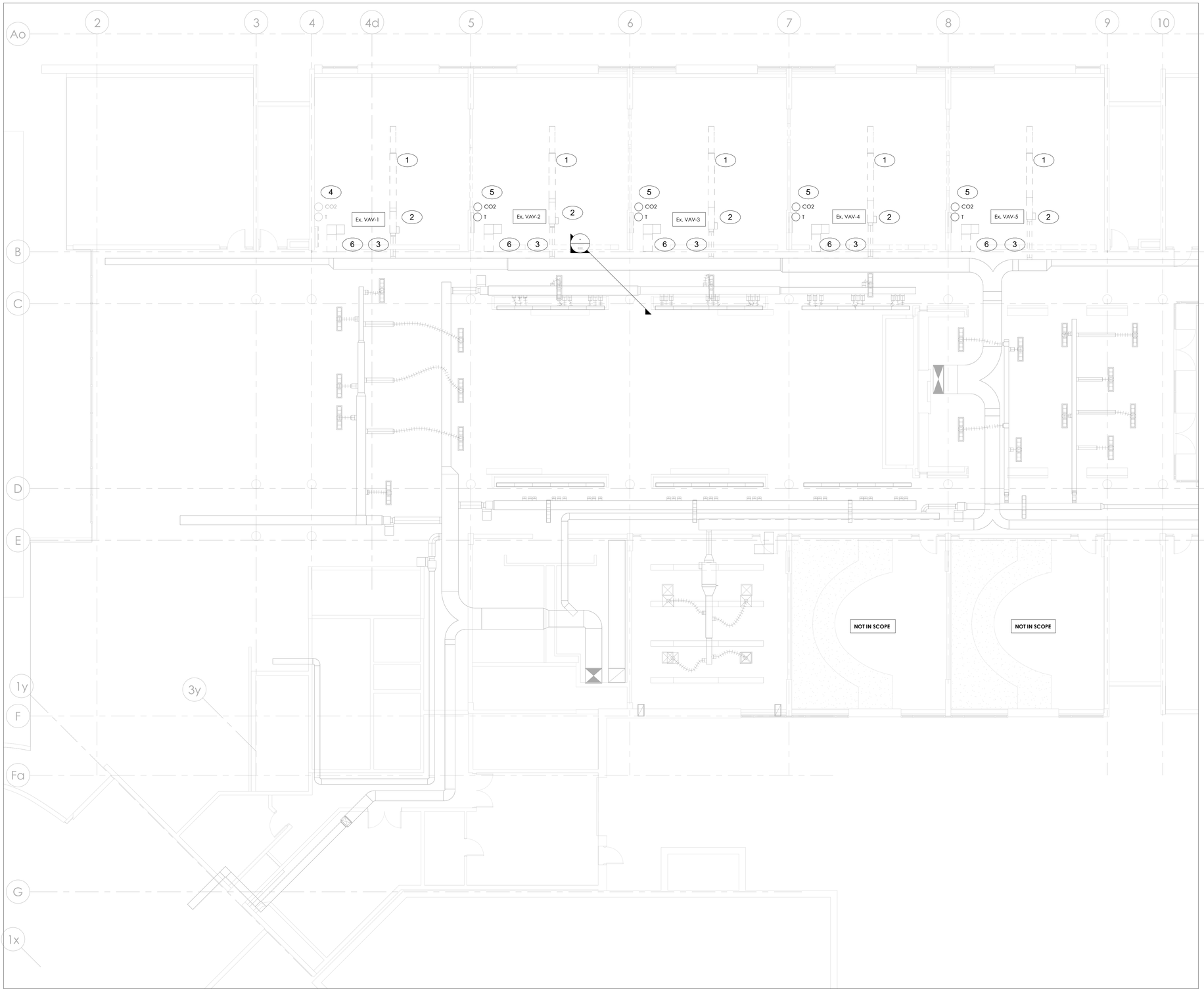
LEVEL 1 - FIRE PROTECTION PLAN

Project North

Scale: As indicated

Project Number: 25-120	
Drawn By: M.V	
Checked By: N.O	

M-201



1 M-300 LEVEL 1 HVAC DEMOLITION PLAN
1 : 100

DRAWING NOTES - HVAC

1. DEMOLISH AND REMOVE EXISTING SUPPLY AIR DUCTWORK AND ASSOCIATED HANGERS.
2. REMOVE AND RELOCATE EXISTING VAV BOX TO LOCATION AS SHOWN IN PROPOSED DRAWING. DISCONNECT POWER, BAS AND TEMPERATURE CONTROL WIRING AND CONNECT TO VAV IN PROPOSED LOCATION.
3. DEMOLISH AND REMOVE EXISTING INTAKE TO VAV AND CAP DISTRIBUTION MAIN DUCTWORK
4. EXISTING TEMPERATURE CONTROL TO REMAIN IN SPACE. ENSURE EQUIPMENT IS PROPERLY PROTECTED AND SECURED FROM ANY WORK. EXISTING CARBON DIOXIDE SENSOR TO DEMOLISH AND REMOVE.
5. EXISTING TEMPERATURE SENSOR AND CARBON DIOXIDE SENSOR TO BE RELOCATED PER PROPOSED PLANS.
6. EXISTING LINED TRANSFER DUCT TO BE REMOVED AND REUSED. REFER TO PROPOSED PLANS FOR RELOCATION.

GENERAL NOTES - HVAC

1. THIS DRAWING INDICATES GENERAL INTENT OF DEMOLITION ONLY. CONTRACTOR TO VERIFY SITE CONDITION BEFORE DEMOLITION AND COMMENCING WORK. REPORT TO ENGINEER ANY DISCREPANCIES BETWEEN EXISTING AND DEMOLITION INTENT.
2. DEMOLISH ALL DUCTWORK, PIPING, DIFFUSERS, GRILLES, CONTROLS, AND ACCESSORIES AS INDICATED AND AS REQUIRED.
3. REMOVE ALL DEBRIS AND RUBBISH DAILY AND ONCE WORK IS COMPLETE.
4. COORDINATE WORK WITH ALL TRADES.
5. SUITABLE FIRE STOP & SMOKE SEAL MATERIALS AS REQUIRED. COORDINATE ALL REQUIREMENTS WITH GENERAL TRADE ON SITE.
6. ALL EXISTING EQUIPMENT AND CONTROLS WIRING TO BE SECURED AND RETAINED IN PLACE FOR FUTURE USE
7. ALL DUCTWORK ABOVE AND IN NOISE SENSITIVE AREAS TO BE INTERNALLY LINED

GOW HASTINGS ARCHITECTS

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SCARBOUROUGH, ONTARIO M1G 3T8

