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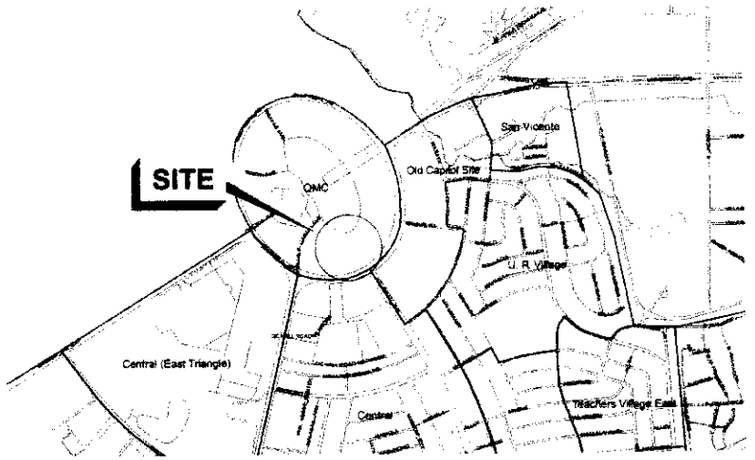
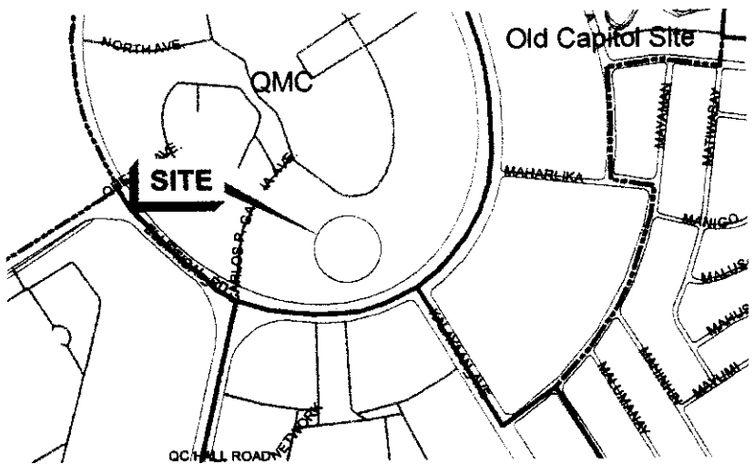
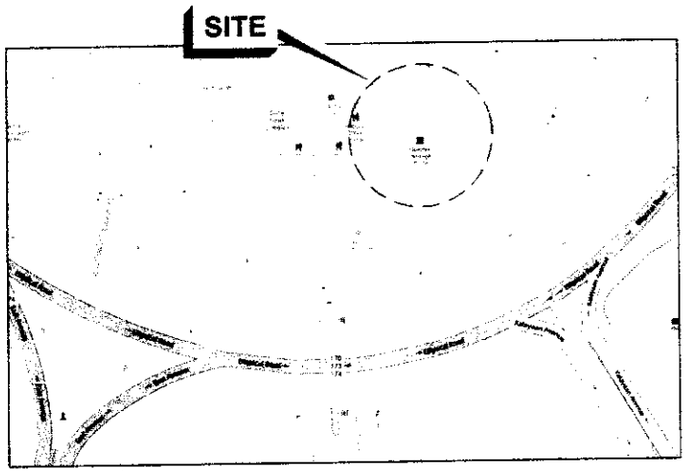


1 AR-01 VICINITY MAP
SCALE: NTS



2 AR-01 LOCATION MAP
SCALE: NTS



3 AR-01 SITE DEVLOPMENT PLAN
SCALE: NTS

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Republika ng Pilipinas
Lungsod ng Quezon
DEPARTMENT OF ENGINEERING
City Center Building B, City Hall Compound, Elliptical Road
Diliman, Central 1100 Quezon City
Telephone: +63 2 8988 4242
E-mail address: engineering@quezoncity.gov.ph

PROJECT TITLE: PURCHASE REQUEST PLAN

IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS)

LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY

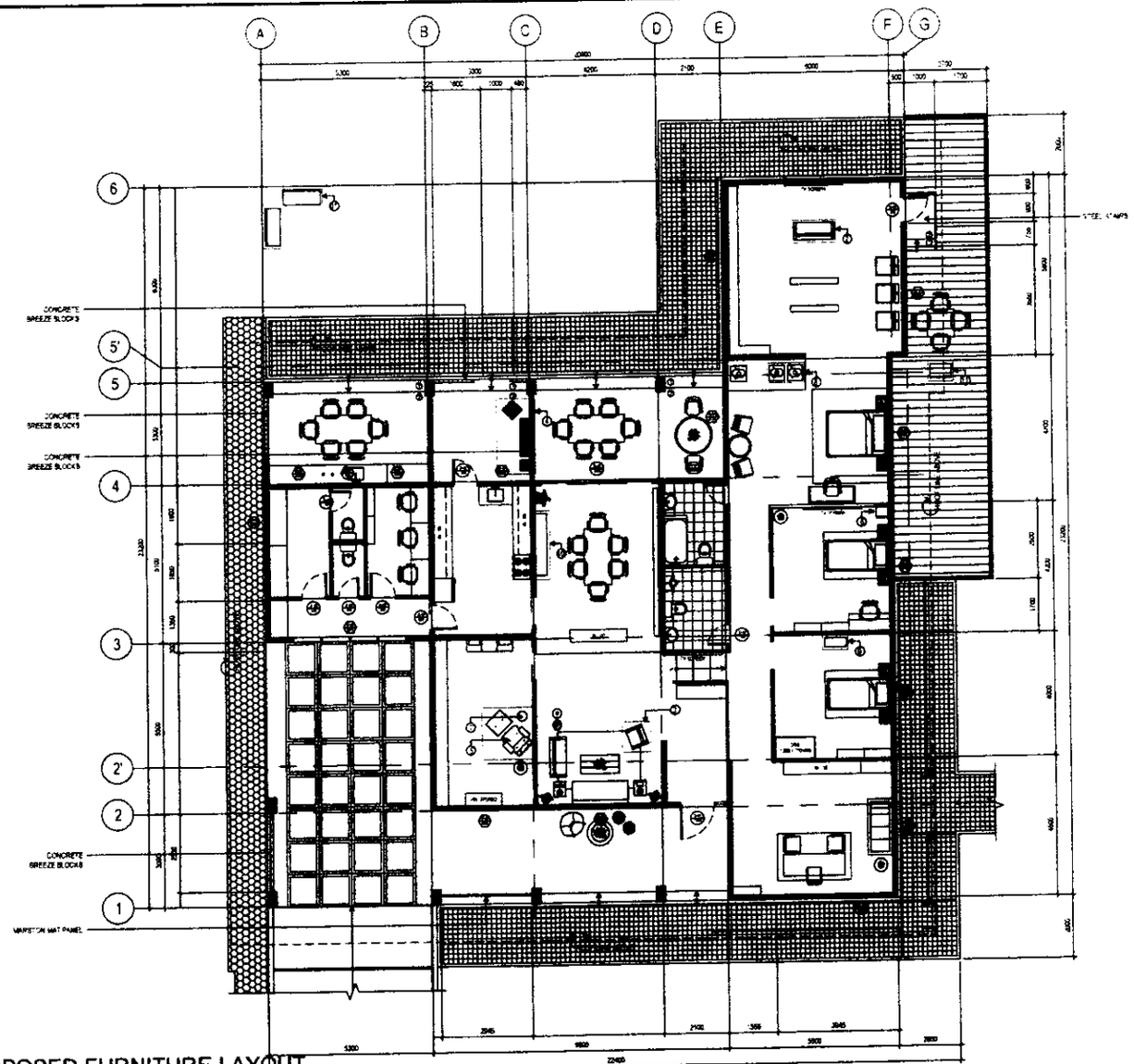
SHEET CONTENT: AS SHOWN

DESIGNED BY: ARCH. RYAN D. NAVARRO, ARCHITECT II - ARCHITECT
PRC NO: 0025617 | PTR NO.: 7125572 | VALID DATE: DECEMBER 02, 2028 | ISSUED DATE: JANUARY 10, 2025

SUBMITTED BY: ENGR. FREDISWINDA L. DE GUZMAN, CHIEF, PLANNING AND DESIGN DIVISION
PRC NO: 0076468 | PTR NO.: 7128682 | VALID DATE: MARCH 28, 2027 | ISSUED DATE: JANUARY 10, 2025

APPROVED BY: ATTY. MARK DALE DIAMOND P. PERRAL, CITY ENGINEER
PRC NO.: 0109882 | PTR NO.: 7128695 | VALID DATE: FEBRUARY 24, 2026 | ISSUED DATE: JANUARY 15, 2025

