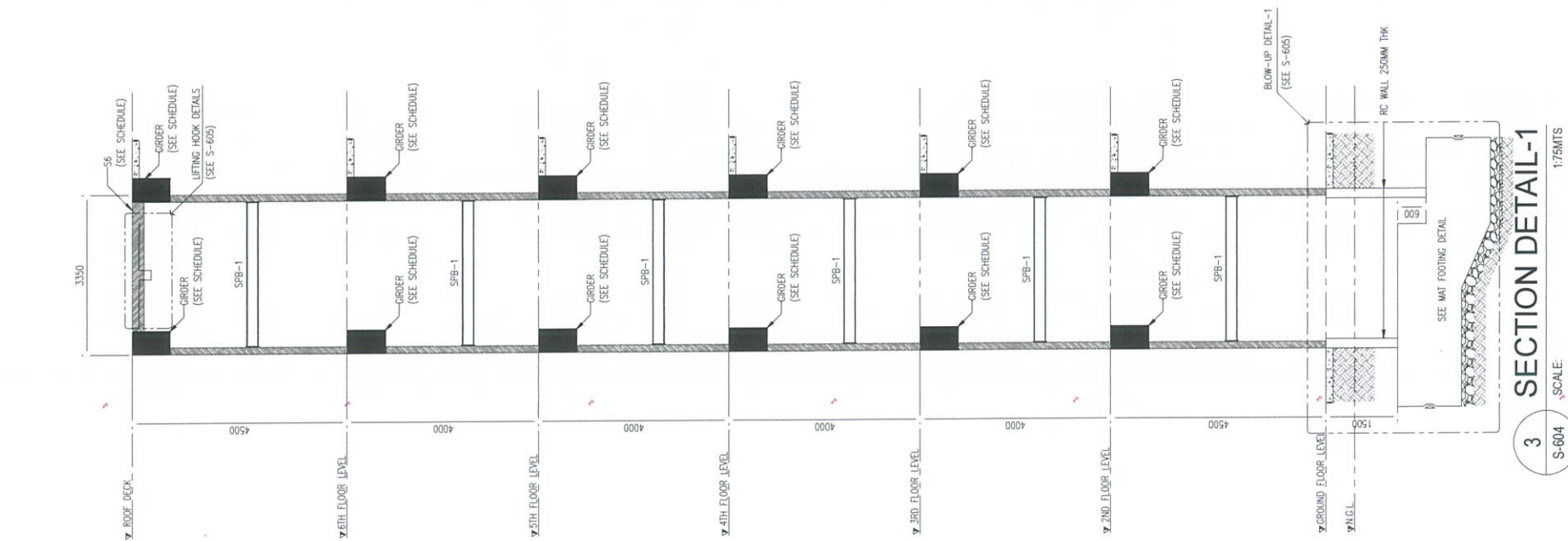
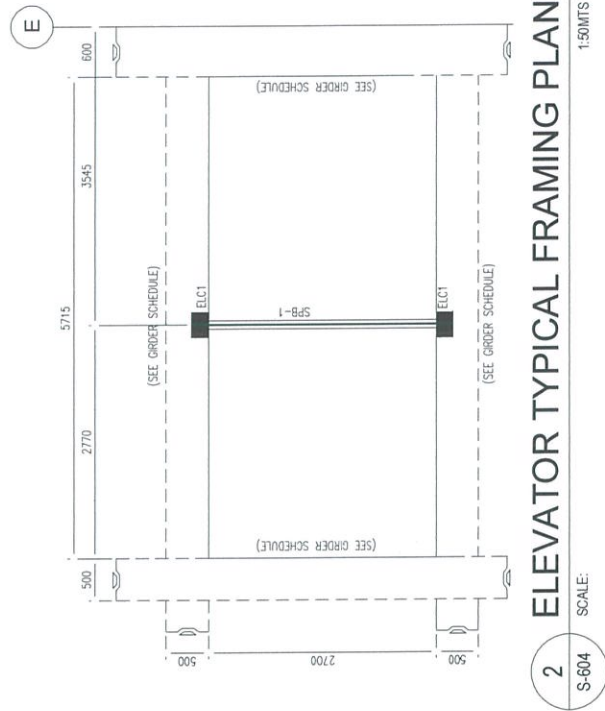
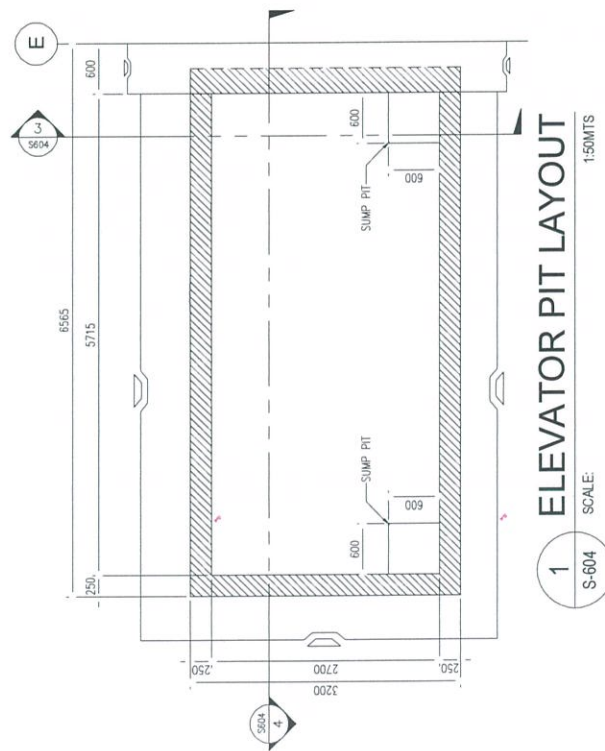


