



N.T.S.

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General Contractor shall check and verify all dimensions and report all errors and omissions to the Architect. Do not scale the drawings. Drawings shall not be used for construction purposes until issued by the Architect for construction.

M1.3



TAG	TYPE	SPECIFICATION	ACCESSORIES	CW	HW	WASTE	VENT	POWER	REMARKS
<u>WC-1</u> <u>(BF)</u>	TOILET	AMERICAN STANDARD #3461.001.020, 'MADERA FLOWISE RIGHT HEIGHT ELONGATED', 419 MM HIGH TOILET, VITREOUS CHINA, FLOOR MOUNTED, OPERATES IN THE RANGE OF 4.2 L TO 6 L (11.1 US GAL TO 1.6 US GAL) PER FLUSH, ELONGATED BOWL, SIPHON JET FLUSH ACTION, CONDENSATE CHANNEL.	CENTOCO #B20STS.001, EXTRA HEAVY DUTY TOILET SEAT, SOLID PLASTIC, OPEN FRONT WITH COVER. CHECK HINGES AND CHROMATED STEEL POSTS, WASHERS AND NUTS.INSTALLATION: TO MEET CODE REQUIREMENTS FOR BARRIER FREE ACCESS. SLOAN #REGAL SLOAN 111-1.2BYG "REGAL" FACTORY SET, OR TECK #B1T201-5, EXTERNAL ADJ. EXPOSED MANUAL FLUSHOMETER FOR TOP SPUD TOILET, 4.8 L (1.28 US GAL) FACTORY SET FLOW. QUIET ACTION DIAPHRAGM TYPE WITH VACUUM BREAKER. CENTRE SEAT BUMPER ON VALVE, PRESSURE LOSS CHECK AND NON-HOLD OPEN FEATURE.PROVIDE FLOOR FLANGE, (SAME MATERIAL AS THE CONNECTING PIPE DRAIN), WITH ALL BRASS BOLTS AND WITH RUBBER GASKET.	1"	-	3"	1 1/2"	NO	
<u>LAV-1</u> <u>(BF)</u>	BASIN	LAVATORY - WALL HUNG BARRIER FREE: AMERICAN STANDARD "MURRO", VITREOUS CHINA WALL HUNG LAVATORY, DRILLED TO ACCOMMODATE CONCEALED ARM SUPPORTS, AND WITH #0059.0200 SEMI-CHINA PEDESTAL.	SLOAN ETF-600-A-VPB-MIX60-A "OPTIMA" ELECTRONIC HARDWIRED "NO-TOUCH" FAUCET WITH SS BOX, MIXING VALVE, MCGUIRE #155A CP 32 MM (1.¼") CAST PLUG WITH OPEN GRID STRAINER TRAP, MCGUIRE #B872C CP 32MM (1.¼") CAST "P" TRAP WITH CLEANOUT. SUPPLIES: MCGUIRE H165LKN3RB CP SHORT RIGID ANGLE BASIN SUPPLY WITH OFFSET BRAIDED FLEX, RISER LOCKSHIELD STOP, ESCUTCHEON. CARRIER: ZURN ZX-1231 CONCEALED FIXTURE CARRIER WITH ARMS.NOTE: INSTALLATION SHALL MEET THE O.B.C. REQUIREMENTS FOR BARRIER FREE ACCESS. INSULATE SUPPLIES AND DRAIN AS REQUIRED BY CODE.	1/2"	1/2"	1 1/4"	1 1/4"	YES	
<u>S-1</u>	SINK	FRANKE SINGLE COMPARTMENT STAINLESS STEEL SINK WITH BACK LEDGE, MODEL No. LBS4607-1 c/w 3 HOLES, 8" CENTER	AMERICAN STANDARD COLONY PRO SINGLE CONTROL KITCHEN FAUCET 7074.000.002 (1.5 GPM) c/w CAST BRASS TRAP, CLEANOUT, UNION ESCUTCHEON, ANGLE STOPS, CPVC RISERS, STAINLESS STEEL CRUMB CUP STRAINER	1/2"	1/2"	1 1/2"	1 1/4"		
<u>HD</u>	HUB DRAIN	ZURN ZN-211-S-P CAST IRON HUB DRAIN AND 1/2" TRAP PRIMER CONNECTION OR EQUIVALENT EQUAL.							
<u>FD</u>	FLOOR DRAIN	ZURN ZN-211-B-P, CAST IRON FLOOR DRAIN WITH 5" ROUND NICKEL BRONZE STRAINER, MIFAB MI-GARD, AND 1/2" TRAP PRIMER CONNECTION OR EQUIVALENT EQUAL.		-	-	3"	1 1/2"		
<u>CO</u>	CLEANOUT	<ul style="list-style-type: none"> <li>ZURN Z-1400-HD (FOR UNFINISHED FLOORS)</li> <li>ZURN ZN-1400-HD (FOR FINISHED FLOORS)</li> <li>ZURN ZN-1400-X (FOR LINOLEUM OR ASPHALT TILE FLOORS)</li> </ul>	<ul style="list-style-type: none"> <li>ZURN ZN-1400-Z (FOR TERRAZZO FLOORS)</li> <li>ZURN ZN-1400-T (FOR CERAMIC TILE FLOORS)</li> <li>ZURN ZN-1400-CM (FOR CARPETED FLOORS)</li> </ul>	-	-	-	-		

