

LOAD SCHEDULE AND COMPUTATION

| PANEL "LP" | | | | | MAIN : 40AT 100AF 2P 230V 1Ø 3-WIRE 230V | | | |
|---------------------|--------------------|------------------|-------|-----------------|--|------|---------------|-----------|
| FEEDER NO. | LOAD DESCRIPTION | AMP. PER CIRCUIT | VOLTS | CIRCUIT BREAKER | | | HOMERUN | |
| | | | | TRIP | FRAME | POLE | WIRE | CONDUIT |
| 1 | CONVENIENCE OUTLET | 7.04 | 230 | 20 | 50 | 2 | 3#3.5mm2 THHN | 15mmØ IMC |
| 2 | CONVENIENCE OUTLET | 6.26 | 230 | 20 | 50 | 2 | 3#3.5mm2 THHN | 15mmØ IMC |
| 3 | SPARE | — | 230 | 20 | 50 | 2 | — | — |
| 4 | SPARE | — | 230 | 20 | 50 | 2 | — | — |
| TOTAL | | 13.30 | | | | | | |
| ILP = 13.30 AMPERES | | | | | USE : 2# 8.0mm2 THHN 1# 5.5mm2 Ø THHN IN 20mmØ IMC | | | |

LOAD SCHEDULE AND COMPUTATION

| PANEL "EP" | | | | | MAIN : 40AT 100AF 2P 230V 1Ø 3-WIRE 230V | | | |
|--------------------|------------------|------------------|-------|-----------------|--|------|---------------|-----------|
| FEEDER NO. | LOAD DESCRIPTION | AMP. PER CIRCUIT | VOLTS | CIRCUIT BREAKER | | | HOMERUN | |
| | | | | TRIP | FRAME | POLE | WIRE | CONDUIT |
| 1 | LIGHTING | 2.91 | 230 | 20 | 50 | 2 | 3#3.5mm2 THHN | 15mmØ IMC |
| 2 | LIGHTING | 5.83 | 230 | 20 | 50 | 2 | 3#3.5mm2 THHN | 15mmØ IMC |
| 3 | SPARE | — | 230 | 20 | 50 | 2 | — | — |
| 4 | SPARE | — | 230 | 20 | 50 | 2 | — | — |
| TOTAL | | 8.74 | | | | | | |
| ILP = 8.74 AMPERES | | | | | USE : 2# 8.0mm2 THHN 1# 5.5mm2 Ø THHN IN 20mmØ IMC | | | |

GENERAL NOTES

1. THE ELECTRICAL INSTALLATION WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS, THE APPLICABLE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE RULES AND REGULATIONS OF THE LOCAL ENFORCING AUTHORITY AND THE REQUIREMENTS OF THE LOCAL AND POWER TELEPHONE COMPANIES. THE ELECTRICAL WORKS SHALL BE UNDER THE IMMEDIATE SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER OR MASTER ELECTRICIAN.
2. THE ELECTRIC SERVICE VOLTAGE SHALL BE SINGLE PHASE- 2 WIRE + GROUND 230 VOLTS.
3. THE ELECTRICAL INSTALLATION SHALL BE DONE IN IMC CONDUITS AND PVC CONDUITS, FLEXIBLE CONDUITS SHALL BE USED WHERE REQUIRED THE USED OF PVC CONDUITS SHALL BE LIMITED TO 15mm DIA. AND 20mm DIA. SIZE. THE MINIMUM SIZE FOR ALL CONDUITS SHALL BE IN 15mm DIA. ELECTRICAL TRADE SIZE . FOR STEEL CONDUITS PANASONIC AND ALLIED BRANDS OR APPROVED LOCAL EQUIVALENT SHALL BE USED. WHERE NON-METALLIC CONDUITS ARE ALLOWED TO BE USED, PVC CONDUITS SCHEDULE 48, ATLANTA AND EMERALD BRANDS OR APPROVED EQUIVALENT SHALL BE USED.
4. ALL WIRES SHALL BE COPPER AND THERMOPLASTIC INSULATED TYPE "THHN" UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE FOR POWER SHALL BE 3.5mm2 AND FOR LIGHTING SHALL BE 2.0mm2. THE CONTROL WIRES SHALL BE 2.0mm2. ALL OTHER WIRES SHALL BE AS INDICATED OR AS SPECIFIED ELSEWHERE ON THE PLANS. PHELPS DODGE AND COLUMBIA BRANDS OR EQUIVALENT SHALL BE USED.
5. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF SERVICE ENTRANCE FOR CONNECTION TO THE POWER SUPPLY AND ALSO THE ACTUAL LOCATION OF THE TELEPHONE AND CABLE TV SYSTEM SERVICE ENTRANCE FOR CONNECTION TO THE TELEPHONE AND CABLE FACILITIES.
6. ALL SERVICE ENTRANCE EQUIPMENT, SWITCHES, PANEL BOARDS, LIGHTING FIXTURES AND ALL NON CURRENT CARRYING METAL PARTS SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE.
7. ALL 20 AMPERE CIRCUIT HOMERUNS TO THE PANEL BOARDS MORE THAN 30 METERS IN LENGTH SHALL BE NO. 3.5mm2 UNLESS OTHERWISE SPECIFIED.
8. ALL FEEDERS AND BRANCH CIRCUITS SHALL BE INSTALLED AS INDICATED ON THE PLANS, BRANCH CIRCUIT HOMERUN WIRES SHALL BE INSTALLED IN INDIVIDUAL HOMERUN CONDUITS.
9. PULLBOX OR PULLBOXES OR MANHOLES OR HANDHOLES SHALL BE PROVIDED EVEN IF NOT INDICATED ON THE PLANS, IF THE FIELD CONDITION IS REQUIRED.
10. THE MOUNTING HEIGHTS OF WIRING DEVICES SHALL BE AS FOLOWS