DRAWING SCALE:	SHEET NO:
AS SHOWN	S-603

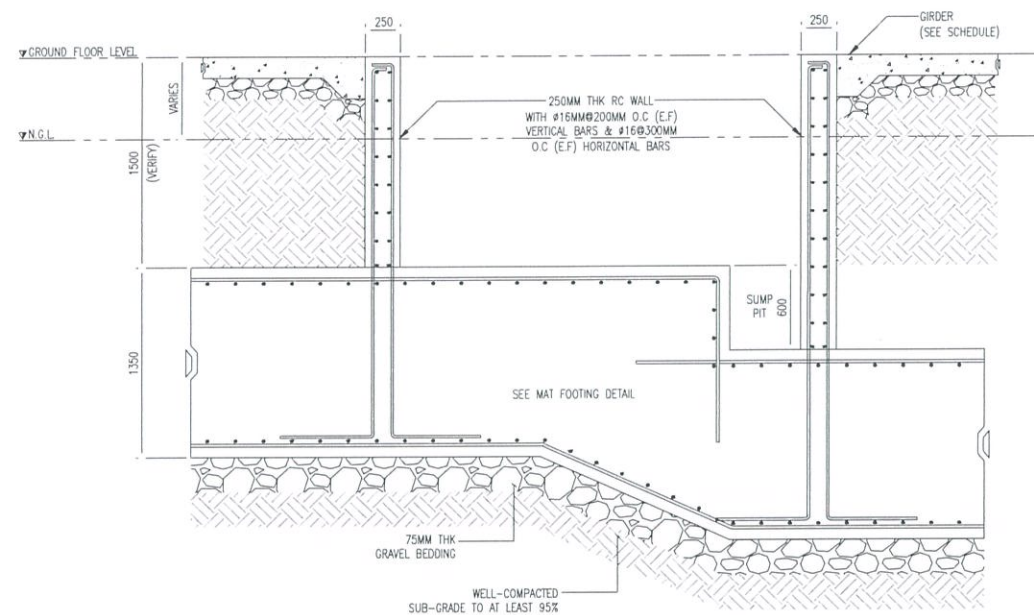


REPUBLIC OF THE PHILIPPINES

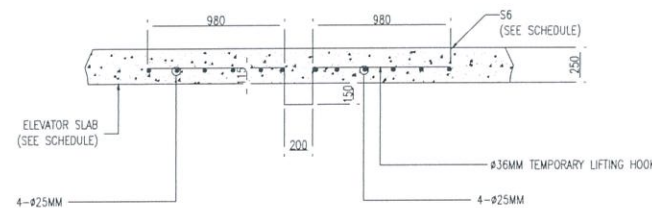
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

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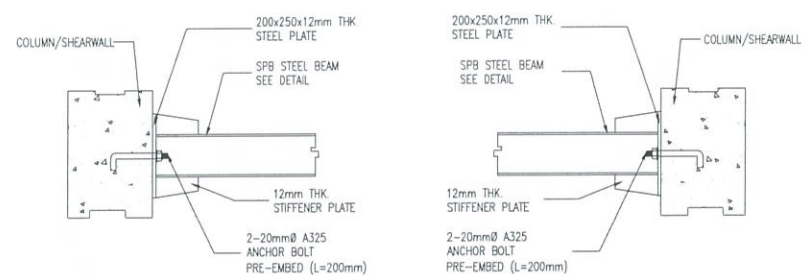
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE	
INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION	
DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	IDDD
DRAWN BY:	IDDD
CHECKED BY:	
REVIEWED BY:	
 RAUL R. CRUCENA Division Chief III, IDDD-AED	
SUBMITTED BY:	
 ARNEL F. BORLADO Department Manager III, AED-ADMS	
RECOMMEND APPROVAL:	
 LT COL VALENTINO A DIONELA PAF (RET) Assistant Director General II, ADMS	
APPROVED BY:	
 CAPTAIN MANUEL ANTONIO L. TAMAYO Director General	
NOTES/REVISIONS:	
PROJECT:	
NEW CAAP BUILDING	
LOCATION:	
CAAP HEAD OFFICE NAIA ROAD, PASAY CITY	
SHEET CONTENTS:	
ELEVATOR PIT LAYOUT ELEVATOR TYPICAL FRAMING PLAN SECTION DETAIL-1 SECTION DETAIL-2	
DRAWING SCALE:	SHEET NO:
AS SHOWN	S-604



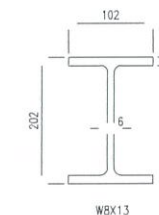
1 BLOW-UP DETAIL-1
S-605 SCALE: 1:30MTS



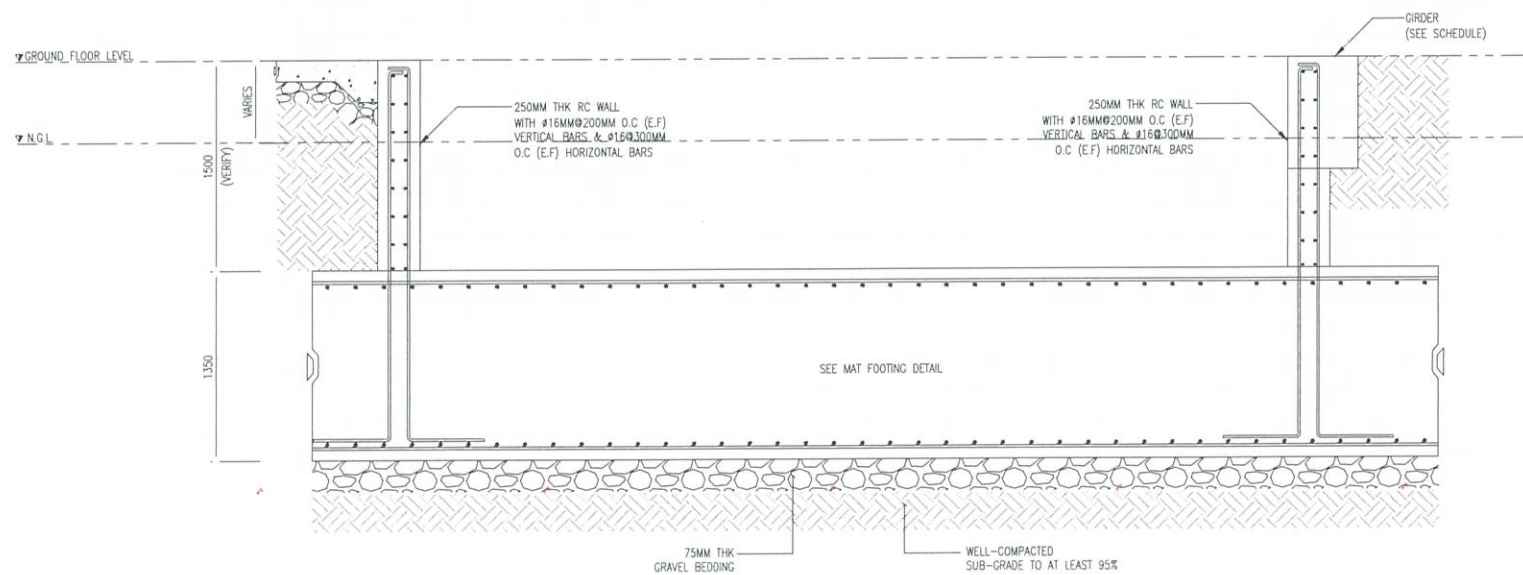
3 LIFTING HOOK DETAILS
S-605 SCALE: 1:25MTS



