PB-SAL-GF

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Total VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	21	2458	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 10 x CONVENIENCE OUTLET	230	SINGLE	2.46	10.69			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2	19	2098	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 8 x CONVENIENCE OUTLET	230	SINGLE	2.10	9.12			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3	20	2278	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 9 x CONVENIENCE OUTLET	230	SINGLE	2.28			9.90	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4	20	2278	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 9 x CONVENIENCE OUTLET	230	SINGLE	2.28			9.90	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5	17	1738	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 6 x CONVENIENCE OUTLET	230	SINGLE	1.74		7.56		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6	12	1180	1 x 48" TUBE LIGHT + 8 x 24" TUBE LIGHT 3 x CONVENIENCE OUTLET	230	SINGLE	1.18		5.13		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
7	15	195	6 x 24" TUBE LIGHT + 6 x LIGHT BULB + 3 x LED STRIP LIGHT	230	SINGLE	0.20	0.85			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
8	15	135	15 x LIGHT BULB	230	SINGLE	0.14	0.59			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
9			SPARE											-	-	-
10			SPARE											-	-	-
11			SPARE											-	-	-
12			SPARE											-	-	-
TOTAL CURRENT IN EACH PHASE (AMPERES)							21.24	12.69	19.81							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										45	100	3	3-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE

TOTAL CURRENT IN AMPERES	53.74	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	12360	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 1.41 + [[1.732 x [1.25 x 20.94 + 21.24 - 20.94]]+ 0] x 0.8 **IC = 38.09 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 1.41 + [[1.732 x [1.25 x 20.94 + 21.24 - 20.94]]+ 0] x 0.8 **IP = 39.50 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-8.0 mm2 THHN/THWN, Stranded, Copper	USE: 45 AT, INVERSE TIME, 230V, 3P

PB - PRINCIPAL'S OFFICE (PO)

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Total VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	7	3000	ACU	230	SINGLE	3.00	13.04			30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
2	3	195	3 x ORBIT FAN	230	SINGLE	0.20	0.85			20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3	1	1492	ACU	230	SINGLE	1.49			6.49	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
4	1	3000	ACU	230	SINGLE	3.00			13.04	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
5	6	4200	6 x CONVENIENCE OUTLET	230	SINGLE	4.20		18.26		20	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
6	10	368	6 x 48" TUBE LIGHT + 4 x LIGHT BULB + 2 x EXHAUST FAN	230	SINGLE	0.37		1.60		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							13.89	19.86	19.53							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										80	100	3	3-14.0 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE

TOTAL CURRENT IN AMPERES	53.28	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	12255	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 13.04 + [[1.732 x [1.25 x 5.37 + 32.15 - 5.37]]+ 0] x 0.8 **IC = 59.45 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 13.04 + [[1.732 x [1.25 x 5.37 + 32.15 - 5.37]]+ 0] x 0.8 **IP = 72.49 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-14.0 mm2 THHN/THWN, Stranded, Copper	USE: 80 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	R.A. 9266 Section 33	PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS	DESIGNED BY: TANO	ISSUED FOR:	REVISIONS:			DRAWING NO.
			Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.	DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1		DATE DRAFTED: 09-04-2024 DATE UPDATED: 09-15-2024 DRAFTED BY: RAS OBISO APPROVED BY:	☐ OWNER'S APPROVAL ☐ AS-BUILT ☐ BIDDING ☐ BUILDING PERMIT ☐ CONSTRUCTION ☐ ESTIMATE ☐ FABRICATION	NO. DATE DESCRIPTION PROJECT CODE:		
				LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY								

PB - REGISTRAR'S OFFICE (RO)

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Total VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	10	168	8 x FLUORESCENT LIGHT + 2 x LIGHT BULB	230	SINGLE	0.17	0.73			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2	20	4185	10 x CONVENIENCE OUTLET	230	SINGLE	4.19	18.20			20	100	2	2-3.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	15 mmØ PVC PIPE
3	4	260	4 x ORBIT FAN	230	SINGLE	0.26			1.13	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4	1	3000	ACU	230	SINGLE	3.00			13.04	30	100	2	2-5.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5	10	5254	10 x CONVENIENCE OUTLET	231	SINGLE	5.25		22.84		30	100	2	2-5.5 mm2 THHN/THWN		1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
6			SPARE													
TOTAL CURRENT IN EACH PHASE (AMPERES)							18.93	22.84	14.17							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**100**	100	**3**	**3-22.0 mm2 THHN/THWN**	-	**1-8.0 mm2 THHN/THWN**	**40 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	55.94	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	7613	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 13.04 + [[1.732 x [1.25 x 40.55 + 41.77 - 40.55]]+ 0] x 0.80 **IC = 84.96 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 13.04 + [[1.732 x [1.25 x 40.55 + 41.77 - 40.55]]+ 0] x 0.80 **IP = 98.00 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-22.0 mm2 THHN/THWN, Stranded, Copper	USE: 100 AT, INVERSE TIME, 230V, 3P