SHEET NO.: **AR-01**



ADDITIONAL FURNITURE	
ITEM NO.	DESCRIPTION
1	ROCKING GARDEN BENCH
2	GREY FABRIC 2 SEATER MIDCENTURY SOFA
3	GREEN FABRIC MIDCENTURY LOUNGE CHAIR
4	SLATTED CHAIR WITH COFFEE TABLE AND SIDE TABLE
5	LOUNGE CHAIR WITH OTTOMAN
6	1960S TURNTABLE, RED PAINTED FINISH
7	RATAN STOOL, WOOD LACQUER FINISH
8	DRESS FORM (FEMALE)
9	MIDCENTURY TELEVISION STAND 1 WOOD FINISH
10	MIDCENTURY TELEVISION STAND 2 MINT GREEN
11	3-TIER PLANT STAND PAINT FINISH

DISPLAYED ITEMS	
ITEM NO.	DESCRIPTION
1	RECREATED 1960S-1980S DRESS
2	3-TIER PLANT STAND PAINT FINISH
3	OIL PAINTING
4	ANTIQUE FRAMED 1980S HOUSE DRAWING
5	VINTAGE CROQUET SET
6	VINTAGE TOYS AND FIGURINES
7	COPPER RELIEF THE LAST SUPPER WALL DECOR
8	VINTAGE SINGER OVEN, CHROME COLOR
9	RETRO ANALOG CLOCK
10	MANTLE CLOCK
11	1960S BLACK ROTARY DIAL TELEPHONE WITH 4 CORD
12	VINTAGE SUNBURST WALL MIRROR
13	CARVED HANGING WOODEN SPOON AND FORK
14	VINTAGE TYPEWRITER
15	VINTAGE STEREO CASETTE RECORDER
16	MANUAL COFFEE GRINDER, WOOD BASE, SMALL
17	VINTAGE WASH TUB
18	CARVED WOOD HANGING WALL DECOR
19	VINTAGE CLOCK RADIO
20	1960S COOKIE MECK CLOCK
21	LAUNDRY EVOLUTION
22	MANUAL RHYTHM CLOCK
23	VINTAGE SHAVERWARE

1 AR-02 PROPOSED FURNITURE LAYOUT
SCALE: 1:150 MTS

Republika ng Pilipinas
Lungsod ng Quezon
DEPARTMENT OF ENGINEERING
Civic Center Building B, City Hall Compound, Elliptical Road
Diliman, Central 1100 Quezon City
Trunkline: +63 2 8988 4242
E-mail address: engineering@quezoncity.gov.ph

PROJECT TITLE: PURCHASE REQUEST PLAN

IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS)

LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY

SHEET CONTENT: AS SHOWN

DESIGNED BY: ARCH. RYAN D. NAVARRO, ARCHITECT-III: ARCHITECT
PRC NO. 0028911 | PTR NO. 7108577
VALID DATE: DECEMBER 02, 2025 | ISSUED DATE: JANUARY 10, 2025

SUBMITTED BY: ENGR. FREDRICK [illegible] DL. DE GUZMAN, CHIEF, PLANNING AND DESIGN DIVISION
PRC NO. 0074459 | PTR NO. 7108552
VALID DATE: MARCH 28, 2027 | ISSUED DATE: JANUARY 10, 2025

APPROVED BY: ATTY. MARK DALE DIAMOND P. PERRAL, CITY ENGINEER
PRC NO. 0108002 | PTR NO. 7108553
VALID DATE: FEBRUARY 24, 2026 | ISSUED DATE: JANUARY 15, 2025

SHEET NO. **AR-02**

1 EE-01 GENERAL NOTES

ALL ELECTRICAL WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE COMPANY.

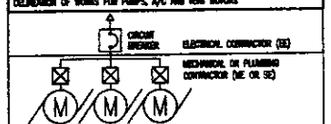
1. MERALCO SERVICE GARNANCE SHALL BE 230V, 1Ø, 2W+G, 60HZ SYSTEM.
2. ALL WIRING MEANS FOR LIGHTING, POWER, TELEPHONE, AND CATV SYSTEM SHALL BE DONE IN PVC PIPE FOR ALL EMBEDDED IN CONCRETE SLAB AND CONCEALED IN DROP CEILING AND 100C FOR SERVICE GARNANCE.
3. SMALLEST BRANCH CIRCUIT SHALL BE 3.5 mm THWP/THHN FOR POWER AND LIGHTING SYSTEM IN RACEWAY 15 mmØC TRADE SIZE CONDUIT. WIRE SHALL BE INSTALLED FOR 600 VOLTS.
4. ALL BRANCH CIRCUIT HOMERUN SHALL BE INSTALLED AS INDICATED IN THE PLAN, EXPOSED CIRCUIT RUN SHALL BE INSTALLED PARALLEL TO OR PERPENDICULAR WITH THE BUILDING LINE AND SUPPORTED BY CONDUIT CLAMPS EVERY 1.5 METERS, DIAGONAL CONDUIT RUN SHALL NOT BE ACCEPTED.
5. WHENEVER NECESSARY PULL BOX OF PROPER SIZE AND DIMENSION SHALL BE PROVIDED ALTHOUGH NOT INDICATED IN THE PLAN. ALL BOXES SHALL BE PROVIDED WITH METAL PLATE COVER.
6. ALL LIGHTING FIXTURES SHALL BE EQUIPPED WITH LAMP HOLDER AND LED LAMP.
7. ALL LIGHT CONTROLLED SWITCHES SHALL BE RATED 15 AMPS, 230VAC ONLY. SWITCHES SHALL BE INSTALLED FOR OPERATION WITH HOMEOWNER MOTION.
8. ALL PANEL BOARDS SHALL BE PROVIDED WITH MULTIPLE TERMINAL LUGS FOR SOLID GROUNDING, CONNECTED TO SERVICE GROUNDING SYSTEM.
9. ALL BRANCH CIRCUIT HOMERUN FOR POWER AND LIGHTING SHALL NOT BE COMBINED IN THE SAME RACEWAY.
10. FOR EACH SPARE CIRCUIT BREAKER IN PANEL BOARD PROVIDE 32mmØ RACEWAY TERMINATED IN 100 mm DEEP TYPE SQUARE BOX WITH COVER BELOW CEILING SLAB AND SHALL BE PROVIDED WITH PULL WIRES OR AS INDICATED ON LOAD SCHEDULE.
11. ALL METALLIC CONDUITS, CABINETS, BOXES AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
12. ALL MATERIALS TO BE USED SHALL BE NEW AND APPROVED FOR THE LOCATION AND PURPOSES.
13. ALL MOLDED CASE CIRCUIT BREAKERS FOR MOTORS SHALL BE INDUSTRIAL TYPE.
14. ALL BOXES SHALL BE MADE OF CODE GAUGE STEEL WITH ZINC CHROMATE PROTECTION.
15. ALL RECEPTACLE OUTLETS SHALL BE PROPERLY GROUNDED TO THE BOX BY MEANS OF GROUNDING LUGS.
16. MOUNTING HEIGHT NOT SHOWN ON SCHEDULE ARE AS FOLLOWS:
    - a. LIGHT CONTROLLED SWITCHES ———— 1.40 METER ABOVE FLOOR FINISH AT CENTER
    - b. DUPLEX CONVENIENCE OUTLET ———— 0.30 METER ABOVE FLOOR FINISH AT CENTER UNLESS INDICATED BY THE FIELD CONDITIONS.
    - c. TELEPHONE OUTLET ———— 0.30 METER ABOVE FLOOR FINISH AT CENTER UNLESS INDICATED BY THE FIELD CONDITIONS.
    - d. PANELBOARD/DISCONNECT ———— 1.80 METER ABOVE FLOOR FINISH AT CENTER UNLESS INDICATED BY THE FIELD CONDITIONS.
17. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:
    - PHASE A ———— RED
    - PHASE B ———— YELLOW
    - GROUND ———— GREEN
18. THE ELECTRICAL CONTRACTOR SHALL SECURE ALL WIRING PERMITS ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER. FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETE WORK.
19. THE ELECTRICAL CONTRACTOR SHALL REFER TO INTERIOR DESIGN AND ARCHITECTURAL PLAN FOR THE EXACT LOCATION, MOUNTING HEIGHT, SPACING, SPECIFICATIONS AND QUANTITY OF ALL MOBILE WIRING DEVICES, LIGHTING FIXTURES, PANEL, ETC. IN CASE OF DISCREPANCY, INTERIOR DESIGN/DRAWINGS AND ARCHITECTURAL PLANS SHALL COVER.
20. THE ELECTRICAL CONTRACTOR SHALL PROVIDE SHOP DRAWING IN ANY CHANGES IN MOUNTING HEIGHT OR LOCATION FOR THE APPROVAL OF ARCHITECT OR ENGINEER.
21. IN CASE ANY CONFLICT BETWEEN PLANS OF DIFFERENT TRADES, ACTUAL SITE CONDITIONS OR SPECIFICATION IS EVIDENT, THE ELECTRICAL CONTRACTOR SHALL IMMEDIATELY VERIFY THE ELECTRICAL CONSULTANT.
22. ALL WIRES AND CABLE WITHIN PULL BOXES, GUTTER, AND RACEWAY SHALL BE BUNDLED TOGETHER PER SET AND PROPERLY AND PERMANENTLY MARKED AND LABELED SPECIFYING SIZE AND LOAD BEING SERVED EVERY 3.0 METERS.
23. EVERY LENGTH OF ALL EXPOSED CONDUIT RUN SHALL BE PROPERLY MARKED AND LABELED DESCRIBING LOAD BEING SERVED. LABELING SHALL BE EVERY 3.0 METERS.
24. ALL ELECTRICAL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY QUALIFIED LICENSED ELECTRICAL ENGINEER.