**NOTES:**

- EACH PLUMBING FIXTURE SHALL BE LOW WATER CONSUMPTION IN ACCORDANCE TO ONTARIO BUILDING CODE.
- PROVIDE ALL REQUIRED FITTINGS, TRAPS, VALVES, FAUCETS AND ESCUTCHEONS TO COMPLETE EACH FIXTURE INSTALLATION.
- SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BEFORE ORDERING ANY FIXTURE.
- ALL ANGLE STOPS TO BE DAHL 1/4 TURN MINI BALL VALVE.
- CONTRACTOR'S RESPONSIBILITIES TO VERIFY ALL EQUIPMENTS AND ITEM QUANTITY.
- GENERAL CONTRACTOR TO PROVIDE, INSTALL & HOOK-UP EQUIPMENTS.
- CONTRACTOR TO CONFIRM ALL EQUIPMENT SPECS PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY ALL OUTLET LOCATIONS WITH OWNER.
- PROVIDE ISOLATING VALVE ON, HOT AND COLD WATER LINES TO EACH PIECE OF PLUMBING FIXTURE. (TYPICAL UNLESS NOTED OTHERWISE)
- WRAP ALL EXPOSED HOT WATER AND DRAIN PIPING AT HANDICAPPED LAVATORY WITH INSULATION.

FAN SCHEDULE													
TAG	SERVICE	MANUFACTURER	MODEL No.	AIR QUANTITY (CFM)	STATIC PRESS. (in.wg.)	MOTOR RPM	ELECTRICAL			STARTER	MOUNTING ARRANGEMENT	WEIGHT (LBS)	REMARKS
							POWER (HP)	V/PH/HZ	FLA (A)				
EF-1	UNIVERSAL WASHROOM 117	GREENHECK	CSP-A125	100	0.25	980	-	120/1/60	0.18	OCCUPANCY SENSOR	CEILING MTD	12	SEE NOTES 3,4,5, STANDARD WHITE POLYSTYRENE GRILLE

NOTES:  
1. c/w 450mm ROOF CURB, BACKDRAFT DAMPER, BIRD SCREEN, DISCONNECT SWITCH,  
2. PROVIDE EC MOTOR.  
3. INLINE FANS C/W BACK DRAFT DAMPER, ROUND DUCT CONNECTION, MOUNTING BRACKETS, VIBRATION ISOLATORS  
4. FAN DUCTWORK TO BE LINED WITH 1" INSULATION FOR MIN. 10'-0" FROM EXTERIOR  
5. ACCEPTABLE EQUIVALENT: COOK

