

1 GENERAL NOTES

ALL ELECTRICAL WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE COMPANY.

- SERVICE POWER SHALL BE THREE PHASE, THREE WIRES W/ GROUND, 230 VOLTS, 60 HERTZ SYSTEM.
- ALL WIRING METHOD FOR LIGHTING, POWER, TELEPHONE AND CATV SHALL BE DONE IN IMC PIPE FOR ALL EMBEDDED IN CONCRETE SLAB AND RSC PIPE FOR FIRE ALARM SYSTEM, EXPOSED CONDUIT LAYOUT, FEEDER DISTRIBUTION AND MAJOR POWER CONDUIT RISER.
- SMALLEST BRANCH CIRCUIT WIRE SHALL BE 3.5 mm² THHN FOR POWER AND LIGHTING SYSTEM IN RACEWAY 15 mm^ø TRADE SIZE CONDUIT. WIRE SHALL BE INSULATED FOR 600 VOLTS.
- ALL BRANCH CIRCUIT HOMERUN SHALL BE INSTALLED AS INDICATED IN THE PLAN. EXPOSED CIRCUIT RUN SHALL BE INSTALLED PARALLEL TO OR PERPENDICULAR WITH THE BUILDING LINE AND SUPPORTED BY CONDUIT CLAMPS EVERY 1.5 METERS, DIAGONAL CONDUIT RUN SHALL NOT BE ACCEPTED.
- ALL PANELBOARD SHALL BE PROVIDED WITH GROUNDING TERMINALS FOR SOLID AND NEUTRAL, GROUNDING WIRE SHALL BE CONNECTED TO A GROUND ROD.
- ALL BRANCH CIRCUIT HOMERUN FOR POWER AND LIGHTING SHALL NOT BE COMBINED IN THE SAME RACEWAY.
- ALL METALLIC CONDUIT, CABINET, BOXES AND EQUIPMENT SHALL BE PROPERLY GROUNDING AND BONDED.
- ALL MATERIALS TO BE USED SHALL BE NEW AND APPROVED FOR THE LOCATION AND PURPOSES.
- ALL MOLDED CASE CIRCUIT BREAKERS FOR PUMPS AND MOTORS SHALL BE INDUSTRIAL TYPE.
- ALL RECEPTACLE OUTLET SHALL BE PROPERLY GROUNDING TO THE BOX BY MEANS OF GROUNDING LUGS.
- MOUNTING HEIGHT NOT SHOWN ON SCHEDULE ARE AS FOLLOWS:
 - LIGHT CONTROLLED SWITCHES 1.40 METER ABOVE FLOOR FINISH @ CENTER
 - DUPLEX CONVENIENCE OUTLET _____ 0.30 METER ABOVE FLOOR FINISH @ CENTER UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS.
 - TELEPHONE OUTLET _____ 0.30 METER ABOVE FLOOR FINISH @ CENTER UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS.
 - PANELBOARD / DISCONNECT _____ 1.40 METER ABOVE FLOOR FINISH @ CENTER UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS.
- ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

PHASE A	_____	RED
PHASE B	_____	BLACK
PHASE C	_____	BLUE
GROUND	_____	GREEN
- ALL ELECTRICAL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY QUALIFIED LICENSED ELECTRICAL ENGINEER.

