

ELECTRICAL SPECIFICATIONS:

E-1 ALL WORKS SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE RULES AND REGULATIONS OF THE LOCAL ENFORCING AGENCY OF THE MUNICIPALITY OF LEGANES, AND THE REQUIREMENTS OF PANAY ELECTRIC COMPANY, INC. (PECO).

E-2 NATURE OF SERVICE SHALL BE 230V, SINGLE PHASE, 60HZ

E-3 TYPE OF WIRING SHALL BE THW, CU FOR SERVICE ENTRANCE IN RIGID METAL CONDUIT AND THHN, CU FOR FEEDER, SUB FEEDER, CIRCUIT LINE AND SWITCH LINE IN NON METALLIC METAL CONDUIT.

E-4 MINIMUM SIZE OF LIVE AND GROUND CONDUCTOR SHALL BE AS FOLLOWS:

- SERVICE ENTRANCE 2 NO. 14.0 THHN CU WIRE
- LIGHTING CIRCUIT 2 NO. 3.5 MM² THHN CU WIRE
- LIGHTING POLE SWITCHES 2 NO. 2.0 MM² THHN CU WIRE
- DUPLEX CONVENIENCE OUTLET 2 NO. 3.5 MM² THHN CU WIRE
- SPECIAL PURPOSE OUTLET 2 NO. 5.5 MM² THHN CU WIRE
- ALL OTHERS AS SPECIFIED

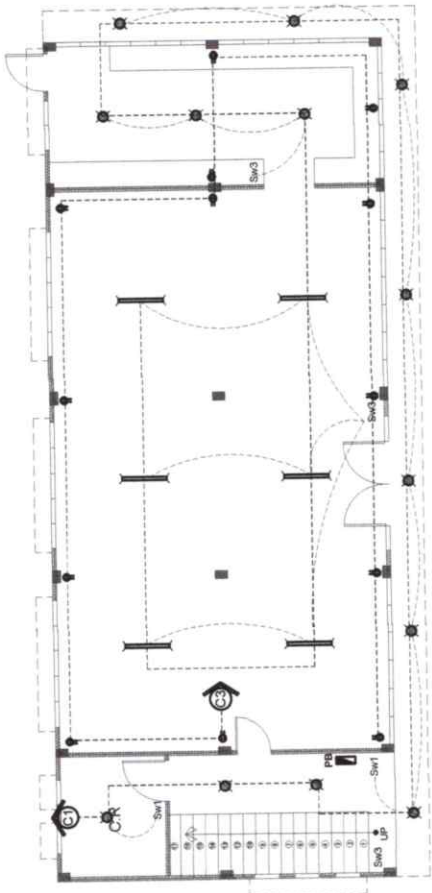
E-5 MINIMUM MOUNTING HEIGHTS FOR THE FOLLOWING SHALL NOT BE LESS THAN AS FOLLOWS:

- POWER PANEL BOARD NOT LESS THAN 1.60M ON PANELBOARD
- POLE SWITCHES CENTER ABOVE FLOOR LEVEL
- DUPLEX CONVENIENCE OUTLET NOT LESS THAN 1.20M ABOVE FLOOR LEVEL
- AIR CONDITIONING UNIT OUTLET NOT LESS THAN .30M ABOVE FLOOR LEVEL
- OTHERS NOT LESS THAN 1.20M ABOVE FLOOR LEVEL

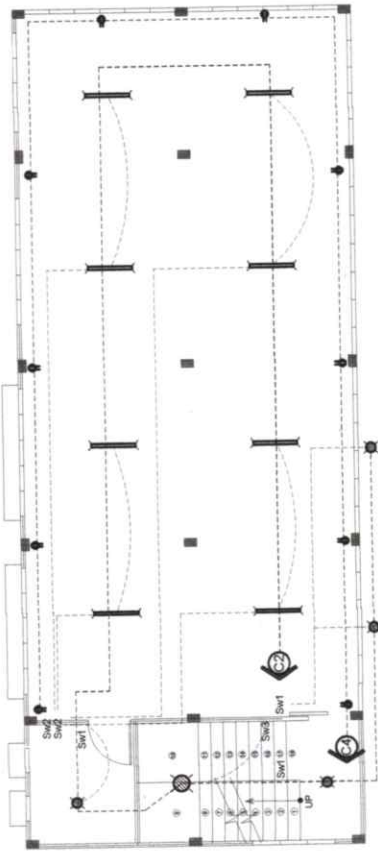
E-6 ALL WORKS SHALL BE DONE IN UNDER THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER OR REGISTERED MASTER ELECTRICIAN

LEGEND:

- LIGHTING OUTLET LINE
- POWER LINE
- 40W FLUORESCENT LAMP
- 100W DECORATIVE LAMP
- 25W CIRCULAR LAMP
- 15W 4" PINLIGHT
- 12W PINLIGHT
- 14W PINLIGHT
- 3W DECORATIVE DROP LIGHT
- DUPLEX CONVENIENCE OUTLET
- SPECIAL PURPOSE OUTLET
- REFRIGERATOR OUTLET
- DUPLEX CONVENIENCE OUTLET WEATHER PROOF
- MOTOR PUMP
- Sg SINGLE SWITCH
- S2H DUPLEX SWITCH
- S3WAY THREE WAY SWITCH
- CA TV CABLE TV OUTLET
- TEL TELEPHONE
- ARC CON OUTLET
- C-1 CIRCUIT HOMERUN
- FB CIRCUIT BREAKER
- PANEL BOARD



G/F ELECTRICAL LAY-OUT
SCALE: 1:100 METER



S/F ELECTRICAL LAY-OUT
SCALE: 1:100 METER

DESIGN ANALYSIS

CIRCUIT NO. - 1
7-12W DROP LIGHT
3-14W PEN LIGHT
6-40W FLUORESCENT LAMP
IL = 366 W / 230 = 1.59 AMP.
IC = 1.59 A x 1.25 = 1.99 AMP.
USE : 2-2.0mm² THHN CU WIRE
IN 20mm² ø FLEX, PVC CONDUIT;
15 A 2POLE CIRCUIT BREAKER

CIRCUIT NO. - 2
2-14W PIN LIGHT
2-12W DROP LIGHT
1-18W PIN LIGHT
8-40W FLUORESCENT LAMP
IL = 390W / 230 = 1.69 AMP.
IC = 1.69 A x 1.25 = 2.12 AMP.
USE : 2-2.0mm² THHN CU WIRE
IN 20mm² ø FLEX, PVC CONDUIT;
15 A 2POLE CIRCUIT BREAKER

CIRCUIT NO. - 8
13-DUPLEX CONVENIENCE OUTLET
AT 180 VA / OUTLET
IL = 2340 / 230 = 10.17 Amp.
IC = 10.17 A x 1.25 = 12.72 Amp.
USE : 2-3.5mm² THHN CU WIRE
IN 20mm² ø FLEX, PVC CONDUIT;
30 A 2POLE CIRCUIT BREAKER

CIRCUIT NO. - 8
11-DUPLEX CONVENIENCE OUTLET
AT 180 VA / OUTLET
IL = 1980 / 230 = 8.61 Amp.
IC = 8.61 A x 1.25 = 10.76 Amp.
USE : 2-3.5mm² THHN CU WIRE
IN 20mm² ø FLEX, PVC CONDUIT;
30 A 2POLE CIRCUIT BREAKER

MAIN COMPUTATION
IL = 5076 / 230 = 22.07 Amp.
IC = 22.07 A x 1.25 = 27.59 Amp.
USE : 2-14mm² THW CU WIRE
IN 40mm² ø FLEX, PVC CONDUIT;
1-3.5mm² GRD WIRE
MAIN PROTECTION:
60 A 2POLE, 250V BOLT - ON TYPE
ACB W/ MINIMUM OF 8 KAIC

SCHEDULE OF LOADS

CIRCUIT NO.	LOAD DESCRIPTIONS			SWITCHES			AMPERE	VOLTS	VA	CIRCUIT PROTECTION	SIZE AND TYPE OF CONDUCTOR	SIZE OF CONDUIT		
	L.O.	C.O.	OTHERS	S1	S2	S3							S3W	
C1	16				2	1	3	1	1.59 A	230	366 W	15 AT 2 P CB	2 - 2.0 mm THHN, CU. WIRE	20 MM Ø UPVC
C2	13				2		2	1	1.69 A	230	390 W	15 AT 2 P CB	2 - 2.0 mm THHN, CU. WIRE	20 MM Ø UPVC
C3			13						10.17 A	230	2340 W	20 AT 2 P CB	2 - 3.5 mm THHN, CU. WIRE 1 - 2.0 mm TW, CU. GRND. WIRE	20 MM Ø UPVC
C4			11						8.61 A	230	1980 W	20 AT 2 P CB	2 - 3.5 mm THHN, CU. WIRE 1 - 2.0 mm TW, CU. GRND. WIRE	20 MM Ø UPVC
TOTAL	29	24		4	3	3	2		22.06 A	230	5076 W	60 AT 2 P CB	2 - 14mm² THW, CU. WIRE 1 - 3.5mm² TW, CU. WIRE	40 MM Ø UPVC

PROJECT TITLE:

PROPOSED CONSTRUCTION OF DA TRAINING CENTER

CHECKED BY:

APPROVED BY:

SHEET CONTENTS

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AS SHOWN

SHEET NO.

E 1

CADD BY: CORTZ

PREPARED BY:

DATE:



LOCATION: CABATUAN, ILOILO