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GENERAL NOTES:

1. ALL ELECTRICAL WORKS AND INSTALLATIONS CONTAINED HEREIN SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST PHILIPPINE ELECTRICAL CODE, LOCAL RULES AND REGULATIONS, STANDARDS AND PRACTICES, AND THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
2. THE ELECTRICAL CONTRACTOR SHALL ENGAGE EXPERIENCED AND SKILLED PERSONNEL IN IMPLEMENTING THE ELECTRICAL WORKS AND SHALL BE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED REGISTERED ELECTRICAL ENGINEER.
3. THE ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE MATERIALS AND WORKMANSHIP TECHNICAL SPECIFICATIONS.
4. MATERIAL SPECIFICATIONS: MATERIALS SHALL BE NEW AND CONFORM WITH THE LATEST PROVISIONS OF THE UNDERWRITER LABORATORIES, INC.

1. WIRES AND CABLES ALL LOW VOLTAGE CABLES SHALL BE COPPER AND INSULATED WITH MOISTURE- AND HEAT-RESISTANT THERMOPLASTIC TYPE "THHN/THWN-2" WITH MAXIMUM 90°C MAXIMUM OPERATING TEMPERATURE AND UL 83 LISTED. MINIMUM BRANCH CIRCUIT WIRING SHALL BE 3.5mm² THHN/THWN-2. COLOR CODING SHALL APPLY AS FOLLOWS:

230V 3-PHASE 3-WIRE + G
PHASE A-RED
PHASE B-YELLOW
PHASE C-BLUE
GROUND-GREEN
5. WIRES AND CABLES ALL LOW VOLTAGE CABLES SHALL BE COPPER AND INSULATED WITH MOISTURE- AND HEAT-RESISTANT THERMOPLASTIC TYPE "THHN/THWN-2" WITH MAXIMUM 90°C MAXIMUM OPERATING TEMPERATURE AND UL 83 LISTED. MINIMUM BRANCH CIRCUIT WIRING SHALL BE 3.5mm² THHN/THWN-2. COLOR CODING SHALL APPLY AS FOLLOWS:

230V 3-PHASE 3-WIRE + G
PHASE A-RED
PHASE B-YELLOW
PHASE C-BLUE
GROUND-GREEN

REFER TO WIRING SCHEDULE FOR SIZES OF WIRE AND CABLES TO BE USED.

- b. CONDUIT PIPES AND FITTINGS

RIGID STEEL CONDUIT (RSC) – PIPES AND FITTINGS SHALL BE UL 63 AND 514B LISTED, RESPECTIVELY. USE RSC TO ENCLOSE SERVICE ENTRANCE CONDUCTORS.

INTERMEDIATE METALLIC CONDUIT (IMC) – PIPES AND FITTINGS SHALL BE UL 1242 AND 514B LISTED, RESPECTIVELY. USE IMC TO ENCLOSE ALL EXPOSED ELECTRICAL WIRING RUNS.

POLYVINYL CHLORIDE CONDUIT (PVC)(SCHEDULE 40/80) – PIPES AND FITTINGS SHALL BE PNS CERTIFIED. USE PVC TO ENCLOSE ALL ELECTRICAL WIRING RUNS CONCEALED IN WALLS, FLOORS, CEILINGS AND INSIDE UNDERGROUND DUCT BANKS.

LIQUIDTIGHT FLEXIBLE METALLIC CONDUITS (LFMC) – PIPES AND FITTINGS SHALL BE UL 1 AND 1660 LISTED, RESPECTIVELY. USE LFMC TO ENCLOSE ALL ELECTRICAL WIRING CONNECTIONS TO MOTORS AND 600V DRY TYPE TRANSFORMERS.

FLEXIBLE METALLIC CONDUITS (FMC) – PIPES AND FITTINGS SHALL BE UL LISTED. USE FMC TO ENCLOSE ALL ELECTRICAL WIRING CONNECTIONS TO RECESSED LIGHT FIXTURES INSIDE CEILING VOIDS.

MINIMUM CONDUIT SIZE SHALL BE 20mm.

REFER TO WIRING SCHEDULE FOR TYPE AND SIZES OF CONDUITS TO BE USED.

- c. ELECTRICAL BOXES

ELECTRICAL BOX – USE ZINC-CHROMATED HOT-ROLLED STEEL BODY WITH A MINIMUM THICKNESS OF 16 GAUGE.

WEATHERPROOF BOX – USE WP RATED BOX FOR ALL OUTDOOR INSTALLATIONS.

- d. PROTECTIVE DEVICES

REFER TO ELECTRICAL DRAWINGS FOR THE TYPE AND RATING OF PROTECTIVE DEVICES USED.

MOLDED CASE CIRCUIT BREAKERS (MCCB) SHALL BE BOLT ON TYPE AND UL 489 LISTED

AIR CIRCUIT BREAKERS (ACB) SHALL BE DRAW OUT TYPE.

ALL MCCB'S RATING	AND ACB'S CONTINUOUS	SHALL HAVE THE FOLLOWING: LONG TIME	ADJUSTABLE SHORT TIME	INSTANTAENOUS	TRIP SETTINGS: GROUND FAULT
BELOW 100A	FIXED	–	–	FIXED	–
100A TO 250A	ADJUSTABLE	ADJUSTABLE	ADJUSTABLE	ADJUSTABLE	–
BELOW 1000A	ADJUSTABLE	ADJUSTABLE	ADJUSTABLE	ADJUSTABLE	–
1000A & ABOVE	ADJUSTABLE	ADJUSTABLE	ADJUSTABLE	ADJUSTABLE	ADJUSTABLE

- e. MOTOR CIRCUITS AND CONTROLLERS

REFER TO ELECTRICAL DRAWINGS OR AS RECOMMENDED BY MOTOR EQUIPMENT MANUFACTURER FOR THE TYPE AND RATING OF MOTOR PROTECTIVE DEVICE AND MOTOR CONTROLLERS.

MOLDED CASE CIRCUIT BREAKERS (MCCB) SHALL BE BOLT ON TYPE

MOTOR CONTROLLERS SHALL BE RATED FOR IEC TYPE 2 COORDINATION

MOTOR DISCONNECT SHALL BE NON FUSIBLE TYPE.

- f. PANELBOARDS, SWITCHGEARS, AND MOTOR CONTROL CENTERS

ENCLOSURE – FABRICATED FROM HOT DIPPED GALVANIZED STEEL SHEETS AND METAL TREATED FOR PROTECTION FROM CORROSSION.

FINISH –POWDER COATED. SUBMIT SAMPLE FINISH FOR APPROVAL.

BUSBAR – SILVER PLATED COPPER AND SIZED IN ACCORDANCE WITH ANSI STANDARD TEMPERATURE RISE CRITERIA OF 65°C OVER 40°C AMBIENT TEMPERATURE.

LABEL – PROVIDE EQUIPMENT LABEL, CIRCUIT DIRECTORY, AND ARC FLASH WARNING HAZARD IN ACCORDANCE WITH PEC 2017 APPENDIX G.

PROTECTION AND COORDINATION – COORDINATION STUDY SHALL BE PREPARED IDENTIFYING THE TRIP SETTINGS OF ALL PROTECTIVE DEVICES IN ORDER TO AVOID NUISANCE TRIPPING DURING OPERATION.

ARC FLASH LABELS – AN ARC FLASH STUDY SHALL BE PREPARED IDENTIFYING THE ARC FLASH CURRENT, INCIDENT ENERGY (CAL/CM2), AND HAZARD CLASSIFICATION WHICH SHALL THEN BE LABELLED AT EACH PANELBOARD.

- g. WIRING DEVICES

CONVENIENCE OUTLETS SHALL BE UL 498 LISTED OR IEC 60884-1 AND RATED 16A 250V. GFCI OUTLETS SHALL BE UL 943 LISTED AND RATED 16A 250V. GROUNDING TYPE LIGHT SWITCHES SHALL BE RATED 16A 250V GROUNDING TYPE.

- h. MOUNTING HEIGHTS

LIGHT SWITCH	1400MM ABOVE FINISH FLOOR
CONVENIENCE OUTLET	300MM ABOVE FINISH FLOOR/300MM ABOVE COUNTER TOP
MOTOR DISCONNECT	1400MM ABOVE FINISH FLOOR OR AS EQUIPMENT MANUFACTURE'S RECOMENDATION
SPECIAL PURPOSE OUTLET	AS RECOMMENDED BY EQUIPMENT MANUFACTURER
PANELBOARD	1900MM FROM TOP OF PANEL TO FINISH FLOOR

5. MATERIAL SUBMITTALS
- THE ELECTRICAL CONTRACTOR SHALL PREPARE EQUIPMENT DATA SHEETS, SAMPLE BOARD, AND SHOP DRAWINGS FOR APPROVAL OF THE RECORD ENGINEER PRIOR TO PROCUREMENT AND INSTALLATION. THIS SHALL INCLUDE BUT NOT LIMITED TO:

- a. EQUIPMENT DATA SHEET
- DISTRIBUTION TRANSFORMERS
 - LOW VOLTAGE CIRCUIT BREAKERS
 - DIGITAL POWER METERS
 - MOTOR CONTROLLERS
 - WIRES AND CABLES
 - CABLE TRAYS, RACEWAYS, AND SUPPORTS
 - CONDUITS AND FITTINGS
 - ELECTRICAL BOXES
 - WIRING DEVICES
 - LUMINAIRES
 - LIGHTNING PROTECTION
- b. SHOP DRAWING
- PANELBOARDS
 - DISCONNECT SWITCHES
 - ENCLOSED CIRCUIT BREAKERS
 - ELECTRICAL MANHOLES AND HANDHOLES
 - ELECTRICAL DUCTS
 - GROUND PITS AND TEST WELLS
- c. LABEL AND IDENTIFICATION
- WIRING COLOR CODING
 - BRANCH CIRCUIT LABELING
 - ARC FLASH HAZARD WARNING LABELS (PEC 2017 APPENDIX G)
6. TESTING AND COMMISSIONING

