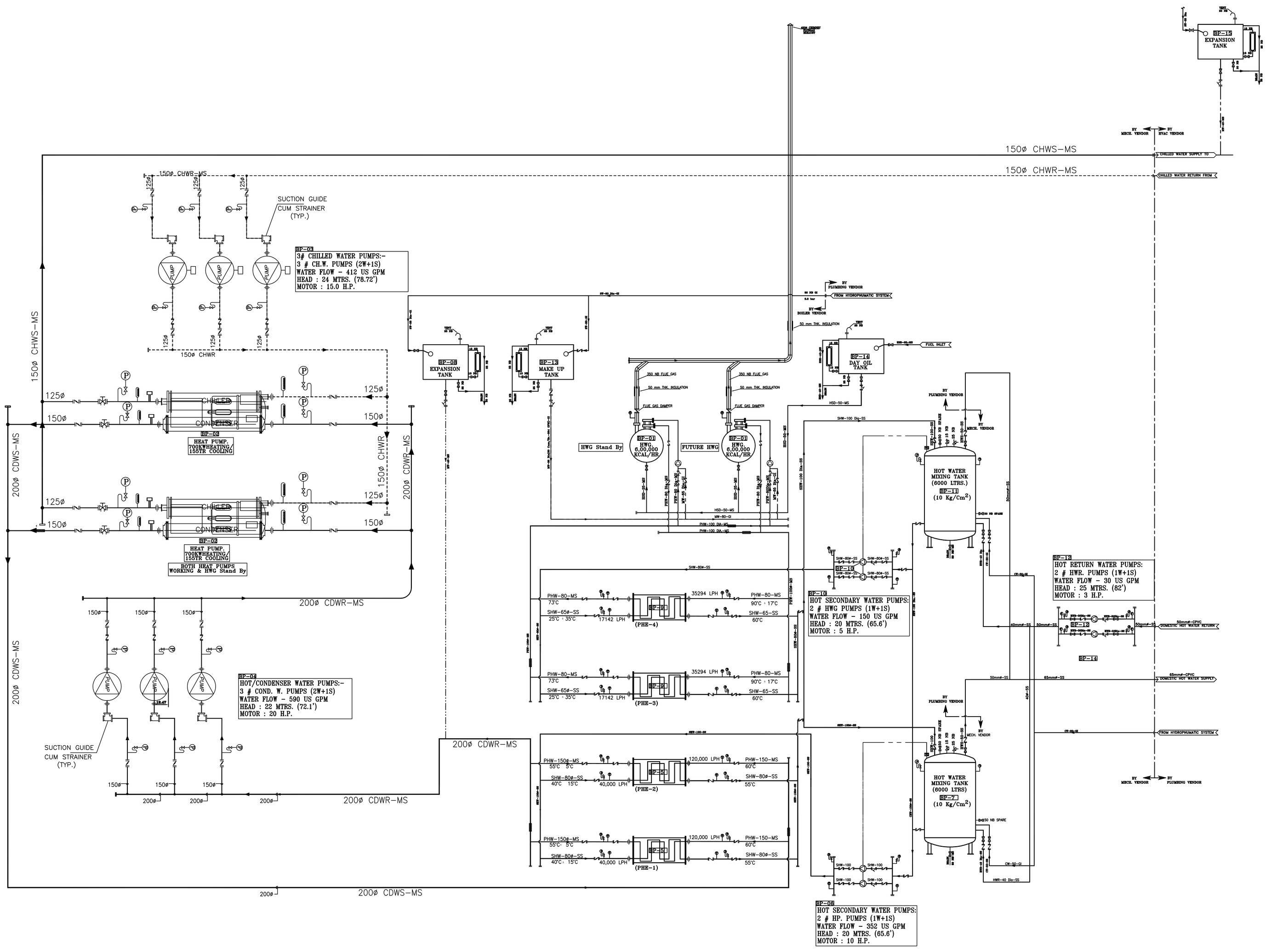

HEAT PUMPS -1 & 2

BP-03		
1.	MAKE	
2.	MODEL	
3.	HEATING CAPACITY	765 KW (192 TR)
4.	CDW/HW FLOW US GPM	590 GPM (37.15 LPS)
5.	CDW PRESSURE DROP	3.98 Mt (39.2 KPA)
	FREE COOLING	
6.	COOLING CAPACITY	155 TR
7.	CHW WATER FLOW US GPM	412 GPM (26.01 LPS)
8.	CHW PRESSURE DROP	52.6 Mt (25.3 KPA)
9.	POWER CONSUMPTION	235 KW