2 LOAD SCHEDULE

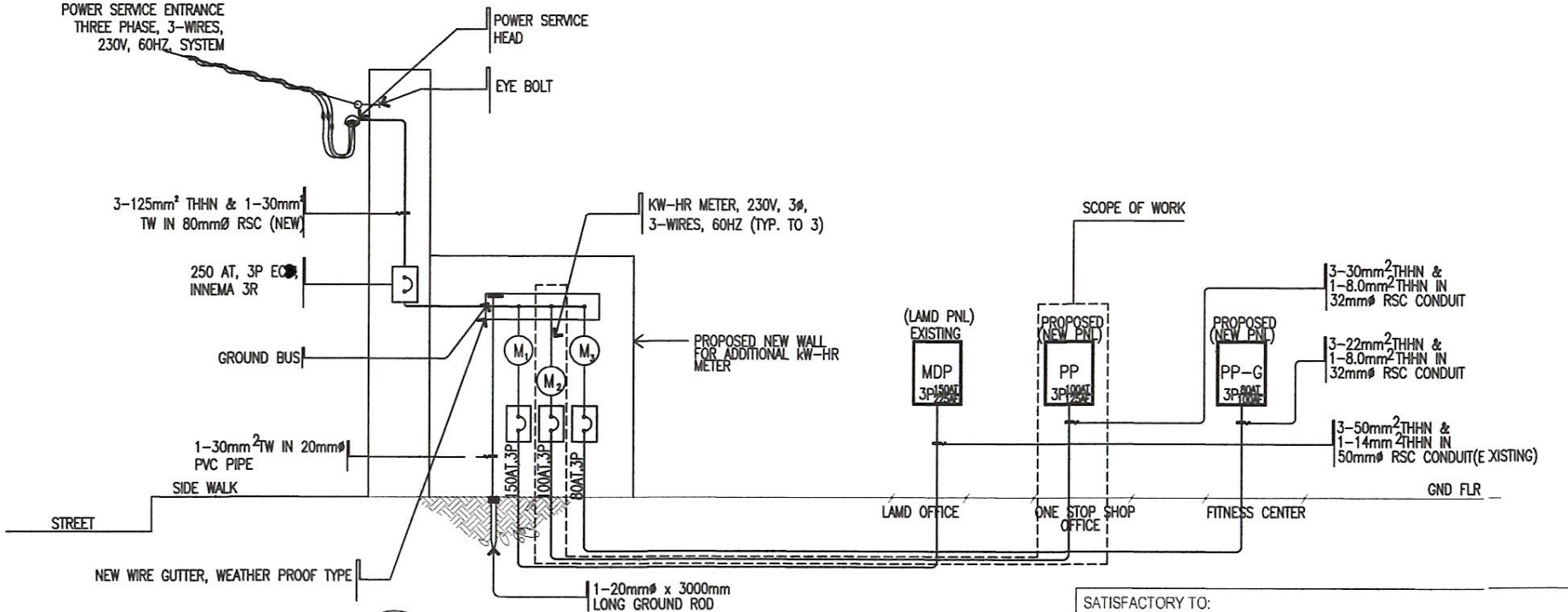
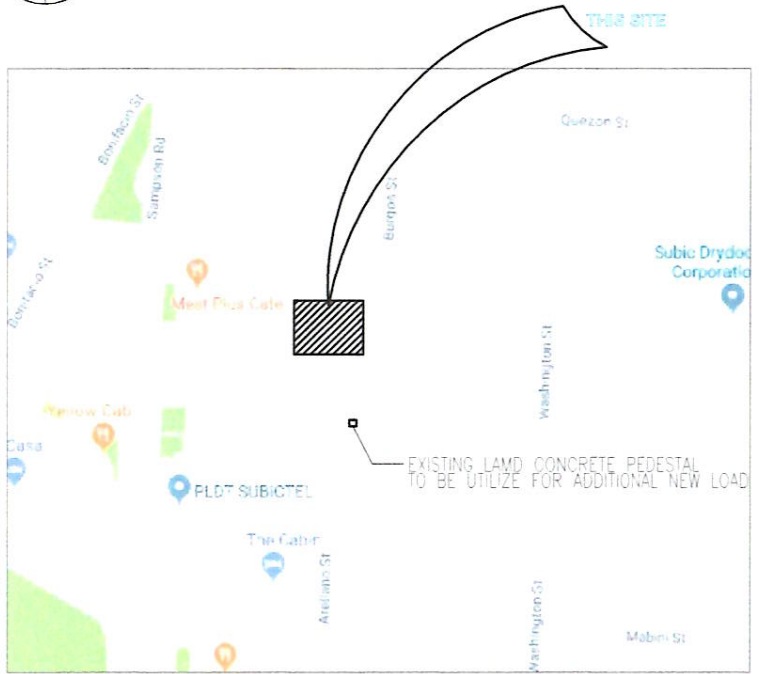
CKT NO.	LOAD DESCRIPTION	VOLT	VOLT-AMPERE	AMPERE LOAD					NUMBER & SIZE				
				AB	BC	CA	ABC	AT	AF	P	WIRE	CONDUIT	
1	18-2X20W TUBE LED, 6-20W TUBE LED, 19-18W PL, 5-50W SPOTLIGHTS, 3-40W EM LIGHTS, 1-40W EXIT L & 4-40W E.F.	230	1752	7.62					20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
2	12-2X20W LED TUBE, 16-18W PL, 2-40W EM LIGHTS & 1-40W EXIT LIGHT	230	888	3.95					20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
3	7-CONVENIENCE OUTLET	230	1260			5.48			20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
4	8-CONVENIENCE OUTLET	230	1440			6.26			20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
5	5-CONVENIENCE OUTLET	230	900			3.91			20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
6	8-CONVENIENCE OUTLET	230	1440			6.26			20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
7	4-CONVENIENCE OUTLET	230	720	3.13					20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
8	1-SHP WINDOW TYPE ACU	230	1450	6.30					20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
9	1-SHP WALL MTD ACU	230	1450			6.30			20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
10	2-OHP ACU	230	1,900			8.26			30	50	2	2-5.5mm ² THHN & 1-5.5mm ² THHN	15mm DIA. IMC
11	ATM MACHINE	230	1,000			4.35			40	50	2	2-8.0mm ² THHN & 1-5.5mm ² THHN	25mm DIA. IMC
12	SPARE	230	1,200			5.22			40	50	2	2-8.0mm ² THHN & 1-5.5mm ² THHN	25mm DIA. IMC
13	SPARE	230	1,200	5.22					20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
14	SPARE	230	1,200	5.22					20	50	2	2-3.5mm ² THHN & 1-3.5mm ² THHN	15mm DIA. IMC
15	STR FLR MTD ACU	230	8,764					22	50	100	3	3-8.0mm ² THHN & 1-5.5mm ² THHN	25mm DIA. IMC
16	STR FLR MTD ACU	230	8,764					22	50	100	3	3-8.0mm ² THHN & 1-5.5mm ² THHN	25mm DIA. IMC
TOTAL CONNECTED LOAD:				35,328	31.35	19.74	26.30	44.00					