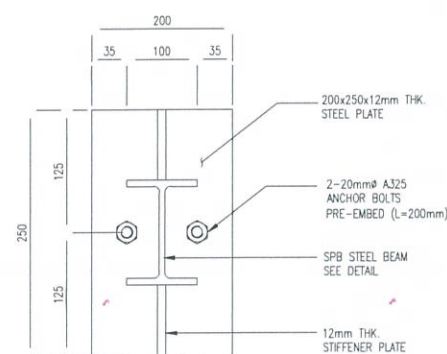
4 CONNECTION DETAILS
S-605 SCALE: 1:30MTS



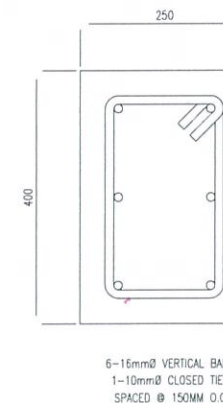
6 SPB DETAIL
S-605 SCALE: 1:5MTS



2 BLOW-UP DETAIL-2
S-605 SCALE: 1:30MTS



5 BASE PLATE DETAIL
S-605 SCALE: 1:12MTS



7 ELC1 DETAIL
S-605 SCALE: 1:5MTS

- NOTES:
1. VERIFY DEPTH OF ELEVATOR PIT AS PER REQUIREMENTS OF ELEVATOR SUPPLIER.
 2. SEPARATOR BEAM SHOWN ARE ALL INDICATIVE ONLY. VERIFY ACTUAL LOCATIONS & QUANTITY AS PER REQUIREMENTS OF ELEVATOR SUPPLIER.
 3. VERIFY & PROVIDE (AS NEEDED) STIFFENER BEAM & STIFFENER COLUMN LOCATIONS & QUANTITY AS PER REQUIREMENTS OF ELEVATOR SUPPLIERS.



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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	IDDD
DRAWN BY:	IDDD
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RAUL R. CRUCENA
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Department Manager III, AED-ADMS

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LT COL VALENTINO A. DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
BLOW-UP DETAIL-1
BLOW-UP DETAIL-2
LIFTING HOOK DETAILS
CONNECTION DETAILS
SPB DETAIL
ELC1 DETAIL

DRAWING SCALE:	SHEET NO:
AS SHOWN	S-605



REPUBLIC OF THE PHILIPPINES
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, PASAY CITY

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AERODROME DEVELOPMENT
AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT
AND DESIGN DIVISION

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Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

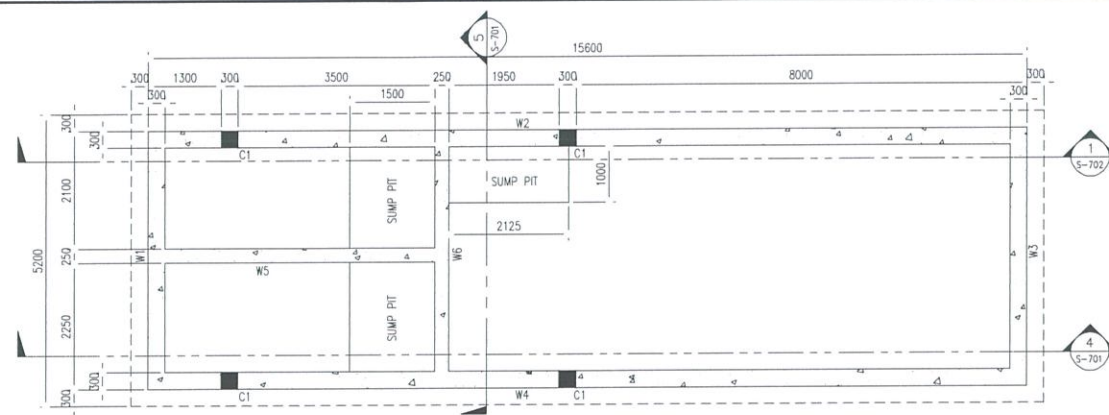
NEW CAAP BUILDING

LOCATION:

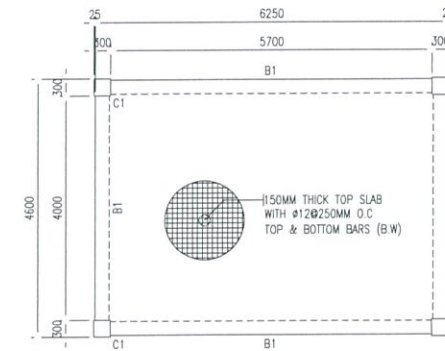
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
FOUNDATION PLAN
FRAMING PLAN
COLUMN (C1) DETAIL
BEAM (B1) DETAIL
SECTION DETAIL