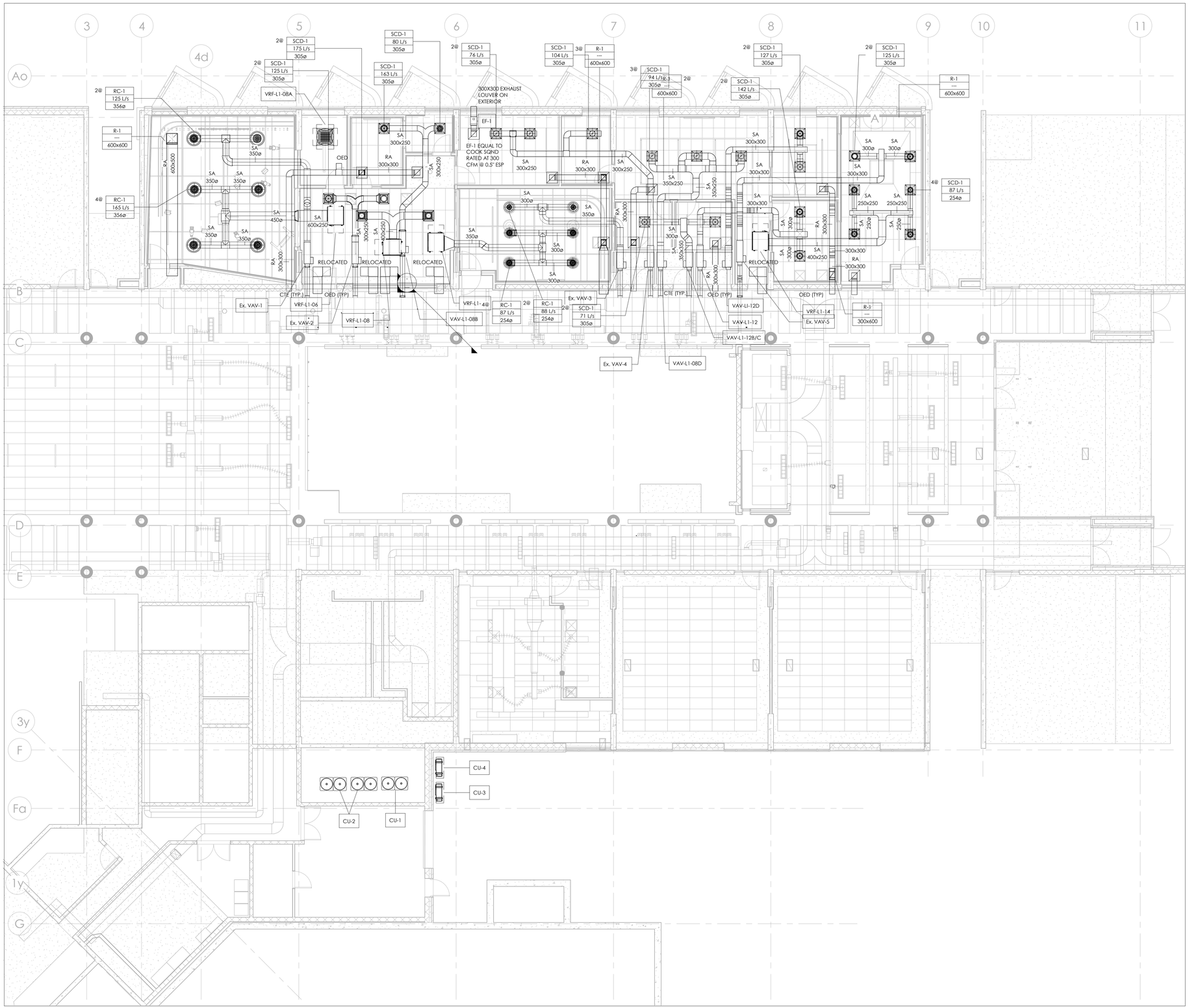
LEVEL 1 HVAC DEMOLITION PLAN

Project North

Scale: As indicated

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-300



1 LEVEL 1 HVAC PROPOSED PLAN
M-301 1 : 100

GENERAL NOTES - HVAC

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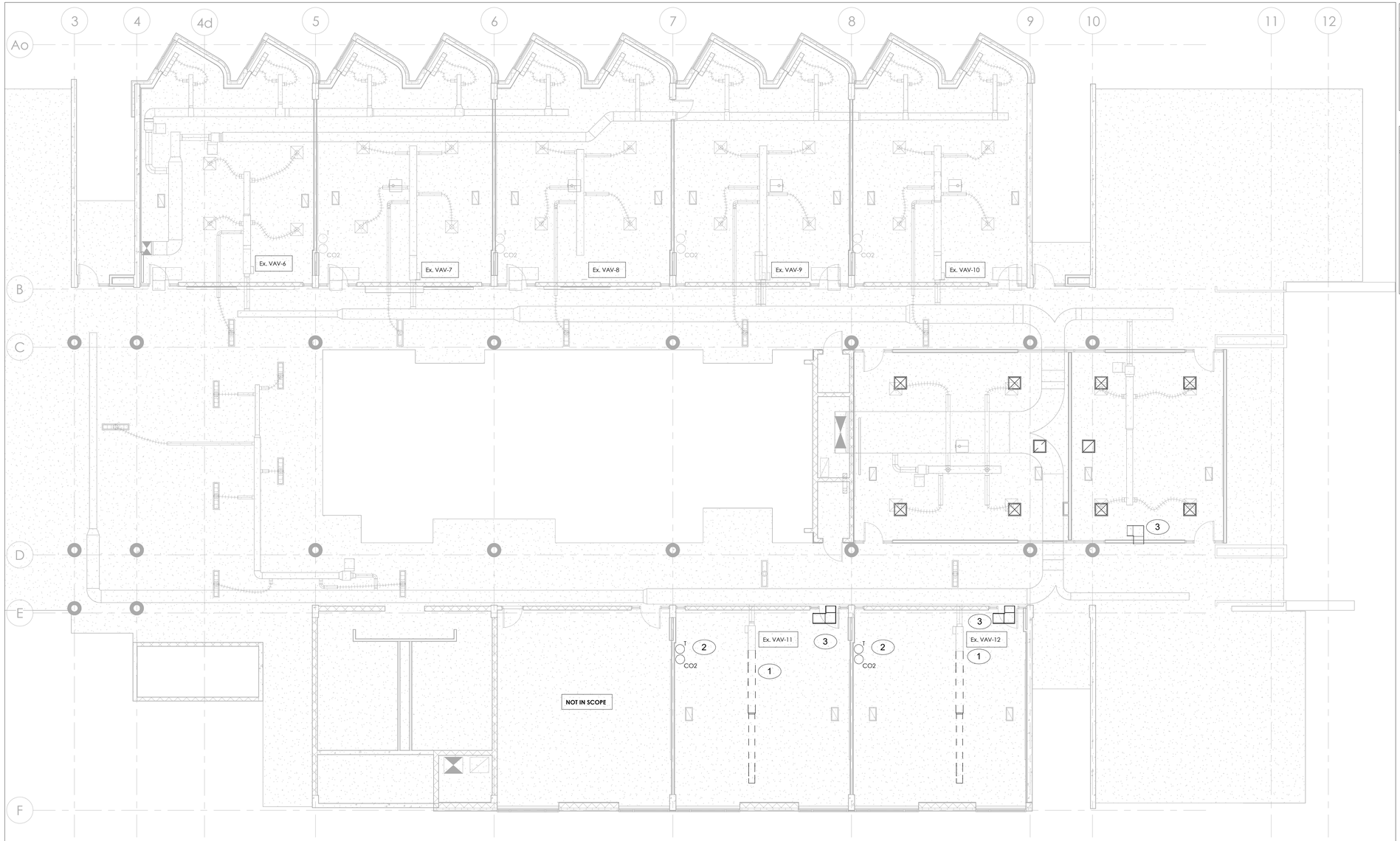
LEVEL 1 HVAC PROPOSED PLAN

Project North

Scale: As indicated

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-301



2 LEVEL 2 HVAC EXISTING PLAN
M-302 1 : 100

DRAWING NOTES - HVAC

1. DEMOLISH AND REMOVE EXISTING SUPPLY AIR DUCTWORK AND ASSOCIATED HANGERS.
2. EXISTING TEMPERATURE SENSORS AND CARBON DIOXIDE SENSORS TO BE RELOCATED. REFER TO PROPOSED PLANS.
3. EXISTING LINED TRANSFER DUCT TO BE REMOVED AND REUSED. REFER TO PROPOSED PLANS FOR RELOCATION.

GENERAL NOTES - HVAC

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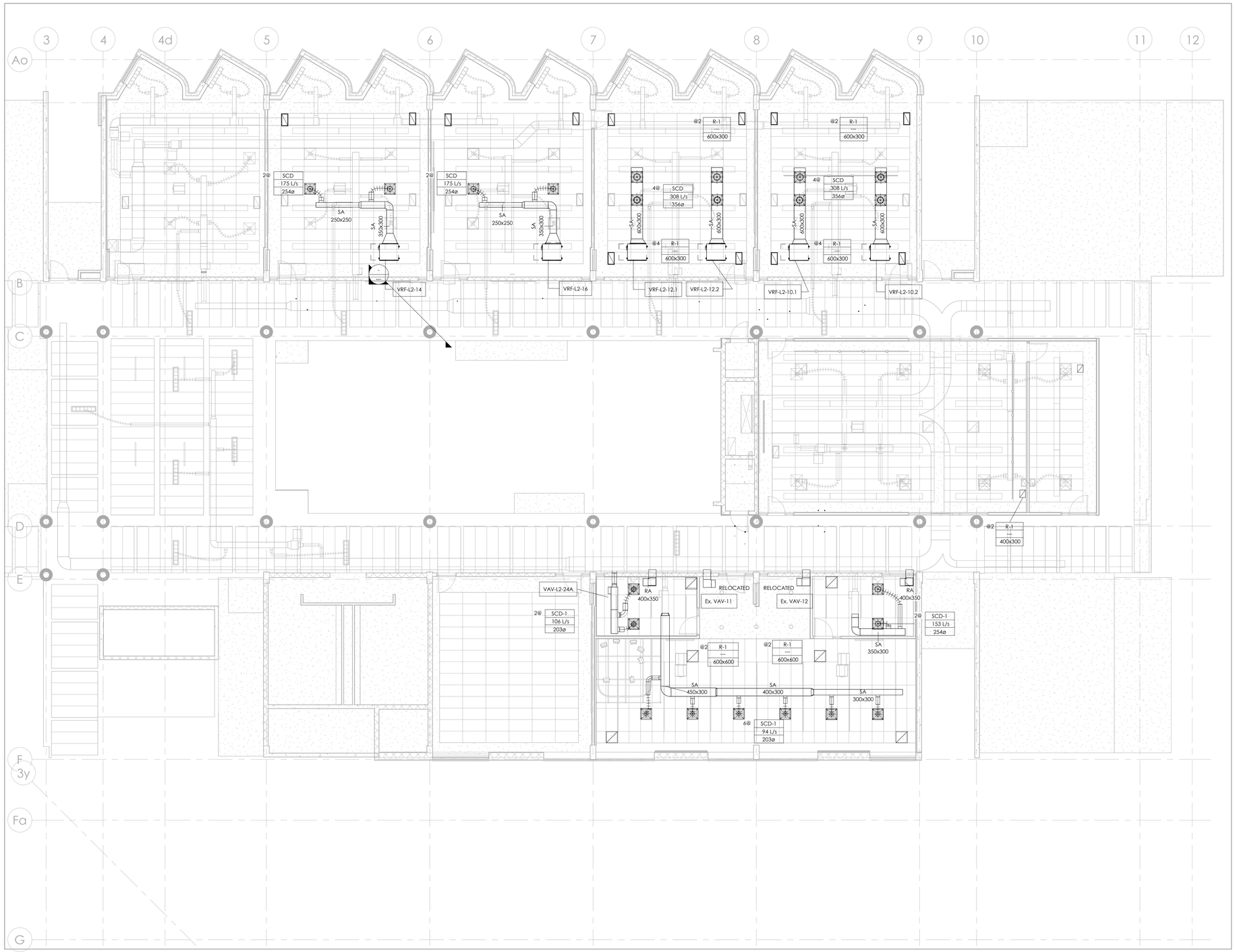
LEVEL 2 HVAC DEMOLITION PLAN

