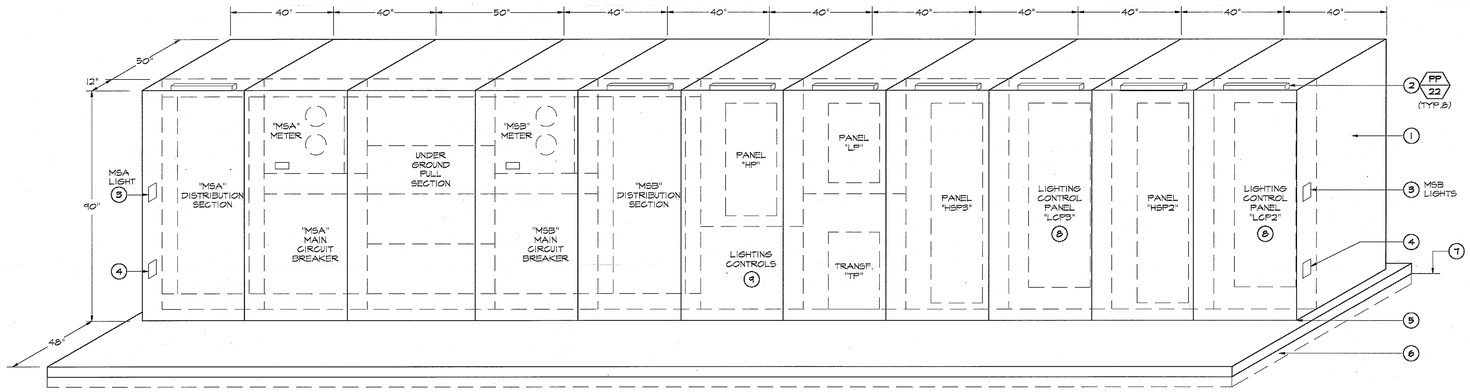


MAIN SWITCHBOARD NOTES

1. NEMA 3R ENCLOSURE. NON-WALK IN TYPE
2. 2 FT. FLUORESCENT LIGHTING FIXTURE. LIGHT FIXTURE SHALL BE MOUNTED INSIDE THE SWITCHBOARD HOUSING. PROVIDE BRANCH CIRCUIT CONDUIT AND WIRES AND CONNECT TO PANEL "LP", CIRCUIT 1. SEE LIGHTING FIXTURE SCHEDULE ON SHEET E-0.1.
3. SINGLE POLE TOGGLE SWITCH FOR SWITCHBOARD LIGHT MOUNTED INSIDE THE SWITCHBOARD HOUSING
4. GFI TYPE RECEPTACLE. PROVIDE BRANCH CIRCUIT CONDUIT AND WIRES AND CONNECT TO PANEL "LP", CIRCUIT 3.
5. PROVIDE 5/8" DIA. WEDGE ANCHORS, MINIMUM 3 1/4" EMBEDMENT. PROVIDE A MINIMUM OF 8 ANCHORS PER SWITCHBOARD SECTION
6. CAST IN PLACE 8" THICK CONCRETE PAD WITH 6"X6", #10X#10 WELDED WIRE MESH (4" ABOVE GRADE AND 4" BELOW FINISH GRADE) EXTEND 6" BEYOND OUTSIDE DIMENSION OF ENCLOSURE WITH MINIMUM 1.2% SLOPE AWAY FROM ENCLOSURE FOR DRAINAGE.
7. FINISHED GRADE
8. SEE LIGHTING CONTROL DIAGRAM ON SHEET E-0.6.
9. SEE LIGHTING CONTROL DIAGRAM ON SHEET E-0.7.

MAIN SWITCHBOARD ELEVATION

NOT TO SCALE

LOAD CALCULATION
MAIN SWITCHBOARD "MSA"

MSA-1	PANEL "HB"	45.0	KVA
MSA-2	PANEL "HA"	70.6	KVA
MSA-3	PANEL "HC"	232.3	KVA
MSA-4	PANEL "HM"	34.9	KVA
MSA-5	PANEL "HSC1"	382.2	KVA
MSA-6	WATER PUMP 1 40 HP, 480V, 3Ø	43.2	KVA
	WATER PUMP 2 40 HP, 480V, 3Ø	43.2	KVA
	25% LARGEST MOTOR	10.8	KVA
	TOTAL	866.6	KVA
		1,042	AMPS.
		@ 480/277V, 3Ø, 4W	

