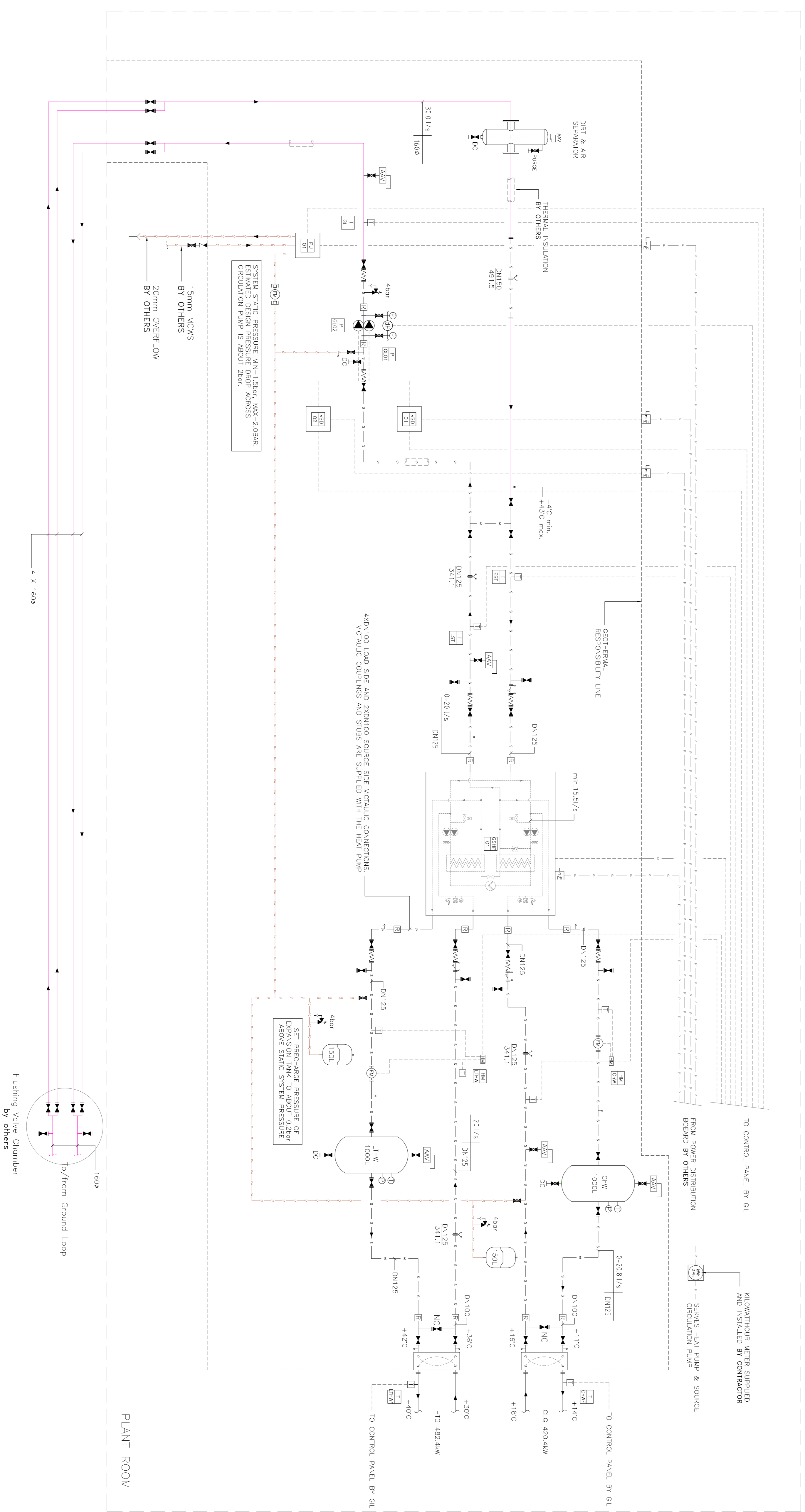


EQUIPMENT SCHEDULE

DESCRIPTION	REFERENCE	QTY.	MANUFACTURER	MODEL	ELECTRICAL SUPPLY	FULL LOAD CURRENT (A)	MAX. INRUSH CURRENT (A)	MAX. POWER INPUT (kW)	HYDR. CONN. SIZE	LOAD FLOW (L/S)	SOURCE FLOW (L/S)	DEPTH	LENGTH	HEIGHT	UNIT WEIGHT (kg)	REFERT.
HEAT PUMP	CHSP/01	1	Chivet	WSHF-XSC 180F	400/330	278.0	655.0	229.0	4"	21.00	17.40	954	4250	1886	2464	84106
CIRCULATION PUMP	P-CAL/CLD2	2	Grundfos	TRD 100-250/4	400/330	20.40	925.80	11.00	4"	-	30.00	118	670	961	616	-
VARIABLE SPEED DRIVE	VSD 01/02	2	ALCO Controls	CLE-90/54723	400/330	25.00	-	-	-	-	-	260	342	480	23	-
DP SWITCH	DP	3	ALCO Controls	FD113	230/150	3.00	-	-	1/4"	-	-	63	128	175	1	-
HEAT METER	LITHW & CHW	2	Adams	CS11	-	-	-	-	5"	21.00	-	55	149	119	1	-
FLOW METER	CHW	1	Nibs	NWN Nubs	-	-	-	-	5"	21.00	-	250	377	5	-	-
FLOW METER	LTHW	1	Nibs	NWN Nubs	-	-	-	-	5"	21.00	-	250	377	5	-	-
PRESSURIZATION UNIT	PI 01	1	Grundfos	MAP-P0802	230/150	1.5	-	0.025	5"	0.02	-	300	200	55	9	-
BURFER TANK, 1000 L	CHW & LTHW	2	Macdonald's High	1000L	-	-	-	-	5"	0.02	-	800	200	2000	120	-
HEAT EXCHANGER	Cooling, 420kW	1	Carrier	TL0200KCAL-1000	-	-	-	-	4"	25.16	21.00	550	1000	1745	875	-
HEAT EXCHANGER	Heating, 452kW	1	Carrier	TL0200KCAL-750	-	-	-	-	4"	11.50	20.00	550	750	1326	553	-
EXPANSION VESSEL	150L	1	Bass	TL0200KCAL-750	-	-	-	-	1"	-	-	484.0m	750	1024	28	-
DIRT & AIR SEPARATOR	DN500	2	Sprayon	SPZ 150-F	-	-	-	-	5"	-	30.00	324.0m	653	1045	80	-

- PIPEWORK AND ASSOCIATED EQUIPMENT**
- BALL VALVE
  - BUTTERFLY VALVE
  - NON-RETURN VALVE
  - SAFETY VALVE
  - FLOW MEASURING ORIFICE
  - DRAIN COCK
  - STRAINER
  - TEST POINT
  - UNION
  - FLANGES
  - AUTOMATIC AIR VENT
  - CIRCULATION PUMP
  - DIAPHRAGM TYPE EXPANSION TANK
- PIPE LINE TYPES**
- 125# PE100 PIPE
  - 160# PE100 PIPE
  - STEEL PIPE
  - COPPER PIPE
- CABLE LINE TYPES**
- POWER CONNECTION BY OTHERS
  - CONTROL CONNECTIONS BY OTHERS
  - CONNECTION BY OIL
- PREWORK AND ASSOCIATED EQUIPMENT**
- KILOWATTHOUR METER THREE PHASE
  - ENERGY/HEAT METER
  - FLOW METER
  - DIFFERENTIAL PRESSURE SWITCH
  - TEMPERATURE SENSOR
  - PRESSURE GAUGE
  - ELECTRIC ISOLATOR SINGLE PHASE
  - ELECTRIC ISOLATOR THREE PHASE
- MECHANICAL SERVICES ABBREVIATION**
- AV AUTOMATIC AIR VENT
  - DC DRAIN COCK
  - PI PRESSURIZATION UNIT
