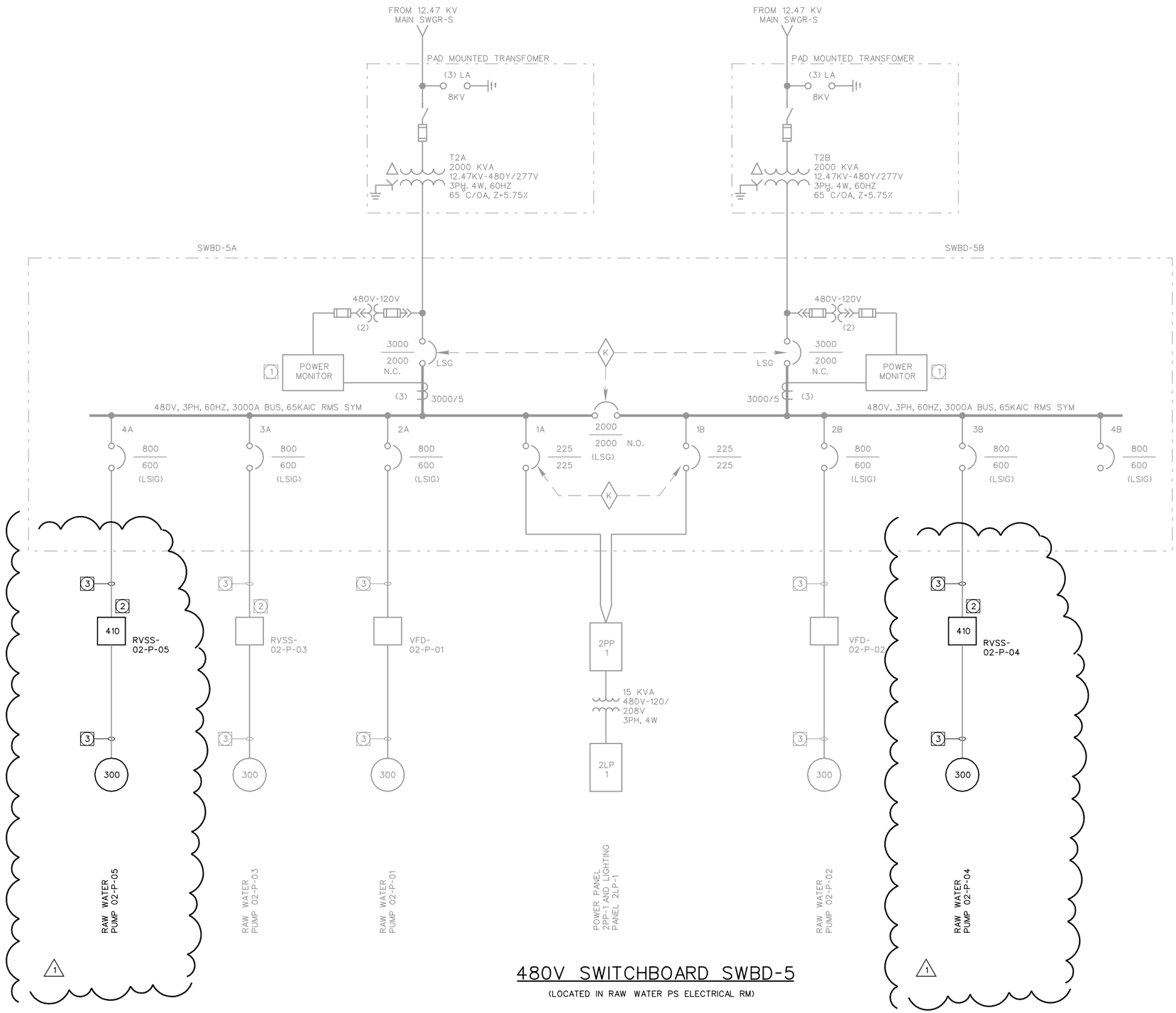

480V SWITCHBOARD SWBD-5

(LOCATED IN RAW WATER PS ELECTRICAL RM)

NOTES:

1. POWER MONITOR: CH IQ DATA
2. CONTROLLER WITH CUTLER-HAMMER MOTOR PROTECTION MODULE TO MATCH EXISTING.
3. WIRES SHALL BE SIZED FOR FUTURE 500 HP MOTOR

LSIG- CIRCUIT BREAKER ELECTRONIC TRIP UNIT, L-LONG, S-SHORT, I-INSTANTANEOUS, G-GROUND FAULT TRIP.

LOAD CALCULATION SWBD-5 (480V):
NOTE: 1 HP APPROX. EQUALS 1 KVA

(4) 300 HP MOTORS @ 300 kVA EACH (1) STANDBY	1,200,000 VA
25% OF LARGEST MOTOR	75,000 VA
LIGHTING	15,000 VA
FUTURE	300,000 VA
TOTAL:	1,590,000 VA
SINGLE TRANSFORMER IN SERVICE @	2,000,000 VA
SERVICE AMPACITY (2,000 KVA x 1.25%)	3000 A
SWBD FEEDER SIZE (8) 500 KCMIL, 75 DEG, XHHW	

STATE OF TEXAS
ROBERT E. ABORDO
84147
REGISTERED PROFESSIONAL ENGINEER

REV	DATE	BY	DESCRIPTION
2	01-31-06	PBM	Record Drawing
1	12-10-04	LRP	COH Building Permit Department

SCALE

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. PHELPS
DRAWN L. PHELPS
CHECKED R. ABORDO

SUBMITTED BY
(RECOMMENDED) LICENSE NO. DATE
LICENSE NO. DATE

MWH
MONTGOMERY WATSON HARZA
5100 Westheimer, Suite 580
Houston, TX 77056

Houston Area Water Corporation

NORTHEAST WATER PURIFICATION SYSTEM
PHASE 2 EXPANSION
RAW WATER PUMP STATION
SINGLE LINE DIAGRAM
RAW WATER PUMP STATION SWBD-5

SHEET
GE-11

Job No: 1650285 File:M:\Houston Record Drawings - Phase II\Electrical\DGN\newGE11_2.dgn User: prashant musale Plot Date: 31-JAN-2006 14:23