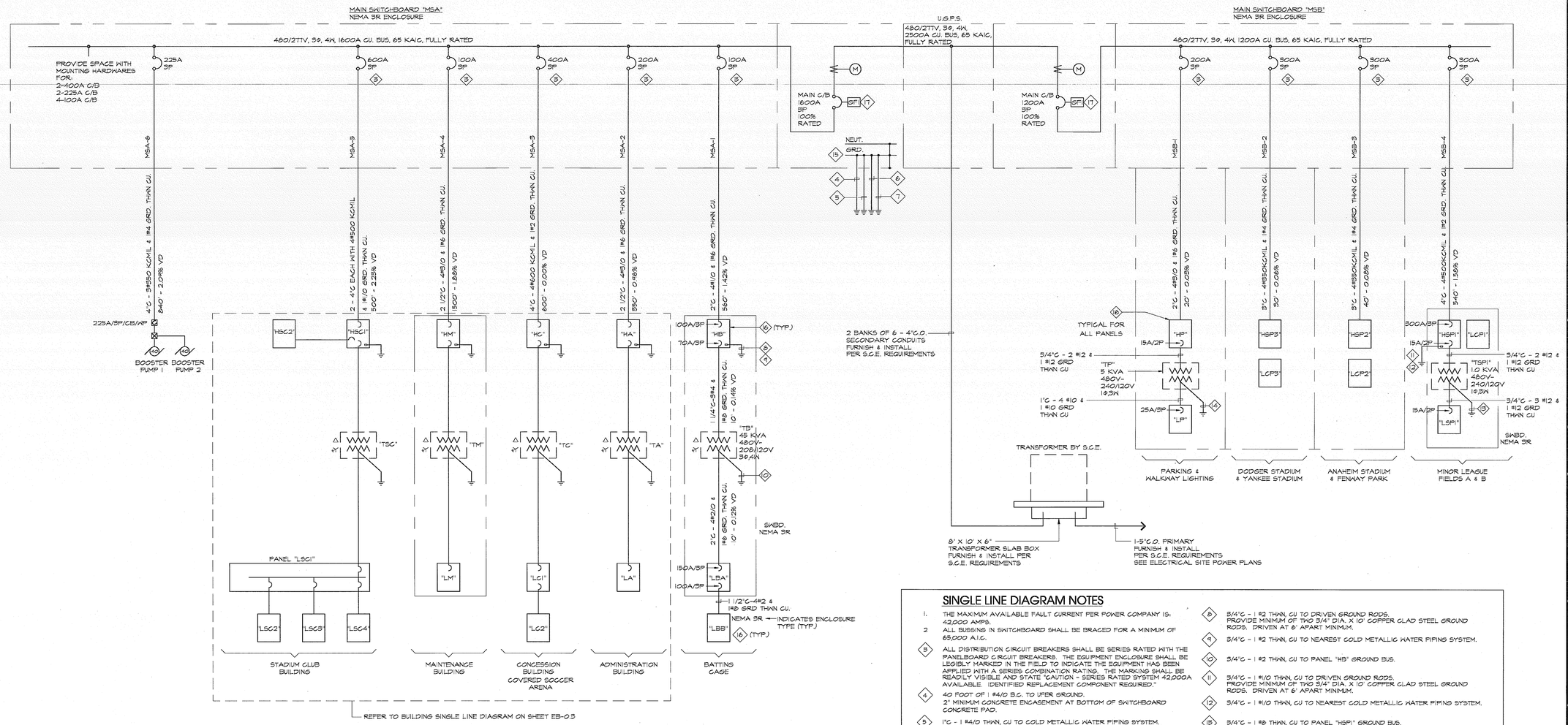
LOAD CALCULATION
MAIN SWITCHBOARD "MSB"

MSB-1	PANEL "HP"	62.8	KVA
MSB-2	PANEL "HSP3"	144.0	KVA
MSB-3	PANEL "HSP2"	144.0	KVA
MSB-4	PANEL "HSP1"	158.8	KVA
	TOTAL	509.6	KVA
		613	AMPS.
		@ 480/277V, 3Ø, 4W	

LOAD CALCULATION
UNDERGROUND PULL SECTION (U.G.P.S.)