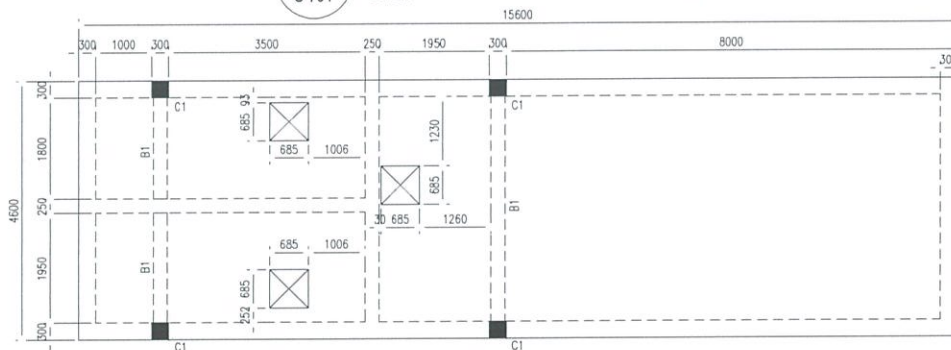
DRAWING SCALE:	SHEET NO:
AS SHOWN	S-701



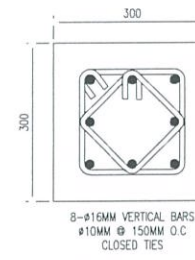
1
S-701
CISTERN & FIRE RESERVE TANK
FOUNDATION PLAN
SCALE: 1:75MM



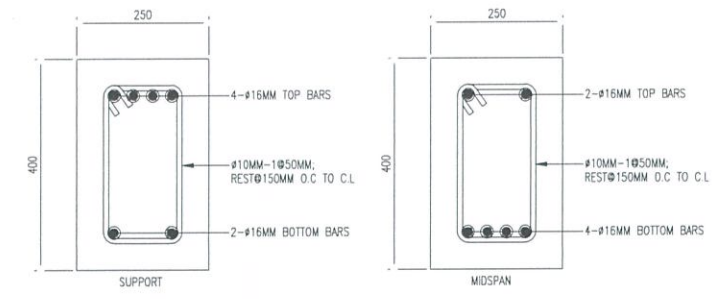
3
S-701
CISTERN & FIRE RESERVE TANK
ROOF DECK FRAMING PLAN
SCALE: 1:75MM



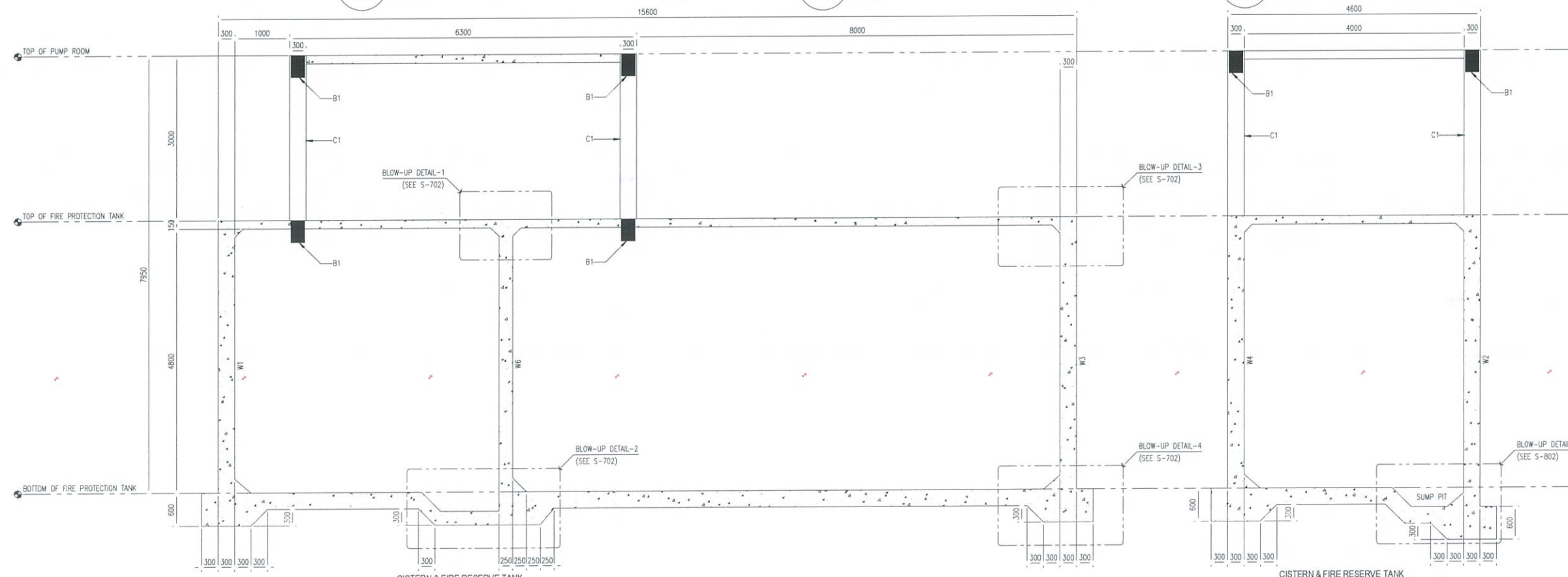
2
S-701
CISTERN & FIRE RESERVE TANK
TOP SLAB FRAMING PLAN
SCALE: 1:75MM



7
S-701
CISTERN & FIRE RESERVE TANK
COLUMN (C1) DETAIL
SCALE: 1:5

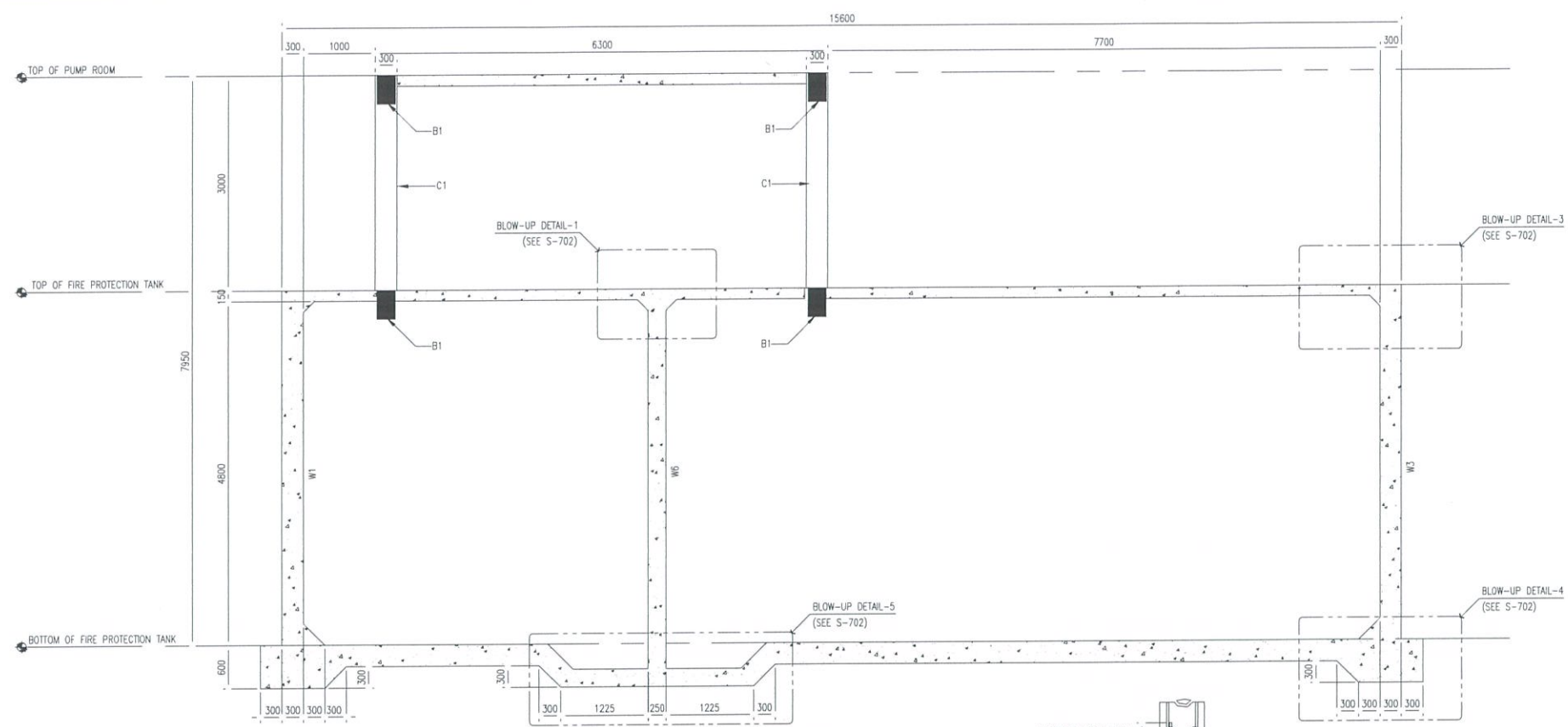


6
S-701
CISTERN & FIRE RESERVE TANK
BEAM (B1) DETAIL
SCALE: 1:5



4
S-701
CISTERN & FIRE RESERVE TANK
SECTION DETAIL 1
SCALE: 1:75MM

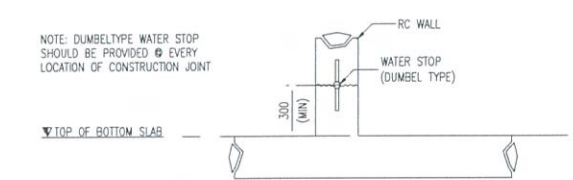
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S-701