PB-SAL-R163

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Total VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	1492	ACU	230	SINGLE	1.49	6.49			30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
2			SPARE													
3	1	1492	ACU	230	SINGLE	1.49			6.49	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
4			SPARE													
5			SPARE													
6	12	1541	12 x 48" TUBE LIGHT + 1 x ORBIT FAN + 8 x CONVENIENCE OUTLET	230	SINGLE	1.54		6.70		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							6.49	6.70	6.49							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**35**	100	**3**	**3-5.5 mm2 THHN/THWN**	-	**1-5.5 mm2 THHN/THWN**	**25 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	19.67	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	4525	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 6.49 + [[1.732 x [1.25 x 1.49 + 12.97 - 1.49]]+ 0] x 0.80 **IC = 24.98 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 6.49 + [[1.732 x [1.25 x 1.49 + 12.97 - 1.49]]+ 0] x 0.80 **IP = 31.47 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-3.5 mm2 THHN/THWN, Stranded, Copper	USE: 35 AT, INVERSE TIME, 230V, 3P

MDP SAL

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Total VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	13815	PB-SAL-4F	230	THREE	13.82	22.04	22.04	15.98	80	100	3	3-22 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE
2	1	10360	PB-SAL-3F	230	THREE	10.36	13.32	14.80	16.92	60	100	3	3-14 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	-
3	1	20710	PB-SAL-2F	230	THREE	20.71	34.88	26.50	28.66	100	100	3	3-30 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE
4	1	11400	PB-SAL-GF	230	THREE	11.40	21.24	12.69	19.81	45	100	3	3-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
5	1	12255	PB-RO	230	THREE	12.26	18.93	22.84	14.17	100	100	3	3-30 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE
6	1	7613	PB-PO	230	THREE	7.61	13.89	19.86	19.53	80	100	3	3-22 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE
7	1	4525	PB-SAL-R163	230	THREE	4.53	6.49	6.70	6.49	35	100	3	3-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
8	1	4525	PB-SAL-R164	230	THREE	4.53	6.70	6.49	6.49	35	100	3	3-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
9	1	4525	PB-SAL-R165	230	THREE	4.53	6.70	6.49	6.49	40	100	3	3-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
10	1	3000	ACU 2ND FLOOR	230	SINGLE	3.00		13.04		30	100	2	2-5.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	20 mmØ PVC PIPE
11	1	3000	ACU 2ND FLOOR	230	SINGLE	3.00			13.04	30	100	2	2-5.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	20 mmØ PVC PIPE
12			SPARE								-			-		-
TOTAL CURRENT IN EACH PHASE (AMPERES)							144.19	151.45	147.59		-			-		-
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**175**	**250**	**3**	**3-50.0 mm2 THW**	-	**1-14 mm2 THHN/THWN**	**65 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	443.23	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	95728	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 12 + [[1.732 x [1.25 x 111.13 + 65.30 - 111.13]]+ 0] x 0.80 **IC = 140.98 Amperes**	IP = 250% HML + (1.732 x (125% of HCNL + HØ) + 3Ø) x DF IP = 2.5 x 12 + [[1.732 x [1.25 x 111.13 + 65.30 - 111.13]]+ 0] x 0.73 **IP = 152.98 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-50.0 mm2 THW, Stranded, Copper	USE: 175 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	
			R.A. 9266 Section 33 Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.

PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS	DESIGNED BY: TANO	ISSUED FOR:	REVISIONS:			DRAWING NO.
DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1		DATE DRAFTED: 09-04-2024 DATE UPDATED: 09-15-2024 DRAFTED BY: RAS OBISO APPROVED BY:	☐ OWNER'S APPROVAL ☐ AS-BUILT ☐ BIDDING ☐ BUILDING PERMIT ☐ CONSTRUCTION ☐ ESTIMATE ☐ FABRICATION	NO.	DATE	DESCRIPTION	
LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY					PROJECT CODE:			

PB-SAL-R164

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Total VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	13	1541	12 x 48" TUBE LIGHT + 1 x ORBIT FAN + 7 x CONVENIENCE OUTLET	230	SINGLE	1.54	6.70			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2			SPARE											-	-	-
3	1	1492	ACU	230	SINGLE	1.49			6.49	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
4			SPARE											-	-	-
5			SPARE											-	-	-
6	1	1492	ACU	230	SINGLE	1.49		6.49		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							6.70	6.49	6.49							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**35**	100	**3**	**3-5.5 mm2 THHN/THWN**	**-**	**1-5.5 mm2 THHN/THWN**	**25 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	19.67	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	4525	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 6.49 + [[1.732 x [1.25 x 2.09 + 13.20 - 2.09]]+ 0] x 0.80 **IC = 25.50 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 6.49 + [[1.732 x [1.25 x 2.09 + 13.20 - 2.09]]+ 0] x 0.80 **IP = 31.99 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-3.5 mm2 THHN/THWN, Stranded, Copper	USE: 35 AT, INVERSE TIME, 230V, 3P

PB-SAL-R165

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Total VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1			SPARE											-	-	-
2	11	1541	12 x 48" TUBE LIGHT + 1 x ORBIT FAN + 11 x CONVENIENCE OUTLET	230	SINGLE	1.54	6.70			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3			SPARE											-	-	-
4	1	1492	ACU	230	SINGLE	1.49			6.49	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
5	1	1492	ACU	230	SINGLE	1.49		6.49		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
6			SPARE													
TOTAL CURRENT IN EACH PHASE (AMPERES)							6.70	6.49	6.49							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**40**	100	**3**	**3-8.0 mm2 THHN/THWN**	**-**	**1-5.5 mm2 THHN/THWN**	**25 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	19.67	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	4525	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 6.49 + [[1.732 x [1.25 x 1.48 + 15.65 - 1.48]]+ 0] x 0.80 **IC = 28.69 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 6.49 + [[1.732 x [1.25 x 1.48 + 15.65 - 1.48]]+ 0] x 0.80 **IP = 35.18 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-3.5 mm2 THHN/THWN, Stranded, Copper	USE: 40 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	R.A. 9266 Section 33
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PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS
DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1	
LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY		

DESIGNED BY: TANO
DATE DRAFTED: 09-04-2024
DATE UPDATED: 09-15-2024
DRAFTED BY: RAS OBISO
APPROVED BY:

ISSUED FOR:
☐ OWNER'S APPROVAL
☐ AS-BUILT
☐ BIDDING
☐ BUILDING PERMIT
☐ CONSTRUCTION
☐ ESTIMATE
☐ FABRICATION

REVISIONS:		
NO.	DATE	DESCRIPTION
PROJECT CODE:		

DRAWING NO.