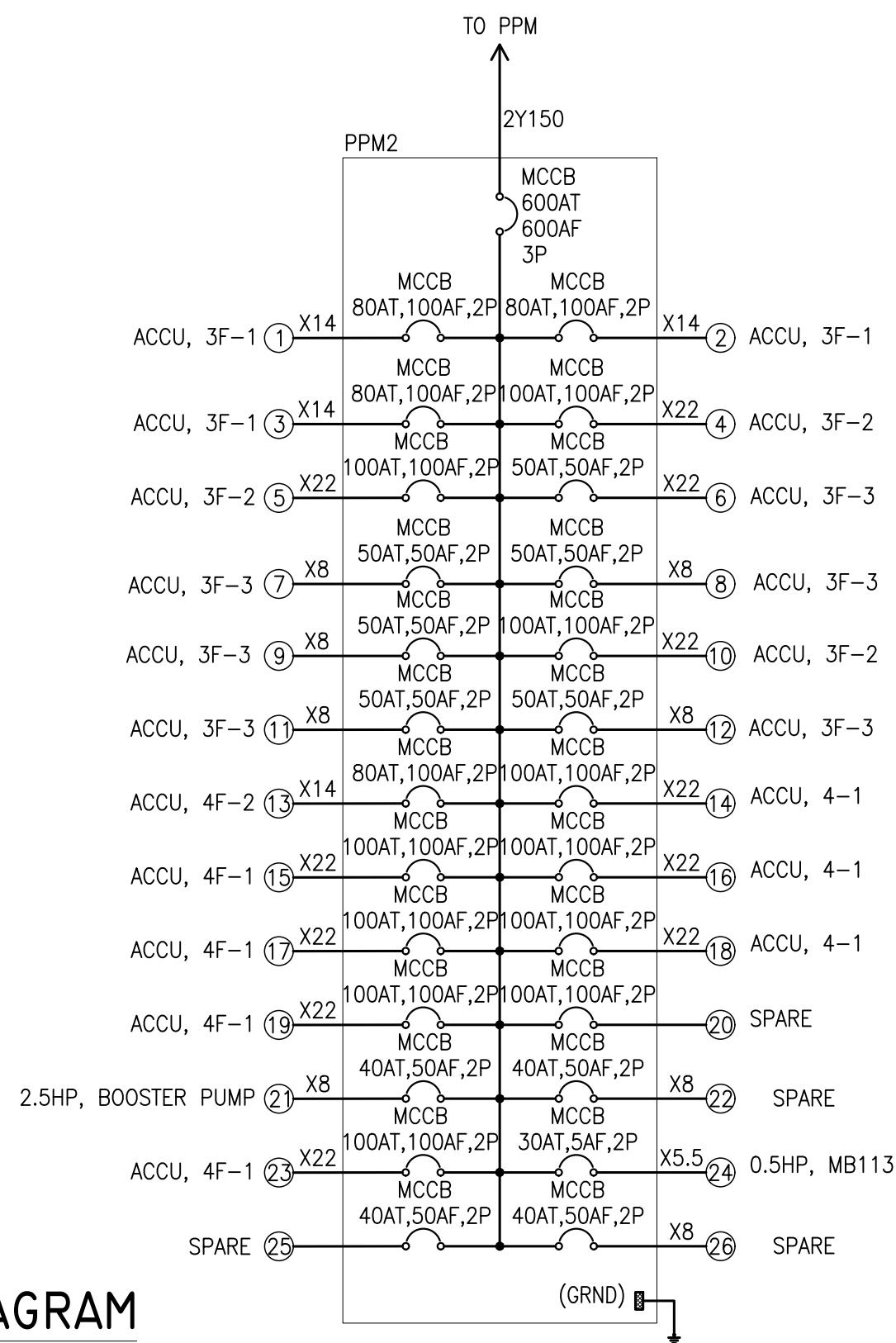
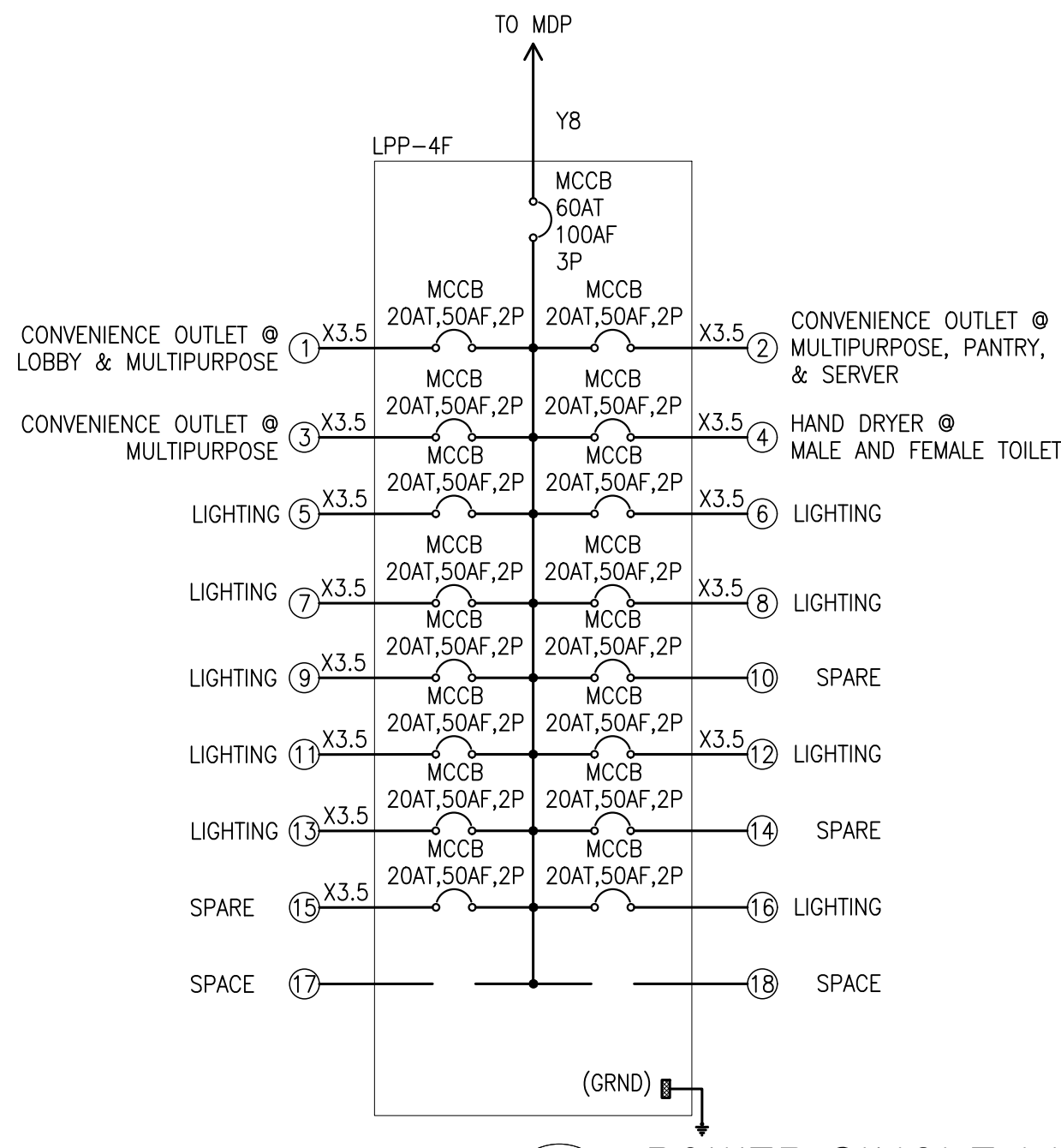
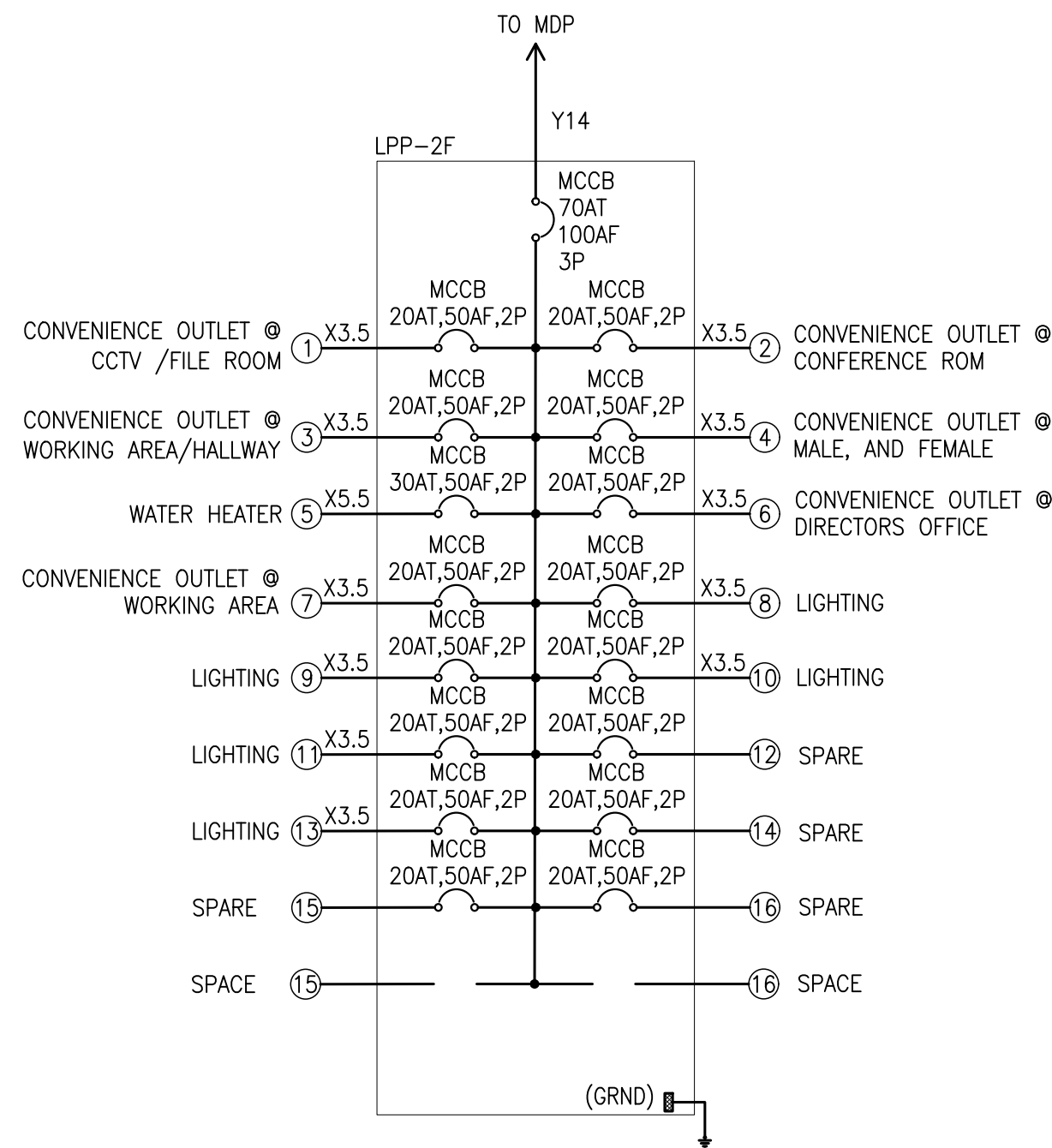
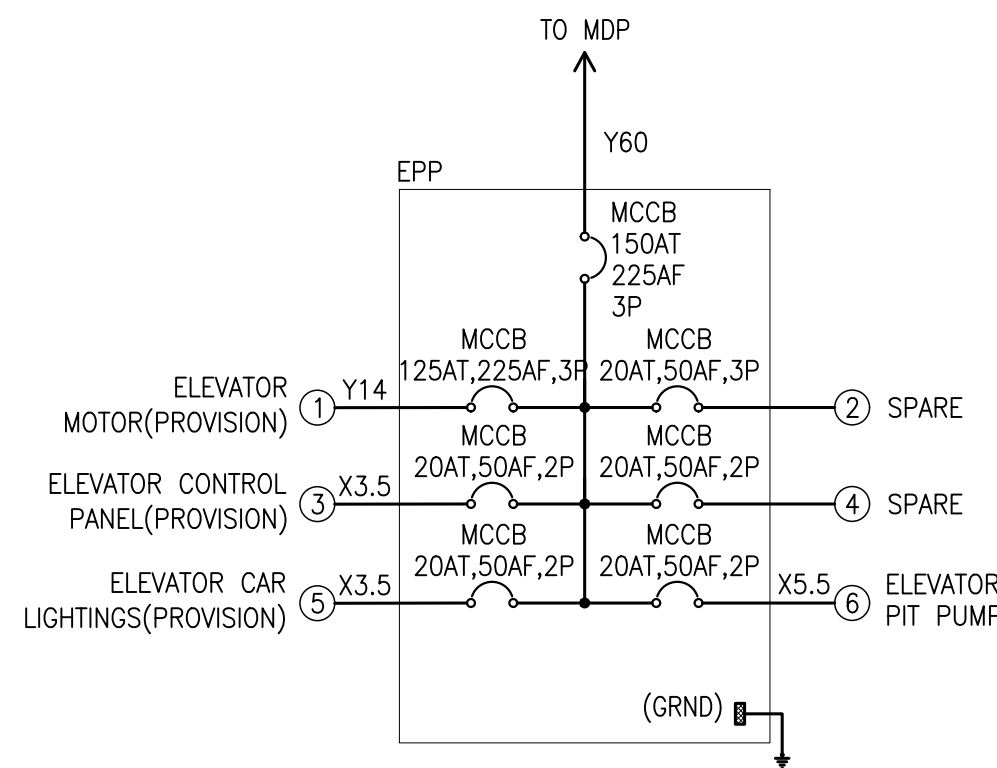
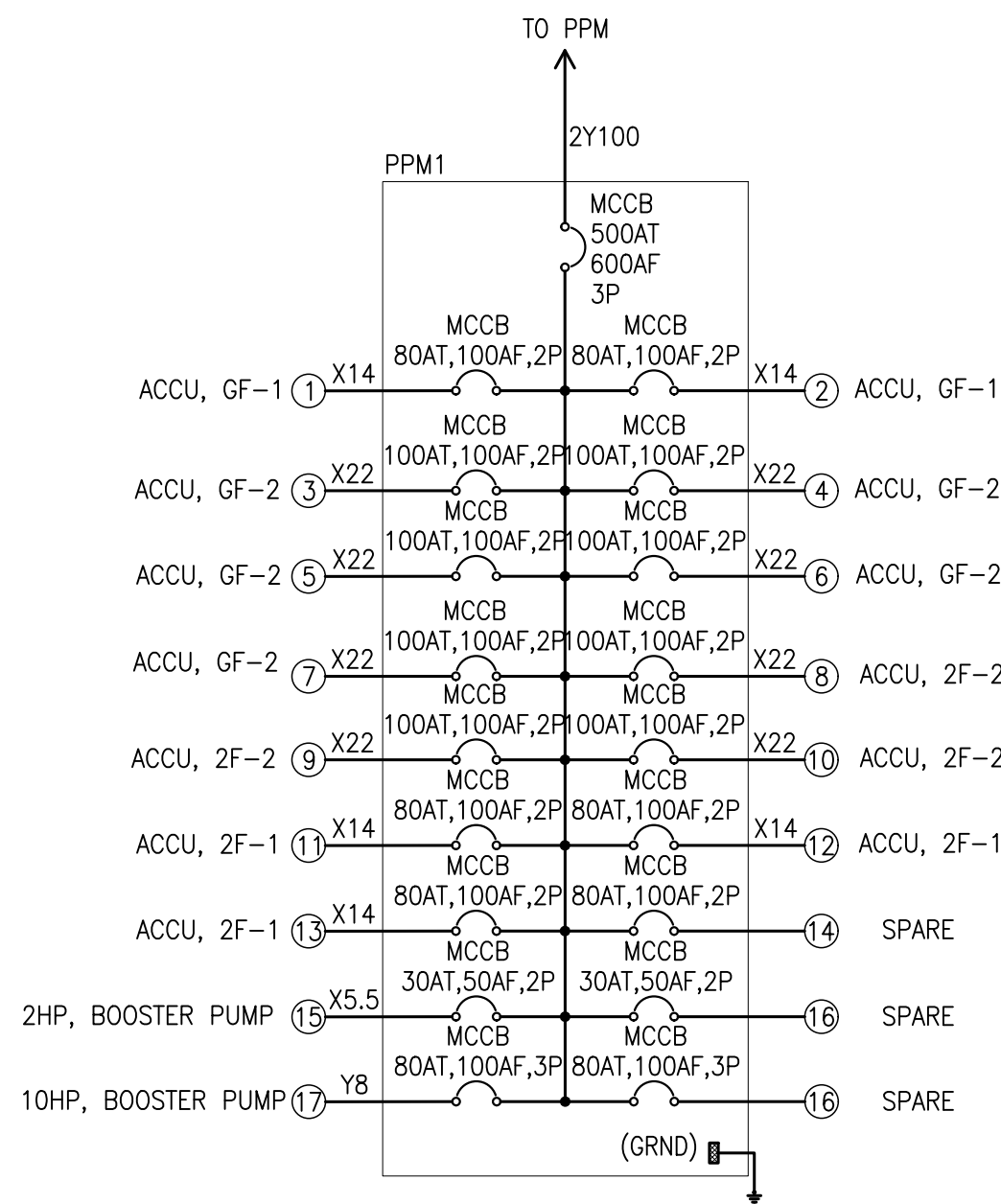
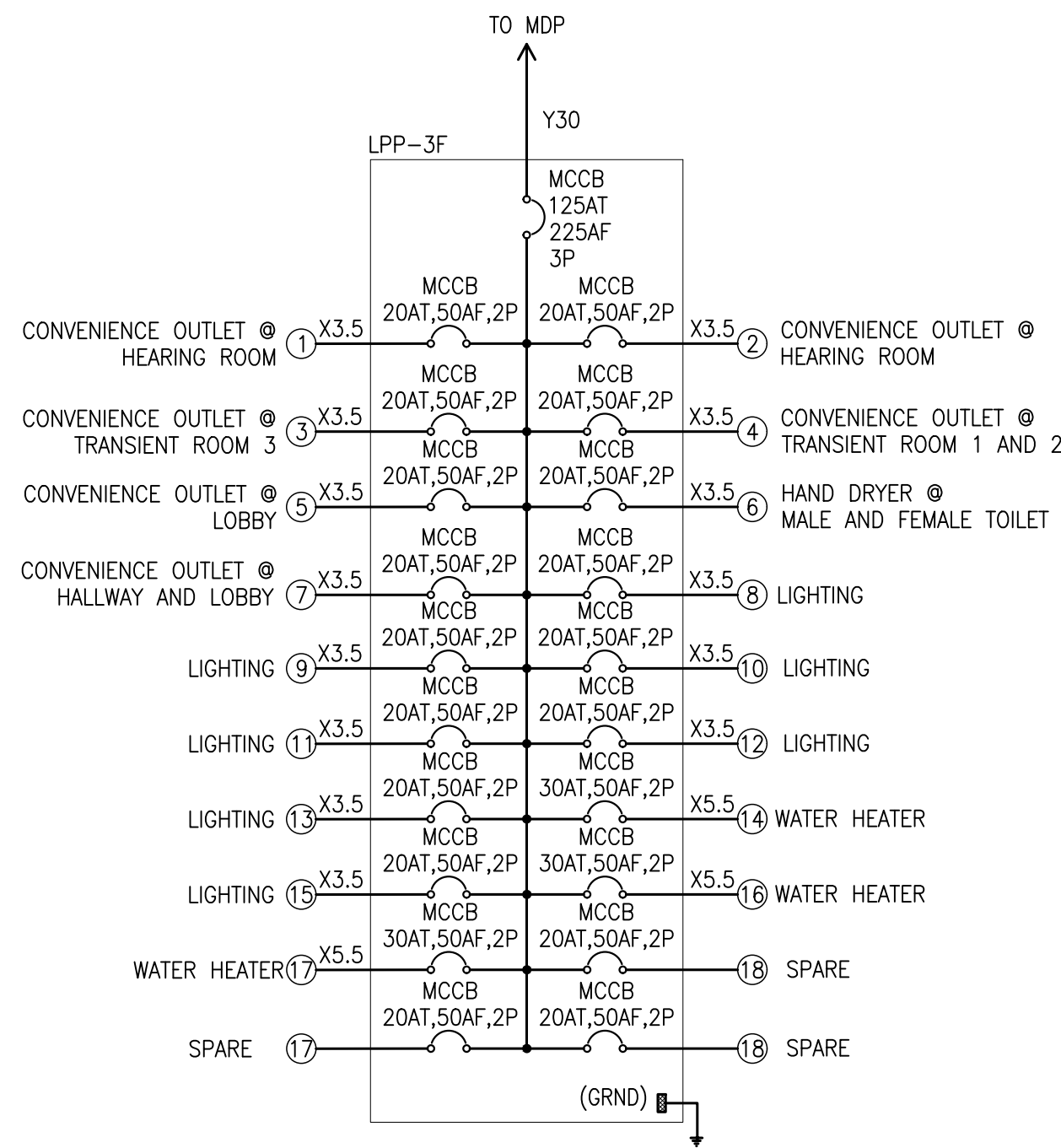
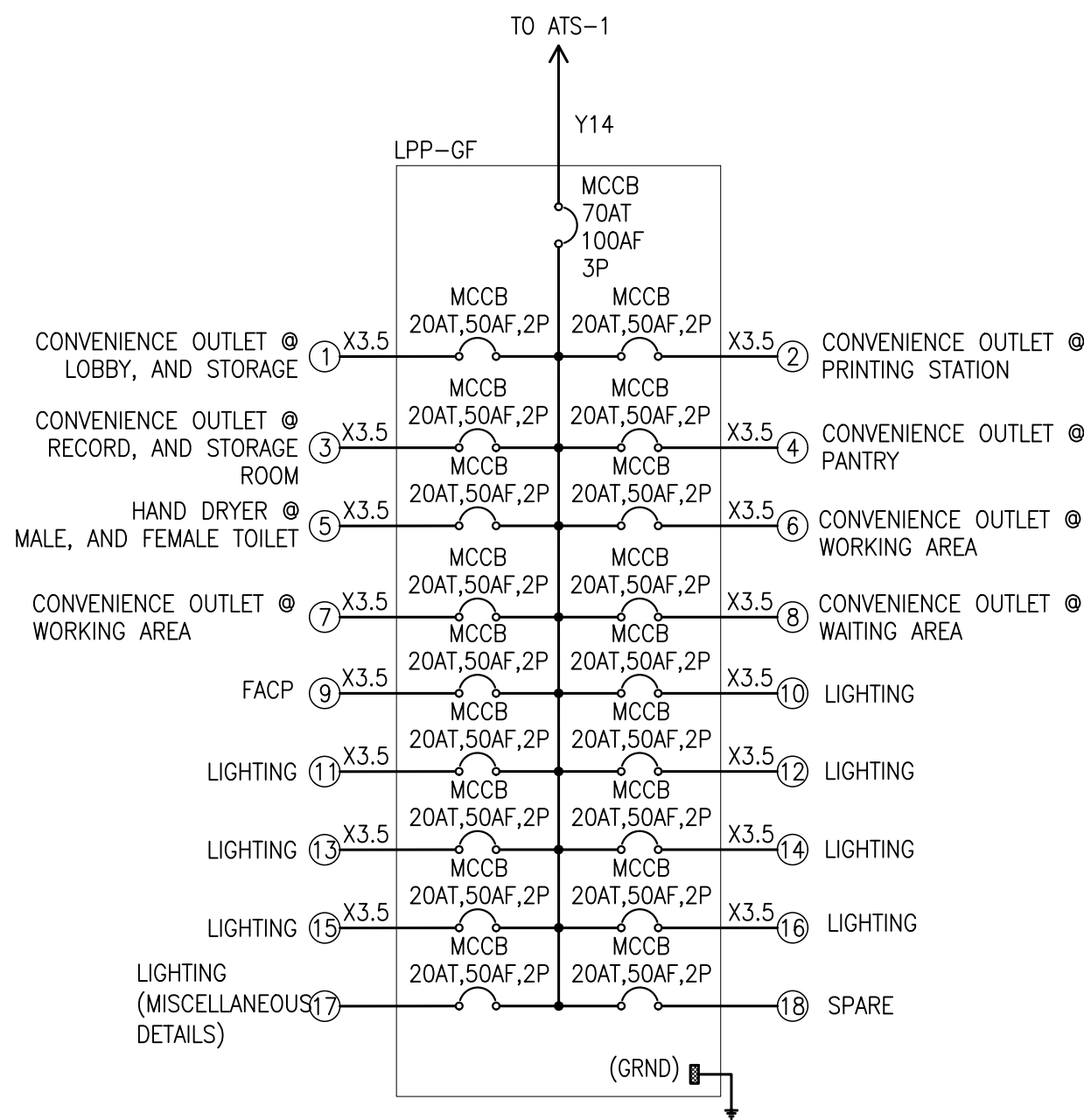
THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE FOLLOWING TESTING AND COMMISSIONING DOCUMENTS AS PARTIAL REQUIREMENT PRACTICAL COMPLETION AND TURN OVER