Project North

Scale: As indicated

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-302



1 Level 2 HVAC PROPOSED PLAN
M-303 1 : 100

GENERAL NOTES - HVAC

1. THIS DRAWING INDICATES GENERAL INTENT OF DEMOLITION ONLY. CONTRACTOR TO VERIFY SITE CONDITION BEFORE DEMOLITION AND COMMENCING WORK. REPORT TO ENGINEER ANY DISCREPANCIES BETWEEN EXISTING AND DEMOLITION INTENT.
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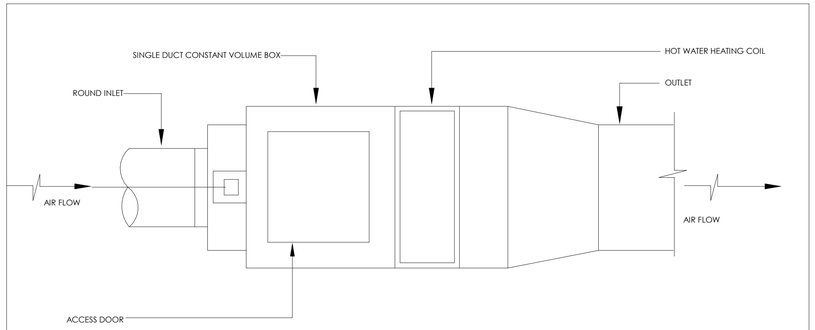
LEVEL 2 HVAC PROPOSED PLAN

Project North

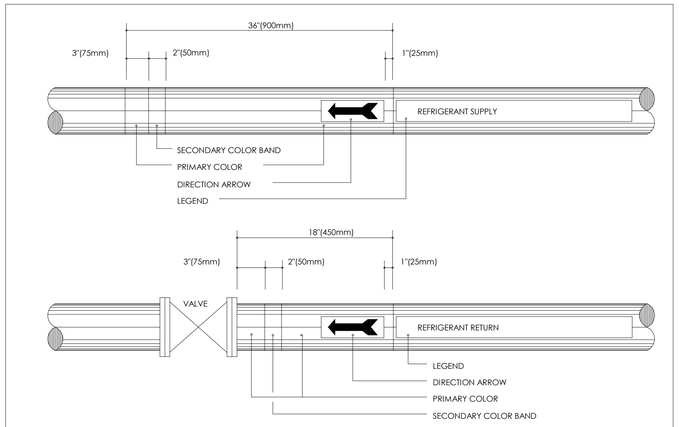
Scale: As indicated

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

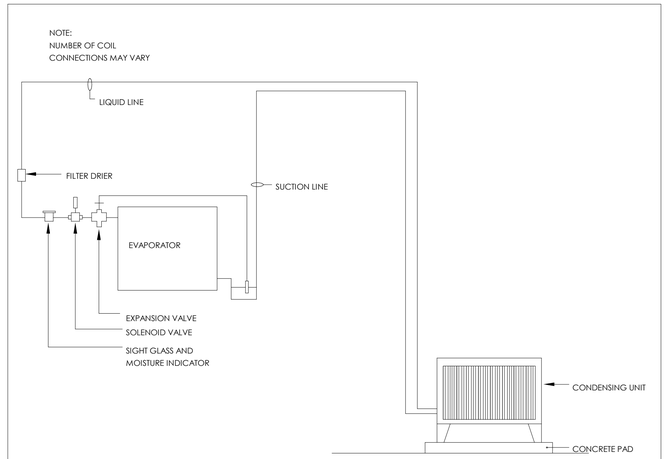
M-303



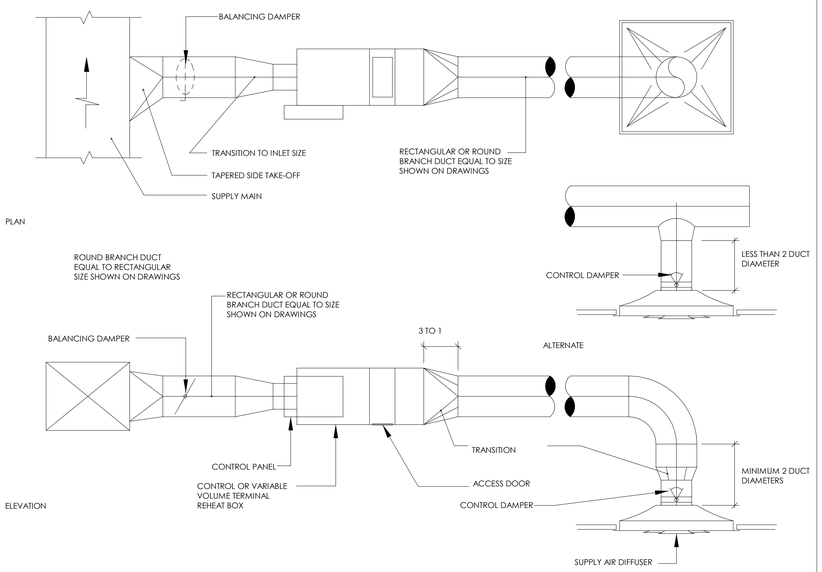
M-400 CLOSE UP DETAIL OF TERMINAL VAV



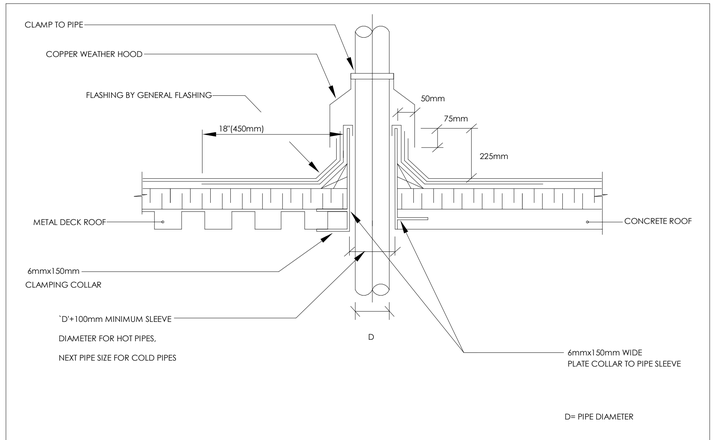
M-400 DETAIL OF PIPING IDENTIFICATION



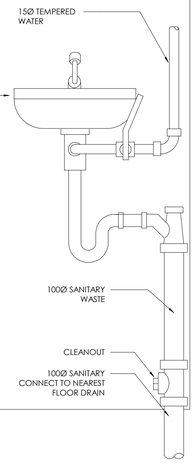
M-400 REFRIGERANT PIPING SCHEMATIC



M-400 DETAIL OF TERMINAL VAV BOX



M-401 DETAIL OF PIPE THROUGH ROOF



M-400 EMERGENCY EYEWASH STATION

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CentenniaL Story Arts Centre Relocation