PB-SAL-2F

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1		999	2 x 48" TUBE LIGHT + 7 x 24" TUBE LIGHT + 1 x LIGHT BULB + 5 x CONVENIENCE OUTLET	230	SINGLE	1.00	4.34			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2		2206	3 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x LIGHT BULB + 10 x CONVENIENCE OUTLET	230	SINGLE	2.21	9.59			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3		1513	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 6 x CONVENIENCE OUTLET	230	SINGLE	1.51			6.58	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4		1873	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 8 x CONVENIENCE OUTLET	230	SINGLE	1.87			8.14	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5		117	2 x 48" TUBE LIGHT + 6 x 24" TUBE LIGHT + 3 x LIGHT BULB	230	SINGLE	0.12		0.51		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6		2053	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 9 x CONVENIENCE OUTLET	230	SINGLE	2.05		8.93		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
7		2764	5 x 48" TUBE LIGHT + 5 x ORBIT FAN + 1 x LIGHT BULB + 13 x CONVENIENCE OUTLET	230	SINGLE	2.76	12.02			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
8		2053	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 9 x CONVENIENCE OUTLET	230	SINGLE	2.05	8.93			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
9		1873	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 8 x CONVENIENCE OUTLET	230	SINGLE	1.87			8.14	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
10		1333	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 5 x CONVENIENCE OUTLET	230	SINGLE	1.33			5.80	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
11		1873	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 8 x CONVENIENCE OUTLET	230	SINGLE	1.87		8.14		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
12		2053	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 9 x CONVENIENCE OUTLET	230	SINGLE	2.05		8.93		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							34.88	26.50	28.66							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**100**	**-**	**3**	**3-22.0 mm2 THHN/THWN**	**-**	**1-8.0 mm2 THHN/THWN**	**40 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	90.04	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	20710	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 15.10 + [[1.732 x [1.25 x 21.8 + 41.74 - 21.8]]+ 0] x 0.80 **IC = 80.49 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 15.1 + [[1.732 x [1.25 x 21.8 + 41.74 - 21.8]]+ 0] x 0.80 **IP = 95.59 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-22.0 mm2 THHN/THWN, Stranded, Copper	USE: 100 AT, INVERSE TIME, 230V, 3P

PB-SAL-3F

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97	4.23			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2	13	144	3 x 48" TUBE LIGHT + 10 x 24" TUBE LIGHT	230	SINGLE	0.14	0.63			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97			4.23	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97			4.23	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5	15	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 4 x CONVENIENCE OUTLET	230	SINGLE	0.97		4.23		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6	8	486	3 x 48" TUBE LIGHT + 5 x 24" TUBE LIGHT	230	SINGLE	0.49		2.11		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
7	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97	4.23			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
8	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97	4.23			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
9	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97			4.23	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
10	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97			4.23	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
11	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97		4.23		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
12	14	973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97		4.23		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							13.32	14.80	16.92							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**60**	100	**3**	**3-8.0 mm2 THHN/THWN**	**-**	**1-5.5 mm2 THHN/THWN**	**25 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	45.04	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	10360	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 7.73 + [[1.732 x [1.25 x 27.04 + 22.51 - 27.04]]+ 0] x 0.8 **IC = 48.29 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 7.73 + [[1.732 x [1.25 x 27.04 + 22.51 - 27.04]]+ 0] x 0.8 **IP = 56.02 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-8.0 mm2 THHN/THWN, Stranded, Copper	USE: 60 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	R.A. 9266 Section 33	PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS	DESIGNED BY: TANO	ISSUED FOR:	REVISIONS:			DRAWING NO.
			Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.	DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1		DATE DRAFTED: 09-04-2024 DATE UPDATED: 09-15-2024 DRAFTED BY: RAS OBISO APPROVED BY:	☐ OWNER'S APPROVAL ☐ AS-BUILT ☐ BIDDING ☐ BUILDING PERMIT ☐ CONSTRUCTION ☐ ESTIMATE ☐ FABRICATION	NO. DATE DESCRIPTION PROJECT CODE:		
				LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY								