MAIN SWBD "MSA"	866.6	KVA
MAIN SWBD. "MSB"	509.6	KVA
TOTAL	1,376.2	KVA
	1,655	AMPS.
	@ 480/277V, 3Ø, 4W	

LOAD SUMMARY



SINGLE LINE DIAGRAM NOTES

1. THE MAXIMUM AVAILABLE FAULT CURRENT PER POWER COMPANY IS: 42,000 AMPS.
2. ALL BUSSING IN SWITCHBOARD SHALL BE BRACED FOR A MINIMUM OF 65,000 A.I.C.
3. ALL DISTRIBUTION CIRCUIT BREAKERS SHALL BE SERIES RATED WITH THE PANELBOARD CIRCUIT BREAKERS. THE EQUIPMENT ENCLOSURE SHALL BE LEGIBLY MARKED IN THE FIELD TO INDICATE THE EQUIPMENT HAS BEEN APPLIED WITH A SERIES COMBINATION RATING. THE MARKING SHALL BE READILY VISIBLE AND STATE "CAUTION - SERIES RATED SYSTEM 42,000A AVAILABLE. IDENTIFIED REPLACEMENT COMPONENT REQUIRED."
4. 40 FOOT OF 1 #4/0 B.C. TO UFER GROUND.
   2" MINIMUM CONCRETE ENCASEMENT AT BOTTOM OF SWITCHBOARD CONCRETE PAD.
5. 1"C - 1 #4/0 THAN, CU TO COLD METALLIC WATER PIPING SYSTEM.
6. 1"C - 1 #4/0 THAN, CU TO MAIN GAS LINE.
   CONNECT TO STEEL GAS LINE ON SECONDARY SIDE OF METER.
7. 1"C - 1 #4/0 THAN, CU TO DRIVEN GROUND RODS.
   PROVIDE MINIMUM OF FOUR 3/4" DIA. X 10' COPPER CLAD STEEL GROUND RODS. DRIVEN AT 6' APART MINIMUM.
8. 3/4"C - 1 #2 THAN, CU TO DRIVEN GROUND RODS.
   PROVIDE MINIMUM OF TWO 3/4" DIA. X 10' COPPER CLAD STEEL GROUND RODS. DRIVEN AT 6' APART MINIMUM.
9. 3/4"C - 1 #2 THAN, CU TO NEAREST COLD METALLIC WATER PIPING SYSTEM.
10. 3/4"C - 1 #2 THAN, CU TO PANEL "HB" GROUND BUS.
11. 3/4"C - 1 #1/0 THAN, CU TO DRIVEN GROUND RODS.
    PROVIDE MINIMUM OF TWO 3/4" DIA. X 10' COPPER CLAD STEEL GROUND RODS. DRIVEN AT 6' APART MINIMUM.
12. 3/4"C - 1 #1/0 THAN, CU TO NEAREST COLD METALLIC WATER PIPING SYSTEM.
13. 3/4"C - 1 #8 THAN, CU TO PANEL "HSP1" GROUND BUS.
14. 3/4"C - 1 #8 THAN, CU TO MAIN SWBD. "MSB" GROUND BUS.
15. CONTINUOUS COPPER GROUND BUS.
16. ALL PANELS AND DISCONNECTS SHALL BE IDENTIFIED ON THE OUTSIDE AS TO EQUIPMENT OR AREAS SERVED.
17. GROUND FAULT MAIN SHALL BE TESTED BY INDEPENDENT THIRD PARTY PREAPPROVED BY CITY OR COUNTY BUILDING DEPARTMENT.
    TESTING SHALL BE PER C.E.C.

NOTE:
FEEDER LENGTHS SHOWN ARE FOR VOLTAGE DROP CALCULATIONS ONLY AND SHALL NOT BE USED FOR BID TAKE-OFF.

SINGLE LINE DIAGRAM

NOT TO SCALE

MIG

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1471 Pomona Road, Unit E
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PROJECT TEAM:
LANDSCAPE ARCHITECT
MIG INC.

ARCHITECT
PITASSI ARCHITECTS INC.

CIVIL ENGINEERS/SURVEYOR
WALDEN & ASSOCIATES

STRUCTURAL ENGINEERS
CORREIA CONSULTING & DESIGN

ELECTRICAL ENGINEERS
LRA ENGINEERS

IRRIGATION DESIGNER
WILLIAMS IRRIGATION DESIGN

GEOTECHNICAL ENGINEERS
CONVERSE CONSULTANTS

TURF GRASS CONSULTANT
GUISE AND ASSOCIATES

PERRIS VALLEY Big League Dreams

2155 Trumble Road
Perris, California, 92570

SHEET TITLE

SINGLE LINE DIAGRAM

100% CONSTRUCTION DOCUMENT

DATE	REVISIONS

STAMP

REGISTERED PROFESSIONAL ENGINEER
CHRIS C. REGALADO
No. E18914
Exp. 6-30-11
ELECTRICAL
STATE OF CALIFORNIA

CHECKED BY	DATE
LRA	
DATE 01-07-10	FILE NAME
DRAWN BY CR	SHEET E-0.3
JOB NO. 05208.00	
SCALE NONE	290 OF 313 SHEETS