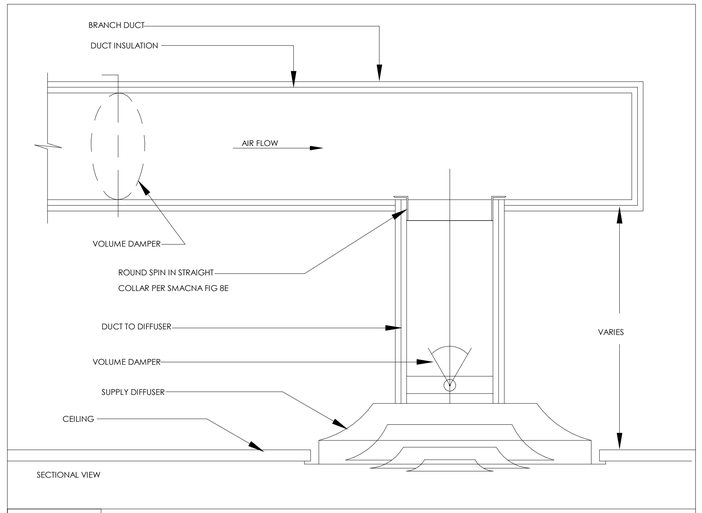
941 PROGRESS AVENUE
SCARBOUROUGH, ONTARIO M1G 3T8

MECHANICAL DETAILS AND SECTIONS

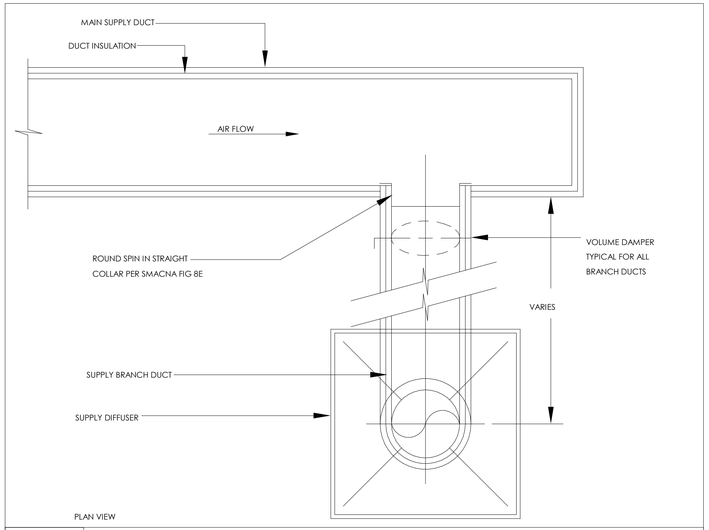
Scale: As indicated

Project Number: 25-120
Drawn By: N.O
Checked By: F.B

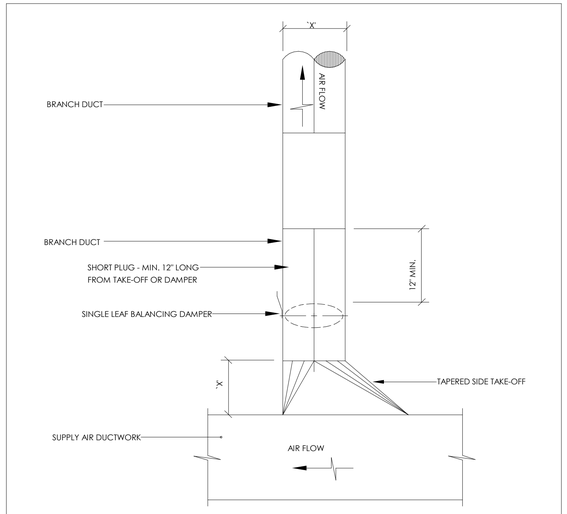
M-400



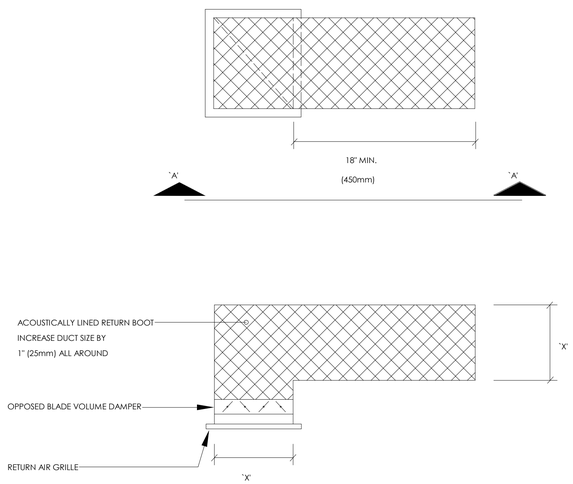
M-401 DETAIL OF DUFFUSER CONNECTION WITH SPIN IN COLLAR



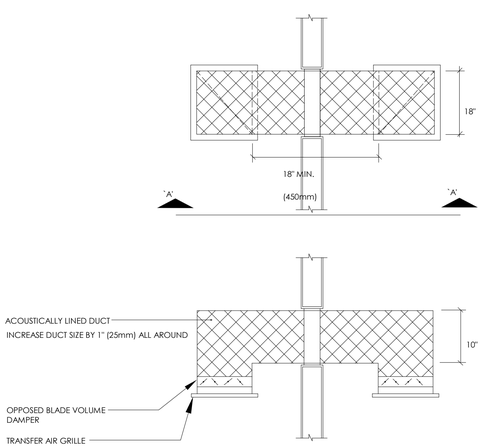
M-401 PLAN VIEW OF DIFFUSER CONNECTION WITH SPIN IN COLLAR



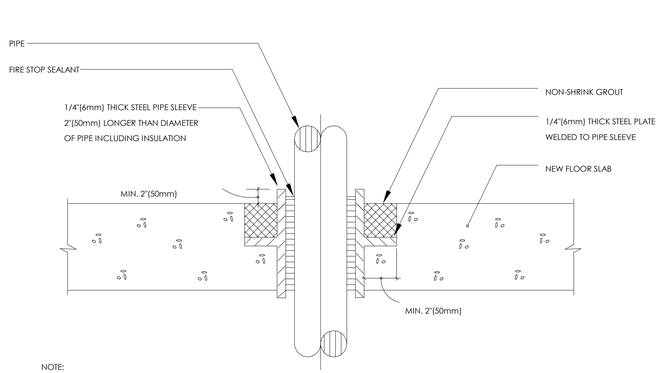
M-401 DETAIL OF ROUND DUCT TO TAKE-OFF



M-401 DETAIL OF AIR GRILLE AND BOOT



M-401 DETAIL OF TRANSFER AIR GRILLE AND BOOT



M-401 DETAIL OF PIPE SLEEVE IN FLOOR SLAB

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CentenniaL Story Arts Centre Relocation

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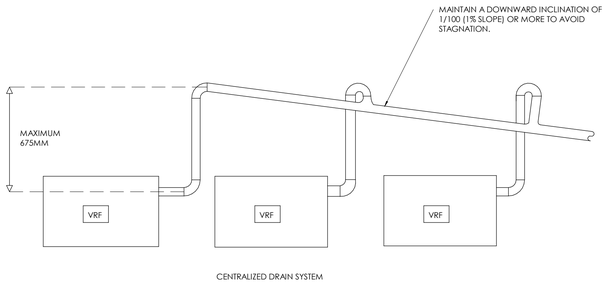
MECHANICAL DETAILS AND SECTIONS

Scale: 1 : 20

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

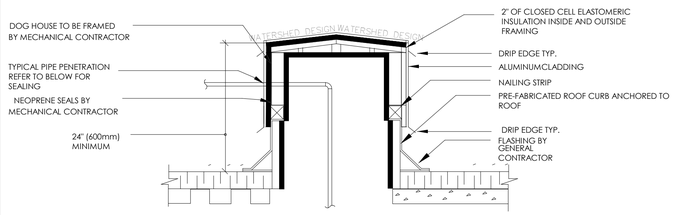
M-401



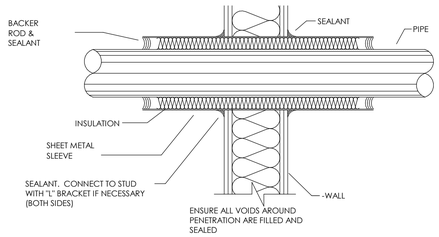
CENTRALIZED DRAIN SYSTEM

M-403	DETAIL OF CENTRALIZED DRAIN PIPE

DOGHOUSE FABRICATION



PIPE PENETRATION



M-403	DETAIL OF DOG HOUSE AND PIPING PENETRATIONS

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MECHANICAL DETAILS AND SECTIONS