ALL MOUNTING HEIGHTS ARE SUBJECT TO THE APPROVAL OF THE ARCHITECT / OWNER.

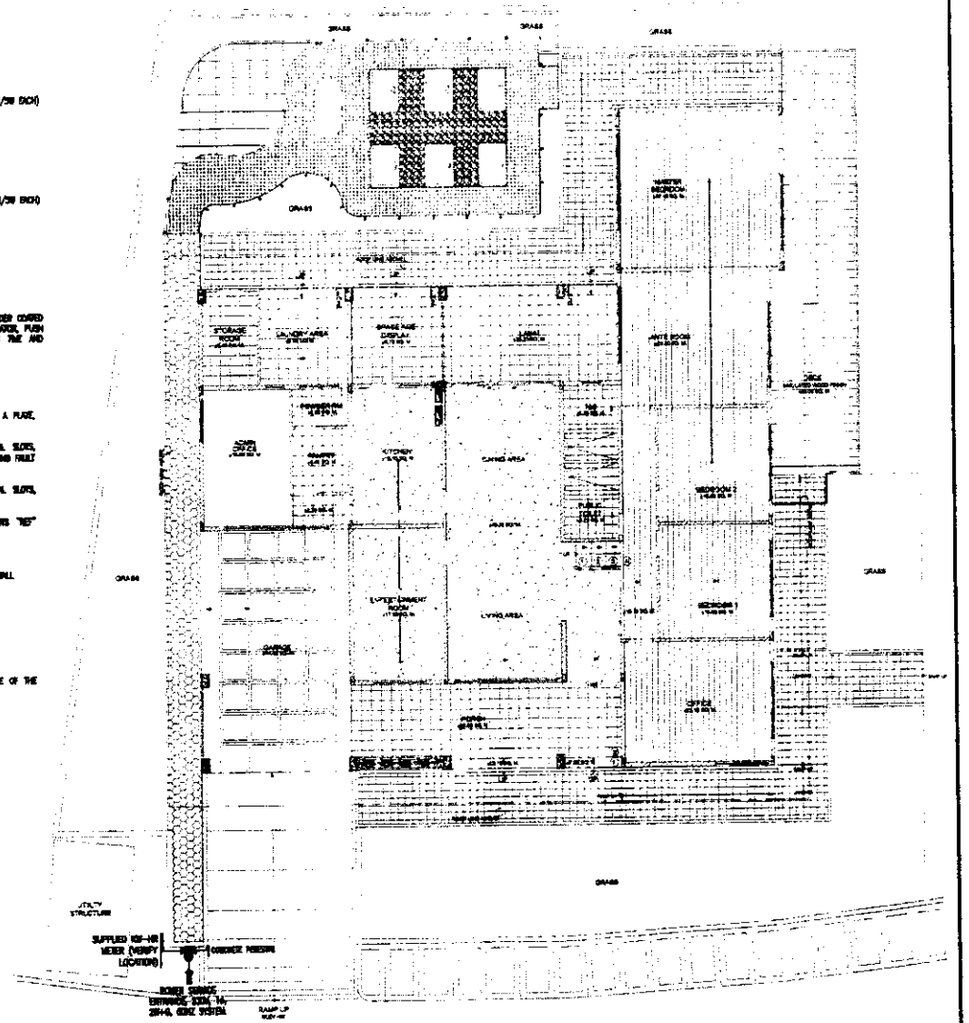
2 EE-01 LEGENDS

- LED SURFACE MOUNTED PANLIGHT (4000K/9W/DAYLIGHT) (AS PER APPROVED BY ARCHITECT)
- 2 PIN TRACK BAR 10/AR16/GU10 LED MOVEABLE TRACK LIGHT (3000K/9W/3W EACH) (AS PER APPROVED BY ARCHITECT)
- 18605 CONE PENDANT LIGHT OR EQUIVALENT (AS PER APPROVED BY ARCHITECT)
- LED SURFACE MOUNTED PANLIGHT (4000K/9W/DAYLIGHT) (AS PER APPROVED BY ARCHITECT)
- 2 PIN TRACK BAR 10/AR16/GU10 LED MOVEABLE TRACK LIGHT (3000K/9W/3W EACH) (AS PER APPROVED BY ARCHITECT)
- 18605 CONE PENDANT LIGHT OR EQUIVALENT (AS PER APPROVED BY ARCHITECT)
- CEILING SPOTLIGHT
- BATTEN PENDANT LIGHT OR EQUIVALENT (AS PER APPROVED BY ARCHITECT)
- 25W — BATTERY OPERATED EMERGENCY LIGHT FOR INDUSTRIAL APPLICATION POWDER COATED PAINT FINISH, COMPLETE WITH NICKEL CADMIUM CELLS, RED LED INDICATOR, PUSH TEST SWITCH, BATTERY PROTECTION, 2 HOURS MINIMUM OPERATING TIME AND AUTOMATIC RE-CHARGING.
- EXIT LIGHTS
- S1/S3W — SINGLE TUMBLER SWITCH / THREE-WAY SWITCH
- 2Sab — TWO GANG TUMBLER SWITCH, NUMBER DENOTES NUMBER OF GANG IN A PLATE, SMALL LETTER DENOTES LIGHT CONTROLLED.
- WALL MOUNTED DUPLEX CONVENIENCE OUTLET, 230V, 15A, UNIVERSAL SLOTS, GROUNDING TYPE, "WP" DENOTES WEATHER PROOF, "EFCI" DENOTES GROUND FAULT CIRCUIT INTERRUPTER.
- FLOOR MOUNTED DUPLEX CONVENIENCE OUTLET, 230V, 15A, UNIVERSAL SLOTS, GROUNDING TYPE.
- WALL MOUNTED SIMPLEX CONVENIENCE OUTLET, 15A, UNIVERSAL SLOTS "RE" DENOTES REFRIGERATOR.
- DISTRIBUTION PANEL / POWER & LIGHTING PANEL
- CONDUIT RUN EMBEDDED OR CONCEALED IN CONCRETE FLOOR SLAB OR WALL
- CONDUIT BRANCH CIRCUIT HOMERUN TO PANELBOARD
- ↑RU / ↓RD — CONDUIT RISER UP / CONDUIT RISER DOWN
- CIRCUIT BREAKER, RATING AS INDICATED
- JUNCTION BOX
- CIRCUIT HOMERUN DESIGNATION, UPPER PART DENOTES POWER SOURCE OF THE CIRCUIT WHILE LOWER HALF DENOTES CIRCUIT DESIGNATION.

DEMARCATION OF WORKS FOR PUMPS, A/C AND VENT MOTORS



1. TERMINATION OF WIRES FROM MOTOR CONTROLLER TO ENCLOSED CIRCUIT BREAKER SHALL BE DONE BY MECHANICAL OR PLUMBING CONTRACTOR IN COORDINATION WITH ELECTRICAL CONTRACTOR.
2. ALL CONNECTION FROM MOTOR CONTROLLER TO ECB SHALL BE DONE BY METALLIC CONDUIT OR LIQUID TIGHT METALLIC FLEXIBLE CONDUIT FOR SUPPLEMENTAL GROUNDING AND BONDING REQUIREMENT.
3. MECHANICAL AND PLUMBING CONTRACTOR TO VERIFY AND CONFIRM THE FINAL RATING OF CIRCUIT BREAKER SHOWN ON MOTOR MANUFACTURER RECOMMENDATION PRIOR TO INSTALLATION TO COMPLY WITH MANUFACTURER REQUIREMENTS.
4. ALL NONFUSE CONNECTION TO OUTDOOR TYPE OR NEMA 3R PANEL OR ECB SHALL BE WATER TIGHT AND SHALL BE PROVIDED WITH RUBBER GASKET AND SEALANT TO COMPLY TO NEMA 3R REQUIREMENT.
5. REQUIREMENT FOR MANUAL DISCONNECT FOR SINGLE PHASE EQUIPMENT WITH GROUP OF A/C MOTORS SHALL BE BY OWNER. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE DISCONNECT ONLY.