LOUVRE SCHEDULE									
TAG	SYSTEM	MANUFACTURER	MODEL NO.	TYPE	SIZE (WxH)	FREE AREA (SQ FT)	VELOCITY (fpm)	WATER PENETRATION S.F.	ACCESSORIES/REMARKS
L-1	ERV INTAKE	VENTEX	2435	4" DEEP LOUVER	SEE PLANS	—	—	—	c/w BIRDSCREEN, COLOR BY ARCHITECT
L-2	ERV EXHAUST	VENTEX	2415	4" DEEP LOUVER	SEE PLANS	—	—	—	c/w BIRDSCREEN, COLOR BY ARCHITECT
WB-1	WASHROOM EXHAUST	REVERSOMATIC	SWBW-8	SINGLE WALL BOX	9"x9"	—	—	—	c/w BACKDRAFT DAMPER, EXTRUDED ALUMINUM GRILLES, COLOUR BY ARCHITECT, FIELD PAINTED

**NOTES:**  
1. ACCEPTABLE EQUIVALENT: EH PRICE

TAG	MANUFACTURER	MODEL	TYPE	FINISH	SIZE	NECK SIZE	MOUNTING	REMARKS	REMARKS
SA1	E.H. PRICE	SDGE	SUPPLY	B12	AS NOTED	--	DUCT	YES	DOUBLE DEFLECTION SPIRAL DUCT GRILLE EXTRUDED
SA2	E.H. PRICE	SCD	DIFFUSER	B12	600x600	AS NOTED	T-BAR	YES	c/w AIR SCOOP
SA3	E.H. PRICE	SCD	DIFFUSER	B12	300x300	AS NOTED	T-BAR	YES	
RA1	E.H. PRICE	80D	EGG CRATE	B12	AS NOTED	--	DUCT	--	
RA2	E.H. PRICE	630	LOUVERED FACE EXHAUST	B12	AS NOTED	--	DRYWALL/T-BAR	YES	
EX	EXISTING DIFFUSER/GRILLE								

NOTE:

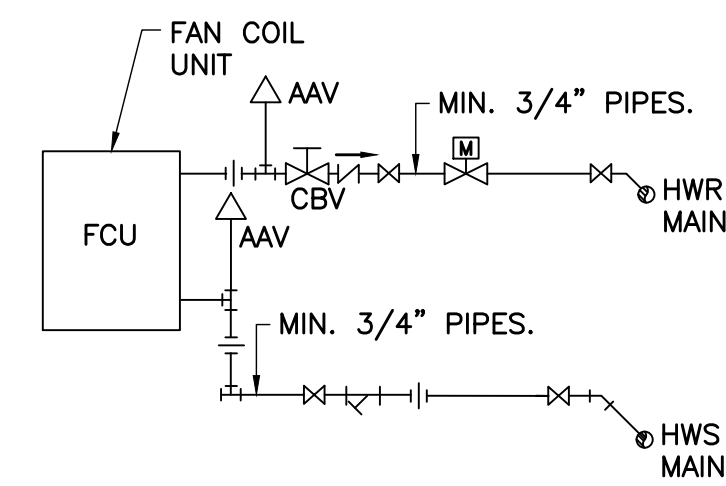
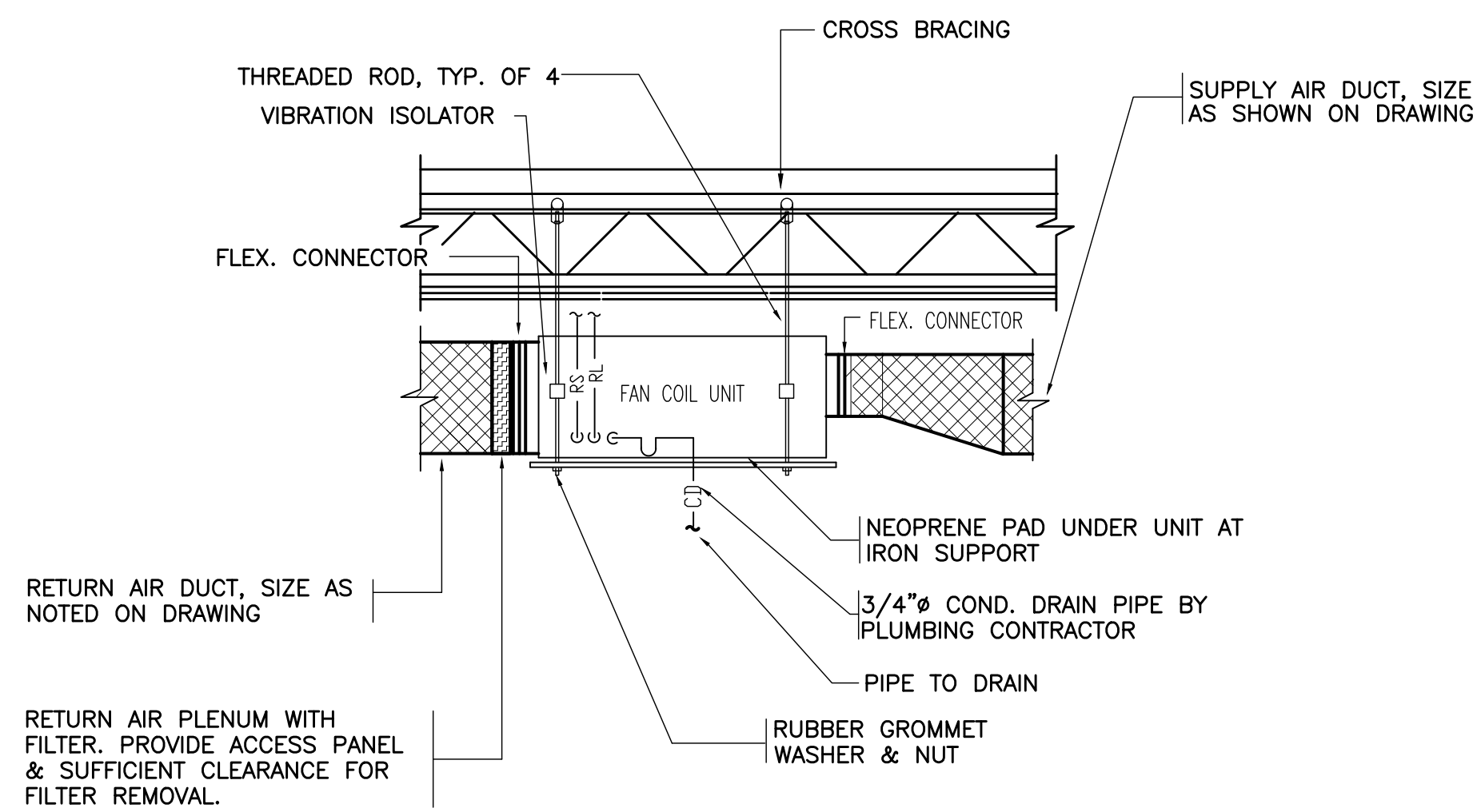
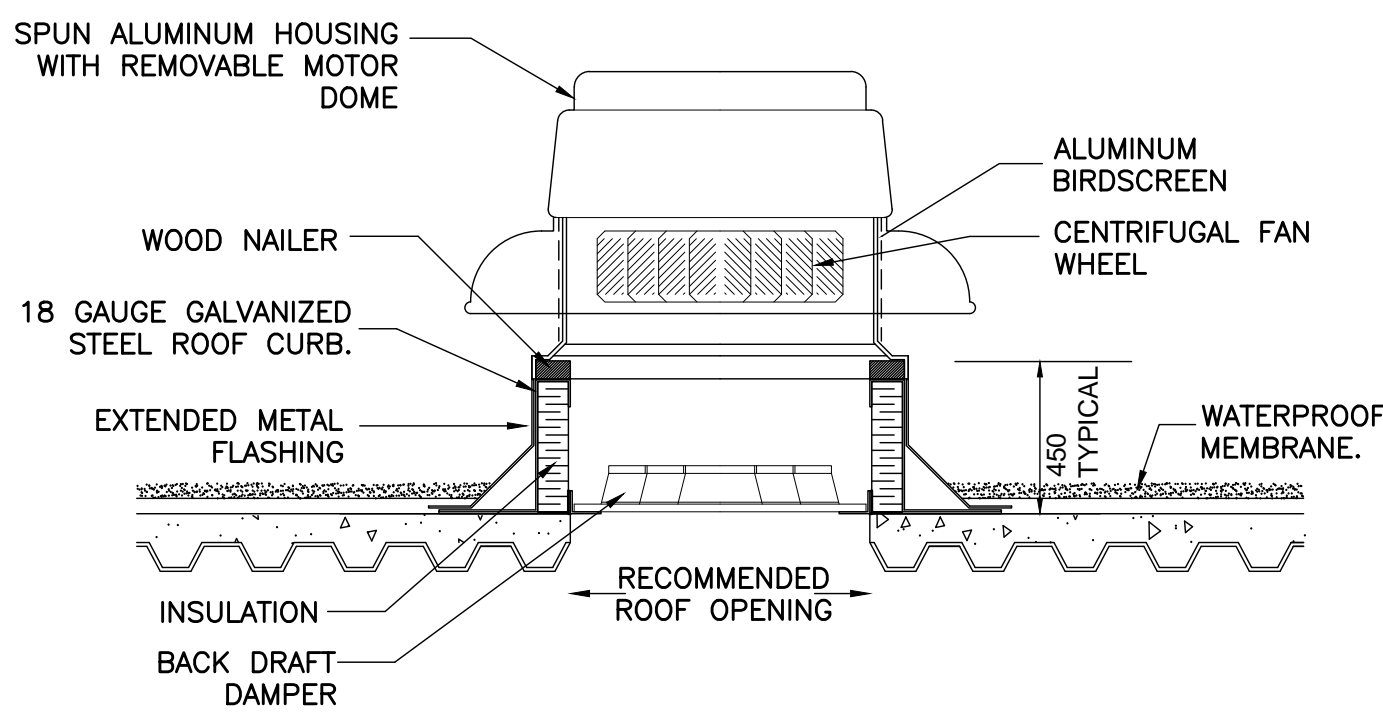