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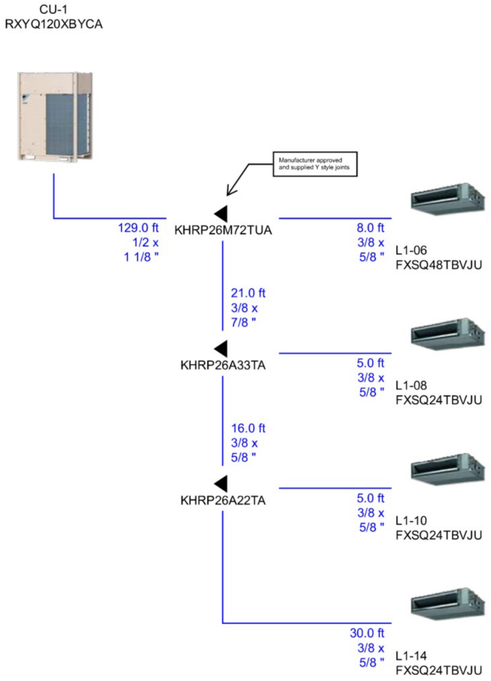
Drawn By: N.O	
Checked By: F.B	

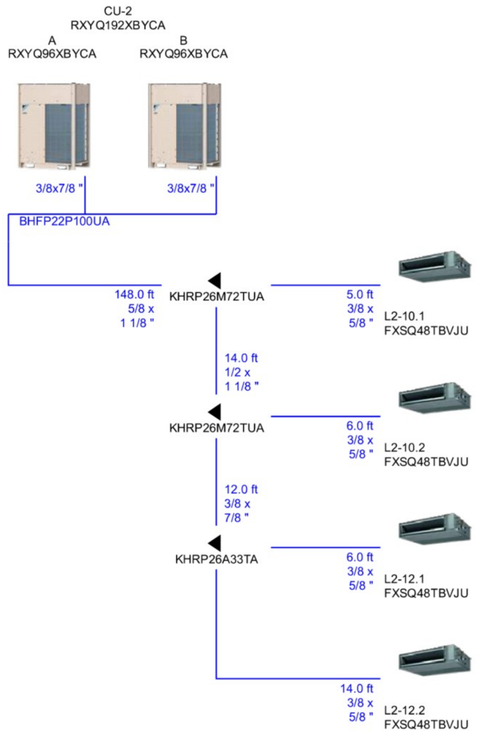
M-403

Piping CU-1



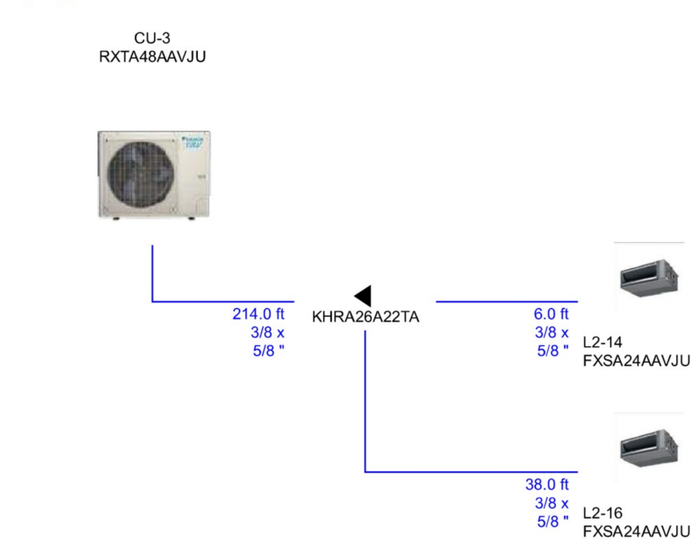
1 M-404 / CU-1 PIPING DIAGRAM
NTS

Piping CU-2



2 M-404 / CU-2 PIPING DIAGRAM
NTS

Piping CU-3



3 M-404 / CU-3 PIPING DIAGRAM
NTS

Piping CU-4

4 M-404 / CU-4 PIPING DIAGRAM
NTS

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941 PROGRESS AVENUE
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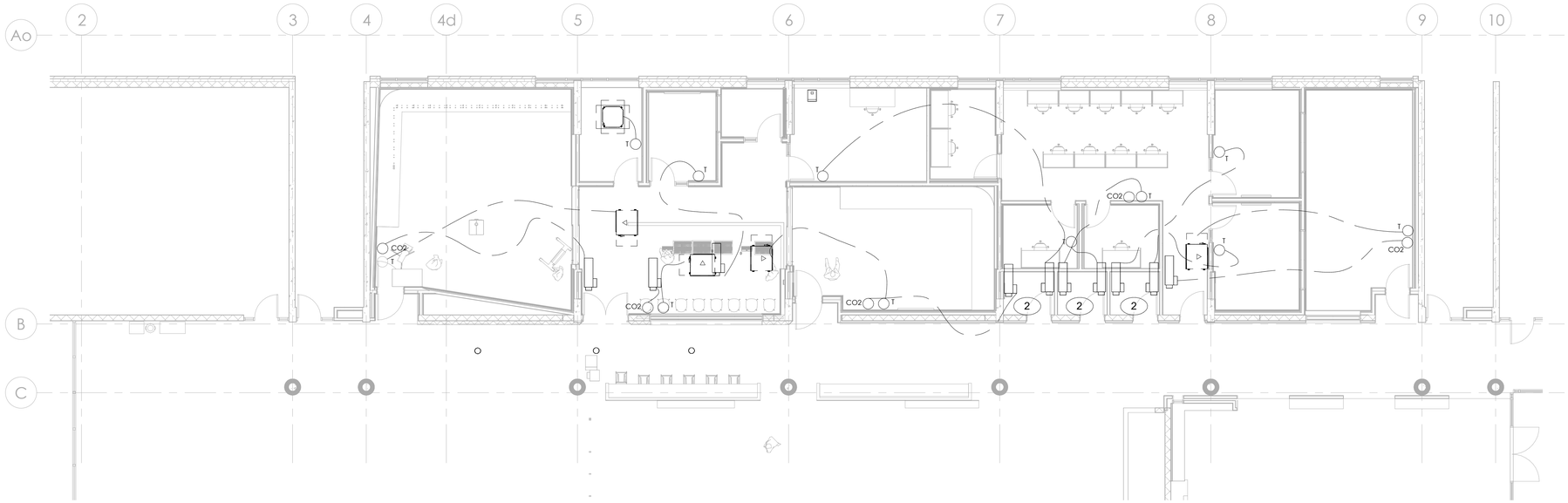
CONDENSING UNIT & VRF PIPING SCHEMATICS