- a. OPERATION AND MAINTENANCE MANUALS
- ARC FLASH HAZARD CALCULATION
 - PROTECTIVE DEVICE PROTECTION AND COORDINATION
- b. TEST RESULTS
- INSULATION RESISTANCE TEST
 - GROUND RESISTANCE TEST
 - OPERATIONAL TEST
 - PHASE SEQUENCE TEST
 - SYSTEM TEST

ABBREVIATION	
AF	AMPERE FRAME
AT	AMPERE TRIP
CO	CONVENIENCE OUTLET
IMC	INTERMEDIATE METAL CONDUIT
LED	LIGHT EMITTING DIODE
MCCB	MOLDED CASE CIRCUIT BREAKER
ACB	AIR CIRCUIT BREAKER
CT	COUNTER TOP
PVC	POLYVINYL CHLORIDE CONDUIT
RSC	RIGID STEEL CONDUIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
ECB	ENCLOSED CIRCUIT BREAKER
WP	WEATHERPROOF OUTLET
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
THWN	THERMOPLASTIC HEAT AND WATER RESISTANT
THHN	THERMOPLASTIC HIGH HEAT-RESISTANT NYLON COATED
FRC	FIRE RATED CABLES(LOW SMOKE HALLOGEN FREE)
ATS	AUTOMATIC TRANSFER SWITCH

LEGEND & SYMBOLS:	
POWER	
	CIRCUIT HOMERUN XXX-XX/XX— CIRCUIT NO. └ FLOOR PANEL LOCATION/LEVEL └ TYPE OF PANEL: LIGHTING PANEL(LP), POWER PANEL(PP), POWER PANEL MOTORS(PPM), POWER PANEL AIRCONDITIONING(PPAC), DISTRIBUTION PANEL(DP), MAIN DISTRIBUTION PANEL(MDP)
	CIRCUIT RUN CONCEALED IN WALL & CEILING
	CIRCUIT RUN EMBEDDED IN FLOOR SLAB, CEILING SLAB, CONCRETE WALL
	RISER UP
	RISER DOWN
	MOTOR LOAD
	PANELBOARD, LETTER DENOTES TYPE: MDP – MAIN DISTRIBUTION PANEL LP – LIGHTING PANEL PP – POWER PANEL PPM – POWER PANEL MOTOR
	FLOOR MOUNTED OUTLET, GROUNDING TYPE
	COUNTER TOP/HEIGHT OUTLET, GROUNDING TYPE (GFCI OUTLET, 16A, 250V)
	DUPLEX CONVENIENCE OUTLET RATED AT 16 AMPS, 250V, GROUNDING TYPE, WALL MOUNTED
	POWER FUSE
	CIRCUIT BREAKER, RATING AS INDICATED
	ENCLOSED CIRCUIT BREAKER
	GROUND ROD/EARTH CONNECTION
	KILOWATT-HOUR METER
	MOTOR LOAD(RATING AS INDICATED)
	MOTOR CONTROLLER
	HANDHOLE
LIGHTING	
	1-GANG SWITCH(250V, 16A RATED)
	2-GANG SWITCH(250V, 16A RATED)
	3-GANG SWITCH(250V, 16A RATED)
	4-GANG SWITCH(250V, 16A RATED)
	THREE WAY SWITCH
	10W, EXIT SIGNAGE LIGHT(250V, 16A RATED)
	EMERGENCY LIGHT W/ 2-10W LED LIGHT
	JUNCTION BOX
	18W, 1200MM BATTEN-TYPE LED, DAYLIGHT W/ IP65
	18W, OUTDOOR WALL LAMP (WARM WHITE) W/ P65 RATING
	22W, SURFACE MOUNTED PENDANT LAMP (WARM WHITE) W/IP20 RATING
	40W, 600MM X 600MM LED PANEL LIGHT (COOL WHITE), RECESSED TYPE W/ IP20 RATING
	18W, 150MMØ LED DOWNLIGHT, NATURAL WHITE, RECESSED TYPE, W/ REFLECTOR, IP65 RATING
	15W, 150MMØ LED DOWNLIGHT, WARM WHITE, RECESSED TYPE, W/ REFLECTOR, IP65 RATING
	20W, 168MM X 168MM X 220MM LED DOWNLIGHT, WARM WHITE, SURFACE MOUNTED, W/ REFLECTOR
	15W, 150MMØ WATERPROOF LED DOWNLIGHT, WARM WHITE, RECESSED TYPE, W/ REFLECTOR, IP65 RATING
	60W, 600MM X 1200MM LED PANEL LIGHT, COOL WHITE, SUSPENDED TYPE W/ IP20 RATING (VERIFY SUPPLIER)
	660 MM X 89MM WALL TO WALL MOUNTED LED LINEAR LIGHT, COOL WHITE, EMBEDDED ON 100MM Ø GA 304 STAINLESS STEEL PIPE W/ IP20 RATING
	30W, SPOTLIGHT SINGLE HEAD, IP65 RATING
	12W, 150MMØ LED DOWNLIGHT, WARM WHITE, RECESSED TYPE, W/ REFLECTOR, IP65 RATING

 Securities and Exchange Commission P H I L I P P I N E S	CHECKED AND SUBMITTED BY			PROJECT TITLE/LOCATION		RECOMMENDING APPROVAL		APPROVED BY		SHEET CONTENTS		R.A. 9266 SEC. 33		CADD	DATE	NO.	REVISIONS		CHK	DATE	PAPER SIZE	SHEET NO.
	ALDEN C. ONG	M.Eng., ASEP	REG. NO.: 68251	AMBROSIO C. CARLOS	PROPOSED RETROFITTING AND RENOVATION OF THE SEC DAVAO EXTENSION OFFICE	VHINCENT G. CAÑARES	JAVEY PAUL D. FRANCISCO	DRAWING INDEX, ABBREVIATIONS, LEGENDS & SYMBOLS	DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF 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 REPEITION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.	CCR	JUL 2024										20X30	E-000
			TIN NO. : 168-950-786							DESIGNED	DATE											
			PTR NO. : 10077889							RRG	JUL 2024											
			DATE : JANUARY 05, 2024							APPROVED	DATE											
SEC-HTC			PROFESSIONAL ELECTRICAL ENGINEER	UNIVERSITY AVENUE, JUNA SUBDIVISION MATINA, DAVAO CITY		SEC DIRECTOR, MSD		COMMISSIONER		ACC	JUL 2024									AS SHOWN	DE-G-24-006	
			PLACE : MAKATI CITY																			