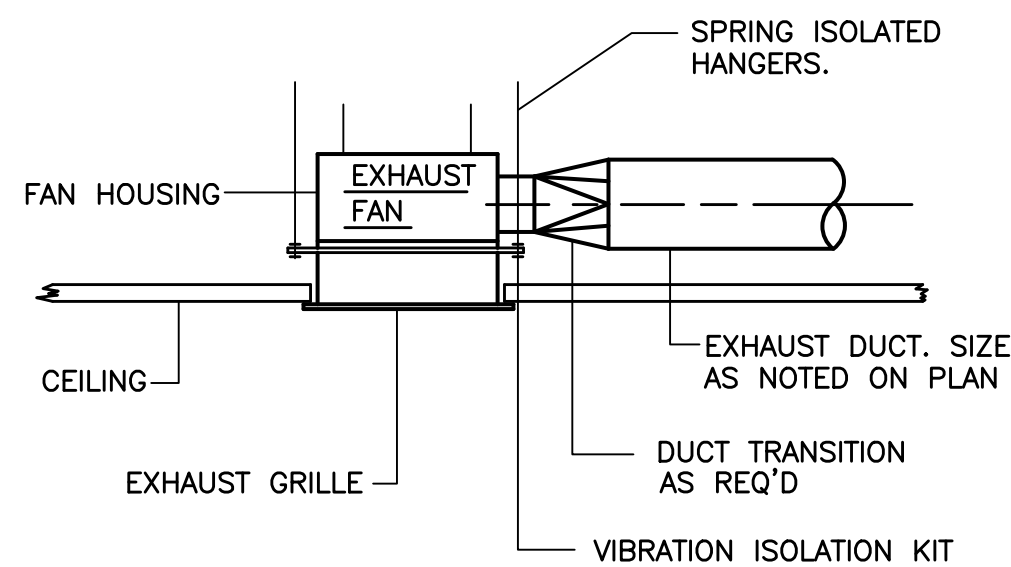
1. ACCEPTABLE EQUIVALENT: KRUEGER, NAILOR, METALAIR