5 EE-01 SITE DEVELOPEMENT PLAN

SCALE NTS

3 EE-01 DRAWING INDEX

	DRAWING TITLE
EE-01	GENERAL NOTES, LEGEND, DRAWING INDEX, SITE DEVELOPEMENT
EE-02	GROUND FLOOR LIGHTING AND POWER DESIGN LAYOUT
EE-03	SITE DEVELOPEMENT LIGHTING SYSTEM LAYOUT
EE-04	LOAD SCHEDULE, DESIGN CALCULATION, RISER DIAGRAM, IMPEDANCE DIAGRAM, SINGLE LINE DIAGRAM, VOLTAGE DROP CALCULATION AND SHORT CIRCUIT ANALYSIS

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Lungsod ng Quezon
DEPARTMENT OF ENGINEERING
Civic Center Building 6, City Hall Compound, Elliptical Road
Diliman, Quezon 1100 Quezon City
Trunkline: +63 2 8988 4242
E-mail address: engineering@quezoncity.gov.ph

PROJECT TITLE: PURCHASE REQUEST PLAN

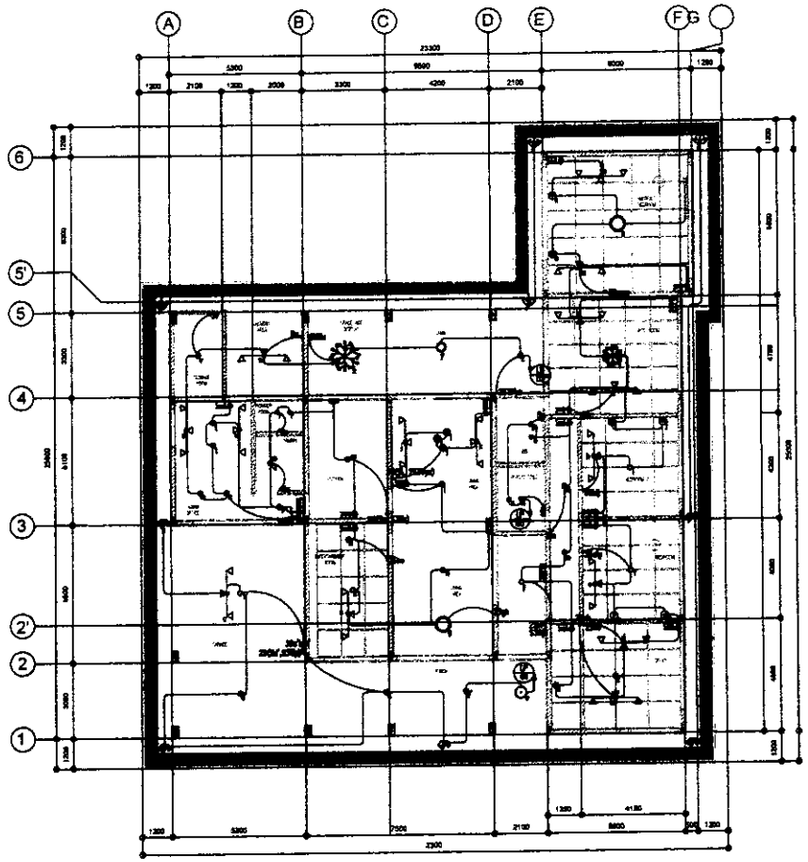
IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS)

LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY

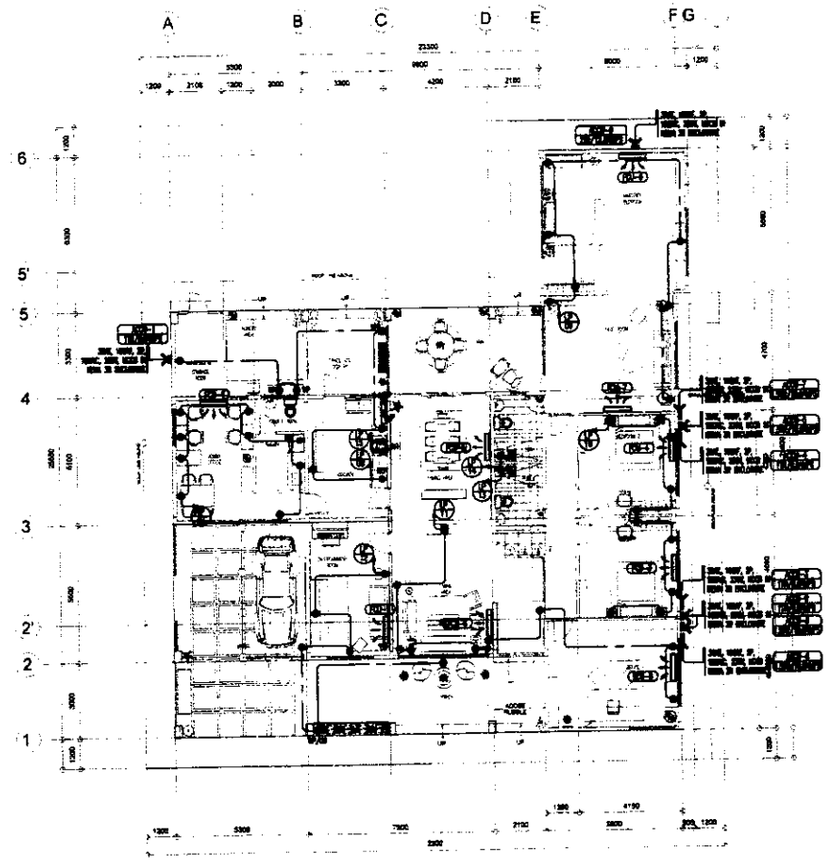
SHEET CONTENT: AS SHOWN

DESIGNED BY:	SUBMITTED BY:	APPROVED BY:
ENGR. KELVIN M. MARZONIA ENGINEER II - ELECTRICAL ENGINEER	ENGR. FREDISWINDE M. DE GUZMAN CHIEF, PLANNING AND DESIGN DIVISION	ATTY. MARK DALE DIAMOND P. PERRAL CITY ENGINEER
PRC. NO.: 0092235 / PTR. NO.: 7125598	PRC. NO.: 0070499 / PTR. NO.: 7125552	PRC. NO.: 0104992 / PTR. NO.: 7126600
VALID DATE: JUNE 02, 2025 / ISSUED DATE: JANUARY 10, 2025	VALID DATE: MARCH 28, 2027 / ISSUED DATE: JANUARY 10, 2025	VALID DATE: FEBRUARY 24, 2026 / ISSUED DATE: JANUARY 10, 2025

SHEET NO.: **EL-01**



1 EE-02 GROUND FLOOR LIGHTING SYSTEM LAYOUT
SCALE



1 EE-02 GROUND FLOOR POWER SYSTEM LAYOUT
SCALE

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Lungsod ng Quezon
DEPARTMENT OF ENGINEERING
Civic Center Building B, City Hall Compound, Elliptical Road
Diliman, Central 1100 Quezon City
Telephone: +63 2 8988 4243
E-mail address: engineering@quezoncity.gov.ph

PROJECT TITLE: PURCHASE REQUEST PLAN

IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS)

LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY

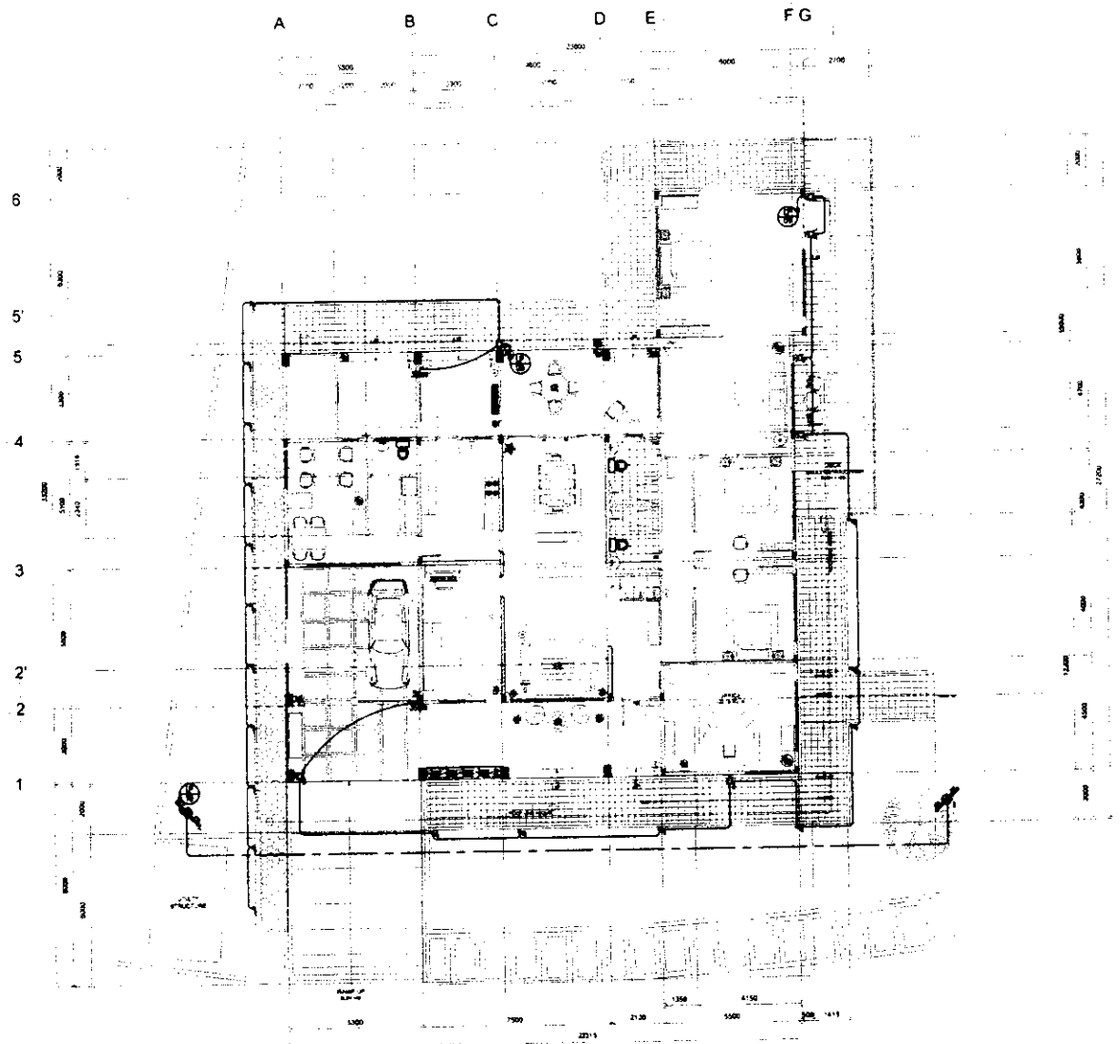
SHEET CONTENT: AS SHOWN

DESIGNED BY:
ENGR. KELVIN M. BARZONIA
ENGINEER II - ELECTRICAL ENGINEER
PRC NO.: 0095288 | PTR NO.: 7138999
VALID DATE: JUNE 02, 2025 | ISSUED DATE: JANUARY 10, 2025

SUBMITTED BY:
ENGR. FREDIMINDO C. DE GUZMAN
CHIEF, PLANNING AND DESIGN DIVISION
PRC NO.: 0070498 | PTR NO.: 7125552
VALID DATE: MARCH 28, 2027 | ISSUED DATE: JANUARY 10, 2025

APPROVED BY:
ATTY. MARK DALE DIAMOND P. PERRAL
CITY ENGINEER
PRC NO.: 0100882 | PTR NO.: 7139085
VALID DATE: FEBRUARY 24, 2028 | ISSUED DATE: JANUARY 15, 2025

SHEET NO.: **EL-02**



1 SITE DEVELOPMENT LIGHTING SYSTEM LAYOUT
EL-03 SCALE

NOTES ON PANELBOARD:

1. MAIN CIRCUIT BREAKER SHALL BE VERTICALLY MOUNTED ON COVER TOP OF THE PANELBOARD. ALL CIRCUIT BREAKERS SHALL BE BOLT-ON, MOLDED CASE CIRCUIT BREAKERS. WIRE JUMPER CONNECTION TO PHASE BUSBAR SHALL NOT BE PERMITTED.
2. LEXMAN PANELBOARD BRANCH CIRCUIT BREAKERS SHALL BE MINI 230 VOLTS FOR A TWO OR POLE BREAKER AND SHALL HAVE A RANGE OF 10 CLOMPERES AMPERAGE CAPACITY UNLESS OTHERWISE SPECIFIED.
3. ALL PANELBOARDS SHALL BE PROVIDED WITH MOLDED TERMINAL BLOCK FOR GROUND BUS. MAIN LUGS SHALL BE PROVIDED FOR CONNECTION TO BUILDING GROUNDING SYSTEM. LOCALLY FABRICATED MULTIPLE TERMINAL GROUND BLOCK SHALL NOT BE PERMITTED.
4. ALL PANELBOARD SHALL BE MADE WITH MINIMUM GAUGE 16 MSM SHEET AND POWDER-COATED PAINT WITH AND GRAY COLOR FINISHES.

NOTES:

1. LOCATION OF ENCLOSED CIRCUIT BREAKER OR COMBINATION OF BREAKER AND SERVICE SHALL BE INSIDE THE PUMPS OR MOTOR BRAND PROVIDED. REFER TO MECHANICAL, SANITARY AND FIRE PROTECTION PLAN FOR THE RECOMMENDED LOCATION.
2. CONDUIT CONNECTIONS FOR SUPPLIER TYPE, MS MCBs OR PANEL OR ENCLOSED CIRCUIT BREAKER SHALL BE PROVIDED WITH INSERT AND SEALANT.
3. FINAL SIZING OF CIRCUIT BREAKER SHALL BE CONFIRMED BY THE SUPPLIER PRIOR TO INSTALLATION TO COMPLY WITH MANUFACTURER'S REQUIREMENTS.
4. ALL CONDUIT FEEDER, VERTICAL AND HORIZONTAL RUN, SHALL BE PROVIDED WITH PERMANENT LABELING AND MARKING INDICATING THE CAPACITY OR SIZING EVERY 3 METERS.

Republika ng Pilipinas Lungsod ng Quezon DEPARTMENT OF ENGINEERING City Center Building 5, City Hall Compound, Elliptical Road Diliman, Sentral 1100 Quezon City Telephone: 403 2 8988 4242 E-mail address: engineering@quezoncity.gov.ph	PROJECT TITLE: PURCHASE REQUEST PLAN **IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS)** LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY	SHEET CONTENT AS SHOWN	DESIGNED BY ENGR. KELVIN M. BARZOMA ENGINEER I - ELECTRICAL ENGINEER PRC NO. 1105300 / PTR NO. 7128888 VALID DATE: JUNE 02, 2026 / ISSUED DATE: JANUARY 10, 2025	SUBMITTED BY ENGR. FREDISWINDAL DE GUZMAN CHIEF, PLANNING AND DESIGN DIVISION PRC NO. 0979459 / PTR NO. 7128883 VALID DATE: MARCH 28, 2027 / ISSUED DATE: JANUARY 10, 2025	APPROVED BY ATTY. MARK DALE DIAMOND P. PERRAL CITY ENGINEER PRC NO. 2499962 / PTR NO. 7128905 VALID DATE: FEBRUARY 24, 2026 / ISSUED DATE: JANUARY 16, 2025	SHEET NO. **EL-03**

1 LOAD SCHEDULE (EE-04)

PANEL: MDP
LOCATION: AS PER PLAN
MOUNTING: NEMA 1, SURFACE MOUNTED WITH GRAY POWDERED PAINT FINISH WITH MULTI-TERMINAL BLOCK FOR SOLID GROUND BUS.

CKT. NO.	LOAD DESCRIPTION	VOLT	VOLT AMPERE	AMPERE LOAD	PROTECTION AT	AF	P	AIC	TYPE	WIRE & CONDUIT
1	LP	230	28160	128.01	150	225	2	10	MCCB	SEE LOAD SCHEDULE
2	1-2.0HP ACCU - 9	230	2760	12.00	30	100	2	10	MCCB	60.5
3	1-1.5HP ACCU - 8	230	2300	10.00	30	100	2	10	MCCB	60.5
4	1-1.5HP ACCU - 7	230	2300	10.00	30	100	2	10	MCCB	60.5
5	1-1.5HP ACCU - 6	230	2300	10.00	30	100	2	10	MCCB	60.5
6	1-1.5HP ACCU - 5	230	2300	10.00	30	100	2	10	MCCB	60.5
7	1-1TR ACCU - 4	230	1840	8.00	30	100	2	10	MCCB	60.5
8	1-1TR ACCU - 3	230	1840	8.00	30	100	2	10	MCCB	60.5
9	1-1TR ACCU - 2	230	1840	8.00	30	100	2	10	MCCB	60.5
10	1-1TR ACCU - 1	230	1840	8.00	30	100	2	10	MCCB	60.5
11	PROVISION FOR FACP	230	1000	4.35	20	100	2	10	MCCB	20mmØ IMC
12	PROVISION FOR MWR	230	1000	4.35	20	100	2	10	MCCB	20mmØ IMC
13	SPARE	230	1000	4.35	20	100	2	10	MCCB	20mmØ IMC
14	SPARE	230	1000	4.35	20	100	2	10	MCCB	20mmØ IMC
				228.30						

I_t = 228.30 + 25%(12.00) = 231.30
USE : 2 SETS OF 2 - 30mm² THHN(L) + 1 - 14mm² THHN(G) IN 32mmØ IMC
MAIN : 250AT, 250AF, 2P, 230V, 22KAIC MCCB

PANEL: LP
LOCATION: AS PER PLAN
MOUNTING: NEMA 1, SURFACE MOUNTED WITH GRAY POWDERED PAINT FINISH WITH MULTI-TERMINAL BLOCK FOR SOLID GROUND BUS.

