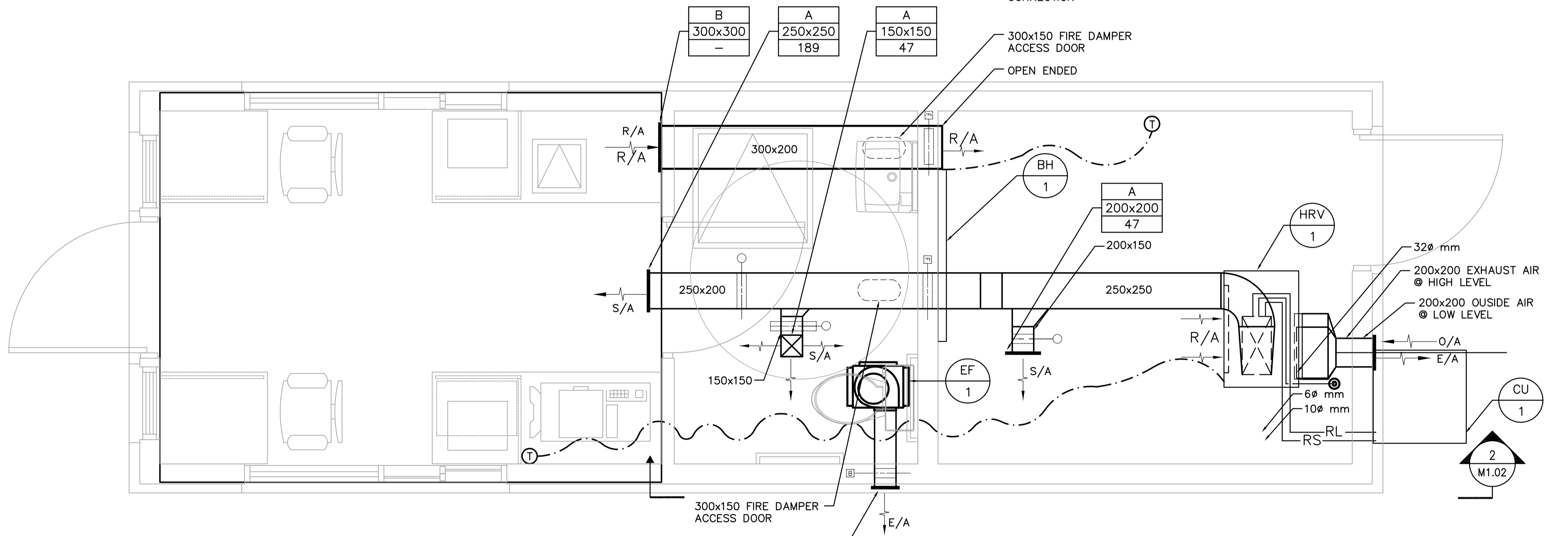


**MECHANICAL PLUMBING PLAN**  
1:20



**MECHANICAL HVAC PLAN**  
1:20

- PLUMBING GENERAL NOTES:**
- MECHANICAL CONTRACTOR SHALL PROVIDE AN APPROVED FIRE STOPPING SYSTEM FOR ALL PIPING THRU FIRE RATED AREAS.
  - MECHANICAL CONTRACTOR SHALL PROVIDE 2 ABC FIRE EXTINGUISHERS.
  - CONDENSATE DRAIN LINE FROM AIR CONDITIONED UNIT SHALL BE CONNECTED TO NEAREST SANITARY LINE.
  - PROVIDE AN OVER FLOW LINE FROM POTABLE WATER TANK.
  - MECHANICAL CONTRACTOR SHALL PROVIDE A MECHANICAL JOINT BETWEEN TANK AND FIXTURE PIPING TO ALLOW FOR EASE OF INSTALLATION. MECHANICAL JOINT SHALL BE ABLE TO ALLOW MOVEMENT IN ALL DIRECTIONS IN CASE OF GROUND EXPANSION AND BE ABLE TO WITHSTAND SEVERE TEMPERATURE CONDITIONS.
  - MECHANICAL CONTRACTOR SHALL PROVIDE A FLOAT SWITCH FOR POTABLE WATER AND SEWAGE TANK C/W L.E.D. LIGHT. POTABLE WATER (L.E.D.) SHALL BE LOCATED IN THE OUTSIDE OF BUILDING BY POTABLE WATER FILL LINE VISIBLE TO OPERATOR. SEWAGE TANK (L.E.D.) LIGHT SHALL BE LOCATED IN WASHROOM C/W BUZZER. ALL FLOAT SWITCHES C/W INDIVIDUAL CONTROL PANELS. WIRE AND CONNECT BY DIV. 16.
  - MECHANICAL CONTRACTOR SHALL WEATHER PROOF ALL SUMP PUMP, REFRIGERATION AND WATER FILL OVER FLOW LINES TERMINATING TO THE OUTDOORS.