DUCT HEATER SCHEDULE								
TAG	SERVES	MANUFACTURER	MODEL	AIR FLOW (CFM)	CAPACITY (Kw)	ELECTRICAL		REMARKS
						V/PH/HZ	AMPS	
DH-1	ERV-1	THERMOLEC	SLIP-IN TYPE	470	5.0	208/1/60	24.05	SEE NOTES BELOW, S.C.R BY THERMOLEC, STAT 0-10VDC (CTH291) + DS600
<b>NOTES:</b> 1. INSTALL UNIT TO MANUFACTURER'S RECOMMENDATION. 2. EACH UNIT IS INTERLOCKED WITH THE RELATED UNIT 3. C/W AUTOMATIC RESET THERMAL CUT-OUT, AIR FLOW SENSOR, MANUAL RESET THERMAL CUT-OUT, SCR CONTROL 4. TEMPERATURE SENSOR, OPEN COIL ELEMENT, CORROSION RESISTANCE ENCLOSURE 5. BUILT IN ELECTRONIC TEMP. AND SENSOR AND COLLARS.								

## M1.4

FAN COIL (DX COOLING/HOT WATER HEATING)/CONDENSER UNIT SCHEDULE																				
FAN COIL UNIT													CONDENSING UNIT							
TAG	SERVICE	MAKE/MODEL	AIR FLOW		HOT WATER HEATING COIL			ELECTRICAL			WEIGHT (LBS)	REMARKS	TAG	MAKE MODEL	COOLING CAPACITY (MBH)	ELECTRICAL			WEIGHT (LBS)	REMARKS
			CFM	EX.SP IN	CAPACITY (MBH)	FLOW (GPM)	EWLT/LWT	V/PH/HZ	MCA	MOCP						V/PH/HZ	MCA	MOCP		
FC-1	AS PER DWG #M3.4	TRANE BCHD054E1-LOA11A4Z	1,600	0.5	30.0	1.02	30.0/47.29	208/3/60	5.75	15	208.4	NOTE 1	CU-3	TRANE ATTA4048A3	48.0	208/3/60	18.0	30	190	NOTE 2
FC-2	AS PER DWG #M3.4	TRANE BCHD054E1-LOA11A4Z	1,600	0.5	40.0	1.36	30.0/53.05	208/3/60	5.75	15	208.4	NOTE 1	CU-4	TRANE ATTA4048A3	48.0	208/3/60	18.0	30	190	NOTE 2

NOTES:  
1. UNIT TO BE c/w ULTRA QUIET CONSTRUCTION, NON-FUSED DISCONNECT SWITCH, INTEGRAL MIX BOX WITH RA/OA DAMPER, 2" MERV8 FILTER, FREEZESTAT. DX COIL TO BE SUPPLIED WITH HARD SHUT-OFF TXV.  
2. UNIT TO BE c/w IN BUILT CONTROLLER AND LOW VOLTAGE TRANSFORMER.  
3. CONDENSING UNIT TO BE c/w CRANK CASE HEATER, HIGH & LOW PRESSURE SWITCHES, HARD START KIT AND TIME GUARD SHORT CYCLE PROTECTION. REFRIGERANT LINES MUST HAVE LONG RADIUS ELBOWS.  
4. UNIT TO BE c/w CONDENSATE PUMP, LITTLE GIANT VMMP15, 230V/1/60, 0.6/0.5 AMPS, 75 WATTS  
5. BASIS OF DESIGN: TRANE; ACCEPTABLE EQUIVALENT: MITSUBISHI, DAIKIN



- NOTES:**
1. ALL HEATING WATER SYSTEM PIPING TO BE ACCOMMODATED TO FAN COIL UNIT MANUFACTURER'S REQUIREMENTS.
  2. THIS DRAWING INDICATES ONLY ONE CIRCUIT FOR CLARITY AND THERE ARE TWO SEPARATE PIPING SYSTEMS FOR FAN COIL UNIT.
  3. FAN COIL UNITS ARE FURNISHED WITH 2-WAY CONTROL VALVES.

Client  
**Halton District School Board**  
2050 Guelph Line  
Burlington, Ontario

BURLINGTON CENTRAL  
H.S. RENOVATIONS

PHASE I  
1433F Baldwin Street  
Burlington, ON

Architect

sn/der

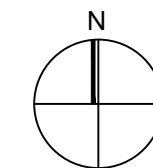
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## Consultants

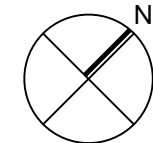


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Key Plan N.T.S.