I POWER SINGLE LINE DIAGRAM
E-002 SCALE NTS

	CHECKED AND SUBMITTED BY		PROJECT TITLE/LOCATION		RECOMMENDING APPROVAL		APPROVED BY		SHEET CONTENTS		R.A. 9266 SEC. 33		CADD	DATE	NO.	REVISIONS	CHK	DATE	PAPER SIZE	SHEET NO.
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	SEC-HTC		UNIVERSITY AVENUE, JUNA SUBDIVISION MATINA, DAVAO CITY		SEC DIRECTOR, MSD		COMMISSIONER						DESIGNED	DATE					SCALE	PROJECT NO.
													RRG	JUL 2024					AS SHOWN	DE-G-24-006
													APPROVED	DATE						
													ACC	JUL 2024						

PANEL ID		MDP	FEED FROM		MAIN CB		SHORT CIRCUIT CAPACITY			65 KAIC		
ENCLOSURE		NEMA 1	VOLTAGE		230		CIRCUIT PROTECTION			1200 AT 1200 AF		
MOUNTING		WALL MOUNTED	PHASE		3Ø		NO OF POLE / TYPE			3P MCCB		
LOCATION		GF ELECTRICAL CABINET	WIRES		3W+G		MAIN FEEDER CABLE			3Y250		

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	LPP-GF	16,480	25.13	23.04	23.48		230	70	100	18	3	MCCB	Y14
2	LPP-2F	14,860	22.78	17.57	24.26		230	70	100	18	3	MCCB	Y14
3	LPP-4F	12,980	22.43	14.00	20.00		230	60	100	18	3	MCCB	Y14
4	LPP-3F	24,760	38.00	36.09	33.57		230	100	100	18	3	MCCB	Y22
5	SPARE						230	150	225	18	3	MCCB	-
6	EPP	19,858		4.35	9.25		230	150	225	18	3	MCCB	Y60
7	PPM	262,876	361.96	361.83	370.66	28.00	230	1000	1000	50	3	MCCB	3Y200
8	SPARE						230	150	225	18	3	MCCB	-
9	SPARE						230	70	100	18	3	MCCB	-
10	SPARE						230	70	100	18	3	MCCB	-
11	SPACE												
12	SPACE												
TOTAL		351,814	470.30	456.87	481.21	28.00					30		

SUMMARY OF LOADS		TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
		861 AMP	1,077 AMP	1,077 AMP
LIGHTINGS	29,600			
CONVENIENCE OUTLET	20,480			
AIR CONDITIONING / REFRIGERATING EQUIPMENT	245,627			
COOKING APPLIANCE				
ELEVATOR/LIFT MOTOR	16,731			
CLOTHES DRYER	-			
PUMPS/MOTORS	18,376			
OTHER LOADS	21,000			
TOTAL LOADS	351,814	VA		

PANEL ID	EPP	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	18 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	150 AT 225 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	Y60

CKT NO.	LOAD DESCRIPTION	VOLT- AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	15HP, ELEVATOR MOTOR(PROVISION)	16731				42.00	230	125	225	18	3	MCCB	Y14
2	SPARE						230	20	50	10	3	MCCB	-
3	ELEVATOR CONTROL PANEL(PROVISION)	1000		4.35			230	20	50	10	2	MCCB	X3.5
4	SPARE						230	20	50	10	2	MCCB	-
5	ELEVATOR CAR LIGHTINGS(PROVISION)	1000			4.35		230	20	50	10	2	MCCB	X3.5
6	0.5HP, ELEVATOR PIT PUMP	1127			4.90		230	20	50	10	2	MCCB	X5.5
TOTAL		19,858	0.00	4.35	9.25						14		

<u>SUMMARY OF LOADS</u>		<u>TOTAL AMPERE</u>	<u>FEEDER AMPACITY</u>	<u>OCPD RATING</u>
PUMPS/MOTORS	19,858	27 AMP	33 AMP	141 AMP
TOTAL LOADS	19,858			VA

PANEL ID	PPM	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	50 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	1000 AT 1000 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL ROOM	WIRES	3W+G	MAIN FEEDER CABLE	3Y200

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	PPM1	117,414	161.96	145.70	154.35	28.00	230	500	600	36	3	MCCB	2Y100
2	PPM2	145,462	200.00	216.13	216.31	0.00	230	600	600	36	3	MCCB	2Y125
3	SPARE						230	250	400	18	3	MCCB	-
4	SPARE						230	250	400	18	3	MCCB	-
5	SPACE												
6	SPACE												
	TOTAL	262,876	361.96	361.83	370.66	28.00					12		

<u>SUMMARY OF LOADS</u>		<u>TOTAL AMPERE</u>	<u>FEEDER AMPACITY</u>	<u>OC PD RATING</u>
AIR CONDITIONING / REFRIGERATING EQUIPMENT	245,627	670 AMP	837 AMP	837 AMP
PUMPS/MOTORS	17,249			
TOTAL LOADS	262,876	VA		

PANEL ID	LPP-GF	FEED FROM	ATS-1	SHORT CIRCUIT CAPACITY	18 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	70 AT 100 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL ROOM	WIRES	3W+G	MAIN FEEDER CABLE	Y14

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	CONVENIENCE OUTLETS @ GF LOBBY & STORAGE	720	3.13				230	20	50	10	2	MCCB	X3.5
2	CONVENIENCE OUTLETS @ GF PRINTING STATION	1440	6.26				230	20	50	10	2	MCCB	X3.5
3	CONVENIENCE OUTLETS @ GF RECORDS RM. & STORAGE	900		3.91			230	20	50	10	2	MCCB	X3.5
4	CONVENIENCE OUTLET @ GF PANTRY	900		3.91			230	20	50	10	2	MCCB	X3.5
5	HAND DRYER @ GF MALE & FEMALE TOILET	1500			6.52		230	20	50	10	2	MCCB	X3.5
6	CONVENIENCE OUTLET @ GF WORKING AREA	900			3.91		230	20	50	10	2	MCCB	X3.5
7	CONVENIENCE OUTLET @ GF WORKING AREA	720	3.13				230	20	50	10	2	MCCB	X3.5
8	CONVENIENCE OUTLET @ WAITING AREA	900	3.91				230	20	50	10	2	MCCB	X3.5
9	FACP	500		2.17			230	20	50	10	2	MCCB	X3.5
10	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
11	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
12	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
13	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
14	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
15	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
16	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
17	SPARE						230	20	50	10	2	MCCB	-
18	SPARE						230	20	50	10	2	MCCB	-
TOTAL		15,480	25.13	23.04	19.13						36		

<u>SUMMARY OF LOADS</u>		<u>TOTAL AMPERE</u>	<u>FEEDER AMPACITY</u>	<u>OCPD RATING</u>
LIGHTINGS	7,000	44 AMP	54 AMP	54 AMP
CONVENIENCE OUTLET	6,980			
OTHER LOADS	1,500			
TOTAL LOADS	15,480	VA		

LOAD SCHEDULE

 Securities and Exchange Commission PHILIPPINES	CHECKED AND SUBMITTED BY		PROJECT TITLE/LOCATION	RECOMMENDING APPROVAL	APPROVED BY	SHEET CONTENTS	R.A. 9266 SEC. 33 DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF 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 OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.	CADD	DATE	NO.	REVISIONS	CHK	DATE	PAPER SIZE	SHEET NO.
	ALDEN C. ONG M.Eng., ASEP SEC-HTC	REG. NO.: 68251	PROPOSED RETROFITTING AND RENOVATION OF THE SEC DAVAO EXTENSION OFFICE UNIVERSITY AVENUE, JUNA SUBDIVISION MATINA, DAVAO CITY	VHINCENT G. CAÑARES SEC DIRECTOR, MSD	JAVEY PAUL D. FRANCISCO COMMISSIONER	LOAD SCHEDULE	CCR	JUL 2024					20X30	E-003	
		TIN NO. : 168-950-786													
		PTIR NO. : 10077889					AMBROSIO C. CARLOS PROFESSIONAL ELECTRICAL ENGINEER	DESIGNED	DATE			SCALE			PROJECT NO.
		DATE : JANUARY 05, 2024						RRG	JUL 2024			AS SHOWN			DE-G-24-006
PLACE : MAKATI CITY		APPROVED	DATE												
							ACC	JUL 2024							

PANEL ID	MDP	FEED FROM	MAIN CB	SHORT CIRCUIT CAPACITY	65 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	1200 AT 1200 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	3Y250

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	LPP-GF	16,480	25.13	23.04	23.48		230	70	100	18	3	MCCB	Y14
2	LPP-2F	14,860	22.78	17.57	24.26		230	70	100	18	3	MCCB	Y14
3	LPP-4F	12,980	22.43	14.00	20.00		230	60	100	18	3	MCCB	Y14
4	LPP-3F	24,760	38.00	36.09	33.57		230	100	100	18	3	MCCB	Y22
5	SPARE						230	150	225	18	3	MCCB	-
6	EPP	19,858		4.35	9.25		230	150	225	18	3	MCCB	Y60
7	PPM	262,876	361.96	361.83	370.66	28.00	230	1000	1000	50	3	MCCB	3Y200
8	SPARE						230	150	225	18	3	MCCB	-
9	SPARE						230	70	100	18	3	MCCB	-
10	SPARE						230	70	100	18	3	MCCB	-
11	SPACE												
12	SPACE												
TOTAL		351,814	470.30	456.87	481.21	28.00					30		

SUMMARY OF LOADS		TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
LIGHTINGS		29,600	861 AMP	1,077 AMP
CONVENIENCE OUTLET		20,480		
AIR CONDITIONING / REFRIGERATING EQUIPMENT		245,627		
COOKING APPLIANCE				
ELEVATOR/LIFT MOTOR		16,731		
CLOTHES DRYER		-		
PUMPS/MOTORS		18,376		
OTHER LOADS		21,000		
TOTAL LOADS		351,814	VA	

PANEL ID	EPP	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	18 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	150 AT 225 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	Y60

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	15HP, ELEVATOR MOTOR(PROVISION)	16731				42.00	230	125	225	18	3	MCCB	Y14
2	SPARE						230	20	50	10	3	MCCB	-
3	ELEVATOR CONTROL PANEL(PROVISION)	1000		4.35			230	20	50	10	2	MCCB	X3.5
4	SPARE						230	20	50	10	2	MCCB	-
5	ELEVATOR CAR LIGHTINGS(PROVISION)	1000			4.35		230	20	50	10	2	MCCB	X3.5
6	0.5HP, ELEVATOR PIT PUMP	1127			4.90		230	20	50	10	2	MCCB	X5.5
TOTAL		19,858	0.00	4.35	9.25						14		

SUMMARY OF LOADS		TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
PUMPS/MOTORS		19,858	27 AMP	33 AMP
TOTAL LOADS		19,858	VA	

PANEL ID	PPM	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	50 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	1000 AT 1000 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL ROOM	WIRES	3W+G	MAIN FEEDER CABLE	3Y200

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	PPM1	117,414	161.96	145.70	154.35	28.00	230	500	600	36	3	MCCB	2Y100
2	PPM2	145,462	200.00	216.13	216.31	0.00	230	600	600	36	3	MCCB	2Y125
3	SPARE						230	250	400	18	3	MCCB	-
4	SPARE						230	250	400	18	3	MCCB	-
5	SPACE												
6	SPACE												
TOTAL		262,876	361.96	361.83	370.66	28.00					12		

SUMMARY OF LOADS		TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
AIR CONDITIONING / REFRIGERATING EQUIPMENT		245,627	670 AMP	837 AMP
PUMPS/MOTORS		17,249		
TOTAL LOADS		262,876	VA	

PANEL ID	LPP-GF	FEED FROM	ATS-1	SHORT CIRCUIT CAPACITY	18 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	70 AT 100 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL ROOM	WIRES	3W+G	MAIN FEEDER CABLE	Y14

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	CONVENIENCE OUTLETS @ GF LOBBY & STORAGE	720	3.13				230	20	50	10	2	MCCB	X3.5
2	CONVENIENCE OUTLETS @ GF PRINTING STATION	1440	6.26				230	20	50	10	2	MCCB	X3.5
3	CONVENIENCE OUTLETS @ GF RECORDS RM. & STORAGE	900		3.91			230	20	50	10	2	MCCB	X3.5
4	CONVENIENCE OUTLET @ GF PANTRY	900		3.91			230	20	50	10	2	MCCB	X3.5
5	HAND DRYER @ GF MALE & FEMALE TOILET	1500			6.52		230	20	50	10	2	MCCB	X3.5
6	CONVENIENCE OUTLET @ GF WORKING AREA	900			3.91		230	20	50	10	2	MCCB	X3.5
7	CONVENIENCE OUTLET @ GF WORKING AREA	720	3.13				230	20	50	10	2	MCCB	X3.5
8	CONVENIENCE OUTLET @ WAITING AREA	900	3.91				230	20	50	10	2	MCCB	X3.5
9	FACP	500		2.17			230	20	50	10	2	MCCB	X3.5
10	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
11	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
12	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
13	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
14	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
15	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
16	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
17	SPARE						230	20	50	10	2	MCCB	-
18	SPARE						230	20	50	10	2	MCCB	-
TOTAL		15,480	25.13	23.04	19.13						36		

