

Pipe Color Fill Legend

- Domestic Cold Water
- Hot Water HP Return
- Hydronic Supply

POSITION OF DEISEL TANKS

16X INDUSTRIAL HEAT PUMPS CONNECTED IN PARALLEL

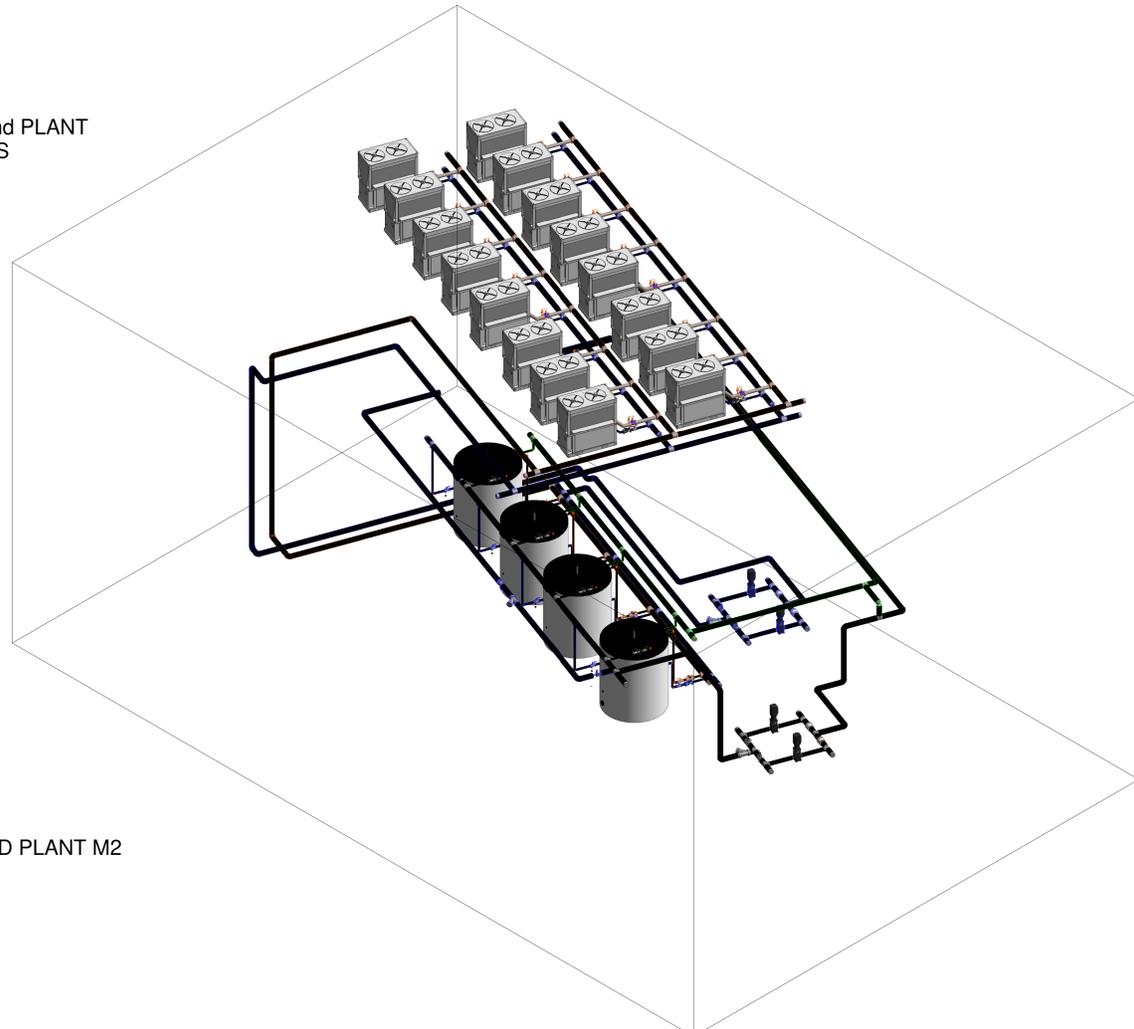
HEAT PUMP SPEC (Per Heat Pump)

HEATING CAPACITY: 117kW

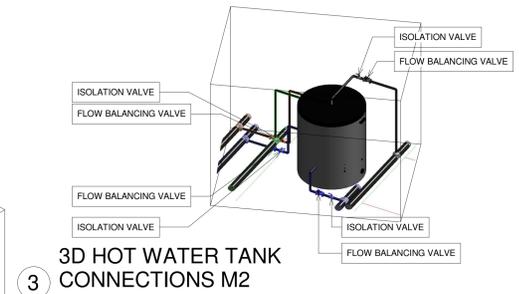
Electrical Power Requirement

Rated Power : 30kW
 Max Running Current : 76.6A
 Max Power Input : 41.6kW
 Voltage : 380V
 Frequency : 50Hz
 Phase : 3 Ph

