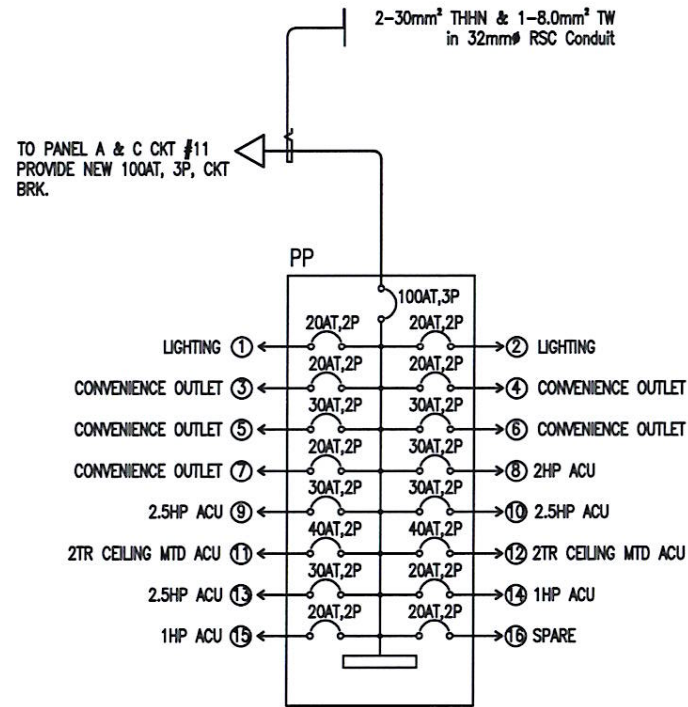


# 1 GENERAL NOTES

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 PVC 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 mm<sup>2</sup> THHN FOR POWER AND LIGHTING SYSTEM IN RACEWAY 15 mm<sup>2</sup> 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:
  - a. DUPLEX CONVENIENCE OUTLET ——— 0.30 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  |
| NEUTRAL | ————— | ————— | ————— | WHITE |
| GROUND  | ————— | ————— | ————— | GREEN |
- ALL ELECTRICAL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY QUALIFIED LICENSED ELECTRICAL ENGINEER.



### 3 POWER RISER DIAGRAM

# 2 LEGEND & SYMBOLS

- EMERGENCY LIGHT WITH BATTERY
- TROFFER CEILING MOUNTED LIGHT WITH DIFFUSER, 2X20W LED LAMP,
- 18W PINLIGHT, 6INCH DIA. RECESSED MOUNTED
- 40W CEILING MOUNTED EXHAUST FAN
- SINGLE TUMBLER SWITCH / THREE WAY SWITCH
- TWO GANG TUMBLER SWITCH, NUMBER DENOTES NUMBER OF GANG IN A PLATE, SMALL LETTER DENOTES LIGHT CONTROLLED
- EXIT LIGHTS W/ BATTERY
- FLOOR MOUNTED DUPLEX CONVENIENCE OUTLET, 15A, PARALLEL SLOTS, GROUNDING TYPE
- WALL MOUNTED DUPLEX CONVENIENCE OUTLET, 15A, PARALLEL SLOTS, GROUNDING TYPE
- CONDUIT RUN EMBEDDED OR CONCEALED IN CONCRETE FLOOR SLAB OR WALL
- CONDUIT BRANCH CIRCUIT HOMERUN TO PANELBOARD POWER AND LIGHTING PANEL
- CIRCUIT HOMERUN DESIGNATION, UPPER PART DENOTES POWER SOURCE OF THE CIRCUIT WHILE LOWER HALF DENOTES CIRCUIT DESIGNATION.
- CIRCUIT BREAKER, RATING AS INDICATED