SUMMARY OF LOADS		TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
LIGHTINGS		7,000	44 AMP	54 AMP
CONVENIENCE OUTLET		6,980		
OTHER LOADS		1,500		
TOTAL LOADS		15,480	VA	

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E-004

LOAD SCHEDULE

SCALE

NTS

PANEL ID	FPP	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	50 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	800 AT 800 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	GF ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	Y80FRC

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	40HP, FIRE PUMP	41429				104.00	230	600	600	36	3	MCCB	Y60FRC
2	3HP, JOCKEY PUMP	3824				9.60	230	70	100	10	3	MCCB	Y5.5FRC
TOTAL		45,254	0.00	0.00	0.00	113.60					6		

SUMMARY OF LOADS			TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
PUMPS/MOTORS			45,254	140 AMP	175 AMP
TOTAL LOADS			45,254	VA	714 AMP

PANEL ID	PPM1	FEED FROM	PPM	SHORT CIRCUIT CAPACITY	36 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	500 AT 600 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	2F ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	2Y100

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	5.2kW, ACCU, GF-1	6500	28.26				230	80	100	10	2	MCCB	X14
2	5.2kW, ACCU, GF-1	6500	28.26				230	80	100	10	2	MCCB	X14
3	7.1kW, ACCU, GF-2	8875		38.59			230	100	100	10	2	MCCB	X22
4	7.1kW, ACCU, GF-2	8875		38.59			230	100	100	10	2	MCCB	X22
5	7.1kW, ACCU, GF-2	8875			38.59		230	100	100	10	2	MCCB	X22
6	7.1kW, ACCU, GF-2	8875			38.59		230	100	100	10	2	MCCB	X22
7	7.1kW, ACCU, GF-2	8875	38.59				230	100	100	10	2	MCCB	X22
8	7.1kW, ACCU, 2F-2	8875	38.59				230	100	100	10	2	MCCB	X22
9	5.2kW, ACCU, 2F-1	6500		28.26			230	80	100	10	2	MCCB	X14
10	5.2kW, ACCU, 2F-1	6500		28.26			230	80	100	10	2	MCCB	X14
11	7.1kW, ACCU, 2F-2	8875			38.59		230	100	100	10	2	MCCB	X22
12	7.1kW, ACCU, 2F-2	8875			38.59		230	100	100	10	2	MCCB	X22
13	5.2kW, ACCU, 2F-1	6500	28.26				230	80	100	10	2	MCCB	X14
14	SPARE						230	80	100	10	2	MCCB	-
15	2HP, TRANSFER PUMP	2760		12.00			230	30	50	10	2	MCCB	X5.5
16	SPARE						230	30	50	10	2	MCCB	-
17	10HP, BOOSTER PUMP	11154				28.00	230	80	100	10	3	MCCB	Y8
18	SPARE						230	80	100	10	3	MCCB	-
TOTAL		117,414	161.96	145.70	154.35	28.00					38		

SUMMARY OF LOADS			TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
AIR CONDITIONING / REFRIGERATING EQUIPMENT			103,500	318 AMP	398 AMP
PUMPS/MOTORS			13,914		409 AMP
TOTAL LOADS			117,414	VA	

PANEL ID	LPP-2F	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	18 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	70 AT 100 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	2F ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	Y14

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	CONVENIENCE OUTLETS @ 2F CCTV/FILE ROOM	720	3.13				230	20	50	10	2	MCCB	X3.5
2	CONVENIENCE OUTLETS @ 2F CONFERENCE ROOM	1080	4.70				230	20	50	10	2	MCCB	X3.5
3	CONVENIENCE OUTLETS @ 2F WORKING AREA/HALLWAY	540		2.35			230	20	50	10	2	MCCB	X3.5
4	HAND DRYER @ MALE AND FEMALE TOILETS	1500		6.52			230	20	50	10	2	MCCB	X3.5
5	WATER HEATER	3500			15.22		230	30	50	10	2	MCCB	X5.5
6	CONVENIENCE OUTLET @ 2F DIRECTORS OFFICE	1080			4.70		230	20	50	10	2	MCCB	X3.5
7	CONVENIENCE OUTLET @ 2F WORKING AREA	1440	6.26				230	20	50	10	2	MCCB	X3.5
8	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
9	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
10	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
11	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
12	SPARE						230	20	50	10	2	MCCB	-
13	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
14	SPARE						230	20	50	10	2	MCCB	-
15	SPARE						230	20	50	10	2	MCCB	-
16	SPARE						230	20	50	10	2	MCCB	-
TOTAL		14,860	22.78	17.57	24.26						32		

SUMMARY OF LOADS			TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
LIGHTINGS			5,000	42 AMP	53 AMP
CONVENIENCE OUTLET			4,860		53 AMP
OTHER LOADS			5,000		
TOTAL LOADS			14,860	VA	

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E-005

LOAD SCHEDULE

SCALE

NTS

PANEL ID	PPM2	FEED FROM	PPM	SHORT CIRCUIT CAPACITY	36 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	600 AT 600 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	3F ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	2Y125

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	5.2kW, ACCU, 3F-1	6500	28.26				230	80	100	10	2	MCCB	X14
2	5.2kW, ACCU, 3F-1	6500	28.26				230	80	100	10	2	MCCB	X14
3	5.2kW, ACCU, 3F-1	6500		28.26			230	80	100	10	2	MCCB	X14
4	7.1kW, ACCU, 3F-2	8875		38.59			230	100	100	10	2	MCCB	X22
5	7.1kW, ACCU, 3F-2	8875			38.59		230	100	100	10	2	MCCB	X22
6	5.2kW, ACCU, 3F-3	4375			19.02		230	50	50	10	2	MCCB	X8
7	5.2kW, ACCU, 3F-3	4375	19.02				230	50	50	10	2	MCCB	X8
8	5.2kW, ACCU, 3F-3	4375	19.02				230	50	50	10	2	MCCB	X8
9	5.2kW, ACCU, 3F-3	4375		19.02			230	50	50	10	2	MCCB	X8
10	7.1kW, ACCU, 3F-2	8875		38.59			230	100	100	10	2	MCCB	X22
11	5.2kW, ACCU, 3F-3	4375			19.02		230	50	50	10	2	MCCB	X8
12	5.2kW, ACCU, 3F-3	4375			19.02		230	50	50	10	2	MCCB	X8
13	5.2kW, ACCU, 4F-2	6500	28.26				230	80	100	10	2	MCCB	X14
14	10kW, ACCU, 4F-1	8875	38.59				230	100	100	10	2	MCCB	X22
15	10kW, ACCU, 4F-1	8875		38.59			230	100	100	10	2	MCCB	X22
16	10kW, ACCU, 4F-1	8875		38.59			230	100	100	10	2	MCCB	X22
17	10kW, ACCU, 4F-1	8875			38.59		230	100	100	10	2	MCCB	X22
18	10kW, ACCU, 4F-1	8875			38.59		230	100	100	10	2	MCCB	X22
19	10kW, ACCU, 4F-1	8875	38.59				230	100	100	10	2	MCCB	X22
20	SPARE						230	100	100	10	2	MCCB	-
21	2.5HP, BOOSTER PUMP	3335		14.50			230	40	50	10	2	MCCB	X8
22	SPARE						230	40	50	10	2	MCCB	-
23	10kW, ACCU, 4F-1	8875			38.59		230	100	100	10	2	MCCB	X22
24	0.5HP, MB113	1,127			4.90		230	30	50	10	2	MCCB	X5.5
25	SPARE						230	20	50	10	2	MCCB	-
26	SPARE						400	20	50	10	2	MCCB	-
TOTAL		145,462	200.00	216.13	216.31	0.00					56		

SUMMARY OF LOADS		TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
AIR CONDITIONING / REFRIGERATING EQUIPMENT	142,127	384 AMP	480 AMP	480 AMP
PUMPS/MOTORS	3,335			
TOTAL LOADS	145,462	VA		

PANEL ID	LPP-3F	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	10 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	100 AT 100 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	3F ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	Y22

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	CONVENIENCE OUTLETS @ 3F HEARING RM.1 & 2	1080	4.70				230	20	50	10	2	MCCB	X3.5
2	CONVENIENCE OUTLETS @ 3FMEDIA RM.	900	3.91				230	20	50	10	2	MCCB	X3.5
3	CONVENIENCE OUTLETS @ 3F TRANSIENT RM. 3	720		3.13			230	20	50	10	2	MCCB	X3.5
4	CONVENIENCE OUTLETS @ 3F TRANSIENT RM. 1 & 2	1080		4.70			230	20	50	10	2	MCCB	X3.5
5	CONVENIENCE OUTLET @ 3F LOBBY	720			3.13		230	20	50	10	2	MCCB	X3.5
6	HAND DRYER @ 3F MALE & FEMALE TOILET	1500			6.52		230	20	50	10	2	MCCB	X3.5
7	CONVENIENCE OUTLET @ 3F HALLWAY & LOBBY	1260	5.48				230	20	50	10	2	MCCB	X3.5
8	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
9	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
10	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
11	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
12	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
13	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
14	WATER HEATER	3500	15.22				230	30	50	10	2	MCCB	X5.5
15	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
16	WATER HEATER	3500		15.22			230	30	50	10	2	MCCB	X5.5
17	WATER HEATER	3500			15.22		230	30	50	10	2	MCCB	X5.5
18	SPARE						230	20	50	10	2	MCCB	-
19	SPARE						230	20	50	10	2	MCCB	-
20	SPARE						230	20	50	10	2	MCCB	-
TOTAL		24,760	38.00	36.09	33.57						40		

SUMMARY OF LOADS		TOTAL AMPERE	FEEDER AMPACITY	OCPD RATING
LIGHTINGS	7,000	66 AMP	82 AMP	82 AMP
CONVENIENCE OUTLET	5,760			
OTHER LOADS	12,000			
TOTAL LOADS	24,760	VA		

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E-006

LOAD SCHEDULE

SCALE

NTS

PANEL ID	LPP-4F	FEED FROM	MDP	SHORT CIRCUIT CAPACITY	18 KAIC
ENCLOSURE	NEMA 1	VOLTAGE	230	CIRCUIT PROTECTION	60 AT 100 AF
MOUNTING	WALL MOUNTED	PHASE	3Ø	NO OF POLE / TYPE	3P MCCB
LOCATION	4F ELECTRICAL CABINET	WIRES	3W+G	MAIN FEEDER CABLE	Y14

CKT NO.	LOAD DESCRIPTION	VOLT-AMPERE	AMPERE LOAD				VOLTS	PROTECTIVE DEVICE					SIZE OF WIRE/ CONDUIT
			AB	BC	CA	ABC		AT	AF	KAIC	P	TYPE	
1	CONVENIENCE OUTLETS @ 4F LOBBY & MULTIPURPOSE	1260	5.48				230	20	50	10	2	MCCB	X3.5
2	CONVENIENCE OUTLETS @ 4F MULTIPURPOSE, PANTRY, & SERVICE RM	900	3.91				230	20	50	10	2	MCCB	X3.5
3	CONVENIENCE OUTLETS @ 4F MULTIPURPOSE	720		3.13			230	20	50	10	2	MCCB	X3.5
4	HAND DRYER @ GF MALE & FEMALE TOILET	1500		6.52			230	20	50	10	2	MCCB	X3.5
5	LIGHTING	1600			6.96		230	20	50	10	2	MCCB	X3.5
6	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
7	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
8	LIGHTING	1000	4.35				230	20	50	10	2	MCCB	X3.5
9	LIGHTING	1000		4.35			230	20	50	10	2	MCCB	X3.5
10	SPARE						230	20	50	10	2	MCCB	-
11	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
12	LIGHTING	1000			4.35		230	20	50	10	2	MCCB	X3.5
13	LIGHTING (MISCELLANEOUS DETAILS)	1000	4.35				230	20	50	10	2	MCCB	X3.5
14	SPARE						230	20	50	10	2	MCCB	-
15	SPARE						230	20	50	10	2	MCCB	-
16	SPARE						230	20	50	10	2	MCCB	-
17	SPACE						230	-	-			MCCB	-
18	SPACE						230	-	-			MCCB	-
TOTAL		12,980	22.43	14.00	20.00						32		

SUMMARY OF LOADS

LIGHTINGS

CONVENIENCE OUTLET

OTHER LOADS

8,600

2,880

1,500

TOTAL LOADS

12,980

VA

TOTAL AMPERE

39 AMP

FEEDER AMPACITY

49 AMP

OCPD RATING

49 AMP

SINGLE PHASE TWO WIRE + GROUND			
WIRE CODE	CONDUCTORS		CONDUIT (MM)
	PHASE	GROUND	
X3.5	2-3.5 MM² THWN/THHN	1-3.5 MM² TW	20
X5.5	2-5.5 MM² THWN/THHN	1-5.5 MM² TW	20
X8	2-8.0 MM² THWN-2/THHN	1-5.5 MM² TW	20
X14	2-14 MM² THWN-2/THHN	1-5.5 MM² TW	25
X22	2-22 MM² THWN-2/THHN	1-5.5 MM² TW	25

THREE PHASE THREE WIRE + GROUND			
WIRE CODE	CONDUCTORS		CONDUIT (MM)
	PHASE	GROUND	
Y5.5	3-5.5 MM² THWN/THHN	1-5.5 MM² TW	20
Y8	3-8.0 MM² THWN-2/THHN	1-5.5 MM² TW	25
Y14	3-14 MM² THWN-2/THHN	1-5.5 MM² TW	32
Y38	3-38 MM² THWN-2/THHN	1-14 MM² TW	50
Y60	3-60 MM² THWN-2/THHN	1-14 MM² TW	65
Y80	3-80 MM² THWN/THHN	1-14 MM² TW	65
Y250	3-250 MM² THWN-2/THHN	1-30 MM² TW	100
2Y150	2 SETS [3-150 MM² THWN-2/THHN]	2 SETS [1-50 MM² TW]	2-90
3Y200	3 SETS [3-200 MM² THWN-2/THHN]	3 SETS [1-60 MM² TW]	3-90
3Y250	3 SETS [3-250 MM² THWN-2/THHN]	3 SETS [1-80 MM² TW]	3-100