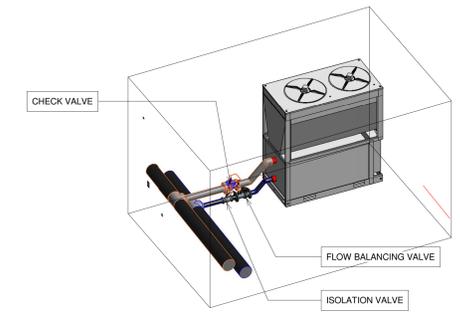
1 Level 2 D1 Ground PLANT M2 HEAT PUMPS 1:50



2 3D PLANT M2



3 3D HOT WATER TANK CONNECTIONS M2



4 3D HEAT PUMP CONNECTION M2

- GENERAL NOTES**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE LATEST ARCHITECTS DRAWINGS AND MECHANICAL STANDARD TECHNICAL SPECIFICATION.
 - THE COMPLETE INSTALLATION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LOCAL AUTHORITIES BY LAWS.
 - THE NATIONAL BUILDING REGULATIONS AND TO THE SATISFACTION OF THE ENGINEER.
 - ALL WORK TO BE CARRIED OUT BY OR UNDER THE DIRECT SUPERVISION OF LICENSED PLUMBERS.
 - ALL TESTING OF PIPE WORK TO BE CARRIED OUT IN STAGES AS WORK PROCEEDS.
- WATER SERVICES NOTES**
- UNDER GROUND PIPES TO BE IN HDPE TO SABS CLASS 12 WITH 60MM MINIMUM COVER.
 - CW PIPES IN PARKING BASEMENTS AND FOR ALL CW RISERS BETWEEN FLOORS TO BE IN CARBON STEEL WITH CLAMRON JOINTS FOR 50MM PIPES AND GREATER.
 - ISOLATING VALVES TO BE TO SABS 776 CLASS 8.
 - APPROVED QUARTER TURN BALL VALVES (WITH FULL PIPE SCREW) MAY BE USED. ALL VALVES TO BE 50% TO SABS.
 - ALL PIPE WORK TO BE PRESSURE TESTED IN STAGES AS WORK PROCEEDS. PIPE WORK ON MAINS PRESSURE TO BE TESTED TO 18 BAR.
 - OTHER PIPE WORK TO BE TESTED TO ONE AND A HALF TIMES THE WORKING PRESSURE.
 - AS BUILT WATER SERVICES TO BE MARKED ON DRAWINGS AS WORK PROCEEDS AND THE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER.
 - ISOLATING VALVES TO BE CLEARLY SHOWN ON DRAWINGS AND LABELLED ON SITE.
 - ALL ISOLATING VALVES SHALL BE POSITIONED IN AN EASILY ACCESSIBLE POSITION.
 - VALVE LABELS TO BE 100MM DIAMETER ENGRAVED TRAFFIC TYTE WITH LARGE CP KEY RING FIXING TO VALVE.

SV		ISOLATING VALVE
BV		BALANCING VALVE
NRV		NON RETURN VALVE
WM		WATER METER
PRV		PRESSURE REDUCING VALVE
PU		PUMP
IS		INLINE STRAINER
PRV		PRESSURE RELIEF VALVE
TRPV		TEMPERATURE & PRESSURE RELIEF VALVE
VV		VACUUM RELIEF VALVE

ARCHITECT

REVISIONS

REV	DATE	BY	DESCRIPTION
0	30/08/2021	NR	ISSUED FOR TENDER

CLIENT

CONSULTANT

PROJECT

SABC Electrode Boiler Replacement

DISCIPLINE

WET SERVICES

DRAWING DESCRIPTION

PLANT ROOM M2 HEAT PUMP PLANT LAYOUT

DESIGNED BY:	SIGNATURE AND DATE:
REVIEWED BY:	SIGNATURE AND DATE:
APPROVED BY:	SIGNATURE AND DATE:

PROJECT NO: A3281 DATE: 30/08/2021

DRAWING NO: A3281MW-PL-006

DRAWING DESCRIPTION	DRAWING NO.	REV	REV DATE

SCALE: 1:50 SHEET SIZE: A0 REVISION: D