CISTERN & FIRE RESERVE TANK
SECTION DETAIL 2
SCALE: 1:75MM



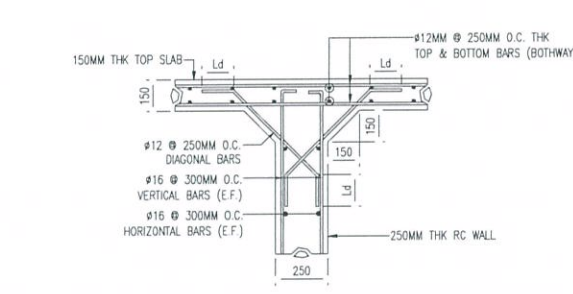
1 SECTION DETAIL 3
S-702 SCALE: 1:50MM

DESIGNATION	THICKNESS (MM)	REINFORCEMENT CONTINUOUS BAR (EACH FACE)		CONCRETE STRENGTH, f'_c (psi)	REBAR YIELD STRENGTH, f_y (MPa)
		HORIZONTAL	VERTICAL		
		W1, W2, W3, W4	W5, W6		
W1	300	#16MM @ 200MM O.C.	#16MM @ 150MM O.C.	4000	414
W2	300	#16MM @ 200MM O.C.	#16MM @ 150MM O.C.		
W3	300	#16MM @ 200MM O.C.	#16MM @ 200MM O.C.		
W4	300	#16MM @ 200MM O.C.	#16MM @ 200MM O.C.		
W5	250	#16MM @ 300MM O.C.	#16MM @ 300MM O.C.		
W6	250	#16MM @ 300MM O.C.	#16MM @ 300MM O.C.		

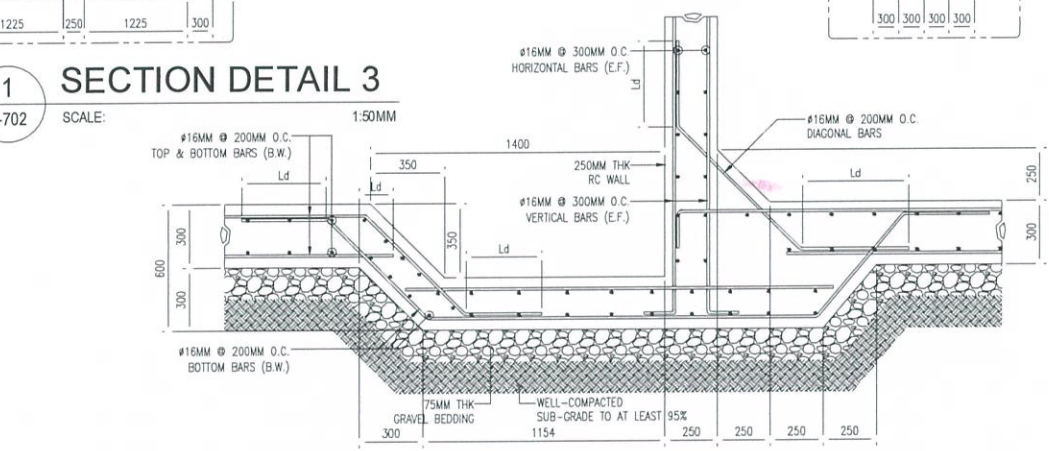
2 WALL SCHEDULE
S-702 SCALE: 1:25MTS



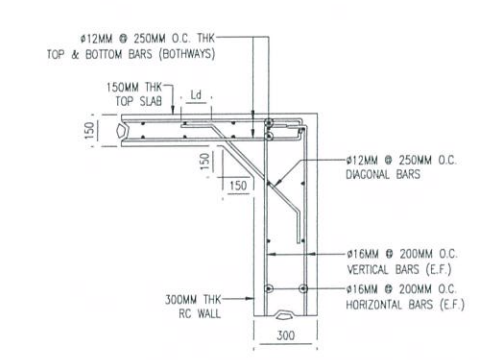
3 TYPICAL WATER STOP DETAIL
S-702 SCALE: 1:25MTS