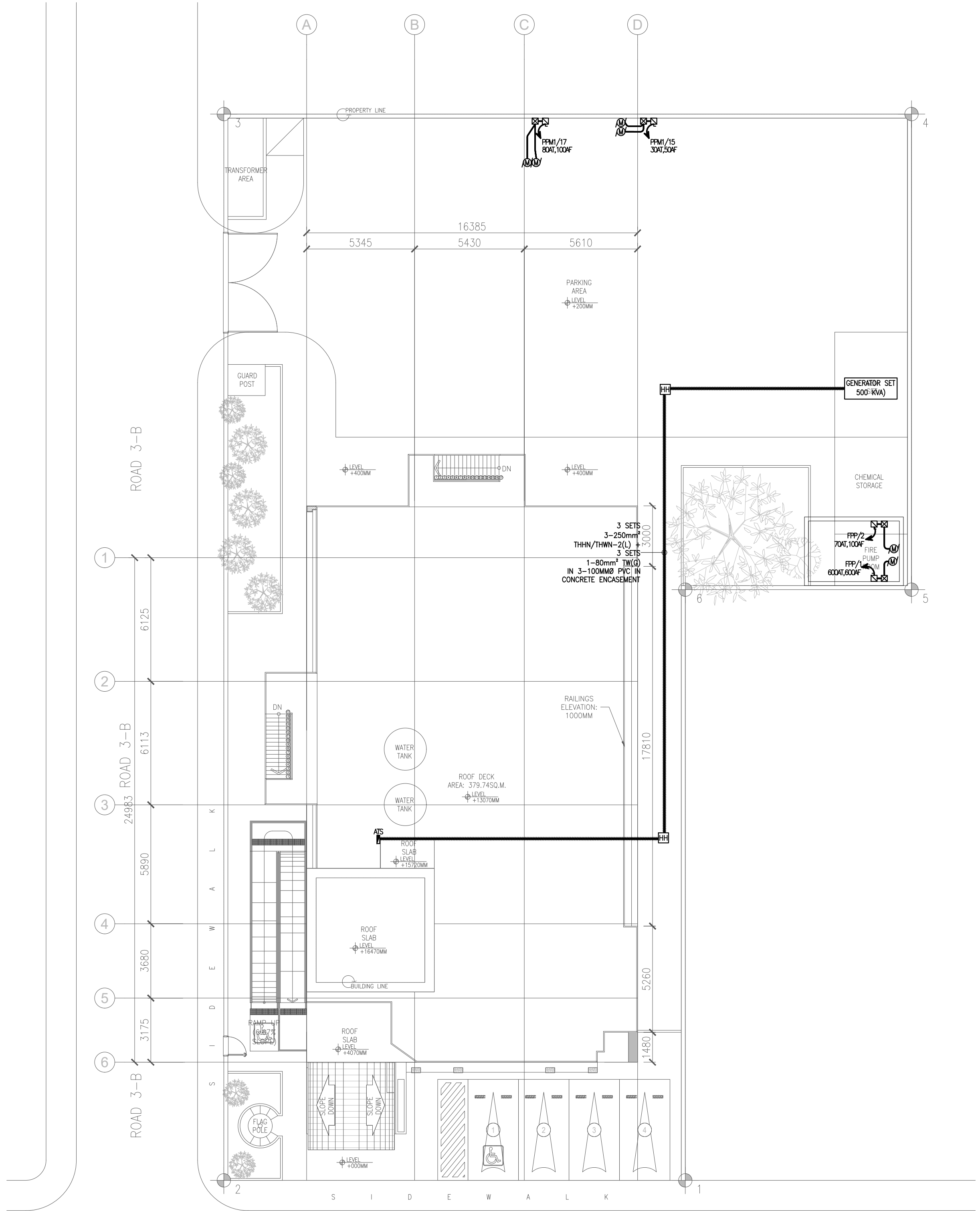
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LOAD SCHEDULE

E-007

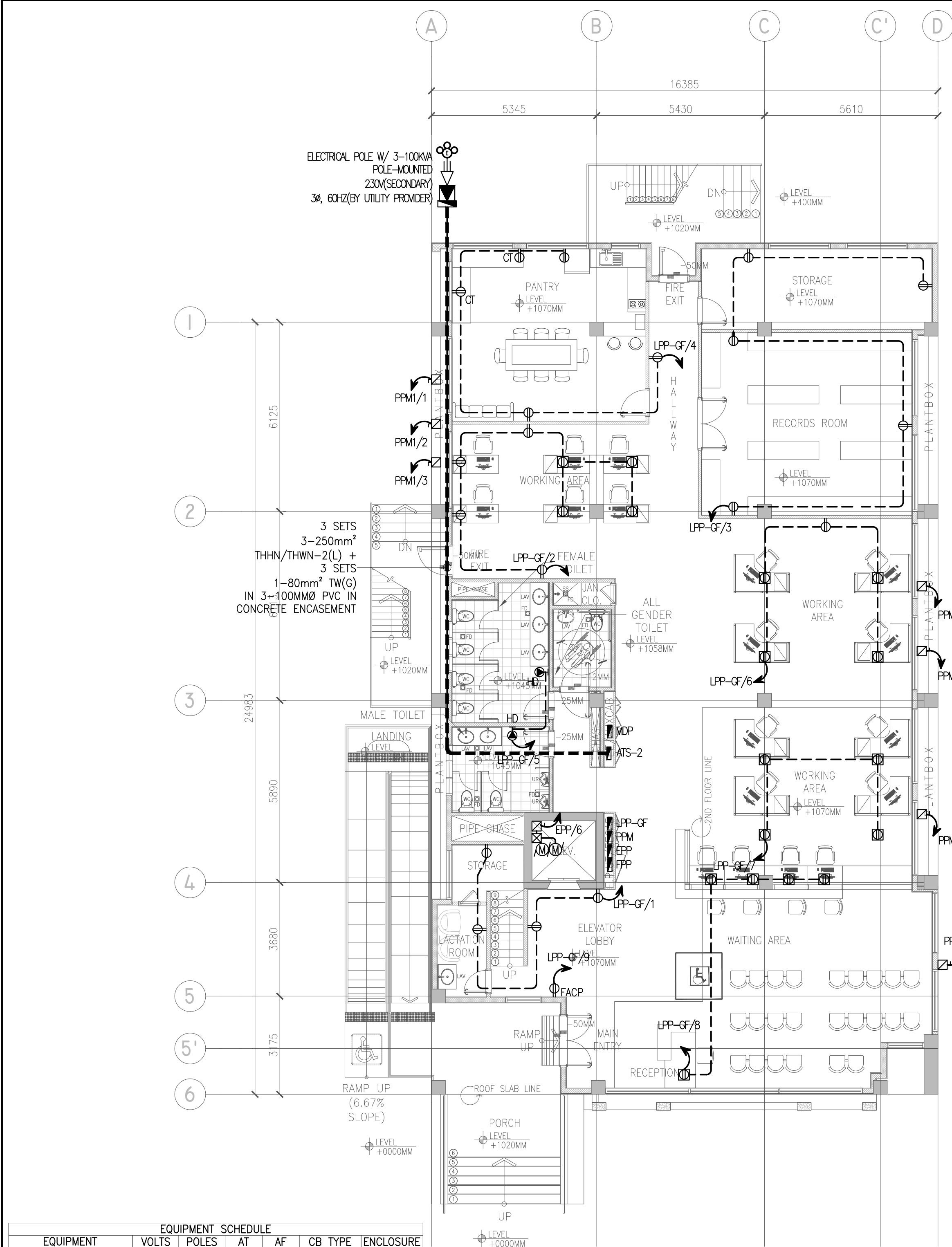
SCALE

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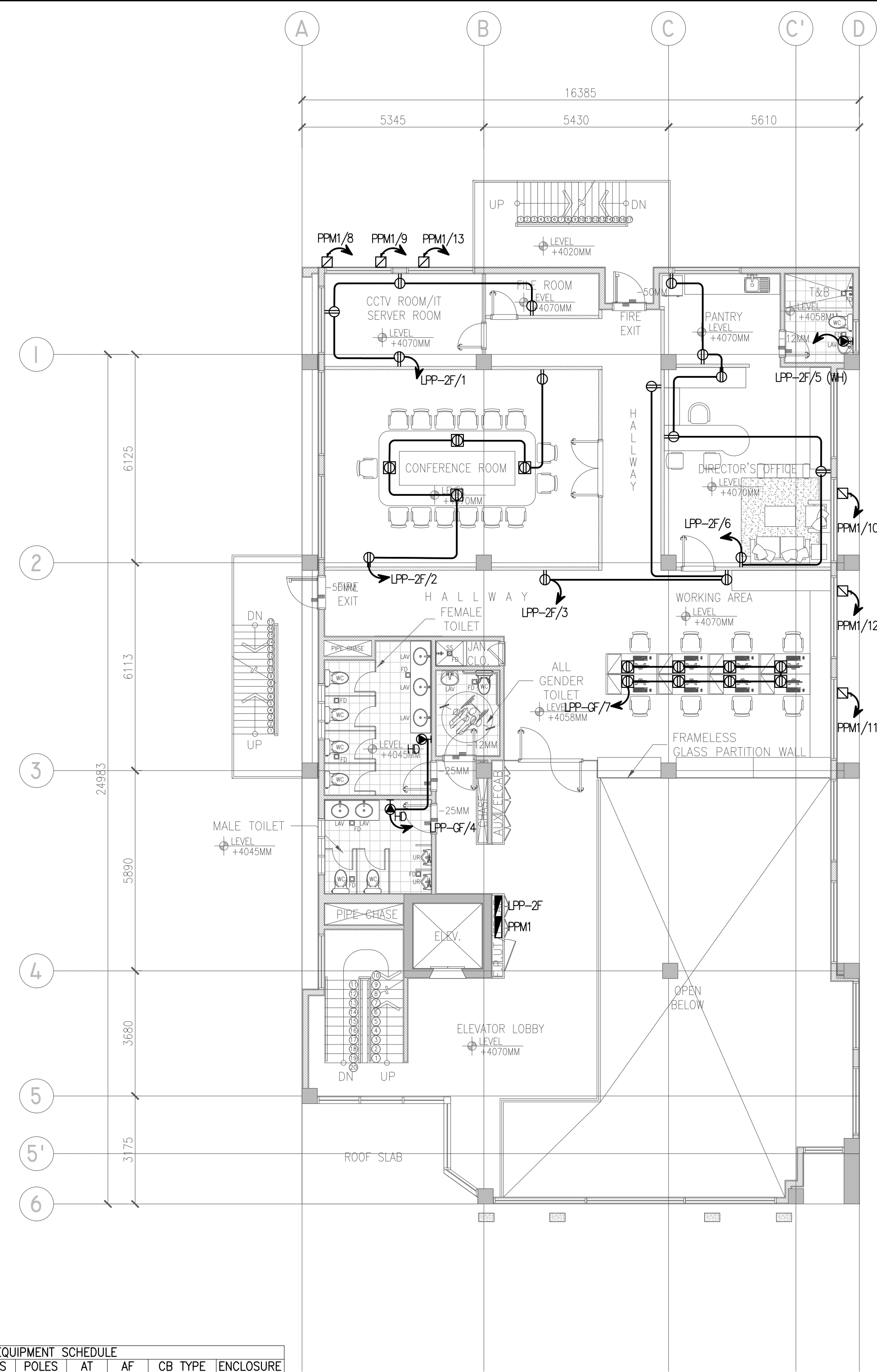