| 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, 9-18W PL, 1-40W EM LIGHTS, 1-40W EXIT L. & 2-40W E.F. | 208  | 1042        | 5.01        |       |       |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 2                     | 18-2X20W TUBE LED, 3-18W PL, 2-40W EM LIGHTS & 1-40W EXIT LIGHTS         | 208  | 894         | 4.30        |       |       |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 3                     | 7-CONVENIENCE OUTLET   | 208  | 1260        |             |       | 6.06  |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 4                     | 8-CONVENIENCE OUTLET   | 208  | 1440        |             |       | 6.92  |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 5                     | 5-CONVENIENCE OUTLET   | 208  | 900         |             | 4.33  |       |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 6                     | 3-CONVENIENCE OUTLET   | 208  | 540         |             | 2.60  |       |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 7                     | 6-CONVENIENCE OUTLET   | 208  | 1080        | 5.19        |       |       |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 8                     | 2HP ACU  | 208  | 1980        | 9.52        |       |       |      | 30 | 50            | 2 | 2-5.5mm <sup>2</sup> THHN & 1-5.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 9                     | 2.5HP ACU  | 208  | 2,300       |             |       | 11.06 |      | 30 | 50            | 2 | 2-5.5mm <sup>2</sup> THHN & 1-5.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 10                    | 2.5HP ACU  | 208  | 2,300       |             |       | 11.06 |      | 30 | 50            | 2 | 2-5.5mm <sup>2</sup> THHN & 1-5.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 11                    | 2TR CEILING MTD ACU  | 208  | 2,930       |             | 14.09 |       |      | 40 | 50            | 2 | 2-8.0mm <sup>2</sup> THHN & 1-5.5mm <sup>2</sup> THHN | 20mm DIA. RSC |
| 12                    | 2TR CEILING MTD ACU  | 208  | 2,930       |             | 14.09 |       |      | 40 | 50            | 2 | 2-8.0mm <sup>2</sup> THHN & 1-5.5mm <sup>2</sup> THHN | 20mm DIA. RSC |
| 13                    | 2.5HP ACU  | 208  | 2,300       | 11.06       |       |       |      | 30 | 50            | 2 | 2-5.5mm <sup>2</sup> THHN & 1-5.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 14                    | 1HP ACU  | 208  | 980         | 4.71        |       |       |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 15                    | 1HP ACU  | 208  | 980         |             |       | 4.71  |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| 16                    | SPARE  | 208  | 1,200       |             |       | 5.77  |      | 20 | 50            | 2 | 2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN | 15mm DIA. RSC |
| TOTAL CONNECTED LOAD: |  |      | 25,056      | 39.79       | 35.10 | 45.58 | 0.00 |    |               |   |   |               |

IL @ 100% D.F. = (45.58 X 1.732) X 0.8 + (25% OF 14.09)  
 = 63.15 + 3.52163  
 = 66.67 A  
 USE : 4-30mm<sup>2</sup> THHN & 1-8.0mm<sup>2</sup> THHN IN 40mm DIA. RSC  
 CKT BREAKER : 100AT, 125AF, 3P, 230V, 60HZ CKT BRK BOLT-ON

# 4 LOAD SCHEDULE

|  |                     |                                     |  |                                    |  |   |  |
|--|---------------------|-------------------------------------|--|------------------------------------|--|---|--|
| <b>ENGINEERING DEPARTMENT</b><br>PUBLIC WORKS & TECHNICAL SERVICES GROUP<br>BLDG. 255 BARRYMAN ROAD, SUBIC BAY FREEPORT ZONE | DESIGNED BY:<br>NVC | CHECKED BY:<br><i>[Signature]</i>   | REVIEWED BY:<br><i>[Signature]</i>             | RECOMMENDED:<br><i>[Signature]</i> | APPROVED BY:<br><i>[Signature]</i>         | PROJECT TITLE:<br>RENOVATION OF GBID OFFICE @ BLDG. 662     | SHEET NO.<br>E1                        |
|  | DESIGNED BY:<br>NVC | EDISON D. ICO<br>DIV CHIEF III, PDD | GARY P. FERNANDEZ<br>MANAGER, ENGINEERING DEPT | MARCO A. ESTABILLO<br>DA FOR PWT&G | WILMA T. EISMA<br>CHAIRMAN & ADMINISTRATOR | SUBIC BAY METROPOLITAN AUTHORITY<br>SUBIC BAY FREEPORT ZONE | LOCATION: BLDG. 662, BARRYMAN RD. SBFZ |

SATISFACTORY TO  
  
**BEATRIX S. ANAGARAN**  
 MANAGER BUSINESS AND INVESTMENT GRP