Project North



True North

[illegible]

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Drawing Title:

## MECHANICAL EQUIPMENT SCHEDULES & DETAILS

Scale: N.T.S. Date: APR 2020

Drawn by: DH | Checked by: CK

Job No.	Drawing No.
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20009

M1.5



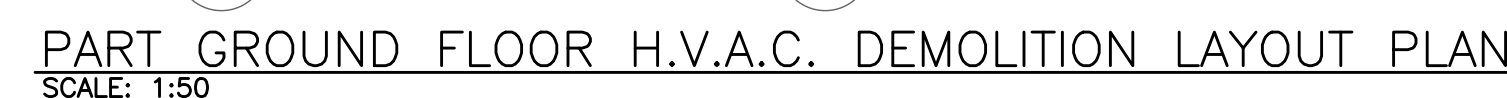
## M2.1



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No.	Revisions	Date
4	ISSUED FOR CONSTRUCTION	2021-06-04
3	ISSUED FOR TENDER	2021-04-19
2	ISSUED FOR PERMIT	2021-01-21
1	ISSUED FOR COORDINATION	2020-08-25
No.	Issue	Date

20009	M3.1
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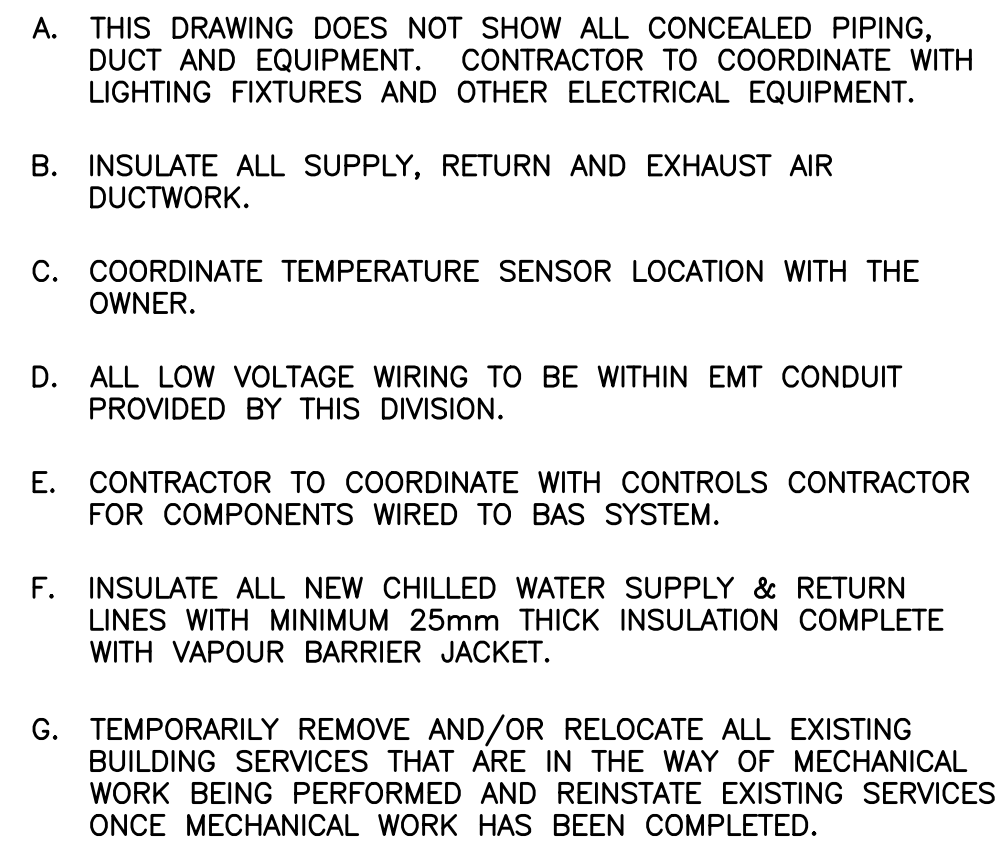
**A** DISCONNECT AND REMOVE EXISTING CEILING MOUNTED UNIT VENTILATOR INCLUDING OBSOLETE DUCTWORK, GRILLE(S) & DUCT HEATER(S). ISOLATE, DISCONNECT HWS/HWR AND CAP. TO BE REWORKED IN REVISED LAYOUT, REFER TO MECHANICAL DRAWING M3.2. COORDINATE WITH ELECTRICAL CONTRACTOR TO DISCONNECT POWER.