EQUIPMENT LIST

SR. NO.	TAG. NO.	QTY.	DESCRIPTION	SIZE/CAPACITY
1	BP-01	1	HOT WATER GENERATOR (Stand by)	6,00,000 KCal/hr-EACH
2	BP-02	2	HEAT PUMPS (Both Working)	700KW-Each. Heating
3	BP-03	3	CHILLED WATER PUMPS (2W+1S)	412 GPM @ 24 M HEAD
4	BP-04	3	HOT WATER/CONDENSER WATER PUMPS (2W+1S)	590 GPM @ 22 M HEAD
5	BP-05	2	PLATE HEAT EXCHANGERS (HEAT PUMPS)	6,00,000 KCal/hr. Each
6	BP-06	2	HOT WATER SECONDARY PUMPS (1W+1S) (FOR HEAT PUMPS)	352 GPM @ 20 M HEAD
7	BP-07	1	HOT WATER MIXING TANKS FOR HEAT PUMPS	6,000 LTRS
8	BP-08	1	EXPANSION TANK	500 Litre.
9	BP-09	2	PLATE HEAT EXCHANGER (HOT WATER GENERATOR)	6,00,000 KCal/hr-Each
10	BP-10	2	HOT WATER SECONDARY PUMPS (1W+1S) (FOR HOT W GENERATOR)	150 GPM @ 20 M HEAD
11	BP-11	1	HOT WATER MIXING TANK (DOMESTIC)	6,000 LTRS
12	BP-12	2	HOT WATER RETURN PUMPS (1W+1S)	30 GPM @ 25 M HEAD
13	BP-13	1	MAKE UP TANK (HWG)	1000 Litre.
14	BP-14	1	DAY OIL TANK	900 LTS
15	BP-15	1	EXPANSION TANK (ON THE TERRACE)	1000 Litre.

LEGENDS

- PRESSURE REDUCING VALVE
- GATE VALVE
- BALL VALVE
- NON RETURN VALVE
- BUTTERFLY VALVE
- BALANCING VALVE
- REDUCER
- TEMPERATURE INDICATOR
- PRESSURE GAUGE
- TEMPRETURE INDICATOR CUM CONTROLLER
- SAFETY VALVE
- AIR RELEASE VALVE
- PUMP
- FLOAT VALVE
- THERMOMETER
- INSULATION
- DRAIN
- AIR VENT
- CONTROL CABLE

SW = SOFT WATER
HWR = HOT WATER RETURN
PHW = PRIMARY HOT WATER
HWS = HOT WATER SUPPLY
SHW = SECONDARY HOT WATER
CW = COLD WATER
MW = MAKE-UP WATER
HSD = HIGH SPEED DIESEL
MS = CARBON STEEL BLACK
GI = CARBON STEEL GALVINIZED
SS = STAINLESS STEEL
CPVC = CHLORINATED POLY VINYL CHLORIDE

SHW-32-GI
- MATERIAL OF CONSTRUCTION
- PIPE SIZE
- SERVICE

INSULATION SCHEDULE

SERVICE/PIPE SIZE	DENSITY	MATERIAL	THICKNESS	FINISHING
CHIMNEY & FLUE DUCTING:-	100 Kg/cmf	ROCK WOOL MATTRESS	50 mm	24 SWG AL. CLADD.
PIPES:- HOT WATER PIPES ALL SIZES	100 Kg/cmf	ROCK WOOL MATTRESS	50 mm	24 SWG AL. CLADD.
TANKS & VESSELS:-	100 Kg/cmf	ROCK WOOL MATTRESS	50 mm	24 SWG AL. CLADD.

DATE	NO	PRINT ISSUED TO	BY

DATE	NO	REVISION	BY

ARCHITECTS

HABITAT ARCHITECTS
1777, MAHARAJ NAGAR
LDH.
PH:0161-2406327
TELFAX:0161-2412099

SERVICES CONSULTANTS
NARINDER SINGH CONSULTING ENGINEERS
G-128, NARAINA VIHAR
NEW DELHI-110028
TEL:-25793414
E-mail: hvacconsult@hotmail.com

PROJECT
GURU RAMDAS LANGAR HALL,
SRI HARMANDIR SAHIB, AMRITSAR

TITLE
HOT WATER SYSTEM SCHEMATIC DIAGRAM

SCALE	DATE	DESIGN	DRAWN
N.T.S	14.4.18	N. SINGH	VIKASH
D.W.G NO.	REV.	REV. DATE	CHECKED
HWS-2	1	21.5.2022	N. SINGH

FOR:-TENDER