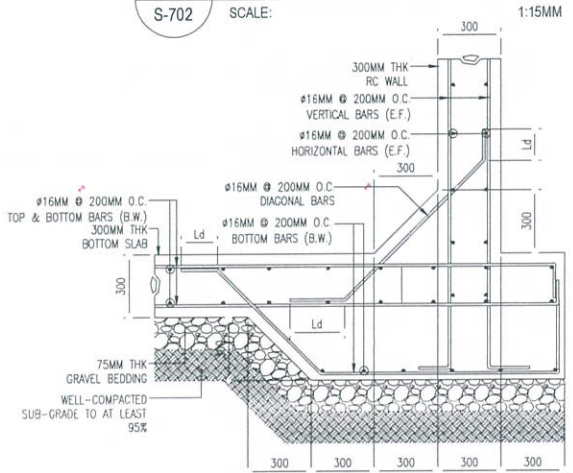
4 BLOW-UP DETAIL-1
S-702 SCALE: 1:15MM



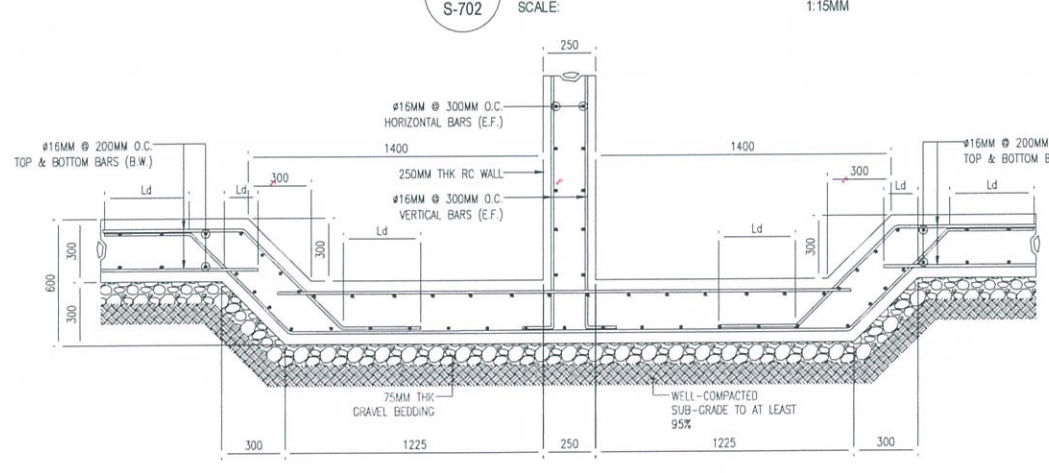
5 BLOW-UP DETAIL-2
S-702 SCALE: 1:15MM



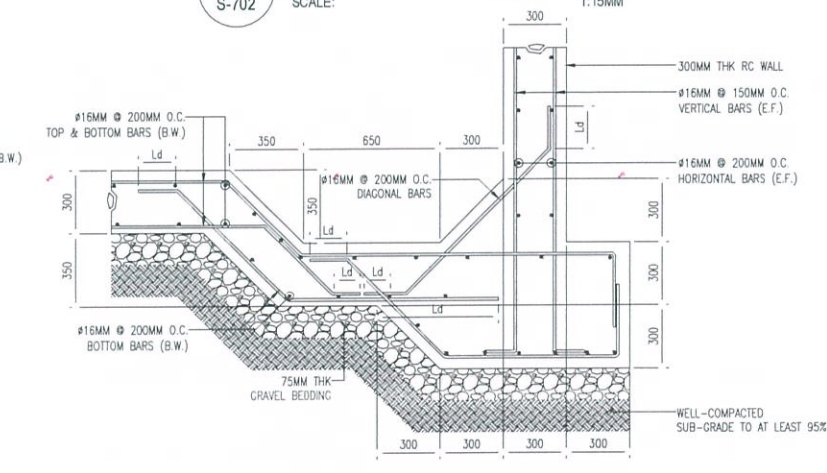
6 BLOW-UP DETAIL-3
S-702 SCALE: 1:15MM



7 BLOW-UP DETAIL-4
S-702 SCALE: 1:15MM



8 BLOW-UP DETAIL-5
S-702 SCALE: 1:15MM



9 BLOW-UP DETAIL-6
S-702 SCALE: 1:15MM



REPUBLIC OF THE PHILIPPINES
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	IDDD
DRAWN BY:	IDDD
CHECKED BY:	
REVIEWED BY:	

RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:

ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

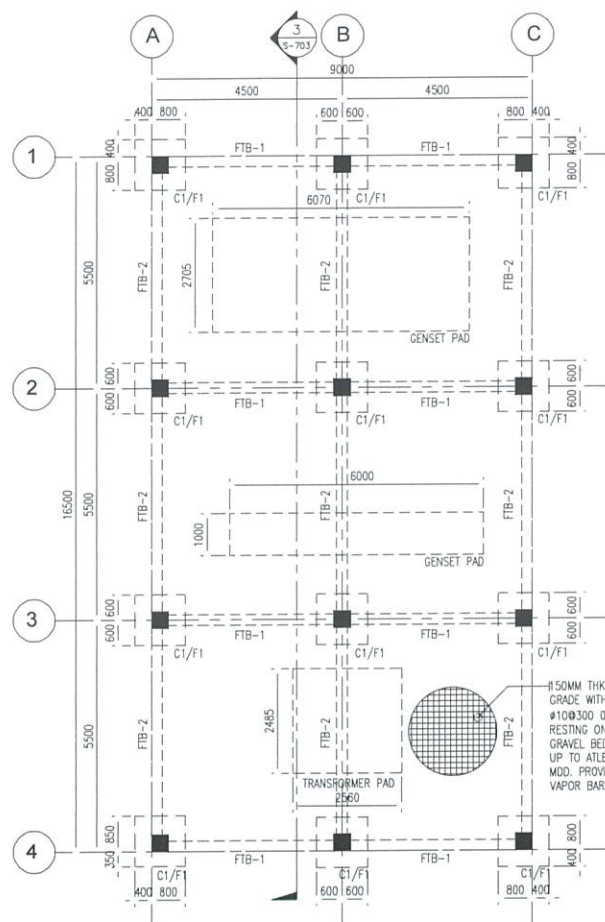
LOCATION:

**CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY**

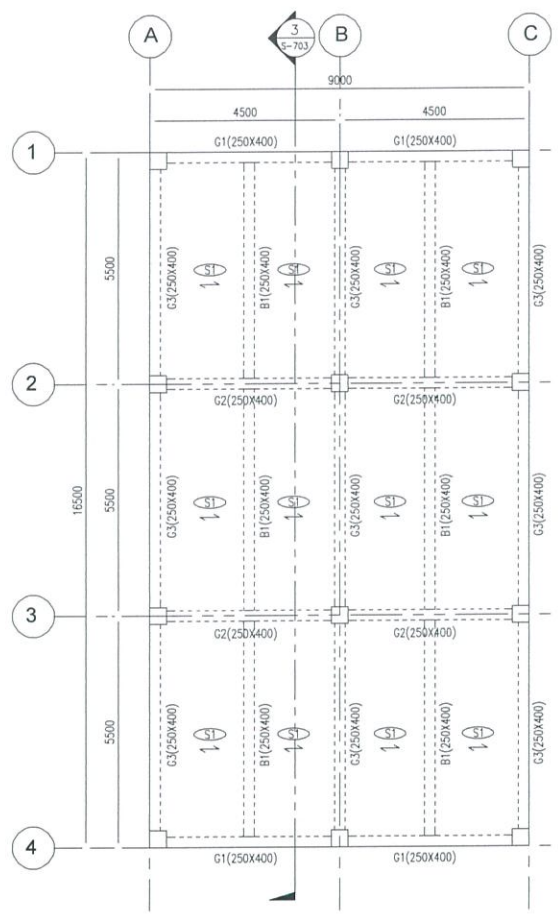
SHEET CONTENTS:

**BLOW-UP DETAIL
TYPICAL WATER STOP DETAIL
SECTION DETAIL
WALL SCHEDULE**

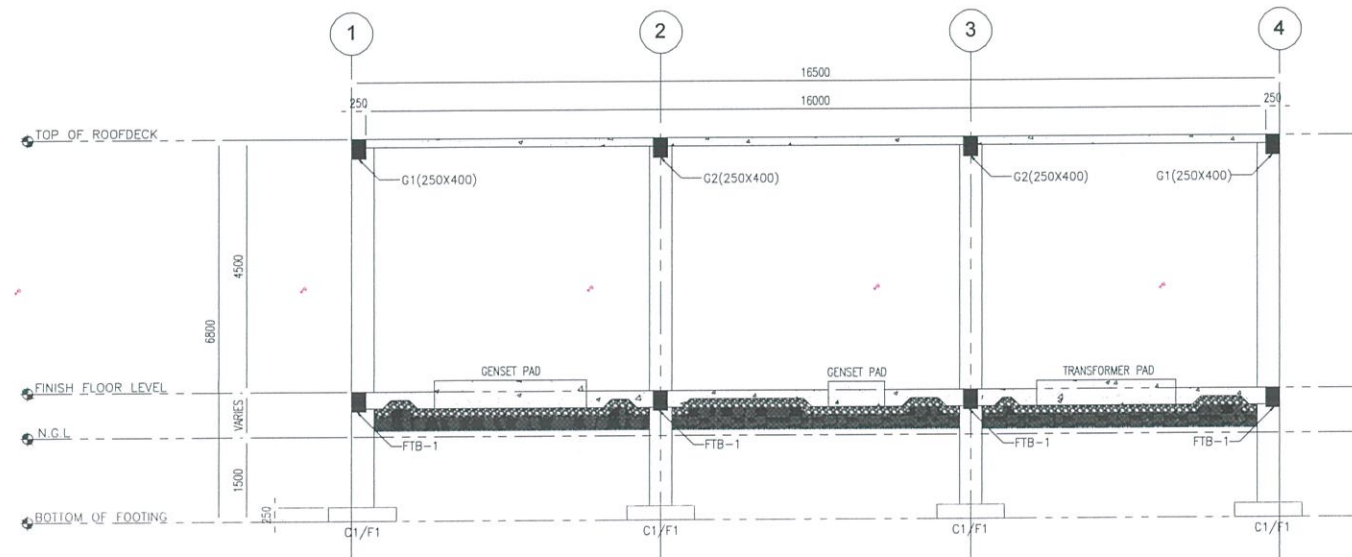
DRAWING SCALE:	SHEET NO:
AS SHOWN	S-702



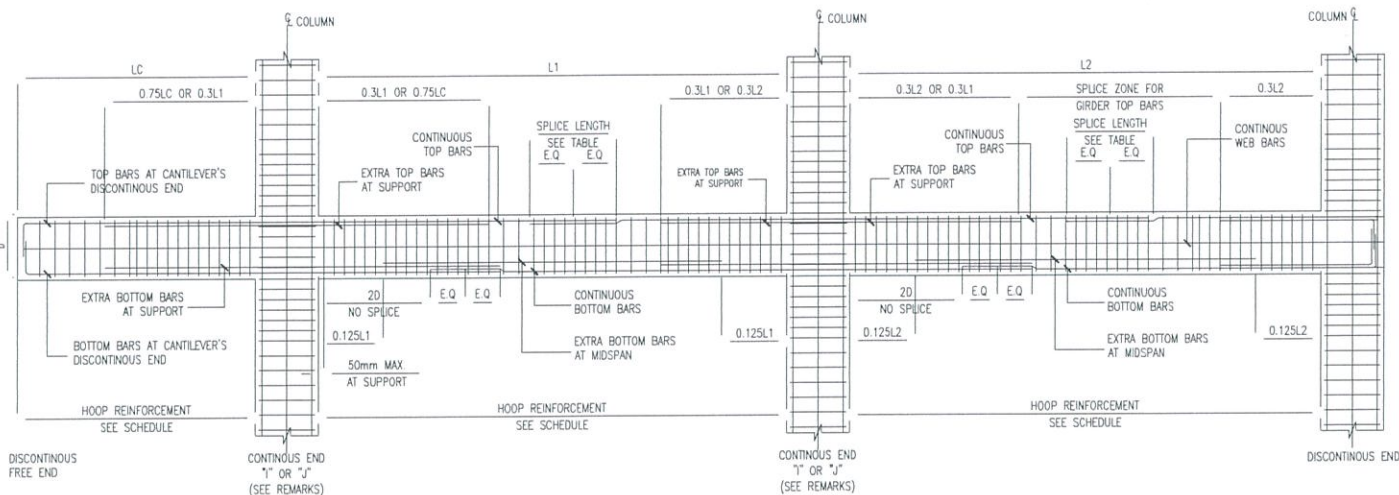
POWER HOUSE
FOUNDATION PLAN
S-703 SCALE: 1:100MTS



POWER HOUSE
ROOF DECK FRAMING PLAN
S-703 SCALE: 1:100MTS



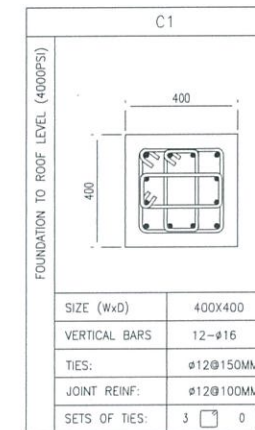
POWER HOUSE
CROSS SECTION DETAIL
S-703 SCALE: 1:75MTS



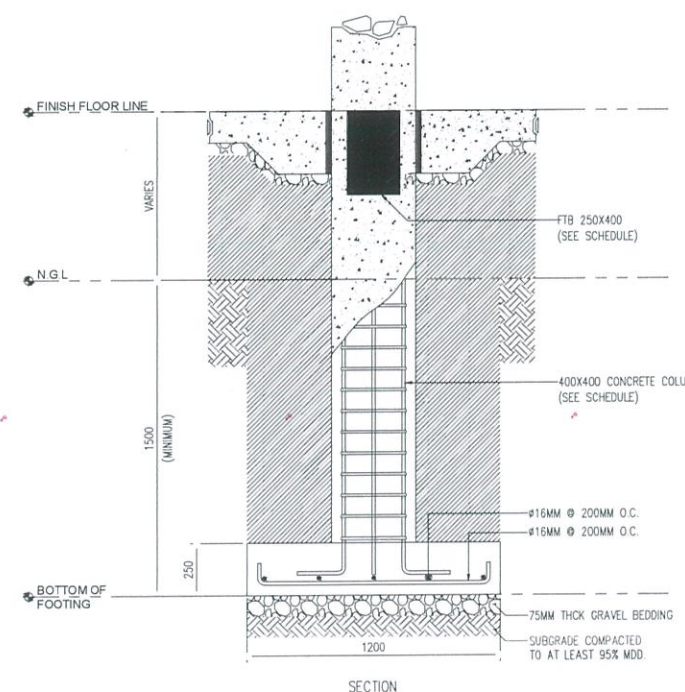
POWER HOUSE
TYPICAL BEAM DETAILS
S-703 SCALE: 1:15MTS