IL @ 80% D.F. = $\frac{((31.35 \times 1.732) + 44)(0.8)}{1000} + (25\% \text{ OF } 22)$
 = 78.64 + 5.5
 = 84.14 A
 USE : 3-30mm² THHN & 1-8.0mm² THHN IN 40mm DIA. RSC
 CKT BREAKER : 100AT, 125AF, 3P, 230V, 60HZ CKT BRK BOLT-ON

CKT NO.	LOAD DESCRIPTION	VOLT	VOLT-AMPERE	AMPERE LOAD					NUMBER & SIZE			
				AB	BC	CA	ABC	AT	AF	P	WIRE	CONDUIT
3	MDP LAMD OFFICE	230	4995	81.58	60.10	75.62	0	150	50	3	3-50mm ² THHN & 1-14mm ² THHN	50mm DIA. RSC
4	PP-ONE STOP SHOP	230	35,328	31.35	19.74	26.30	44	100	50	3	3-30mm ² THHN & 1-8.0mm ² THHN	32mm DIA. RSC
5	PP-G FITNESS CENTER	230	27082	45.57	28.26	43.91	0	100	50	3	3-22mm ² THHN & 1-8.0mm ² THHN	32mm DIA. RSC
TOTAL CONNECTED LOAD:				112,405	158.50	108.10	145.84	44.00				

IL @ 80% D.F. = $\frac{((158.501 \times 1.732) + 44)(0.8)}{1000} + (25\% \text{ OF } 22)$
 = 254.82 + 5.5
 = 260.32 A
 USE : 3-125mm² THHN & 1-30mm² THHN IN 80mm DIA. RSC

3 LOCATION MAP



4 POWER SYSTEM RISER DIAGRAM

SATISFACTORY TO:

KENNETH LEMUEL G. REMIENTILLA
 DA FOR BUSINESS GROUP