PB-SAL-4F

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1		2998	10 x 48" TUBE LIGHT + 17 x 24" TUBE LIGHT + 5 x ORBIT FAN + 13 x CONVENIENCE OUTLET	230	SINGLE	3.00	13.03			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2		126	2 x 48" TUBE LIGHT + 10 x 24" TUBE LIGHT	230	SINGLE	0.13	0.55			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3		576	2 x 48" TUBE LIGHT + 3 x CONVENIENCE OUTLET	230	SINGLE	0.58			2.50	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4		1153	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 4 x CONVENIENCE OUTLET	230	SINGLE	1.15			5.01	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5		2998	10 x 48" TUBE LIGHT + 17 x 24" TUBE LIGHT + 5 x ORBIT FAN + 13 x CONVENIENCE OUTLET	230	SINGLE	3.00		13.03		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6		126	4 x 48" TUBE LIGHT + 6 x 24" TUBE LIGHT	230	SINGLE	0.13		0.55		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
7		973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97	4.23			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
8		973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97	4.23			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
9		973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97			4.23	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
10		973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97			4.23	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
11		973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97		4.23		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
12		973	6 x 48" TUBE LIGHT + 5 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.97		4.23		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							22.04	22.04	15.98							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**80**	**100**	**3**	**3-22.0 mm2 THHN/THWN**	**-**	**1-8.0 mm2 THHN/THWN**	**22 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	60.07	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	13815	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 2.83 + [[1.732 x [1.25 x 26.73 + 43.16 - 26.73]]+ 0] x 0.80 **IC = 71.89 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 2.83 + [[1.732 x [1.25 x 26.73 + 43.16 - 26.73]]+ 0] x 0.80 **IP = 74.72 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-22.0 mm2 THHN/THWN, Stranded, Copper	USE: 80 AT, INVERSE TIME, 230V, 3P

PB - BASEMENT

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1		180	5 x 48" TUBE LIGHT+ 10 x LIGHT BULB	230	SINGLE	0.18	0.78			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2		342	9 x 48" TUBE LIGHT + 1 x CONVENIENCE OUTLET	230	SINGLE	0.34	1.49			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3		342	9 x 48" TUBE LIGHT + 1 x CONVENIENCE OUTLET	230	SINGLE	0.34			1.49	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4		522	9 x 48" TUBE LIGHT + 2 x CONVENIENCE OUTLET	230	SINGLE	0.52			2.27	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5			SPARE							15	100		2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6		2223	10 x 48" TUBE LIGHT + 7 x HANGING LIGHT + 11 x CONVENIENCE OUTLET	230	SINGLE	2.22		9.67		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
7		360	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 1 x CONVENIENCE OUTLET	230	SINGLE	0.36	1.57			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
8		540	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 2 x CONVENIENCE OUTLET	230	SINGLE	0.54	2.35			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
9		1440	20 x 48" TUBE LIGHT + 7 x CONVENIENCE OUTLET	230	SINGLE	1.44			6.26	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
10			SPARE							15	100		2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
11		540	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 2 x CONVENIENCE OUTLET	230	SINGLE	0.54	2.35			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
12		360	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 1 x CONVENIENCE OUTLET	230	SINGLE	0.36	1.57			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							10.10	9.67	10.02							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**150**	**150**	**3**	**3-30 mm2 THHN/THWN**	**-**	**1-14.0 mm2 THHN/THWN**	-

TOTAL CURRENT IN AMPERES	29.78	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	6849	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 27.17 + [[1.732 x [1.25 x 67.44 + 36.83 - 67.44]]+ 0] x 0.8 **IC = 101.56 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 27.17 + [[1.732 x [1.25 x 67.44 + 36.83 - 67.44]]+ 0] x 0.8 **IP = 128.73 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-30 mm2 THHN/THWN, 1-2.0 mm2, Stranded, Copper	USE: 150 AT, INVERSE TIME, 230V, 3P

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			Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.	DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1		DATE DRAFTED: 09-04-2024 DATE UPDATED: 09-15-2024 DRAFTED BY: RAS OBISO APPROVED BY:	☐ OWNER'S APPROVAL ☐ AS-BUILT ☐ BIDDING ☐ BUILDING PERMIT ☐ CONSTRUCTION ☐ ESTIMATE ☐ FABRICATION	NO.	DATE	DESCRIPTION	
				LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY					PROJECT CODE:			

PB-07

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	3500	ACU-LINK-276	230	SINGLE	3.50	15.22			30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
2			SPARE	230	SINGLE	0.00	0.00							-		15 mmØ PVC PIPE
3	1	3500	ACU-LINK-275	230	SINGLE	3.50			15.22	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
4	1	3500	ACU-LINK-274	230	SINGLE	3.50			15.22	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
5	1	3500	ACU-LINK-273	230	SINGLE	3.50		15.22		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
6	1	3500	ACU-LINK-275	230	SINGLE	3.50		15.22		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
7	1	3500	ACU-LINK-274	230	SINGLE	3.50	15.22			30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
8			SPARE	230	SINGLE	0.00	0.00			30	100	2		-		15 mmØ PVC PIPE
9	1	3500	ACU-LINK-273	230	SINGLE	3.50			15.22	30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
10	1	3500	ACU-LINK-276	230	SINGLE	3.50			15.22	30	100		2-5.5 mm2 THHN/THWN		1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
11	1	3500	ACU-LINK-GF	230	SINGLE	3.50		15.22		30	100		2-5.5 mm2 THHN/THWN		1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
12	1	3500	ACU-LINK-GF	230	SINGLE	3.50		15.22		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							30.43	60.87	60.87							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										125	125	3	3-30 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	-

TOTAL CURRENT IN AMPERES	152.17	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	35000	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 15.22 + [[1.732 x [1.25 x 0 + 60.87 - 0]]+ 0] x 0.80 **IC = 99.56 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x x 15.22 + [[1.732 x [1.25 x 0 + 60.87 - 0]]+ 0] x 0.80 **IP = 114.78 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-30 mm2 THHN/THWN, 1-2.0 mm2, Stranded, Copper	USE: 125 AT, INVERSE TIME, 230V, 3P