  - NC NORMALLY CLOSED
  - NO NORMALLY OPEN
  - VSD VARIABLE SPEED DRIVE
  - 1502 ORIFICE PLATE SIZE AND KVS VALUE
  - 488



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**Notes:**

- To be read with all other project drawings and specifications.
- Report any errors, omissions or changes to/in this drawing to Geothermal International.
- All builders work in connection with Geothermal Installation by others.
- Air vents shall be installed at high points of the system.
- Drain cocks shall be installed at low points of the system.
- All load side pipe work and ancillaries designed, supplied and installed by others.
- Thermal insulation of source side pipe work by others.
- Suitably sized isolators/breakers to be located within 1m of electrical equipment/ isolators/ breakers shall be supplied and installed by others.
- Wall mounted pressurization unit, to exclude expansion vessel.
- Controls supplied & installed by GI
- Control wiring by GI
- Electrical supply & Power distribution by others.
- Electrical wiring by others.
- Control Panels by GI
- Power Distribution panels by others.
- Final electrical connections by others.
- BMS by others.
- Main cold water service (MCHWS) supplied to pressurization unit, should be regulated to 4bar max, 1.5bar min, and should be fitted with a device achieving category 4 backflow prevention by others.
- 45 No. 40# pipe Boreholes to an effective geothermal depth of 150 m to serve the WSHF-XSC 180F Chivet Heat Pump.

**FOR CONSTRUCTION**

Rev	By	Chkd	Appr'd	Date	Description
A	MP	AHJ	15Apr-11	15Apr-11	Work in Progress/ Issued for Comments

**C0** MP RM 20Apr-11 Issued for Construction  
**C** MP RM 04Apr-11 Issued for Approval  
**B** MP RM 13Jul-11 Issued for Approval  
**A** MP AHJ 15Apr-11 Work in Progress/ Issued for Comments

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**Client**  
**BAM Construction Ltd.**

**Project**  
**South Camden Community School**

**Drawing**  
**Geothermal Plant Room Schematic**

**Drawn By:** MP **Date:** 13Apr-11  
**Checked By:** **Date:**  
**Approved By:** **Date:**  
**Drawing No.:** SCCS-GIL-0003 **Revision:** C0  
**Drawing Scale:** NTS

**geothermal international**

ground source heating cooling & hot water

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