

ELECTRICAL  
 CONFORM WITH THE RULES AND REGULATIONS OF THE NATIONAL AND LOCAL AUTHORITIES CONCERNED.

4. SMALLEST SIZE OF WIRE SHALL BE 15MM<sup>2</sup> FOR LIGHTING AND FOR CONVENIENCE OUTLET, AND SHALL BE INSTALLED AT 45°.
5. LIGHT SWITCHES SHALL BE MATED AT 15A, 240V.
6. SWITCH BOXES SHALL BE GALVA #16 STEEL, PRESSED:
  - A. CEILING LIGHTING: 2" DEEP JUNCTION BOX E.T. FOR 1 TO 4 CONDUIT ENTRIES.
  - B. WALL SWITCHES: 2" DEEP UTILITY BOX E.T. FOR 1-CONDUIT TO 3-GANG SWITCH ON ONE STRAP.
  - C. CONVENIENCE OUTLET: 2" DEEP UTILITY BOX FOR 1 OR 2 CONDUIT ENTRIES.
7. INSTALLING HEIGHT SHALL BE AS FOLLOWS:
  - A. SWITCHES: 1.4 METERS ABOVE FLOOR.
  - B. CONVENIENCE OUTLET: 0.30 METERS ABOVE FLOOR OR AS INDICATED.
  - C. PANELBOARDS: 1.50 METERS ABOVE FLOOR.
8. ALL ELECTRICAL MATERIALS, DEVICES, EQUIPMENT AND ACCESSORIES TO BE INSTALLED SHALL BE NEW AND APPROVED TYPE FOR THE LOCATION AND PURPOSES.
9. DATA PRESENTED ON THE PLAN ARE ASSUMED AS PRELIMINARY SURVEY THAT PLANNING CAN BE DEPENDABLE BUT ALL INFORMATION IS SUBJECT TO ACCURACY AND CANNOT BE GUARANTEED. FIELD VERIFICATION OF ALL DIMENSIONS IS REQUIRED ON ACTUAL EXECUTION OF WORK THIS IS FOR GUIDANCE, BUT LEVEL SHALL BE GOVERNED BY FIELD CONDITIONS.

LEGEND

①	THREE POLE DOUBLE THROW SWITCH IN THREE GANG-PLATE COVER, 15AMPS, 220 V
②	THREE-WAY SWITCH 15AMPS, 220V IN ONE GANG-PLATE COVER
③	THREE-WAY SWITCH 15AMPS, 220V IN ONE GANG-PLATE COVER
④	CIRCUIT BREAKER NO. INDICATE CIRCUIT NUMBER
⑤	UTILITY TERMINAL
⑥	LIGHTING PANEL
⑦	CONVENIENCE OUTLET 200V, 10AMPS, GROUNDING TYPE
⑧	2 x 40 / 12" x 48 RECESSED DIFFUSER LIGHTING

PROPOSED REPAIR OF OHS AND PAO OFFICE  
 PHILIPPINE PUBLIC SAFETY COLLEGE  
 DEPARTMENT OF ELECTRICAL ENGINEERING  
 COLLEGE OF ENGINEERING AND ARCHITECTURE  
 UNIVERSITY OF CALLOSSES (UNIC) - CALLOSSES CAMPUS  
 CALLOSSES, CALLOSSES CITY, CALLOSSES PROVINCE, CALLOSSES  
 2024

DESCRIPTION: MECHANICAL EXTENSION

PROTECTION: 100A/150A/2P

VOLTAGE: 400V / 3Ø

CKT. NO.	CIRCUIT BREAKER RATING	POLE	TRIP	FRAME	WIRE / CABLE SIZE		CONDUIT	LOAD DESCRIPTION	VA LOAD	AMPERE LOAD				
					WIRE	GROUND WIRE				AB	BC	CA	Σ Ø	
1	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	L.O. (15)	1000	6.5				
2	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	L.O. (15)	1000	6.5				
3	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	L.O. (18)	1800				7.8	
4	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	L.O. (23)	2300				10	
5	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	C.O. (9)	1800				7.8	
6	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	C.O. (9)	1800				7.8	
7	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	A/C 1HP					8	
8	20A	1	20	50	2-1.5mm <sup>2</sup>	1-1.5mm <sup>2</sup>	20mmØ PVC	A/C 2HP					12	
9	20A	1	20	50				spare						
10	20A	1	20	50				spare						
11	30A	3	30	50	3-5.5mm <sup>2</sup>	1-5.5mm <sup>2</sup>	20mmØ PVC	3 TONNER						6.1
12	30A	3	30	50	3-5.5mm <sup>2</sup>	1-5.5mm <sup>2</sup>	20mmØ PVC	3 TONNER						6.1
13	30A	3	30	50	3-5.5mm <sup>2</sup>	1-5.5mm <sup>2</sup>	20mmØ PVC	5 TONNER						6.7
14	30A	3	30	50	3-5.5mm <sup>2</sup>	1-5.5mm <sup>2</sup>	20mmØ PVC	5 TONNER						6.7

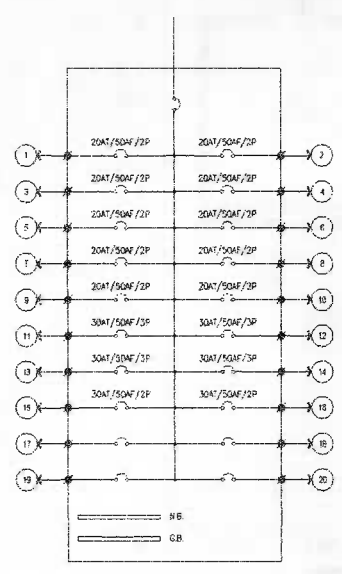
LOAD COMPUTATION:

$$I = (33 + 31.8) + 25K (9.7)$$

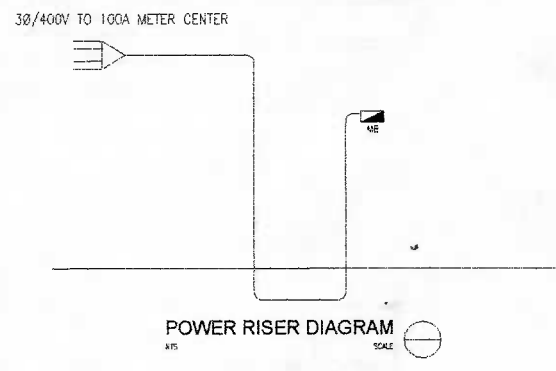
$$= 64.8 + 2,425 = 67 \text{ AMP}$$

$$= 67 (1.2) = 80.78$$

USE: 100A/150A/2P  
 4-30mm<sup>2</sup> THHN  
 1- 6 mm<sup>2</sup> TRN  
 Ø 40mmØ PVC



2 PANEL BOARD DIAGRAM  
 SCALE: NTS



POWER RISER DIAGRAM  
 SCALE: NTS