DP-LINK-3F

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	24240	PB - LINK3F - R373	230	SINGLE	24.24	32.09	38.35	34.96	110	125	2	3-22 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	-
2	1	24240	PB - LINK3F - R374	230	SINGLE	24.24	32.09	39.13	34.17	110	125	2	3-22 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	-
3	1	24240	PB - LINK3F - R375	230	SINGLE	24.24	31.30	38.35	33.39	110	125	2	3-22 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	-
4	1	24240	PB - LINK3F - R376	230	SINGLE	24.24	31.30	37.57	34.96	110	125	2	3-22 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	-
TOTAL CURRENT IN EACH PHASE (AMPERES)							126.77	153.40	137.48							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										350	400	3	3-175 mm2 THHN/THWN	-	1-30 mm2 THHN/THWN	-

TOTAL CURRENT IN AMPERES	417.65	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	96960	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 37.57 + [[1.732 x [1.25 x 153.39 + 150.28 - 153.39]]+ 0] x 0.8 **IC = 298.93 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 37.57 + [[1.732 x [1.25 x 153.39 + 150.28 - 153.39]]+ 0] x 0.8 **IP = 336.50 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-175 mm2 THHN/THWN, Stranded, Copper	USE: 350 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	
			R.A. 9266 Section 33 Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.

PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS
DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1	
LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY		

DESIGNED BY: TANO	ISSUED FOR:	REVISIONS:			DRAWING NO.
DATE DRAFTED: 09-04-2024	☐ OWNER'S APPROVAL	NO.	DATE	DESCRIPTION	
DATE UPDATED: 09-15-2024	☐ AS-BUILT				
DRAFTED BY: RAS OBISO	☐ BIDDING				
APPROVED BY:	☐ BUILDING PERMIT				
	☐ CONSTRUCTION				
	☐ ESTIMATE				
	☐ FABRICATION	PROJECT CODE:			

PB - LINK3F - R373

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	7	3540	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 7 x CONVENIENCE OUTLET	230	SINGLE	3.54	15.39			20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84	16.70			20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84			16.70	20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4	8	4200	10 x CONVENIENCE OUTLET	230	SINGLE	4.20			18.26	20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5	8	4020	9 x CONVENIENCE OUTLET	230	SINGLE	4.02		17.48		20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6	10	4800	10 x CONVENIENCE OUTLET	230	SINGLE	4.80		20.87		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							32.09	38.35	34.96					-	-	-
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**110**	125	**3**	**3-22 mm2 THHN/THWN**	-	**1-14 mm2 THHN/THWN**	-

TOTAL CURRENT IN AMPERES	105.39	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	24240	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IC = 86.21 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IP = 107.08 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-22 mm2 THHN/THWN, Stranded, Copper	USE: 110 AT, INVERSE TIME, 230V, 3P

PB - LINK3F - R374

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	7	3540	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 7 x CONVENIENCE OUTLET	230	SINGLE	3.54	15.39			20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84	16.70			20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84			16.70	20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4	8	4020	9 x CONVENIENCE OUTLET	230	SINGLE	4.02			17.48	20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5	8	4200	10 x CONVENIENCE OUTLET	230	SINGLE	4.20		18.26		20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6	10	4800	10 x CONVENIENCE OUTLET	230	SINGLE	4.80		20.87		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							32.09	39.13	34.17					-	-	-
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**110**	125	**3**	**3-22 mm2 THHN/THWN**	-	**1-14 mm2 THHN/THWN**	-

TOTAL CURRENT IN AMPERES	105.39	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	24240	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IC = 86.21 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IP = 107.08 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-22 mm2 THHN/THWN, Stranded, Copper	USE: 110 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	
			R.A. 9266 Section 33 Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.

PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS	DESIGNED BY: TANO
DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1		DATE DRAFTED: 09-04-2024 DATE UPDATED: 09-15-2024 DRAFTED BY: RAS OBISO APPROVED BY:
LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY			

ISSUED FOR:	REVISIONS:			DRAWING NO.
☐ OWNER'S APPROVAL	NO.	DATE	DESCRIPTION	
☐ AS-BUILT				
☐ BIDDING				
☐ BUILDING PERMIT				
☐ CONSTRUCTION				
☐ ESTIMATE				
☐ FABRICATION	PROJECT CODE:			

PB - LINK3F - R375

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	7	3540	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 7 x CONVENIENCE OUTLET	230	SINGLE	3.54	15.39			20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84	16.70			20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84			16.70	20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4	8	4200	10 x CONVENIENCE OUTLET	230	SINGLE	4.20			18.26	20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5	8	4020	9 x CONVENIENCE OUTLET	230	SINGLE	4.02		17.48		20	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6	10	4800	10 x CONVENIENCE OUTLET	230	SINGLE	4.80		20.87		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							32.09	38.35	34.96					-	-	-
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**110**	125	**3**	**3-22 mm2 THHN/THWN**	**-**	**1-14 mm2 THHN/THWN**	-

TOTAL CURRENT IN AMPERES	105.39	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	24240	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IC = 86.21 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IP = 107.08 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-22 mm2 THHN/THWN, Stranded, Copper	USE: 110 AT, INVERSE TIME, 230V, 3P