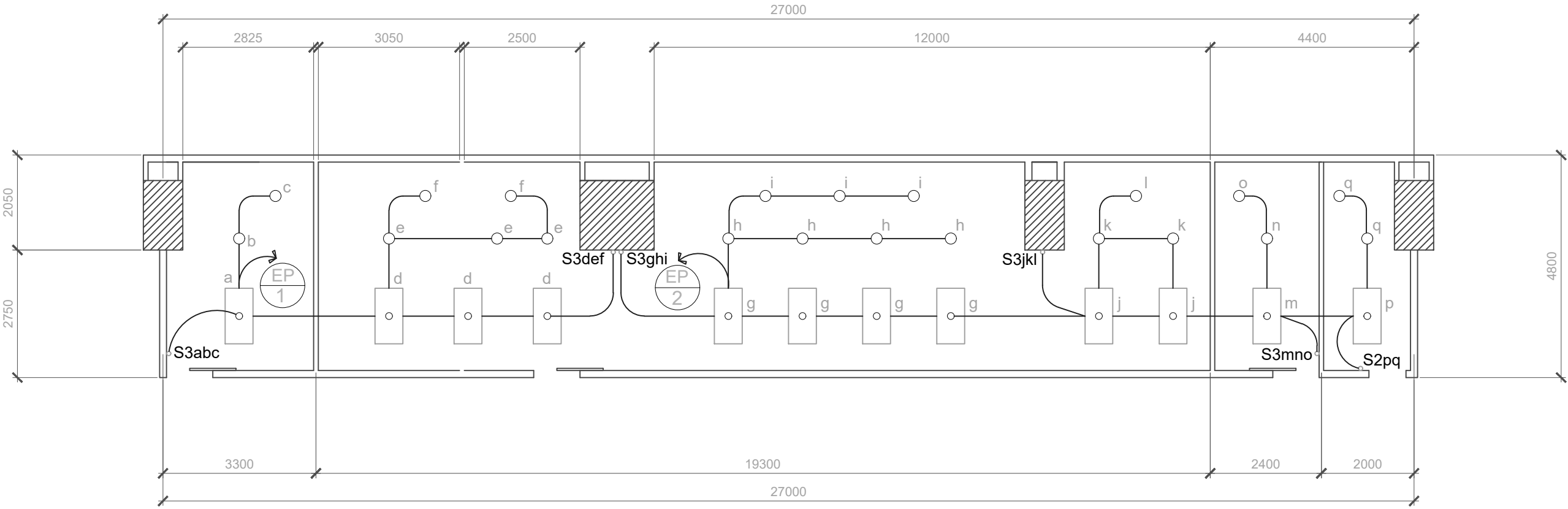
| | |
|---------------------------------|---|
| LIGHT SWITCHES | 1.40 METER ABOVE FLOOR FINISH |
| CONVENIENCE OUTLET | 0.30 METER ABOVE FLOOR FINISH |
| VOICE AND DATA TELEPHONE OUTLET | 0.30 METER ABOVE FLOOR FINISH |
| PANEL BOARD AND CABINETS | 1.40 METER ABOVE FLOOR FINISH @ CENTER OR AS REQUIRED |