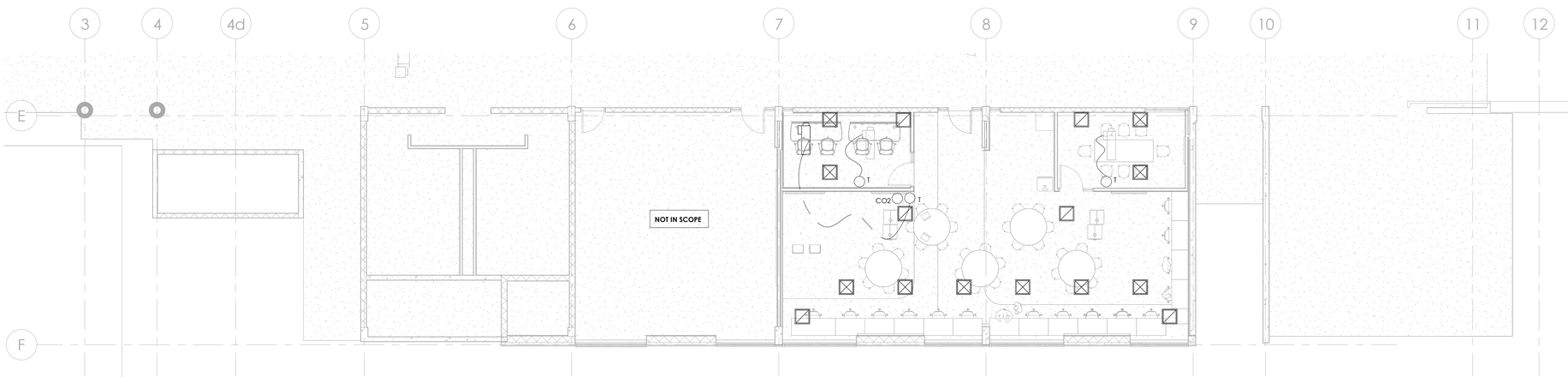
Scale: NTS

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-404



1 M-500 LEVEL 1 BROADCASTING WING CONTROLS FLOOR PLAN
1 : 100



2 M-500 LEVEL 2 JOURNALISM CONTROLS FLOOR PLAN
1 : 100

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MECHANICAL EQUIPMENT CONTROLS FLOOR PLAN

Project North

Scale: 1 : 100

Project Number: 25-120	
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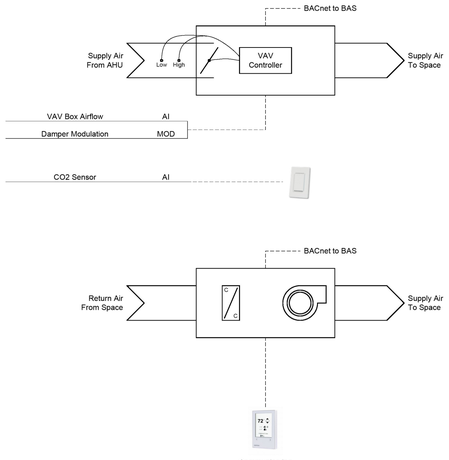
Checked By: F.B	

M-500



1 M-501 VRF & VAV CONTROL SCHEMATICS
1 : 1

1.1. TYPICAL VAV BOX

1.1.1. General

1.1.1.1. When the associated air handling unit is operational the VAV box controls the amount of air to the space to maintain temperature and to provide adequate ventilation.

1.1.1.2. The VAV box uses a cascading control loop where the first loop calculates the desired airflow setpoint to maintain either temperature or ventilation. The second loop modulates the damper to maintain the airflow at setpoint.

1.1.2. Modes of Operation

1.1.2.1. The occupied and unoccupied modes are determined by a time of day schedule.

1.1.3. Occupied Mode

1.1.3.1. Overview: The air handling unit is operational and the VAV box will provide variable airflow to the space to maintain the space temperature at setpoint. The following describes the logical sequencing during the various scenarios.

1.1.3.1.1. When cooling is required, and the AHU is providing cool air: The airflow setpoint will increase until either the cooling load is met or the airflow setpoint reaches the maximum allowable value.

1.1.3.1.2. When heating is required, and the AHU is providing cool air: The airflow setpoint will decrease until either the load is met or the airflow setpoint reaches the minimum allowable value.

1.1.3.2. Space Temperature Setpoint: The space temperature setpoint will be set to 23 Deg C. A bias of +/- 1 Deg C will be applied to the space temperature setpoint to allow for heating and cooling control. Setpoint is adjustable via the local stat.

1.1.3.3. Airflow Setpoint: The airflow setpoint is automatically calculated between the minimum and maximum values to maintain the space temperature at setpoint as per the scenarios above. The minimum airflow setpoint is set to the lowest of either: 1) the minimum value shown in the VAV schedule or 2) the minimum value calculated by the CO2 algorithm.

1.1.3.4. CO2 Control: The CO2 algorithm will calculate the amount of air required maintain the space CO2 level at 1000 ppm. The program will adjust the minimum airflow setpoint to be the higher of either: 1) the minimum airflow setpoint, 2) the minimum amount for CO2 control.

1.1.3.5. Damper Modulation: The damper will modulate to maintain the airflow at setpoint.

1.1.4. Unoccupied Mode

1.1.4.1. Overview: When the air handling unit is not running there is no temperature control in the space.

1.1.5. Integration and Optimization

1.1.5.1. Airflow Request: An airflow request is generated (starved box flag) when the VAV box is occupied, the damper is fully open, and the airflow is more than 10% of the cooling maximum airflow setpoint, below setpoint. The request is reset once the damper is less than 75% open. The airflow request is sent to the associated air handling unit to increase the static pressure setpoint. An accumulation counter is provided to indicate the number of hours the request is on.

1.1.5.2. The AHU status is shared over the network.

1.1.6. Critical Events

1.1.6.1. Extremely Low Space Temperature: The space temperature drops below 10 Deg C.

1.1.7. Urgent Events

1.1.7.1. None

1.1.8. Non-Urgent Events

1.1.8.1. Space Temperature Alarm: Space temperature is more than 3 Deg C above or below setpoint (10-minute delay).

1.1.8.2. Low Airflow Alarm: Airflow is less than 50% of setpoint (10-minute delay).

1.1.8.3. High CO2 Alarm: CO2 level is above 1500 ppm (10-minute delay).

1.1.8.4. Manual overrides are placed on the system (10-minute delay).

1.1.9. Maintenance Events

1.1.9.1. None

1.2. TYPICAL VAV BOX + VRF

1.2.1. General

1.2.1.1. When the associated air handling unit is operational the VAV box controls the amount of air to the space to maintain adequate ventilation. Cooling is provided by the VRF unit.

1.2.1.2. The VAV box uses a cascading control loop where the first loop calculates the desired airflow setpoint to maintain either temperature or ventilation. The second loop modulates the damper to maintain the airflow at setpoint.

1.2.1.3. The VRF is connected to the BAS via a BACnet interface.

1.2.2. Modes of Operation

1.2.2.1. The occupied and unoccupied modes are determined by a time of day schedule.

1.2.3. Occupied Mode

1.2.3.1. Overview: The air handling unit is operational and the VAV box will provide variable airflow to the space to maintain the space CO2 level at setpoint. The VRF system provides cooling to the space. The following describes the logical sequencing during the various scenarios.

1.2.3.2. Space Temperature Setpoint: The space temperature setpoint will be set to 23 Deg C. A bias of +/- 1 Deg C will be applied to the space temperature setpoint to allow for heating and cooling control. Setpoint is adjustable via the local VRF stat.

1.2.3.3. Airflow Setpoint: The airflow setpoint is automatically calculated between the minimum and maximum values to maintain the space temperature at setpoint as per the scenarios above. The minimum airflow setpoint is set to the lowest of either: 1) the minimum value shown in the VAV schedule or 2) the minimum value calculated by the CO2 algorithm.

1.2.3.4. CO2 Control: The CO2 algorithm will calculate the amount of air required maintain the space CO2 level at 1000 ppm. The program will adjust the minimum airflow setpoint to be the higher of either: 1) the minimum airflow setpoint, 2) the minimum amount for CO2 control.

1.2.3.5. Damper Modulation: The damper will modulate to maintain the airflow at setpoint.

1.2.3.6. VRF Operation: The VRF fan coil will run continuously and provide temperature control to the space.

1.2.4. Unoccupied Mode

1.2.4.1. Overview: CO2 control is disabled when the AHU is not running. Temperature control is maintain by the VRF to the unoccupied setpoints. The space temperature heating setpoint will be set to 18 Deg C and the space temperature cooling setpoint will be set to 28 Deg C.

1.2.5. Integration and Optimization

1.2.5.1. Airflow Request: An airflow request is generated (starved box flag) when the VAV box is occupied, the damper is fully open, and the airflow is more than 10% of the cooling maximum airflow setpoint, below setpoint. The request is reset once the damper is less than 75% open. The airflow request is sent to the associated air handling unit to increase the static pressure setpoint. An accumulation counter is provided to indicate the number of hours the request is on.

1.2.5.2. The AHU status is shared over the network.

1.2.6. Critical Events

1.2.6.1. Extremely Low Space Temperature: The space temperature drops below 10 Deg C.

1.2.7. Urgent Events

1.2.7.1. None

1.2.8. Non-Urgent Events

1.2.8.1. Space Temperature Alarm: Space temperature is more than 2 Deg C above or below setpoint (10-minute delay).

1.2.8.2. Low Airflow Alarm: Airflow is less than 50% of setpoint (10-minute delay).

1.2.8.3. High CO2 Alarm: CO2 level is above 1500 ppm (10-minute delay).

1.2.8.4. Manual overrides are placed on the system (10-minute delay).

1.2.8.5. VRF Failure: Failure alarms as provided over the BACnet interface.

1.2.9. Maintenance Events

1.2.9.1. None

1.3. TYPICAL VAV BOX + VRF + IN-FLOOR HEATING

1.3.1. General

1.3.1.1. When the associated air handling unit is operational the VAV box controls the amount of air to the space to maintain adequate ventilation. Cooling is provided by the VRF unit. Heating is provided by the in-floor heating system.

1.3.1.2. The VAV box uses a cascading control loop where the first loop calculates the desired airflow setpoint to maintain either temperature or ventilation. The second loop modulates the damper to maintain the airflow at setpoint.