PB - LINK3F - R376

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	7	3540	9 x 48" TUBE LIGHT + 2 x 24" TUBE LIGHT + 7 x CONVENIENCE OUTLET	230	SINGLE	3.54	15.39			20	100	2	2-3.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	15 mmØ PVC PIPE
2	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84	16.70			20	100	2	2-3.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	15 mmØ PVC PIPE
3	8	3840	8 x CONVENIENCE OUTLET	230	SINGLE	3.84			16.70	20	100	2	2-3.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	15 mmØ PVC PIPE
4	8	4200	10 x CONVENIENCE OUTLET	230	SINGLE	4.20			18.26	20	100	2	2-3.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	15 mmØ PVC PIPE
5	8	4020	9 x CONVENIENCE OUTLET	230	SINGLE	4.02		17.48		20	100	2	2-3.5 mm2 THHN/THWN	-	1-3.5 mm2 THHN/THWN	15 mmØ PVC PIPE
6	10	4800	10 x CONVENIENCE OUTLET	230	SINGLE	4.80		20.87		30	100	2	2-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							32.09	38.35	34.96					-	-	-
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**110**	125	**3**	**3-22 mm2 THHN/THWN**	**-**	**1-14 mm2 THHN/THWN**	-

TOTAL CURRENT IN AMPERES	105.39	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	24240	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IC = 86.21 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 20.87 + [[1.732 x [1.25 x 38.35 + 37.57 - 38.35]]+ 0] x 0.8 **IP = 107.08 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-22 mm2 THHN/THWN, Stranded, Copper	USE: 110 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	R.A. 9266 Section 33	PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS	DESIGNED BY: TANO	ISSUED FOR:	REVISIONS:			DRAWING NO.
			Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.	DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1		DATE DRAFTED: 09-04-2024 DATE UPDATED: 09-15-2024 DRAFTED BY: RAS OBISO APPROVED BY:	☐ OWNER'S APPROVAL ☐ AS-BUILT ☐ BIDDING ☐ BUILDING PERMIT ☐ CONSTRUCTION ☐ ESTIMATE ☐ FABRICATION	NO. / DATE / DESCRIPTION		
				LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY					PROJECT CODE:			

PB - LINK4F

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1		908	6 x 48" TUBE LIGHT + 4 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.91	3.95			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
2		908	6 x 48" TUBE LIGHT + 4 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.91	3.95			15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
3		72	4 x 48" TUBE LIGHT	230	SINGLE	0.07			0.31	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
4		908	6 x 48" TUBE LIGHT + 4 x ORBIT FAN + 3 x CONVENIENCE OUTLET	230	SINGLE	0.91			3.95	15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
5			SPARE	230	SINGLE	0.00		0.00					2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
6		1088	6 x 48" TUBE LIGHT + 4 x ORBIT FAN + 4 x CONVENIENCE OUTLET	230	SINGLE	1.09		4.73		15	100	2	2-3.5 mm2 THHN/THWN	-	1-2.0 mm2 THHN/THWN	15 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							7.90	4.73	4.26					-		-
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**35**	100	**3**	**3-5.5 mm2 THHN/THWN**	**-**	**1-5.5 mm2 THHN/THWN**	**20 mmØ PVC PIPE**

TOTAL CURRENT IN AMPERES	16.89	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	3884	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 3.39 + [[1.732 x [1.25 x 9.03 + 17.48 - 9.03]+ 0] x 0.8 **IC = 30.73 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 3.39 + [[1.732 x [1.25 x 9.03 + 17.48 - 9.03]+ 0] x 0.8 **IP = 34.13 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-5.5 mm2 THHN/THWN, Stranded, Copper	USE: 35 AT, INVERSE TIME, 230V, 3P

PB-ACU-LINK

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES			INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	3500	ACU-3F-374	230	SINGLE	3.50	15.22			40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
2	1	3500	ACU--3F-374	230	SINGLE	3.50	15.22			40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
3	1	3500	ACU-3F-375	230	SINGLE	3.50			15.22	40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
4	1	3500	ACU--3F-375	230	SINGLE	3.50			15.22	40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
5	1	3500	ACU--3F-376	230	SINGLE	3.50		15.22		40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
6	1	3500	ACU--3F-376	230	SINGLE	3.50		15.22		40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
7	1	3500	ACU-3F-373	230	SINGLE	3.50	15.22			40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
8	1	3500	ACU--3F-373	230	SINGLE	3.50	15.22			40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
9	1	3000	ACU-B1	230	SINGLE	3.00			13.04	40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
10	1	3000	ACU-GF	230	SINGLE	3.00			13.04	40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
11	1	3000	ACU-B2	230	SINGLE	3.00		13.04		40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
12	1	3000	ACU-GF	230	SINGLE	3.00		13.04		40	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
13	1	1942	ACU-DNY	230	SINGLE	1.94	8.44			30	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
14			SPARE	230	SINGLE	0.00	0.00							-		
15	1	3000	ACU-B3	230	SINGLE	3.00			13.04	30	100	2	2-8.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	25 mmØ PVC PIPE
16			SPARE	230	SINGLE	0.00			0.00					-		-
TOTAL CURRENT IN EACH PHASE (AMPERES)							69.31	56.52	69.57							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS										**150**	**150**	**3**	**3-38 mm2 THHN/THWN**	**-**	**1-14.0 mm2 THHN/THWN**	**-**

TOTAL CURRENT IN AMPERES	195.40	COMPUTATIONS: **SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR**	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	44942	IC = 125% of HML + (1.732 x (125% of HCNL + HØ)+ 3Ø) x DF IC = 1.25 x 15.22 + [[1.732 x [1.25 x 0 + 73.91 - 0]]+ 0] x 0.8 **IC = 117.63 Amperes**	IP = 250% HML + (1.732 x (125% of HCL + HØ) + 3Ø) x DF IP = 2.5 x 15.22 + [[1.732 x [1.25 x 0 + 73.91 - 0]]+ 0] x 0.8 **IP = 132.85 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-38 mm2 THHN/THWN, 1-5.5 mm2, Stranded, Copper	USE: 150 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	R.A. 9266 Section 33
			Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.

PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS
DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1	
LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY		

DESIGNED BY: TANO	ISSUED FOR:	REVISIONS:			DRAWING NO.
DATE DRAFTED: 09-04-2024	☐ OWNER'S APPROVAL	NO.	DATE	DESCRIPTION	
DATE UPDATED: 09-15-2024	☐ AS-BUILT				
DRAFTED BY: RAS OBISO	☐ BIDDING				
APPROVED BY:	☐ BUILDING PERMIT				
	☐ CONSTRUCTION				
	☐ ESTIMATE				
	☐ FABRICATION	PROJECT CODE:			

DP-01

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES				INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	3Ø	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	62584.19	EE/ECE/CE	230	THREE	62.58	244.39	227.16	256.04	75.63	250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
2	1	151915	MDP-DNY	230	THREE	151.92	220.42	229.05	225.59		500	600	3	2 sets 3-150mm2 THW	-	1-38 mm2 THW	CABLE TRAY
3	1	36769.71	OLD BUILDING	230	THREE	36.77	61.20	87.10	92.30		250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
4	1	474.30	ME LAB 24/7	230	THREE	0.47	20.70	20.70	18.14	32.00	250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
5	1	93068.52975	MDP-CLPH	230	THREE	93.07	198.02	191.45	157.28		400	400	3	3-200 mm2 THW	-	1-22 mm2 THHN/THWN	CABLE TRAY
6	1	8923.53	PERIMETER/CANTEEN	230	THREE	8.92	6.10	20.60	22.40		250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
TOTAL CURRENT IN EACH PHASE (AMPERES)							750.83	776.06	771.75								
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS											**1200**	**-**	**3**	**3 sets of 250 mm2 THW/ phase**	**-**	**1-80 mm2 THHN/THWN**	CABLE TRAY

TOTAL CURRENT IN AMPERES	2298.63	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	353735.25	IC = 125% of HCL+ ((1.732 x HØ)+ 3Ø) x DF IC = 1.25 x 224.32 + [[1.732 x 625.82]]+ 0] x 0.8 **IC = 1147.54 Amperes**	Ip = 125% of HCL+ ((1.732 x HØ)+ 3Ø) x DF Ic = 2.50 x 224.32 + [[1.732 x 625.82]]+ 0] x 0.8 **IP = 1427.94 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-250 mm2 THW, 1-38 mm2 THW, Stranded, Copper	USE: 1500 AT, INVERSE TIME, 230V, 3P

DP-02

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES				INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	3Ø	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	84321	PB-06 + PB-04 + PB-07 + PB-ACU-ML	230	THREE	84.32	82.92	103.04	104.55	76.09	250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
2	1	35000	PB-05	230	THREE	35.00	15.22	15.22	0.00	121.24	200	250	3	3-30 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
3	1	22149.47	ME157&158	230	THREE	22.15	36.03	26.41	96.30	0.00	250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
4	1	106152	DP-ML	230	THREE	106.15	153.12	159.31	145.75	0.00	450	600	3	3-150 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
5	1	20874.68	HS LIBRARY	230	THREE	20.87	64.00	72.00	58.53	76.20	250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
6	1	238128	MDP-SAL + ME	230	THREE	238.13	142.80	150.06	146.19	0.00	250	250	3	3-125 mm2 THHN/THWN	-	1-14 mm2 THHN/THWN	CABLE TRAY
TOTAL CURRENT IN EACH PHASE (AMPERES)							494.09	526.04	551.32	197.33							
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS											**800**	**-**	**3**	**2-250 mm2 THW**	**-**	**1-38 mm2 THW**	CABLE TRAY

TOTAL CURRENT IN AMPERES	1571.45	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	506625.15	IC = 125% of HCL+ ((1.732 x HØ)+ 3Ø) x DF IC = 1.25 x 150.06 + [[1.732 x 150.06]]+ 0] x 0.8 **IC = 395.50 Amperes**	Ip = 250% of HCL+ ((1.732 x HØ)+ 3Ø) x DF Ip = 2.50 x 150.06 + [[1.732 x 150.06]]+ 0] x 0.8 **Ip = 583.07 Amperes**
ENCLOSURE	NEMA - 1	USE: 3sets of 250 mm2 THW each phase, 1-38 mm2 THW, Stranded, Copper	USE: 1200 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	R.A. 9266 Section 33
			Drawing and specification and other contract documents signed, stamped or sealed, as instrument of service, are the intellectual property and documents of the architect, whether the object for which they are made is executed or not, it shall be unlawful for any person to duplicate or to make copies of said documents for use in the repetition of and for other projects of building, wether executed partly in whole, without the written consent of architect or author of said documents.