I SITE DEV'T POWER LAYOUT
E-008 SCALE 1:150M

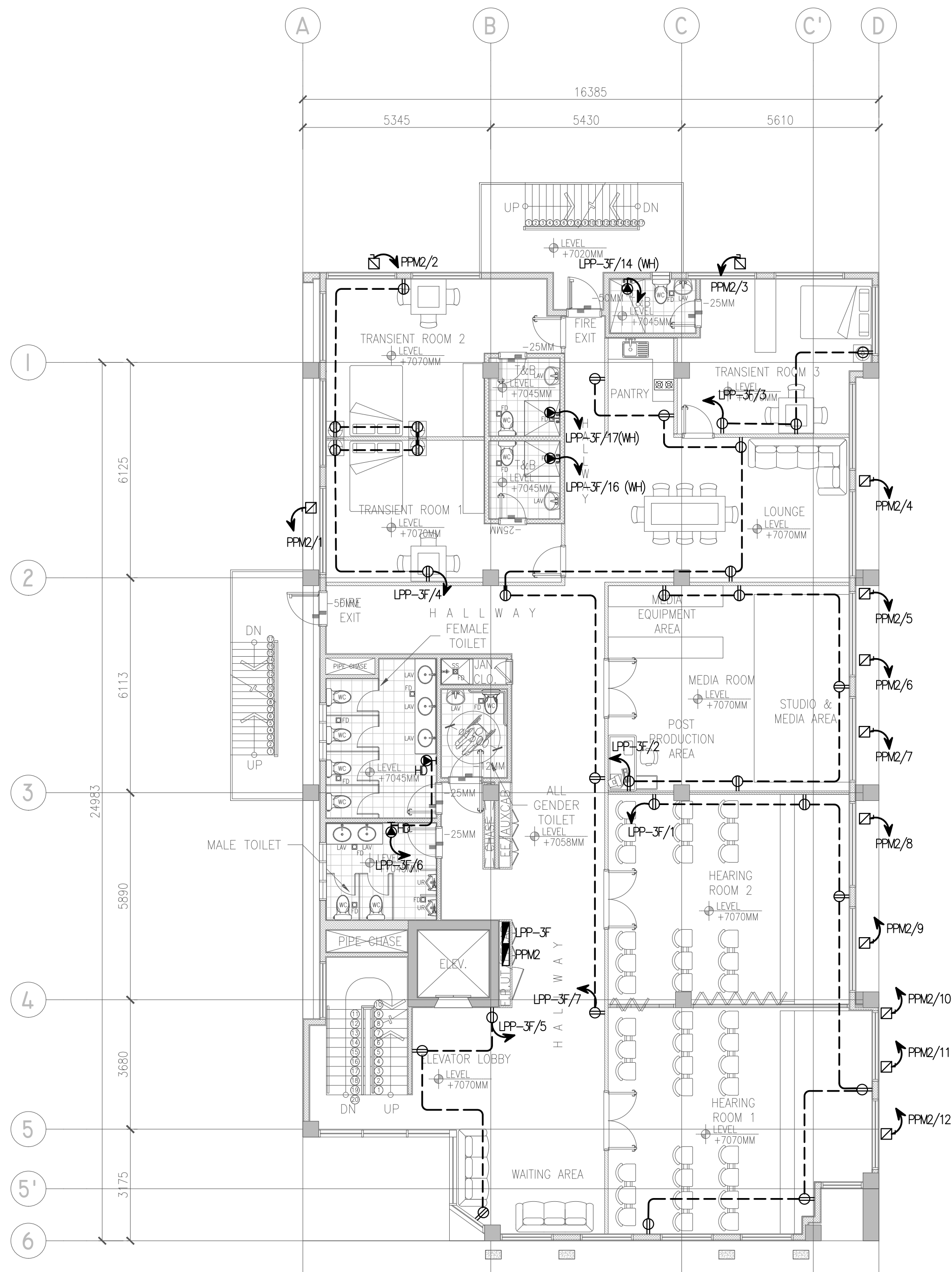
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	ALDEN C. ONG M.Eng., ASEP SEC-HTC	REG. NO.: 68251	AMBROSIO C. CARLOS PROFESSIONAL ELECTRICAL ENGINEER	PROPOSED RETROFITTING AND RENOVATION OF THE SEC DAVAO EXTENSION OFFICE UNIVERSITY AVENUE, JUNA SUBDIVISION MATINA, DAVAO CITY	VHINCENT G. CAÑARES SEC DIRECTOR, MSD	JAVEY PAUL D. FRANCISCO COMMISSIONER	SITE DEV'T POWER LAYOUT	DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF 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 OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.	CCR	JUL 2024									20X30	E-008
		TIN NO. : 168-950-786																		
		PTR NO. : 10077889																		
		DATE : JANUARY 05, 2024																		
		PLACE : MAKATI CITY											RRG	JUL 2024					SCALE	PROJECT NO.
													APPROVED	DATE					AS SHOWN	DE-G-24-006
													ACC	JUL 2024						



1 GROUND FLOOR POWER LAYOUT
SCALE 1:100M

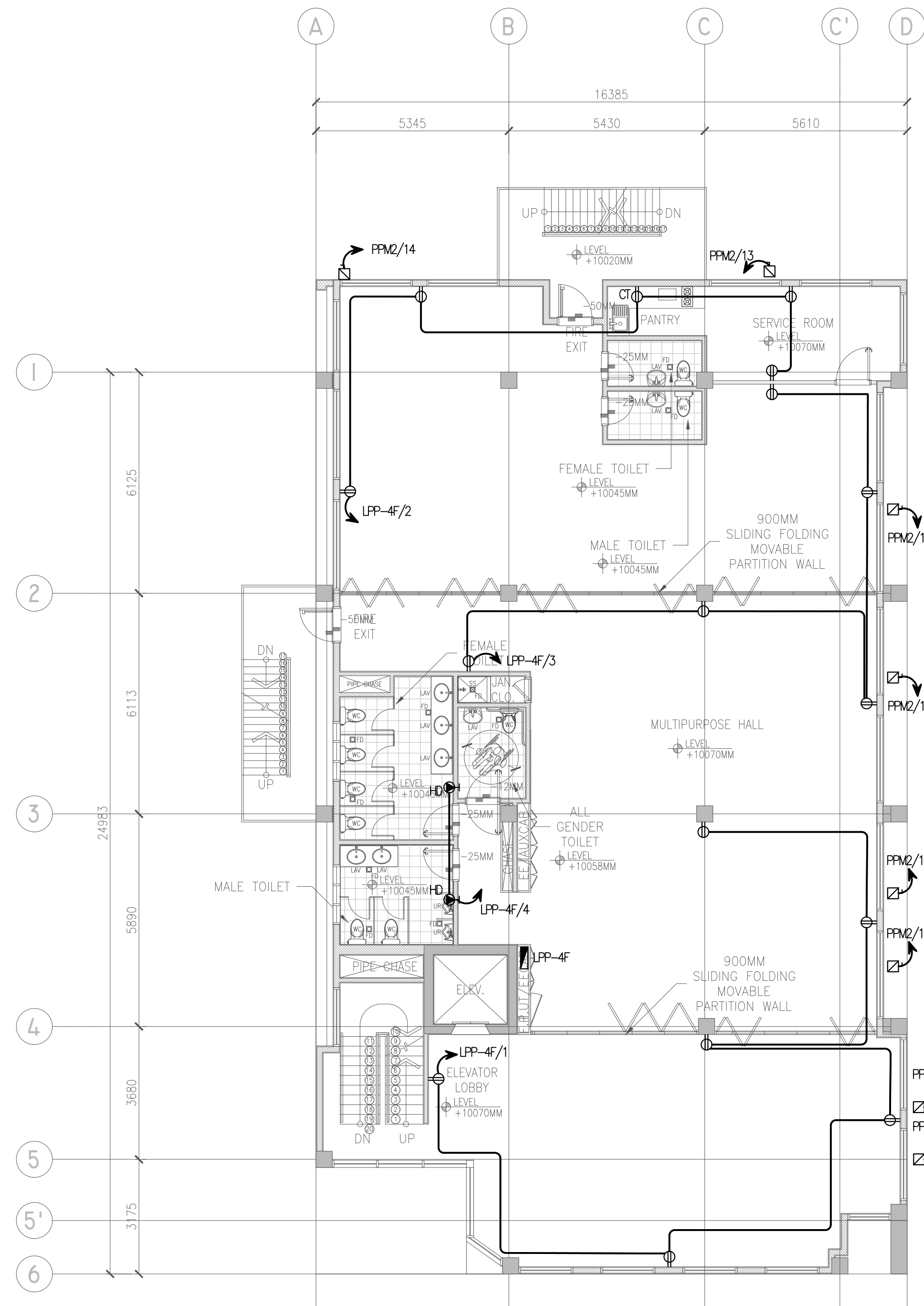


2 SECOND FLOOR POWER LAYOUT
SCALE 1:100M



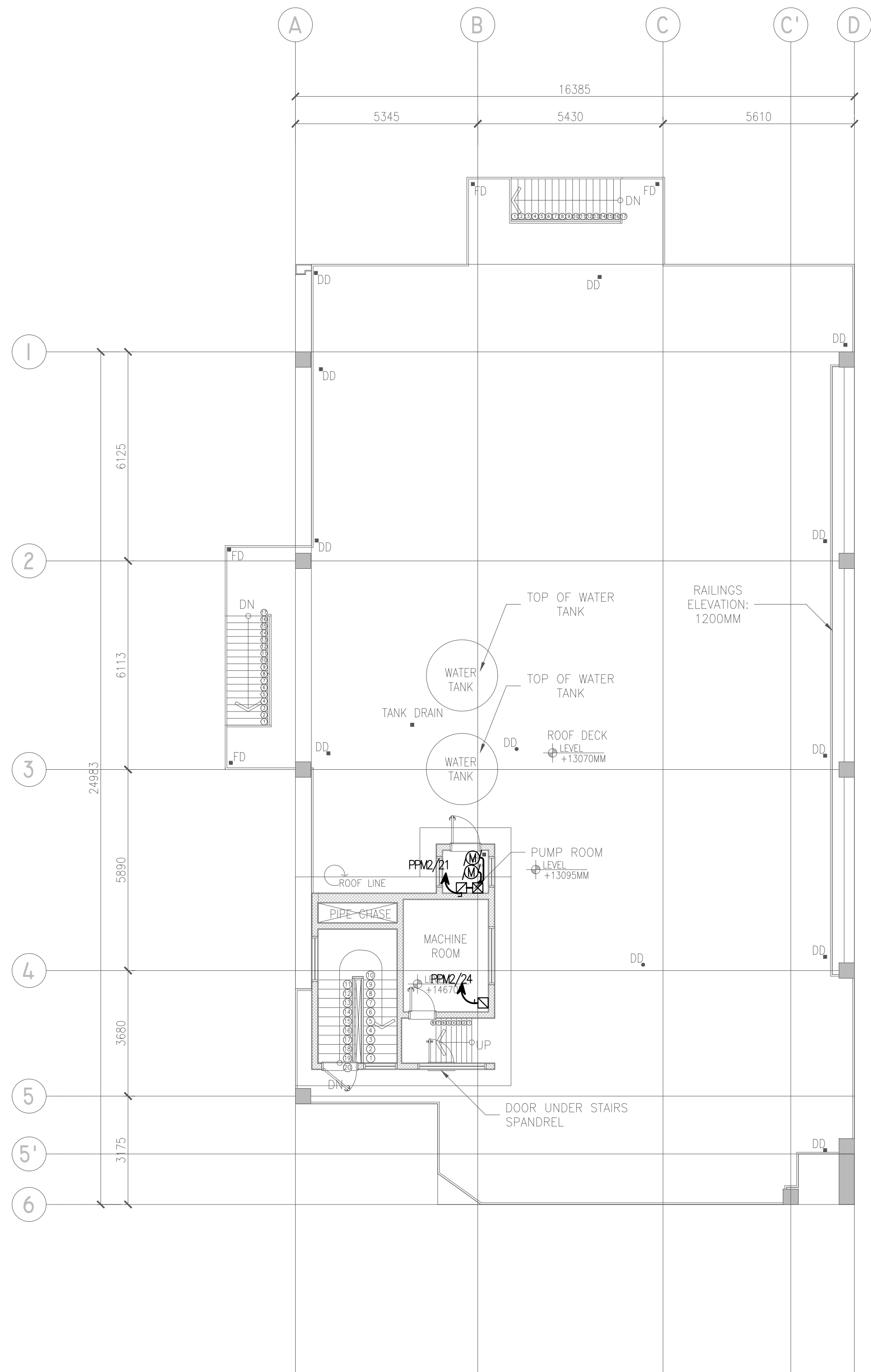
EQUIPMENT SCHEDULE					
EQUIPMENT	VOLTS	POLES	AT	AF	CB TYPE ENCLOSURE
5.2KW, ACCU-3F1	230	2	80	100	MCCB NEMA-4X
7.1KW, ACCU-3F2	230	2	100	100	MCCB NEMA-4X
5.2KW, ACCU-3F3	230	2	80	100	MCCB NEMA-4X

1 THIRD FLOOR POWER LAYOUT
E-010 SCALE 1:100M



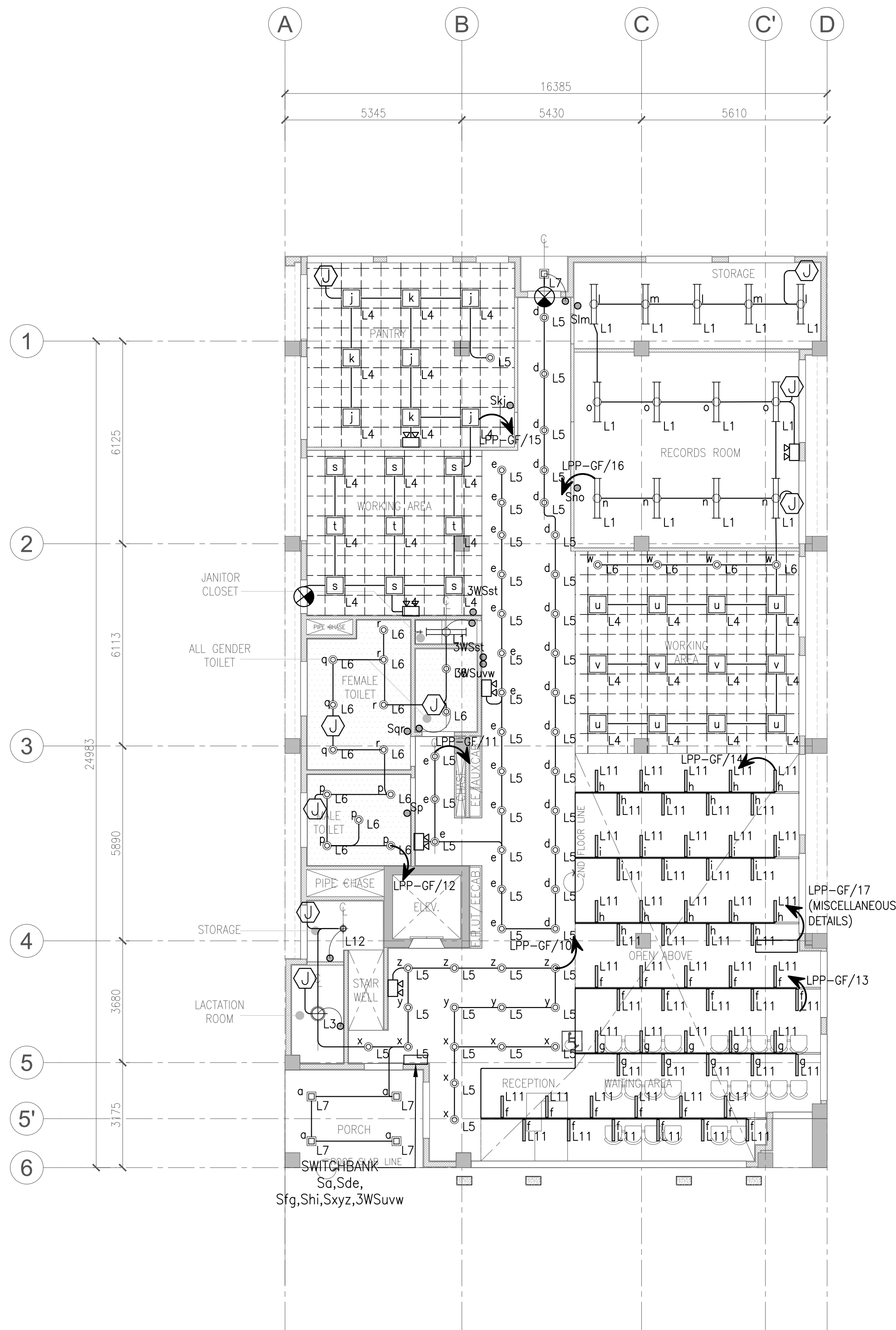
EQUIPMENT SCHEDULE					
EQUIPMENT	VOLTS	POLES	AT	AF	CB TYPE ENCLOSURE
10KW, ACCU-4F1	230	2	100	100	MCCB NEMA-4X
5.2KW, ACCU-4F2	230	2	80	100	MCCB NEMA-4X