1.3.1.3. The VRF is connected to the BAS via a BACnet interface.

1.3.2. Modes of Operation

1.3.2.1. The occupied and unoccupied modes are determined by a time of day schedule.

1.3.2.2. Summer Operation: The in-floor heating system is disabled when the outdoor air temperature is above 15 Deg C.

1.3.3. Occupied Mode

1.3.3.1. Overview: The air handling unit is operational and the VAV box will provide variable airflow to the space to maintain the space CO2 level at setpoint. The VRF system provides cooling to the space. The in-floor heating system provides heating to the space. The following describes the logical sequencing during the various scenarios.

1.3.3.2. Space Temperature Setpoint: The space temperature setpoint will be set to 23 Deg C. A bias of +/- 1 Deg C will be applied to the space temperature setpoint to allow for heating and cooling control. Setpoint is adjustable via the local VRF stat.

1.3.3.3. Airflow Setpoint: The airflow setpoint is automatically calculated between the minimum and maximum values to maintain the space temperature at setpoint as per the scenarios above. The minimum airflow setpoint is set to the lowest of either: 1) the minimum value shown in the VAV schedule or 2) the minimum value calculated by the CO2 algorithm.

1.3.3.4. CO2 Control: The CO2 algorithm will calculate the amount of air required maintain the space CO2 level at 1000 ppm. The program will adjust the minimum airflow setpoint to be the higher of either: 1) the minimum airflow setpoint, 2) the minimum amount for CO2 control.

1.3.3.5. In-Floor Heating HWS Temperature Setpoint: The setpoint is reset between the min/max value based on a comparison of space temperature to the space temperature heating setpoint. A step and wait algorithm will increase the setpoint by 1 Deg C every 30 minutes when the space temperature is more than 0.5 Deg C below the heating setpoint. The algorithm will decrease the setpoint by 0.5 Deg C every 30 minutes when the space temperature is more than 0.5 Deg C above the heating setpoint. Minimum setpoint is 20 Deg C, maximum setpoint is 26 Deg C (confirm setpoints on site).

1.3.3.6. Damper Modulation: The damper will modulate to maintain the airflow at setpoint.

1.3.3.7. VRF Operation: The VRF fan coil will run continuously and provide temperature control to the space.

1.3.3.8. In-Floor Heating Pump: Pump is enabled when the space temperature drops below the heating setpoint. Pump is disabled when the space temperature reaches the cooling setpoint and the outdoor air temperature is above 0 Deg C.

1.3.3.9. In-Floor Heating Valve: When the pump is running the valve will modulate to maintain the HWS-T at setpoint.

1.3.4. Unoccupied Mode

1.3.4.1. Overview: CO2 control is disabled when the AHU is not running. Temperature control is maintain by the VRF and in-floor heating system to the unoccupied setpoints. The space temperature heating setpoint will be set to 20 Deg C and the space temperature cooling setpoint will be set to 28 Deg C.

1.3.5. Integration and Optimization

1.3.5.1. Airflow Request: An airflow request is generated (starved box flag) when the VAV box is occupied, the damper is fully open, and the airflow is more than 10% of the cooling maximum airflow setpoint, below setpoint. The request is reset once the damper is less than 75% open. The airflow request is sent to the associated air handling unit to increase the static pressure setpoint. An accumulation counter is provided to indicate the number of hours the request is on.

1.3.5.2. The AHU status is shared over the network.

1.3.6. Critical Events

1.3.6.1. Extremely Low Space Temperature: The space temperature drops below 10 Deg C.

1.3.7. Urgent Events

1.3.7.1. None

1.3.8. Non-Urgent Events

1.3.8.1. Space Temperature Alarm: Space temperature is more than 2 Deg C above or below setpoint (10-minute delay).

1.3.8.2. Low Airflow Alarm: Airflow is less than 50% of setpoint (10-minute delay).

1.3.8.3. High CO2 Alarm: CO2 level is above 1500 ppm (10-minute delay).

1.3.8.4. Manual overrides are placed on the system (10-minute delay).

1.3.8.5. VRF Failure: Failure alarms as provided over the BACnet interface.

1.3.8.6. Pump Failure: Pump is commanded on, but status is off (30-second delay).

1.3.9. Maintenance Events

1.3.9.1. None

1.4. TYPICAL VAV BOX + IN-FLOOR HEATING

1.4.1. General

1.4.1.1. When the associated air handling unit is operational the VAV box controls the amount of air to the space to maintain adequate ventilation. Heating is provided by the in-floor heating system.

1.4.1.2. The VAV box uses a cascading control loop where the first loop calculates the desired airflow setpoint to maintain either temperature or ventilation. The second loop modulates the damper to maintain the airflow at setpoint.

1.4.1.3. The VRF is connected to the BAS via a BACnet interface.

1.4.2. Modes of Operation

1.4.2.1. The occupied and unoccupied modes are determined by a time of day schedule.

1.4.2.2. Summer Operation: The in-floor heating system is disabled when the outdoor air temperature is above 15 Deg C.

1.4.3. Occupied Mode

1.4.3.1. Overview: The air handling unit is operational and the VAV box will provide variable airflow to the space to maintain the space CO2 level at setpoint. The in-floor heating system provides heating to the space. The following describes the logical sequencing during the various scenarios.

1.4.3.2. Space Temperature Setpoint: The space temperature setpoint will be set to 23 Deg C. A bias of +/- 1 Deg C will be applied to the space temperature setpoint to allow for heating and cooling control. Setpoint is adjustable via the local VRF stat.

1.4.3.3. Airflow Setpoint: The airflow setpoint is automatically calculated between the minimum and maximum values to maintain the space temperature at setpoint as per the scenarios above. The minimum airflow setpoint is set to the lowest of either: 1) the minimum value shown in the VAV schedule or 2) the minimum value calculated by the CO2 algorithm.

1.4.3.4. CO2 Control: The CO2 algorithm will calculate the amount of air required maintain the space CO2 level at 1000 ppm. The program will adjust the minimum airflow setpoint to be the higher of either: 1) the minimum airflow setpoint, 2) the minimum amount for CO2 control.

1.4.3.5. In-Floor Heating HWS Temperature Setpoint: The setpoint is reset between the min/max value based on a comparison of space temperature to the space temperature heating setpoint. A step and wait algorithm will increase the setpoint by 1 Deg C every 30 minutes when the space temperature is more than 0.5 Deg C below the heating setpoint. The algorithm will decrease the setpoint by 0.5 Deg C every 30 minutes when the space temperature is more than 0.5 Deg C above the heating setpoint. Minimum setpoint is 20 Deg C, maximum setpoint is 26 Deg C (confirm setpoints on site).

1.4.3.6. Damper Modulation: The damper will modulate to maintain the airflow at setpoint.

1.4.3.7. In-Floor Heating Pump: Pump is enabled when the space temperature drops below the heating setpoint. Pump is disabled when the space temperature reaches the cooling setpoint and the outdoor air temperature is above 0 Deg C.

1.4.3.8. In-Floor Heating Valve: When the pump is running the valve will modulate to maintain the HWS-T at setpoint.

1.4.4. Unoccupied Mode

1.4.4.1. Overview: CO2 control is disabled when the AHU is not running. Temperature control is maintain by the in-floor heating system to the unoccupied setpoints. The space temperature heating setpoint will be set to 20 Deg C and the space temperature cooling setpoint will be set to 28 Deg C.

1.4.5. Integration and Optimization

1.4.5.1. Airflow Request: An airflow request is generated (starved box flag) when the VAV box is occupied, the damper is fully open, and the airflow is more than 10% of the cooling maximum airflow setpoint, below setpoint. The request is reset once the damper is less than 75% open. The airflow request is sent to the associated air handling unit to increase the static pressure setpoint. An accumulation counter is provided to indicate the number of hours the request is on.