ALL MOUNTING HEIGHTS SHALL BE SUBJECT FOR ARCHITECTS APPROVAL PRIOR TO INSTALLATION

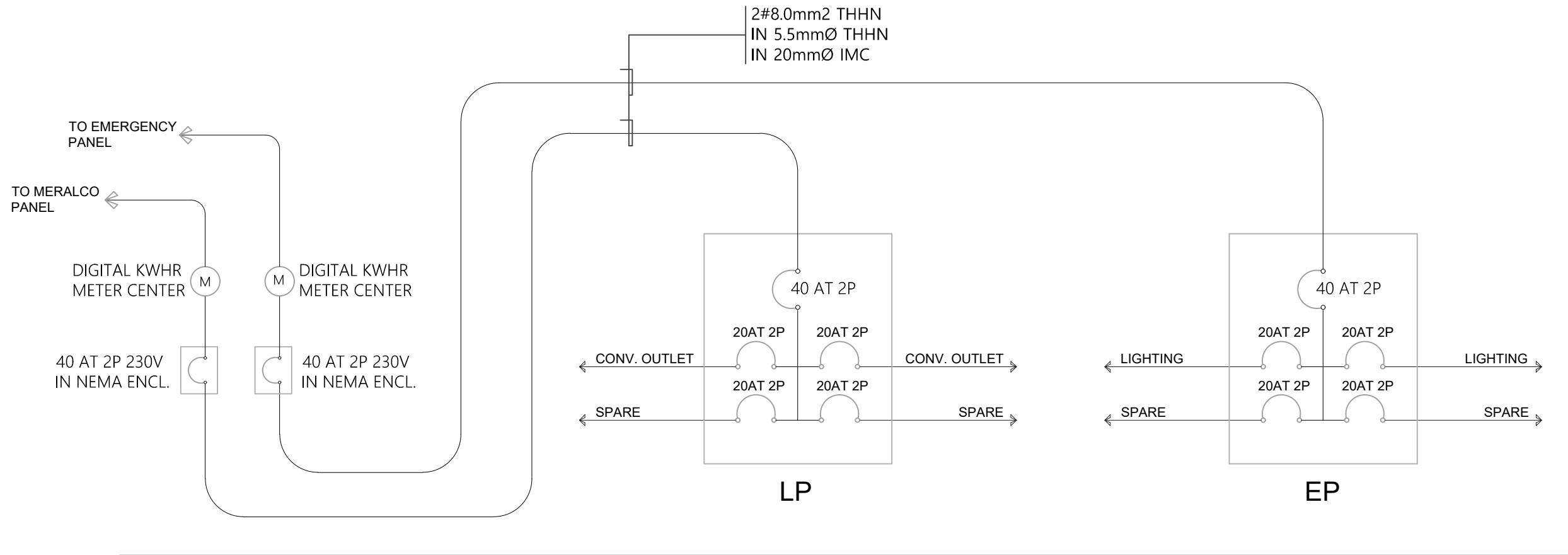
LEGEND

| | |
|--|-------------------------------------|
| | 1 X 24 WATTS DAYLIGHT TROFFER LIGHT |
| | PINLIGHT |
| | DUPLUX CONVENIENCE OUTLET |
| | EMERGENCY PANEL BOARD |
| | PANEL BOARD |
| | TWO GANG SWITCH |
| | THREE GANG SWITCH |

POWER SYSTEM LAYOUT SCALE 1 : 100 MTS.



LIGHTING SYSTEM LAYOUT SCALE 1 : 100 MTS.



SINGLE LINE DIAGRAM NTS.

| | | | | | | | |
|------------|-------------|----------------------------------|--|----------------------------|---------------|----------------|-----------|
| CONTRACTOR | CHECKED BY. | SUBMITTED BY. | PROJECT | OWNER | SHEET CONTENT | DESIGN BY. | SHEET NO. |
| | | PROFESSIONAL ELECTRICAL ENGINEER | DEPARTMENT HEAD OFFICE RENOVATION | MACRO ASIA NAIA TERMINAL 3 | AS SHOWN | CADD BY. jst | E-1 |
| | | PRC. NO. TIN. NO. | LOCATION 2ND FLOOR, TERMINAL BLDG., NINOY AQUINO AVENUE, PASAY. CITY | ADDRESS | | DATE JAN. 2025 | |
| | | PTR. NO. ISSUED ON | | | | APPROVED BY. | |