2 FOURTH FLOOR POWER LAYOUT
E-010 SCALE 1:100M

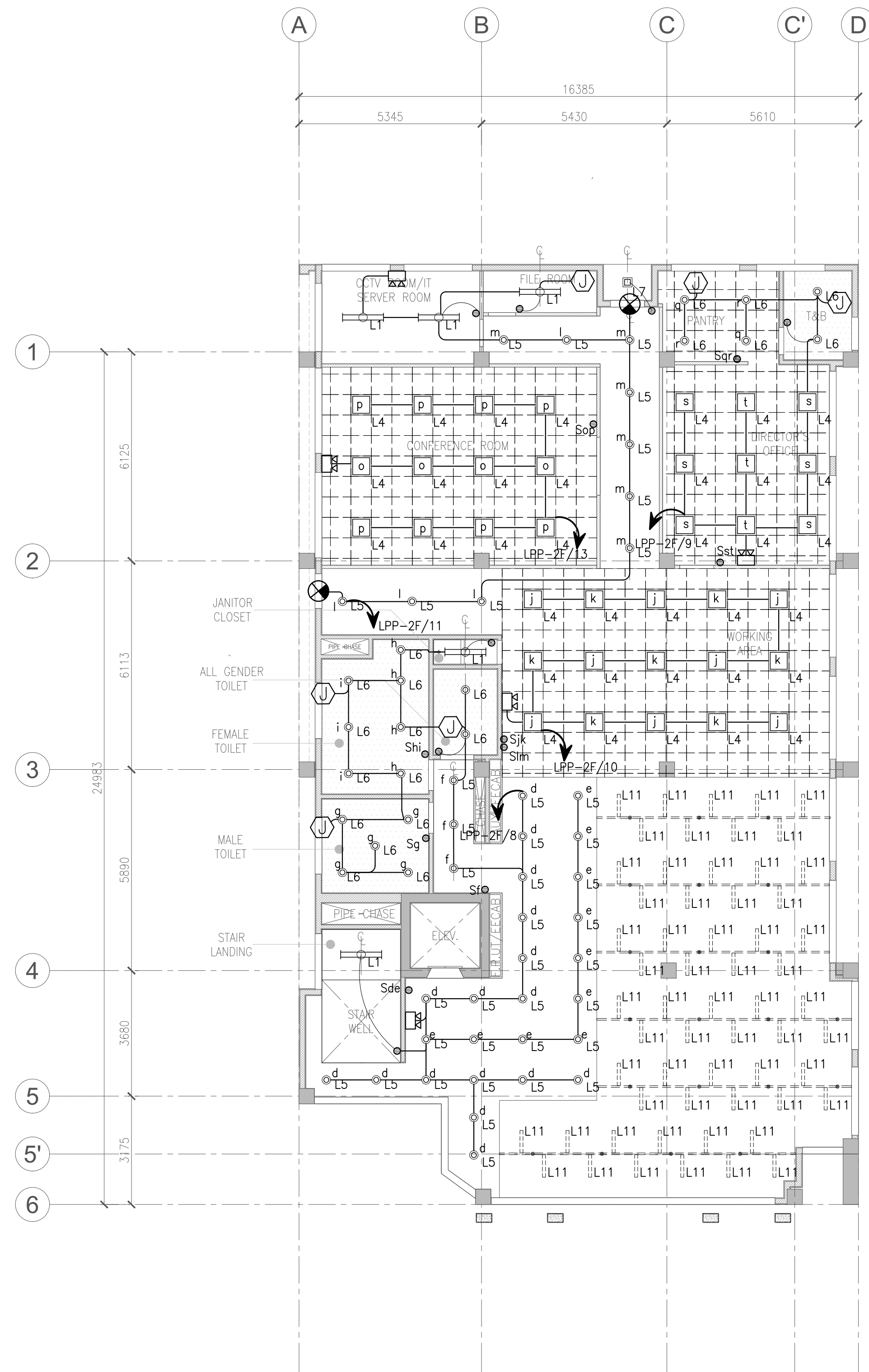


I ROOF DECK POWER LAYOUT
E-011 SCALE 1:100M

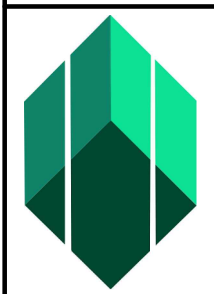
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	ALDEN C. ONG M.Eng., ASEP SEC-HTC			REG. NO.: 68251		PROPOSED RETROFITTING AND RENOVATION OF THE SEC DAVAO EXTENSION OFFICE		VHINCENT G. CAÑARES SEC DIRECTOR, MSD		JAVEY PAUL D. FRANCISCO COMMISSIONER		ROOF DECK POWER LAYOUT		DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF 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 OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.										CCR	JUL 2024						20X30	E-011				
				TIN NO. : 168-950-786																				DATE		DESIGNED	DATE							SCALE	PROJECT NO.	
				PTR NO. : 10077889																				DATE : JANUARY 05, 2024		RRG		JUL 2024								
				PROFESSIONAL ELECTRICAL ENGINEER																				PLACE : MAKATI CITY		APPROVED		DATE								AS SHOWN
					UNIVERSITY AVENUE, JUNA SUBDIVISION MATINA, DAVAO CITY																		ACC	JUL 2024												



1 GROUND FLOOR LIGHTING LAYOUT
E-012 SCALE 1:100M

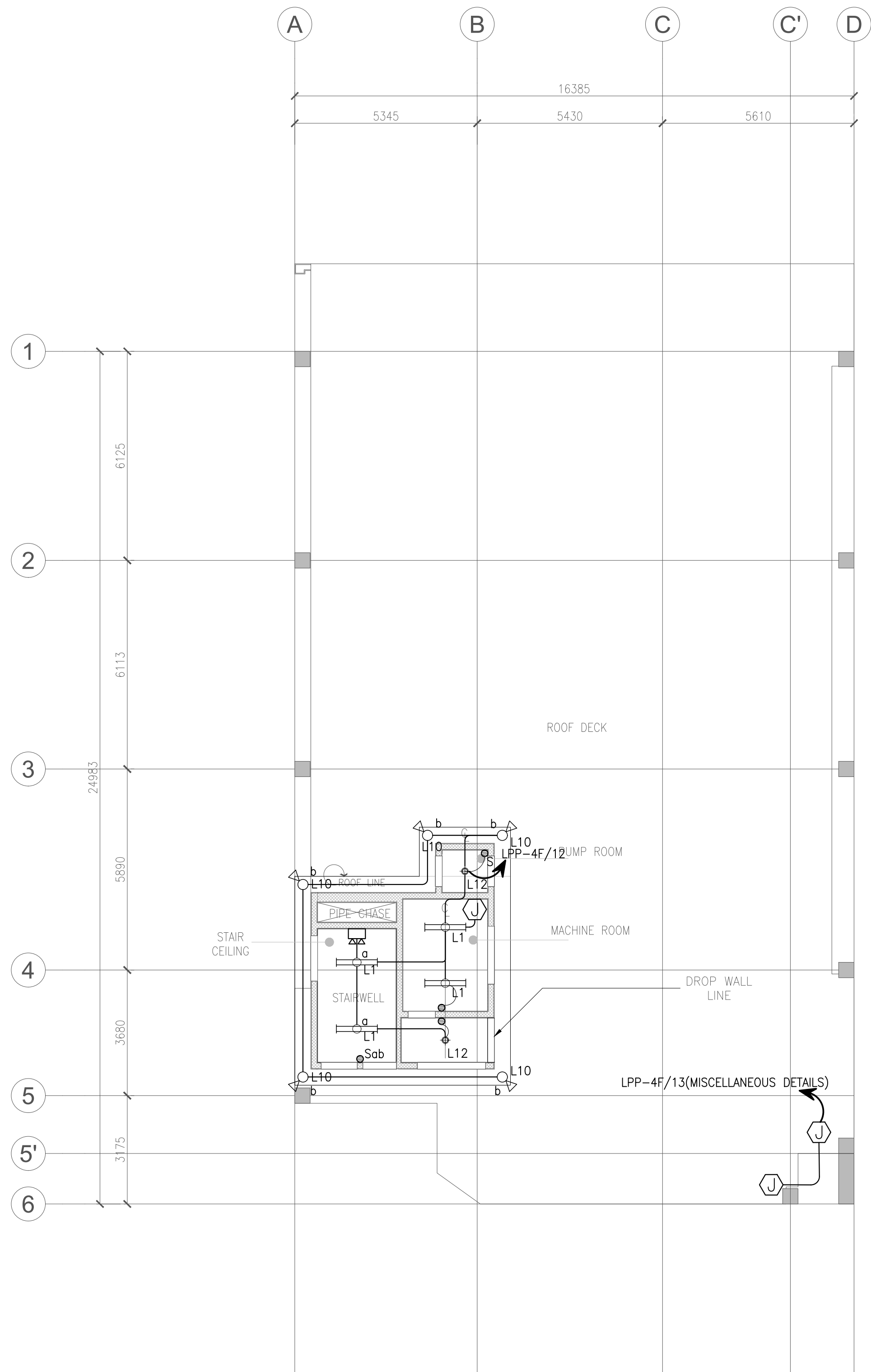


2 SECOND FLOOR LIGHTING LAYOUT
E-012 SCALE 1:100M

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	ALDEN C. ONG M.Eng., ASEP		PROPOSED RETROFITTING AND RENOVATION OF THE SEC DAVAO EXTENSION OFFICE		VHINCENT G. CAÑARES		JAVEY PAUL D. FRANCISCO		GROUND FLOOR LIGHTING LAYOUT SECOND FLOOR LIGHTING LAYOUT		CADD DESIGNED RRG APPROVED ACC										20X30		E-012	
	SEC-HTC		UNIVERSITY AVENUE, JUNA SUBDIVISION MATINA, DAVAO CITY		SEC DIRECTOR, MSD		COMMISSIONER				DATE JUL 2024										SCALE		PROJECT NO.	
											NO.										AS SHOWN		DE-G-24-006	
											REVISIONS													



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ALDEN C. ONG M.Eng., ASEP SEC-HTC	REG. NO.: 68251	AMBROSIO C. CARLOS PROFESSIONAL ELECTRICAL ENGINEER	PROPOSED RETROFITTING AND RENOVATION OF THE SEC DAVAO EXTENSION OFFICE UNIVERSITY AVENUE, JUNA SUBDIVISION MATINA, DAVAO CITY	VHINCENT G. CAÑARES SEC DIRECTOR, MSD	JAVEY PAUL D. FRANCISCO COMMISSIONER	THIRD FLOOR LIGHTING LAYOUT FOURTH FLOOR LIGHTING LAYOUT	DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF 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 OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.	CCR	JUL 2024					20X30	E-013
	TIN NO. : 168-950-786							DESIGNED	DATE						
	PTR NO. : 10077889							RRG	JUL 2024				SCALE	PROJECT NO.	
	DATE : JANUARY 05, 2024							APPROVED	DATE				AS SHOWN	DE-G-24-006	
	PLACE :MAKATI CITY						ACC	JUL 2024							



I ROOF DECK LIGHTING LAYOUT
E-014 SCALE 1:100M

 Securities and Exchange Commission PHILIPPINES	CHECKED AND SUBMITTED BY			PROJECT TITLE/LOCATION		RECOMMENDING APPROVAL	APPROVED BY	SHEET CONTENTS	R.A. 9266 SEC. 33	CADD	DATE	NO.	REVISIONS	CHK	DATE	PAPER SIZE	SHEET NO.			
	REG. NO.: 68251			PROPOSED RETROFITTING AND RENOVATION OF THE SEC DAVAO EXTENSION OFFICE		VHINCENT G. CAÑARES	JAVEY PAUL D. FRANCISCO	ROOF DECK LIGHTING LAYOUT	DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF 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 OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.	CCR	JUL 2024					20X30	E-014			
	TIN NO. : 168-950-786									DESIGNED	DATE									
	PTR NO. : 10077889									PROFESSIONAL ELECTRICAL ENGINEER	SEC DIRECTOR, MSD	COMMISSIONER	RRG	JUL 2024					SCALE	PROJECT NO.
	DATE : JANUARY 05, 2024												APPROVED	DATE						
	SEC-HTC			PLACE : MAKATI CITY					ACC	JUL 2024					AS SHOWN	DE-G-24-006				