CKT. NO.	LOAD DESCRIPTION	VOLT	VOLT AMPERE	AMPERE LOAD	PROTECTION AT	AF	P	AIC	TYPE	WIRE & CONDUIT
1	LIGHTING OUTLET	230	500	2.17	20	100	2	10	MCCB	60.5
2	LIGHTING OUTLET	230	980	4.26	20	100	2	10	MCCB	60.5
3	LIGHTING OUTLET	230	1140	4.96	20	100	2	10	MCCB	60.5
4	LIGHTING OUTLET	230	650	2.83	20	100	2	10	MCCB	60.5
5	LIGHTING OUTLET	230	1300	5.67	20	100	2	10	MCCB	60.5
6	SPARE	230	1100	4.78	20	100	2	10	MCCB	20mmØ IMC
7	9 - COMMENCE OUTLET	230	1620	7.04	20	100	2	10	MCCB	60.5
8	7 - COMMENCE OUTLET	230	1380	6.00	20	100	2	10	MCCB	60.5
9	7 - COMMENCE OUTLET	230	1380	6.00	20	100	2	10	MCCB	60.5
10	10 - COMMENCE OUTLET	230	1800	7.83	20	100	2	10	MCCB	60.5
11	8 - COMMENCE OUTLET	230	1440	6.26	20	100	2	10	MCCB	60.5
12	6 - COMMENCE OUTLET	230	1100	4.78	20	100	2	10	MCCB	60.5
13	1 - 3.5KW WATER HEATER	230	3500	15.22	20	100	2	10	MCCB	60.5
14	1 - 3.5KW WATER HEATER	230	3500	15.22	20	100	2	10	MCCB	60.5
15	RANGE/RANGEHOOD	230	5500	23.91	30	100	2	10	MCCB	60.5
16	HI MAST	230	1000	4.35	20	100	2	10	MCCB	60.5
17	SPARE	230	1000	4.35	20	100	2	10	MCCB	20mmØ IMC
				128.01						

I_t = 128.01
USE : 2 - 50mm² THHN(L) + 1 - 14mm² THHN(G) IN 40mmØ IMC (EXISTING)
MAIN : 150AT, 225AF, 2P, 230V, 22KAIC MCCB

2 DESIGN CALCULATION (EE-04)

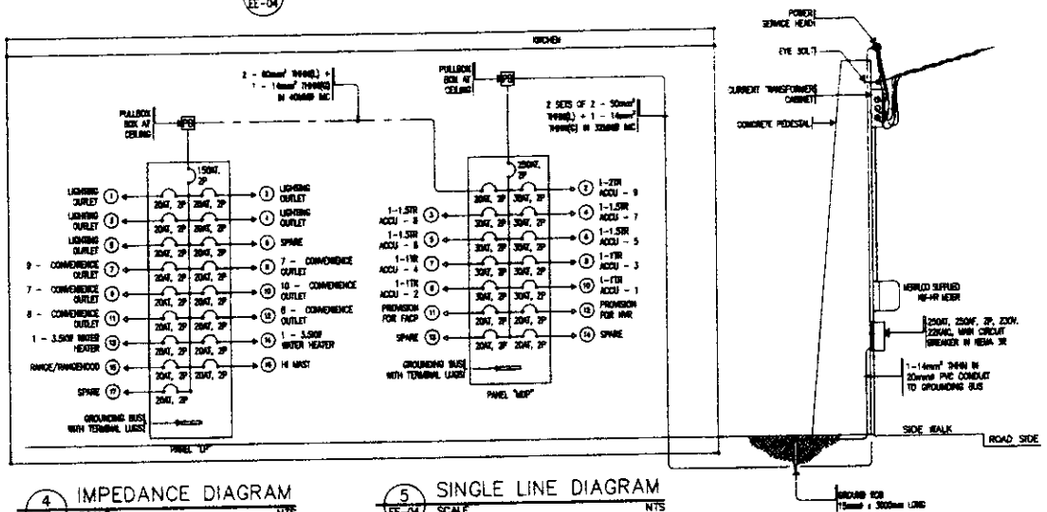
PANEL: MDP

1. AIR CONDITIONING LOAD
   - A. 1-2TR, ACCU AT 12.00 AMPS
     1 x 12.00 x 230V ——— 2760 VA
   - B. 4-1.5TR, ACCU AT 10.00 AMPS
     4 x 10.00 x 230V ——— 9200 VA
   - C. 4-1TR, ACCU AT 8.00 AMPS
     4 x 8.00 x 230V ——— 7360 VA
   - SUB-TOTAL 18320 VA
2. OTHER LOADS
   - A. PANEL LP ——— 28160 VA
   - B. PROVISION FOR MWR
     1000VA ——— 1000 VA
   - C. PROVISION FOR FACP
     1000VA ——— 1000 VA
   - SUB-TOTAL 31480 VA
3. OTHER LOADS
   - TOTAL CONNECTED LOAD 51480 VA
5. SERVICE EMERGENCY CALCULATION
   - I_t = [51480 ÷ (25% x 27000)] ÷ 230V ——— 225.32 AMPS

PANEL: LP

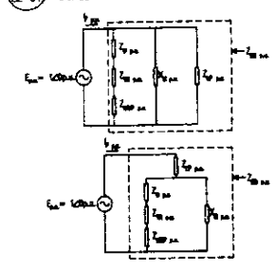
1. LIGHTING LOAD
   - 600.00 M² x 24 VA/M² ——— 14400 VA
2. OTHER LOADS
   - A. SMALL APPLIANCE LOAD
     47 x 180VA ——— 8460 VA
   - B. 2 - 3.5KW WATER HEATER
     2 x 3500VA ——— 7000 VA
   - SUB-TOTAL 15460 VA
   - TOTAL CONNECTED LOAD 29860 VA
5. SERVICE EMERGENCY CALCULATION
   - I_t = [29860] ÷ 230V ——— 128.83 AMPS
   - USE : 2-50mm² (L) + 1-14mm² (G) THHN/THWN IN 40mmØ IMC
     150AT, 225AF, 2P, 230V, 22KAIC MCCB

3 RISER DIAGRAM (EE-04)



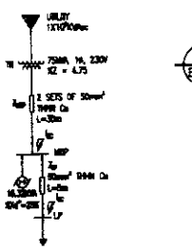
4 IMPEDANCE DIAGRAM (EE-04)

SCALE NTS



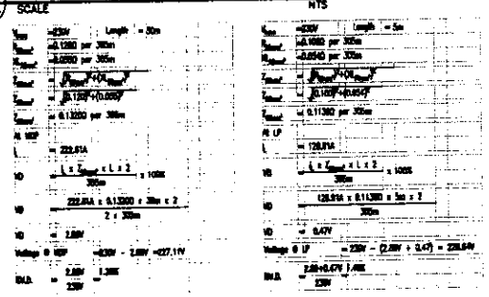
5 SINGLE LINE DIAGRAM (EE-04)

SCALE NTS



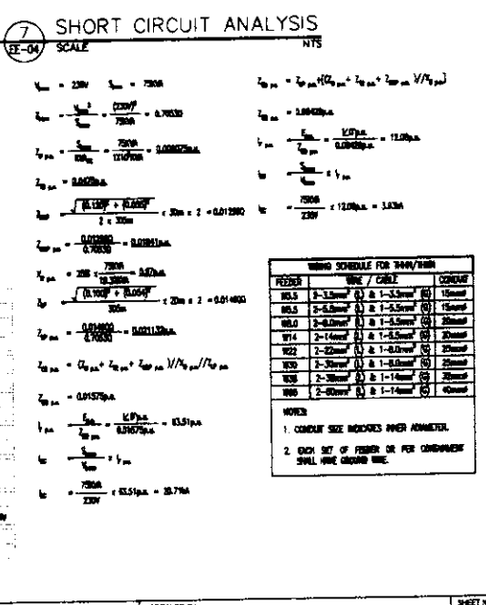
6 VOLTAGE DROP CALCULATION (EE-04)

SCALE NTS



7 SHORT CIRCUIT ANALYSIS (EE-04)

SCALE NTS



WIRING SCHEDULE FOR THHN/THWN			
FEEDER	WIRE / CABLE		CONDUIT
60.5	3-3.5mm² (L) & 1-3.5mm² (G)		15mmØ
60.5	3-5.5mm² (L) & 1-5.5mm² (G)		15mmØ
60.5	3-8.0mm² (L) & 1-5.5mm² (G)		20mmØ
101.4	2-14mm² (L) & 1-5.5mm² (G)		20mmØ
102.2	2-22mm² (L) & 1-8.0mm² (G)		25mmØ
153.0	2-38mm² (L) & 1-8.0mm² (G)		25mmØ
153.0	2-38mm² (L) & 1-14mm² (G)		25mmØ
180.0	2-50mm² (L) & 1-14mm² (G)		40mmØ

NOTES:
1. CONDUIT SIZE INDICATES INNER DIAMETER.
2. EACH SET OF FEEDER OR PER CONDUIT SHALL HAVE GROUND WIRE.