**B** DEMOLISH AND REMOVE EXISTING INTAKE GRILLE ABOVE WINDOW. CAP/SEAL, WEATHER PROOF AND INSULATE EXISTING OPENING, NEW WINDOW AND GLAZING AS PER ARCHITECTURAL DRAWINGS.

**C** DEMOLISH EXISTING WALL MOUNTED PNEUMATIC THERMOSTAT c/w ALL ASSOCIATED ACCESSORIES. INSTALL BLANK COVER PLATE. (BY CONTROLS CONTRACTOR)

1. THE EXISTING SERVICES SHOWN ON THIS DRAWING HAVE BEEN TAKEN FROM THE ORIGINAL AS-BUILT DRAWINGS. THIS INFORMATION MUST NOT ASSUMED TO BE COMPLETE OR UP-TO-DATE. THIS MECHANICAL CONTRACTOR SHALL CARRYOUT A FULL SURVEY OF ALL EXISTING SERVICES AND STRUCTURE TO CONFIRM THE SIZE AND LOCATION OF THESE SERVICES, BEFORE THE COMMENCEMENT OF ANY WORK.
2. REMOVE ALL EQUIPMENT, PIPING, STEEL SUPPORTS, CONTROLS, PLUMBING MATERIAL, HOUSE KEEPING PAD, SHOWN APPROXIMATELY WITH HEAVY BROKEN LINES THROUGHOUT (UNLESS OTHERWISE INDICED)
3. THIS DRAWING DOES NOT SHOW ALL HIDDEN OR CONCEALED PIPING, DUCTS, PLUMBING AND EQUIPMENT TO BE REMOVED. CONTRACTOR SHALL VISIT THE SITE AND MAKE THEIR OWN EVALUATION AND ESTIMATE OF THE EXTEND AND MAGNITUDE OF THE WORK INVOLVED PRIOR TO SUBMITTING PROPOSAL.
4. COORDINATE WITH GENERAL CONTRACTOR FOR PATCHING FLOORS, WALL, AND CEILINGS CAUSED BY THE VERTICAL UNIT VENTILATOR REPLACEMENT THAT IS CARRIED OUT BY THIS CONTRACT. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS.
5. CONTRACTOR TO ALLOW FOR FREEZING OF ALL HWS/HWR BRANCH PIPING, REMOVAL AND REPLACEMENT OF EXISTING ISOLATION VALVES.









- A. THIS DRAWING DOES NOT SHOW ALL CONCEALED PIPING, DUCT AND EQUIPMENT. CONTRACTOR TO COORDINATE WITH LIGHTING FIXTURES AND OTHER ELECTRICAL EQUIPMENT.
- B. INSULATE ALL SUPPLY, RETURN AND EXHAUST AIR DUCTWORK.
- C. COORDINATE TEMPERATURE SENSOR LOCATION WITH THE OWNER.
- D. ALL LOW VOLTAGE WIRING TO BE WITHIN EMT CONDUIT PROVIDED BY THIS DIVISION.
- E. CONTRACTOR TO COORDINATE WITH CONTROLS CONTRACTOR FOR COMPONENTS WIRED TO BAS SYSTEM.
- F. INSULATE ALL NEW CHILLED WATER SUPPLY & RETURN LINES WITH MINIMUM 25mm THICK INSULATION COMPLETE WITH VAPOUR BARRIER JACKET.
- G. TEMPORARILY REMOVE AND/OR RELOCATE ALL EXISTING BUILDING SERVICES THAT ARE IN THE WAY OF MECHANICAL WORK BEING PERFORMED AND REINSTATE EXISTING SERVICES ONCE MECHANICAL WORK HAS BEEN COMPLETED.
- H. FOR ALL EXHAUST FAN REFER TO EXHAUST FAN INSTALLATION DETAIL ON MECHANICAL DRAWING M1.5.

20009	M3.3
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MECHANICAL ROOF PLAN  
SCALE: 1:250

Project North

True North

[illegible]

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Drawing Title:

MECHANICAL  
ROOF PLAN

Scale: AS SHOWN Date: APR 2020

Drawn by:	DH	Checked by:	CK
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Job No.	Drawing No.
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20009

M3.4