1.4.5.2. The AHU status is shared over the network.

1.4.6. Critical Events

1.4.6.1. Extremely Low Space Temperature: The space temperature drops below 10 Deg C.

1.4.7. Urgent Events

1.4.7.1. None

1.4.8. Non-Urgent Events

1.4.8.1. Space Temperature Alarm: Space temperature is more than 2 Deg C above or below setpoint (10-minute delay).

1.4.8.2. Low Airflow Alarm: Airflow is less than 50% of setpoint (10-minute delay).

1.4.8.3. High CO2 Alarm: CO2 level is above 1500 ppm (10-minute delay).

1.4.8.4. Manual overrides are placed on the system (10-minute delay).

1.4.8.5. Pump Failure: Pump is commanded on, but status is off (30-second delay).

1.4.9. Maintenance Events

1.4.9.1. None

GOW HASTINGS ARCHITECTS

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No.	ISSUED/REVISED	DATE
3	ISSUED FOR TENDER	03/22/2026
2	Issued for 90% CD SET	2026-03-06
1	Issued for 50% CD SET	2026-02-18

CentenniaL Story Arts Centre Relocation

941 PROGRESS AVENUE
SCARBOUROUGH, ONTARIO M1G 3T8

MECHANICAL EQUIPMENT CONTROLS

Project North

Scale: 1 : 1

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-501

AIR COOLED CONDENSING UNIT SCHEDULE (OWNER SUPPLIED)

TAG	MANUFACTURER	MODEL	REFRIGERANT	AMBIENT AIR TEMP. (F)	ESTIMATE TOTAL CHARGE (lbs)	CAPACITY (MBH)	ELECTRICAL			WEIGHT	DIMENSION	REMARKS
							MCA	MOP	VOLTAGE			
CU-1	DAIKIN	RXQ120XBYCA	R410A	95	53.67	114.332	18.2	25	575 3ph	727.5	48.9 x 66.7 x 30.2	PROVIDE AMBIENT COOLING KIT
CU-2	DAIKIN	RXYQ96XBYCA	R410A	95	-	-	16.8	20	575 3ph	727.5	48.9 x 66.7 x 30.2	RXYQ192XBYCA, 178 MBH , 95.1 lbs REFRIGERANT CHARGE, CONDENSER IS COMPRISED OF TWO INDEPENDENT MODULES, PROVIDE AMBIENT COOLING KIT
CU-2	DAIKIN	RXYQ96XBYCA	R410A	95	-	-	16.8	20	575 3ph	727.5	48.9 x 66.7 x 30.2	RXYQ192XBYCA, 178 MBH , 95.1 lbs REFRIGERANT CHARGE, CONDENSER IS COMPRISED OF TWO INDEPENDENT MODULES, PROVIDE AMBIENT COOLING KIT
CU-3	DAIKIN	RXTA48AAVJU	R32	95	16.69	44.3	29.4	30	208 - 230V 1ph	220.5	43.3 x 34.3 18.1	PROVIDE AMBIENT COOLING KIT
CU-4	DAIKIN	RXTA36AAVJU	R32	95	12.84	34.4	19.8	20	208 - 230V 1ph	220.5	43.3 x 34.3 18.1	PROVIDE AMBIENT COOLING KIT

EVAPORATOR SCHEDULE (OWNER SUPPLIED)

TAG	MANUFACTURER	MODEL	AIRFLOW (CFM)	COOLING		dBA	ELECTRICAL			CONDENSER	DIMENSION	WEIGHT
				TOTAL CAP. MBTUH	SENS. CAP. MBTUH		MCA	MOP	VOLTAGE			
VRF-L1-06	DAIKIN	FXSQ48TBVJU	1307	29,994	22,023	30 - 38	1.8	15	208 - 230V 1ph	CU-1	39 x 9.6 x 31.5	82
VRF-L1-08	DAIKIN	FXSQ24TBVJU	742	23,939	16,749	29 - 36	1.8	15	208 - 230V 1ph	CU-1	39 x 9.6 x 31.5	82
VRF-L1-08A	DAIKIN	FXFA36AAVJU	1253	36,003	25,138	32 - 44	1.6	15	208 - 230V 1ph	CU-4	33.1 x 11.3 x 33.1	58
VRF-L1-10	DAIKIN	FXSQ24TBVJU	742	29,994	22,023	30 - 38	1.8	15	208 - 230V 1ph	CU-1	39 x 9.6 x 31.5	82
VRF-L1-14	DAIKIN	FXSQ24TBVJU	742	29,994	22,023	30 - 38	1.8	15	208 - 230V 1ph	CU-1	39 x 9.6 x 31.5	82
VRF-L2-10.1	DAIKIN	FXSQ48TBVJU	1307	33,599	33,599	35 - 42	2.8	15	208 - 230V 1ph	CU-2	55.1 x 9.6 x 31.5	104
VRF-L2-10.2	DAIKIN	FXSQ48TBVJU	1307	33,599	33,599	35 - 42	2.8	15	208 - 230V 1ph	CU-2	55.1 x 9.6 x 31.5	104
VRF-L2-12.1	DAIKIN	FXSQ48TBVJU	1307	33,599	33,599	35 - 42	2.8	15	208 - 230V 1ph	CU-2	55.1 x 9.6 x 31.5	104
VRF-L2-12.2	DAIKIN	FXSQ48TBVJU	1307	33,599	33,599	35 - 42	2.8	15	208 - 230V 1ph	CU-2	55.1 x 9.6 x 31.5	104
VRF-L2-14	DAIKIN	FXSA24AAVJU	742	23,989	16,745	29 - 36	1.8	15	208 - 230V 1ph	CU-3	39.4 x 9.6 x 31.5	81.6
VRF-L2-16	DAIKIN	FXSA24AAVJU	742	23,989	16,745	29 - 36	1.8	15	208 - 230V 1ph	CU-3	39.4 x 9.6 x 31.5	81.6

EXISTING VARIABLE AIR VOLUME BOX SCHEDULE

TAG	UNIT SIZE	OPERATING AIRFLOW (CFM)	MIN	MAX	INLET SIZE (mm)	MANUFACTURER	MODEL	REMARKS
Ex. VAV-1	10	530	700	1500	251	METALAIRE	TH-500-010	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
Ex. VAV-2	10	530	700	1500	251	METALAIRE	TH-500-010	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
Ex. VAV-3	10	530	700	1500	251	METALAIRE	TH-500-010	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
EX. VAV-4	8	600	400	1000	200	METALAIRE	TH-500-008	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
Ex. VAV-5	10	530	700	1500	251	METALAIRE	TH-500-010	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
Ex. VAV-11	10	1200	700	1500	251	METALAIRE	TH-500-010	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
Ex. VAV-12	10	650	700	1500	251	METALAIRE	TH-500-010	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED

VARIABLE AIR VOLUME BOX SCHEDULE

TAG	UNIT SIZE	OPERATING AIRFLOW (CFM)	AIR RANGE CFM		INLET SIZE (mm)	MANUFACTURER	MODEL	REMARKS
			MIN	MAX				
VAV-L1-08B	8	515	400	1000	200	METALAIRE	TH-500-008	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
VAV-L1-08D	8	540	400	1000	200	METALAIRE	TH-500-008	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
VAV-L1-12	10	660	700	1500	251	METALAIRE	TH-500-010	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
VAV-L1-12B/C	6	310	200	600	149	METALAIRE	TH-500-006	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
VAV-L2-24A	6	450	200	600	149	METALAIRE	TH-500-006	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED
VAV-L1-12D	8	540	400	1000	200	METALAIRE	TH-500-008	BALANCE AIRFLOW THROUGH DAMPER IN VAV INLET AS PER OPERATION CFM PROVIDED

GRILLE, REGISTER AND DIFFUSER SCHEDULE

TAG	APPLICATION	NECK SIZE	MANUFACTURER AND MODEL (BASIS OF DESIGN: EH PRICE)
R-1	RETURN GRILLE	AS INDICATED	80 EGG CRATE GRILLE - 45 DEGREES
RC-1	SUPPLY DIFFUSER	AS INDICATED	ROUND CONE DIFFUSER, C/W MULTI DAMPER
SCD-1	SUPPLY DIFFUSER	AS INDICATED	SQAURE CONE DIFFUSER, (24in x 24in FACE SIZE) C/W MULTI-DAMPER

PIPE ACCESSORIES SCHEDULE

TAG	APPLICATION	MANUFACTURER	MODEL	REMARKS
TMV-1	THERMOSTATIC MIXING VALVE	ZURN	ZW1017XL	
BFP-1	BACKFLOW PREVENTER	ZURN	975XL3	

PLUMBING FIXTURE CONNECTION SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	SANITARY CONNECTION	VENT CONECTION	REMARKS
HD-1	HUB DRAIN	ZURN	Z1870	50mm DIA.	--	C/W P-TRAP
HD-2	HUB DRAIN	ZURN	Z1870	50mm DIA.	--	C/W P-TRAP

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1	Issued for 50% CD SET	2026-02-18

CentenniaL Story Arts Centre Relocation

941 PROGRESS AVENUE
SCARBOUROUGH, ONTARIO M1G 3T8

MECHANICAL EQUIPMENT SCHEDULE

Project North

Scale:

Project Number: 25-120	
Drawn By: N.O	
Checked By: F.B	

M-600