Republika ng Pilipinas, Lungsod ng Quezon, DEPARTMENT OF ENGINEERING, Civic Center Building B, City Hall Development, Elliptical Road, Diliman, Quezon City, Telephone: 453 1 6866 4342, Email address: engineering@quezoncity.gov.ph	PROJECT TITLE: PURCHASE REQUEST PLAN IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS) LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY	SHEET CONTENT: AS SHOWN	DESIGNED BY: ENGR. KELVIN B. BURZONIA, ENGINEER I - ELECTRICAL ENGINEER PRC NO. 1000209 / PTR NO. 7128880 VALID DATE: JUNE 22, 2026 / ISSUED DATE: JANUARY 10, 2025	SUBMITTED BY: ENGR. FREDISWINDA B. DE GUZMAN, CHIEF, PLANNING AND DESIGN DIVISION PRC NO. 1074488 / PTR NO. 7128842 VALID DATE: MARCH 28, 2027 / ISSUED DATE: JANUARY 10, 2025	APPROVED BY: ATTY. MARK DALE DIAMOND P. PERRAL, CITY ENGINEER PRC NO. 2108882 / PTR NO. 7128865 VALID DATE: FEBRUARY 24, 2028 / ISSUED DATE: JANUARY 10, 2025	SHEET NO. EL-04

1 GENERAL NOTES (ECE-01)

ALL ELECTRONIC WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES WITH THE REQUIREMENTS OF THE LOCAL EXCHANGE CARRIER (LEC) OR SERVICE PROVIDER AND SHALL COMPLY WITH THE IMPLEMENTING RULES AND REGULATION OF REPUBLIC ACT 9292 (I.R.R. 9292) REFFERED TO AS THE NEW ECE LAW OR ELECTRONICS LAW OF 2004.

1. ALL ELECTRONICS WORKS HEREIN SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY QUALIFIED, LICENSED AND EXPERIENCED ELECTRONICS ENGINEER.
2. ALL EQUIPMENTS, COMPONENTS, WIRING AND INSTALLATION OF ALL ITEMS DESCRIBED OR IMPLIED IN THE PLANS SHALL BE NEW, (UL) UNDERWRITERS LABORATORY LISTED AND APPROVED FOR USE.
3. THE INSTALLATION OF EACH SYSTEM COMPONENT , ASSOCIATED EQUIPMENT AND WIRING SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATION AND INSTRUCTION.
4. THE CONTRACTOR/CERTIFIED INSTALLER SHALL OBSERVE PROPER INSTALLATION PRACTICES AND ADHERE TO CABLE MANUFACTURERS REQUIREMENT FOR BENDING RADIUS, PULLING TENSION, CABLE SLACK, CABLE FILL ETC..
5. ALL VOICE, DATA, VIDEO, AND OTHER ELECTRONICS RELATED CABLES SHALL BE WITHIN OR CONCEALED IN A CONDUIT, WIREWAY, PATHWAY, RISERWAY AND OTHER CABLE DELIVERY SYSTEM.
6. ALL METALLIC CONDUIT, CABINET, BOXES AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
7. WHENEVER NECESSARY PULLBOX OF PROPER SIZE AND DIMENSION SHALL BE PROVIDED ALTHOUGH NOT INDICATED IN THE PLAN. ALL BOXES SHALL BE PROVIDED WITH COVER.
8. ALL CONDUIT SLEEVES, FLOOR PIPE CHASE AND WALL SLOT PENETRATION THROUGH EQUIPMENT ROOM AND TELECOMS ROOM SHALL BE PROPERLY SEALED-OFF WITH FIRESTOP MATERIAL TO MAINTAIN FIRE RESISTIVE RATING OF THE OPENING.
9. THE CONTRACTOR/INSTALLER SHALL FULLY COORDINATE THE DESIGN , EQUIPMENT ,DEVICES ,WIRING, CONNECTION OF ALL ELECTRONIC SYSTEMS WITH THE PROJECT MANAGER THROUGHOUT EACH DEVELOPMENTAL PHASE OR STAGE OF THE PROJECT.
10. THE CONTRACTOR/INSTALLER SHOULD REFER TO ARCHITECTURAL OR INTERIOR DESIGN DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHT OF ALL VISIBLE WIRING DEVICES ,EQUIPMENT AND FIXTURES.
11. THE ELECTRONICS CONTRACTOR SHALL PROVIDE SHOP DRAWING IN ANY CHANGES IN THE DESIGN SUCH AS MOUNTING HEIGHT OR LOCATION OF THE DEVICE/EQUIPMENT FOR THE APPROVAL OF ARCHITECT OR ENGINEER.
12. ANY DISCREPANCIES BETWEEN PLANS AND SPECIFICATION, CONFLICT WITH OTHER TRADE OR SITE CONDITION SHALL BE REFERRED TO ENGINEER AND/OR ARCHITECT.
13. THE CONTRACTOR/CERTIFIED INSTALLER SHALL BE RESPONSIBLE TO CONDUCT ALL ACCEPTANCE TESTING WITH THE APPROVED AND CALIBRATED TESTING EQUIPMENT IN THE PRESENCE OF THE AUTHORIZED CUSTOMER REPRESENTATIVE AND PROJECT MANAGER.
14. THE INSTALLATION, WORKMANSHIP,TESTING , DOCUMENTATION AND ADMINISTRATION MUST BE OF THE HIGHEST QUALITY.
15. THE ELECTRONICS CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEERS FINAL CERTIFICATES OF ELECTRONICS INSPECTION AND APPROVAL FROM PROPER

2 NOTES (ECE-01)

1. SMOKE DETECTORS SHALL BE PROVIDED BY CONTRACTOR WHICH WILL INCLUDE WIRING AND CONDUIT FOR ADDITIONAL ADDRESSABLE CONTROL DEVICES IN THE FDAS CONTROL PANEL.
2. ALL ADDRESSABLE SMOKE DETECTORS INDICATED IN THE BUILDING PLAN SHALL BE RELOCATED AS AFFECTED BY ACTUAL SITE CONDITION.
3. THE FDAS CONTRACTOR SHALL BE PROPERLY COORDINATED IN ANY CHANGES IN THE SMOKE DETECTOR LAYOUT AS WELL AS WIRING CONNECTION.
4. SMOKE DETECTORS/HEAT DETECTORS SHALL BE OF THE SAME BRAND AND MODEL AS THE EXISTING UNITS ON SITE.

3 TESTING (ECE-01)

1. SUBMIT TEST REPORT.
2. CONDUCT SMOKE TEST PRIOR TO ACTUATION AT WALL FDAS.
3. ALL TESTING SHALL BE WITNESSED BY WALL ENGINEERING PERSONNEL.
4. COORDINATE WITH WALL ACCREDITED FDAS CONTRACTOR.

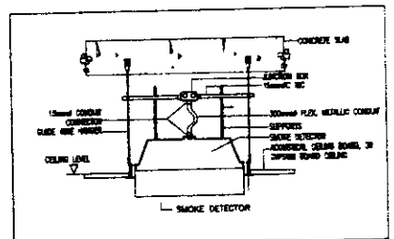
4 LEGENDS (ECE-01)

LEGENDS

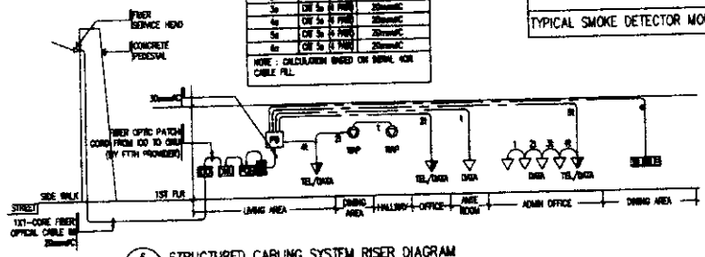
- FIXED BULLET TYPE NON VARIFOCAL LENS, CMOS COLOR 2-MEGA PIXEL, 4MM, 1/3" CMOS, 30M IR
- FIXED DOME TYPE NON VARIFOCAL LENS, CMOS COLOR 2-MEGA PIXEL, 4MM, 1/3" CMOS, 30M IR VIDEO SURVEILLANCE CAMERA
- TEL/DATA OUTLET (WALL MOUNTED)
- OPTICAL NETWORK UNIT
- INDOOR OPTICAL OUTLET
- NVR — NETWORK VIDEO RECORDER
- CAT5e, 4-PAIR UTP CABLE (CCTV)
- CAT5e, 4-PAIR UTP CABLE (DATA & TELEPHONE)

CABLE CONDUIT FILL CHART			
NUMBER OF RUNS	WIRE	CONDUIT SIZE	
1	CAT 5e (4 PAIR)	15mmØC	
2a	CAT 5e (4 PAIR)	15mmØC	
3a	CAT 5e (4 PAIR)	20mmØC	
4a	CAT 5e (4 PAIR)	25mmØC	
5a	CAT 5e (4 PAIR)	30mmØC	
6a	CAT 5e (4 PAIR)	30mmØC	

NOTE : CALCULATION BASED ON 60% ADD CABLE FILL



TYPICAL SMOKE DETECTOR MOUNTING DETAIL (CEILING MOUNT)