- PLUMBING EQUIPMENT SPECIFICATIONS:**
- P-1** GRUNDFOS (POTABLE WATER PUMP)  
MODEL: CHIE-PLUS (CHIE 2-40)  
1 HP C/W PRESSURE TANK AND CONTROLS  
20 FT HEAD @ 8 USGPM
  - P-2** GRUNDFOS (SUMP PUMP)  
MODEL: KP150  
1/4 HP C/W HIGH AND LOW WATER ALARM  
13 FT HEAD @ 20 USGPM
  - HWT-1** BRADFORD WHITE, HOT WATER TANK  
MODEL: LD-WH6U3  
1.5kW 23L (6USG) TANK  
WALL HUNG MODEL
  - TNK-1** EQUINOX POTABLE WATER HOLDING TANK  
MODEL: E-125W  
75cm ø X 163cm (29 1/2"ø x 64"H)  
568L (125 IMP. GAL.)  
C/W FLOAT SWITCH, CONTROL PANEL & L.E.D.
  - TNK-2** EQUINOX SEWAGE HOLDING TANK  
MODEL: E650 LP-S  
3048mm X 1524mm X 787mm (120x60x31H)  
C/W FLOAT SWITCH, CONTROL PANEL, L.E.D. AND BUZZER WARNING
  - SP-1** EQUINOX SUMP PIT  
MODEL: E SP-1848  
OCTAGONAL SUMP PIT 450ø mm BY 1200mm HIGH

- HVAC GENERAL NOTES:**
- PROVIDE A 1kW BASEBOARD HEATER FOR MECHANICAL ROOM. C/W THERMOSTAT.
  - FIRE DAMPERS REQUIRED C/W HINGED AND LATCHED ACCESS DOORS.
  - EXHAUST DUCTWORK TO EXTERIOR, C/W ALUMINIZED WALL CAP AND C/W BACK DRAFT DAMPER. THERMALLY INSULATE EXHAUST DUCTWORK FROM EXTERIOR WALL TO THE INSIDE FOR 5'-0" FROM WALL.
  - MECHANICAL CONTRACTOR TO PROVIDE A VENMAR HRV450w C/W AIR TO AIR ALUMINUM FLAT PLATE HEAT EXCHANGER; 7.5kW OPEN COIL RESISTIVE ELEMENT (208V OR 230V), WASHABLE FILTERS 30 PORES PER INCH FOR SUPPLY AND EXHAUST; DEFROST MODE; VENMAR PROGRAMMABLE THERMOSTAT OFFERING 2 STAGE HEATING; VENMAR BOTTOM COLLECTOR BASE; 457mm x 508mm x 102mm DRAINABLE SUPPLY LOUVER; 356mm x 356mm x 51mm EXHAUST LOUVER, 14 GAUGE EXTRUDED ALUMINUM WITH 13mm x13mm GALVANIZED BIRDSCREEN ALUMINUM MILL FINISHED AND 45°DEFLECTION BLADES.
  - MOTORIZED DAMPERS IN CRAWLSPACE TO BE 24 VOLT.

- HVAC EQUIPMENT SPECIFICATIONS:**
- HRV-1** VENMAR, HEAT RECOVERY VENTILATOR c/w T7300D T'STAT  
MODEL: HRV 450w - 230/1ø/60Hz  
SUPPLY: @ 236L/s (500CFM) @ REDUCE LOW SPEED  
OUTSIDE AIR REQUIRED @ 47L/s (100 CFM)  
COOLING COIL : CARRIER MODEL: CAPVU1814ACA 1.5 TON DX COIL.  
HEATING COIL : 7.5kW ELECTRIC COIL SUPPLIED WITH VENMAR HRV-1
  - CU-1** CARRIER COOLING @ 18000 B.T.U./H  
MODEL: 24ACA318A003  
R410 REFRIGERANT  
208/230/1ø/60  
MOTOR: 1/10HP 1100RPM 13.8A
  - SPF-1** GREENHECK, EXHAUST FAN CRAWLSPACE EXHAUST  
MODEL: S1-8-426  
1/80 HP 1550 RPM 39W  
66L/s (140CFM)
  - EF-1** GREENHECK, EXHAUST FAN WASHROOM EXHAUST  
MODEL: CSP-B110  
80W 950 RPM, 1.14A  
46L/s (98CFM)
  - BH-1** CHROMALOX BASE BOARD HEATER  
1KW 240V/1ø  
MODEL: BL4810W31

<p><b>APEGM</b> Certificate of Authorization Earth Tech Canada Inc. No. 730</p>	B.M. ELEV.	Frederickson Cooper ARCHITECTS	EarthTech A Type International Ltd. Company	ENGINEER'S SEAL	<p><b>THE CITY OF WINNIPEG</b> WATER AND WASTE DEPARTMENT SOLID WASTE SERVICES DIVISION</p>	
	DESIGNED BY	DJP	CHECKED BY	PVL		ORIGINAL SIGNED BY
	DRAWN BY	DJP	APPROVED BY	TGS		P. LAITINEN
	SCALE:	AS NOTED	RELEASED FOR CONSTRUCTION BY:	V. JEANCART		2007/07/20
0 ISSUED FOR TENDER	07/07/20	DJP		CONSULTANT DRAWING NO.	<p>BRADY RD. LANDFILL NEW ENTRANCE AND SCALE FACILITY</p> <p>MECHANICAL MAIN FLOOR PLUMBING &amp; HVAC PLAN</p>	
NO. REVISIONS	DATE	BY	DATE	M1.01		
			2006/08/25	2007/07/20	CITY FILE NUMBER	
					SHEET OF	
					CITY DRAWING NUMBER	
					SWD-D-386	