PROJECT TITLE :	PROJECT OWNER:	DRAWING CONTENTS
DON SIMPLICIO A. LIZARES BUILDING PROPOSED SCHEDULE OF LOADS	EE481 EEK2414 CAPSTONE 1	
LOCATION: CEBU INSTITUTE OF TECHNOLOGY - UNIVERSITY		

DESIGNED BY: TANO	ISSUED FOR:	REVISIONS:			DRAWING NO.
DATE DRAFTED: 09-04-2024	☐ OWNER'S APPROVAL	NO.	DATE	DESCRIPTION	
DATE UPDATED: 09-15-2024	☐ AS-BUILT				
DRAFTED BY: RAS OBISO	☐ BIDDING				
APPROVED BY:	☐ BUILDING PERMIT				
	☐ CONSTRUCTION				
	☐ ESTIMATE				
	☐ FABRICATION	PROJECT CODE:			

MDP-CLPH

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES				INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	3Ø	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	10118.64	PB-ACU-1	230	THREE	10.12	46.20	50.50	25.40		125	125	3	3-30 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE
2	1	23609.00	PB-CLINIC	230	THREE	23.61	55.98	20.67	26.00		225	250	3	3-100 mm2 THHN/THWN	-	1-22.0 mm2 THHN/THWN	50 mmØ PVC PIPE
3	1	22428.33	PB-ACU-2	230	THREE	22.43	56.30	56.00	44.20		125	125	3	3-30 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE
4	1	17966.56	PB-PHYS	230	THREE	17.97	23.70	41.70	45.10		125	125	3	3-38 mm2 THHN/THWN	-	1-8.0 mm2 THHN/THWN	40 mmØ PVC PIPE
5	1	18946	PB-TROOM	231	THREE	18.95	15.84	14.58	16.58	34.09	60	100	3	3-14.0 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	
6	1		SPARE	230	THREE	0.00											
TOTAL CURRENT IN EACH PHASE (AMPERES)							198.02	191.45	157.28	34.09							32 mmØ PVC PIPE
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS											**400**	400	**3**	3-200 mm2 THW	**-**	1-30 mm2 THHN/THWN	40 mmØ PVC PIPE

TOTAL CURRENT IN AMPERES	91.30	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	93068.53	IC = 125% of HML + (1.732 x HØ)+ 3Ø) x DF IC = 1.25 x 56.30 + [[1.732 x 156.20]]+ 34.9] x 0.8 **IC = 314.73 Amperes**	Ic = 250% of HML + (1.732 x HØ)+ 3Ø) x DF IP = 2.5 x 56.30 + [[1.732 x 156.20]]+ 34.9] x 0.8 **IP = 385.1 Amperes**
ENCLOSURE	NEMA - 1	USE: 3-200 mm2 THW, 1-22 mm2 THHN/THWN, Stranded, Copper, in 40 mm Ø PVC PIPE	USE: 400 AT, INVERSE TIME, 230V, 3P

MDP-DNY

CKT NO.	LOAD DESCRIPTIONS			VOLTS	PHASE	kVA	CURRENT AMPERES				INVERSE TIME DELAY CIRCUIT BREAKER			FEEDER BRANCH CIRCUIT COPPER WIRE, THHN/THWN			CONDUIT SIZE
	QTY.	Unit VA	Description				AB	BC	CA	3Ø	AT	AF	POLE	PHASE	NEUTRAL	EGC	
1	1	44942	PB-ACU-LINK	230	THREE	44.94	69.31	56.52	69.57		150	150	3	3-38 mm2 THHN/THWN	-	1-14.0 mm2 THHN/THWN	40 mmØ PVC PIPE
2	1	6849	PB-BASEMENT	230	THREE	6.85	10.10	9.67	10.02		150	150	3	3-30 mm2 THHN/THWN	-	1-14.0 mm2 THHN/THWN	40 mmØ PVC PIPE
3	1	100124	DP-LINK3F	230	THREE	100.12	133.11	158.13	141.74		350	400	3	3-175 mm2 THHN/THWN	-	1-30 mm2 THHN/THWN	-
4	1	3884	PB-LINK-4F	230	THREE	3.88	7.90	4.73	4.26		35	100	3	3-5.5 mm2 THHN/THWN	-	1-5.5 mm2 THHN/THWN	20 mmØ PVC PIPE
TOTAL CURRENT IN EACH PHASE (AMPERES)							220.42	229.05	225.59								
INCOMING FEEDER CONDUCTOR & PROTECTION DETAILS											**500**	**600**	**3**	**2 sets 3-150mm2 THW**	**-**	**1-38 mm2 THW**	**-**

TOTAL CURRENT IN AMPERES	675.06	COMPUTATIONS:	
		SIZE OF INCOMING FEEDER AT 80% DEMAND FACTOR	**SIZE OF FEEDER PROTECTION AT 80% DEMAND FACTOR**
TOTAL CONNECTED LOAD VA	151915	IC = 125% of HML + (1.732 x HØ + 3Ø) x DF IC = 1.25 x 195.40 + ((1.732 x 224.32)+0) x 0.8 **IC = 555.08 Amperes**	IP = 250% HML + ((1.732 x HØ) + 3Ø) x DF IP = 2.50 x 195.40 + ((1.732 x 224.32)+0) x 0.8 **IP = 484.74 Amperes**
ENCLOSURE	NEMA - 1	USE: 2 sets 3-150mm2 THW, 1-38 mm2 THW, Stranded, Copper	USE: 500 AT, INVERSE TIME, 230V, 3P

CHECKED / REVIEWED BY:	UNDER THE DIRECT SUPERVISION OF :	SEAL	R.A. 9266 Section 33
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☐ FABRICATION

REVISIONS:			
NO.	DATE	DESCRIPTION	
PROJECT CODE:			

DRAWING NO.