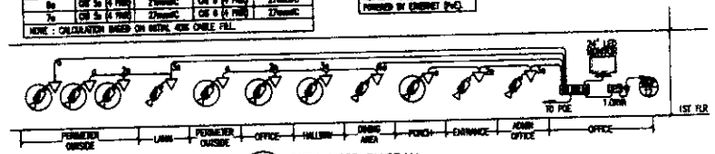


6 STRUCTURED CABLING SYSTEM RISER DIAGRAM (ECE-01)

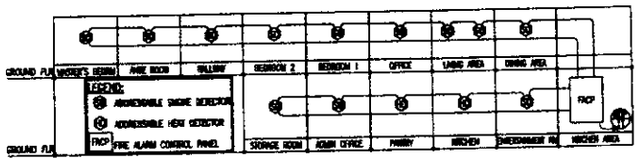
CABLE CONDUIT FILL CHART				
NUMBER OF RUNS	WIRE	CONDUIT SIZE	WIRE	CONDUIT SIZE
1	CAT 5e (4 PAIR)	16mmØC	CAT 6 (4 PAIR)	16mmØC
2a	CAT 5e (4 PAIR)	16mmØC	CAT 6 (4 PAIR)	16mmØC
3a	CAT 5e (4 PAIR)	16mmØC	CAT 6 (4 PAIR)	21mmØC
4a	CAT 5e (4 PAIR)	21mmØC	CAT 6 (4 PAIR)	21mmØC
5a	CAT 5e (4 PAIR)	21mmØC	CAT 6 (4 PAIR)	27mmØC
6a	CAT 5e (4 PAIR)	21mmØC	CAT 6 (4 PAIR)	27mmØC
7a	CAT 5e (4 PAIR)	27mmØC	CAT 6 (4 PAIR)	27mmØC

NOTE : CALCULATION BASED ON 60% ADD CABLE FILL

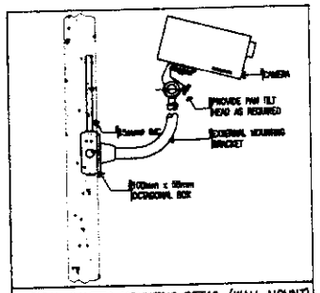
NOTE:
NETWORK VIDEO RECORDER (NVR) SHALL HAVE 30-DAY MEMORY OR PER MANUFACTURER'S MANUAL.
ALL CCTV CAMERAS SHALL BE POWERED BY ETHERNET (PoE).



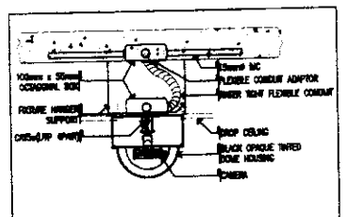
7 CCTV RISER DIAGRAM (ECE-01)



5 FDAS RISER DIAGRAM (ECE-01)



TYPICAL CAMERA MOUNTING DETAIL (WALL MOUNT)



TYPICAL CAMERA MOUNTING DETAIL (CEILING MOUNT)

Republika ng Pilipinas
Lungsod ng Quezon
DEPARTMENT OF ENGINEERING
Civic Center Building B, City Hall Compound, Elliptical Road
Diliman, Central 1100 Quezon City
Telephone : 43 2 8988 4242
E-mail address: engineering@ais.quezoncity.gov.ph

PROJECT TITLE: PURCHASE REQUEST PLAN

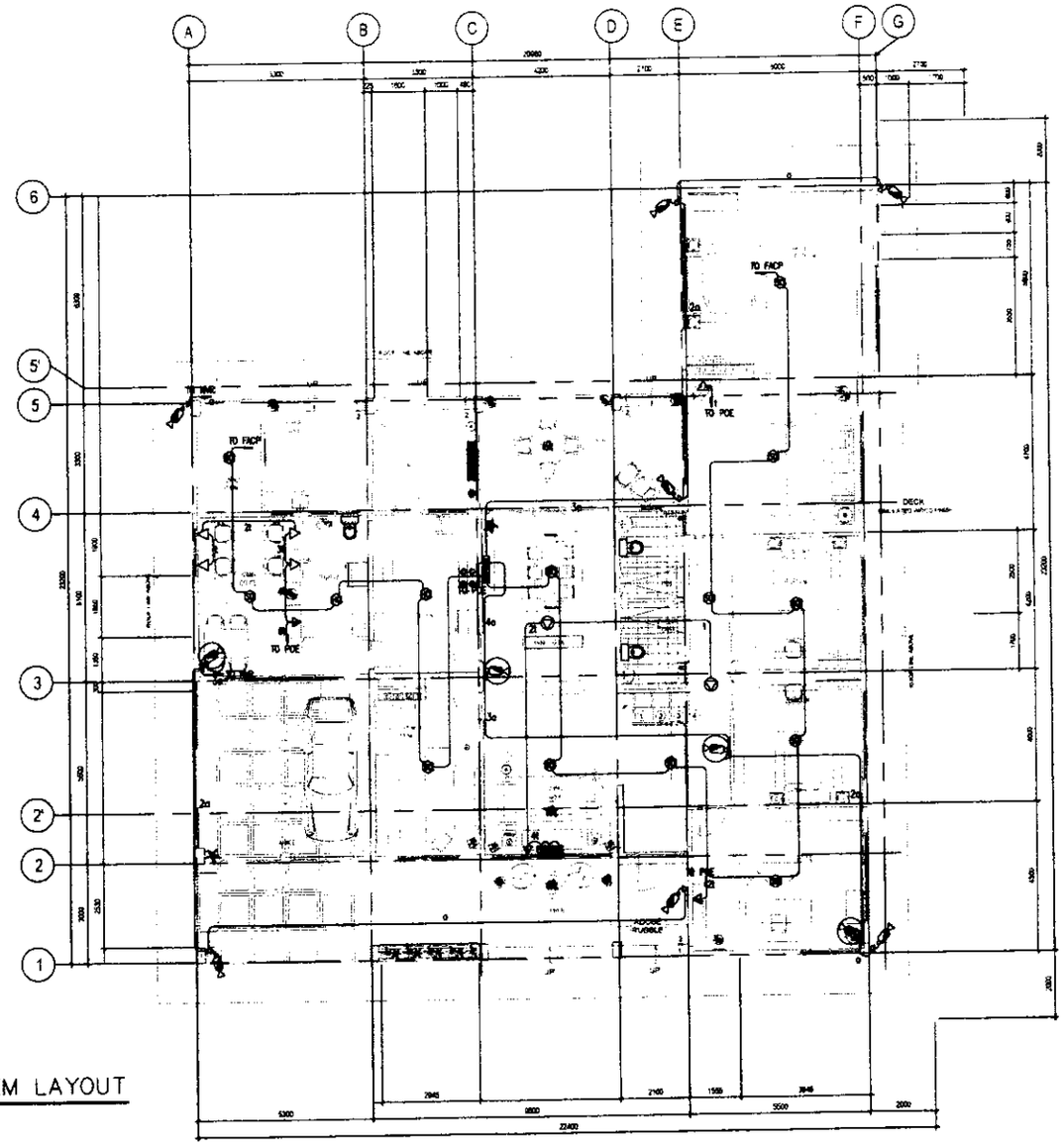
IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS)

LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY

SHEET CONTENT: AS SHOWN

DESIGNED BY:	SUBMITTED BY:	APPROVED BY:
ENGR. KELVIN M. MARZONIA ENGINEER II - ELECTRICAL ENGINEER	ENGR. FREDISWINDA M. DE GUZMAN CHIEF, PLANNING AND DESIGN DIVISION	ATTY. MARK DALE DIAMOND P. PERRAL CITY ENGINEER
PRC NO. 0305209 / PTR NO. 7125588	PRC NO. 0070408 / PTR NO. 7128652	PRC NO. 0109982 / PTR NO. 7128886
VALID DATE: JUNE 30, 2026 / ISSUED DATE: JANUARY 10, 2025	VALID DATE: MARCH 28, 2027 / ISSUED DATE: JANUARY 10, 2025	VALID DATE: FEBRUARY 24, 2026 / ISSUED DATE: JANUARY 15, 2025

SHEET NO.: **EL-05**



1 ECE-02 GROUND FLOOR AUXILIARY SYSTEM LAYOUT
SCALE

Republika ng Pilipinas Lungsod ng Quezon DEPARTMENT OF ENGINEERING	PROJECT TITLE: PURCHASE REQUEST PLAN **IMPROVEMENT OF BAHAY MODERNISMO AT QUEZON CITY MEMORIAL CIRCLE (ADDITIONAL ITEMS)** LOCATION: BARANGAY CENTRAL, DISTRICT 4, QUEZON CITY	SHEET CONTENT: AS SHOWN	DESIGNED BY: ENGR. KELVIN M. BARZONIA ENGINEER 4 - ELECTRICAL ENGINEER PRC NO. 0099285 / PTR NO. 7129884 VALID DATE: JUNE 02, 2028 / ISSUED DATE: JANUARY 10, 2025	SUBMITTED BY: ENGR. FREDISWINDA DL. DE GUZMAN CHIEF, PLANNING AND DESIGN DIVISION PRC NO. 0079499 / PTR NO. 7129883 VALID DATE: MARCH 28, 2027 / ISSUED DATE: JANUARY 10, 2025	APPROVED BY: ATTY. MARK DALE DIAMOND P. PERRAL CITY ENGINEER PRC NO. 0109882 / PTR NO. 7129880 VALID DATE: FEBRUARY 24, 2028 / ISSUED DATE: JANUARY 16, 2025	SHEET NO. **EL-06**