BEAM SCHEDULE													
BEAM LABEL	DIMENSION		LONGITUDINAL REINFORCEMENT						WEB BARS	STIRRUPS		REMARKS	
			I-END		MID		J-END			Ø (GRADE 40)	SPACING (mm)		
	WIDTH (mm)	DEPTH (mm)	Ø	TOP	BOT	TOP	BOT	TOP					BOT
FTB-1	250	400	16	3	3	3	3	3	3	-	10	1 Ø50 [A]; 11 Ø75[A]; REST Ø150MM [A]	
FTB-2	250	400	16	4	4	4	4	4	4	-	10	1 Ø50 [A]; 11 Ø75 [A]; REST Ø150MM [A]	
G1	250	400	16	4	2	2	3	4	2	-	10	1 Ø50 [A]; 11 Ø75 [A]; REST Ø150MM [A]	
G2	250	400	16	4/2	3	2	4	4/2	3	1-#12	10	1 Ø50 [C]; 11 Ø75 [C]; 13 Ø100 [C]; REST Ø150MM [C]	
G3	250	400	16	3	2	2	3	3	2	-	10	1 Ø50 [A]; 11 Ø75 [A]; REST Ø150MM [A]	
B1	250	400	16	3	2	2	3	3	2	-	10	1 Ø50 [A]; 9 Ø100 [A]; REST Ø150MM [A]	

POWER HOUSE
BEAM SCHEDULE
S-703 SCALE: 1:15MTS



POWER HOUSE
COLUMN SCHEDULE
S-703 SCALE: 1:15MM



POWER HOUSE
FOOTING DETAIL (F1)
S-703 SCALE: 1:15MM

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	IDDD
DRAWN BY:	IDDD
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REVIEWED BY:	

RAUL R. CRUCENA
 Division Chief III, IDDD-AED

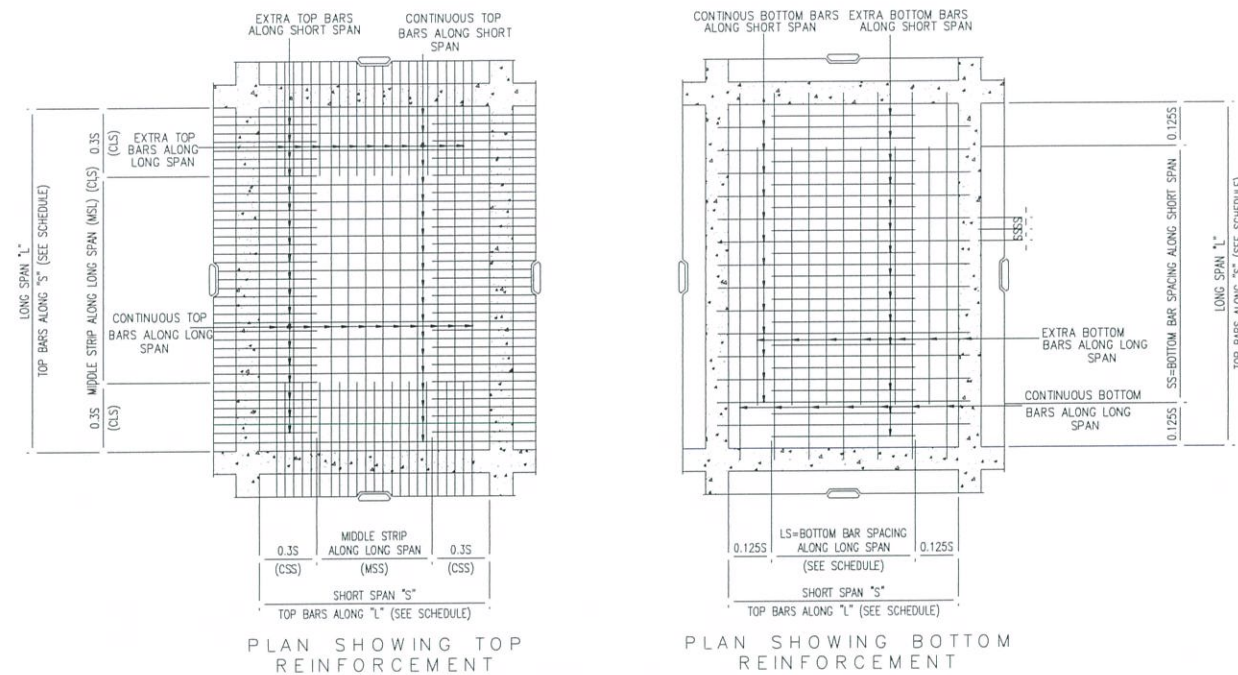
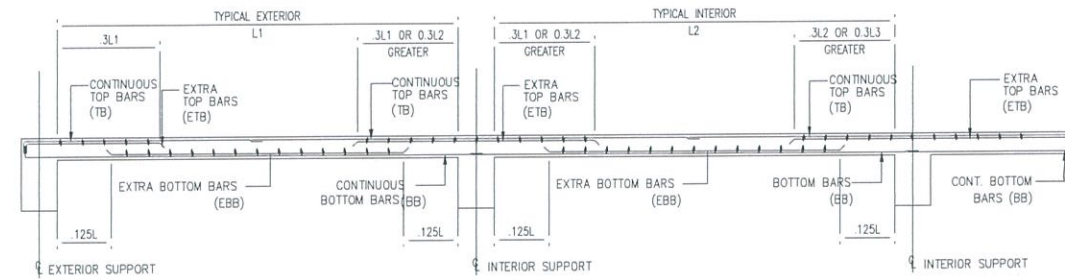
ARNEL F. BORLADO
 Department Manager III, AED-ADMS

LT COL VALENTINO A. DIONELA PAF (RET)
 Assistant Director General II, ADMS

CAPTAIN MANUEL ANTONIO L. TAMAYO
 Director General

NOTES/REVISIONS:

PROJECT:	NEW CAAP BUILDING
LOCATION:	CAAP HEAD OFFICE NAIA ROAD, PASAY CITY
SHEET CONTENTS:	FOUNDATION PLAN ROOF DECK FRAMING PLAN CROSS SECTION DETAIL TYPICAL BEAM DETAILS COLUMN SCHEDULE
DRAWING SCALE:	SHEET NO:
AS SHOWN	S-703

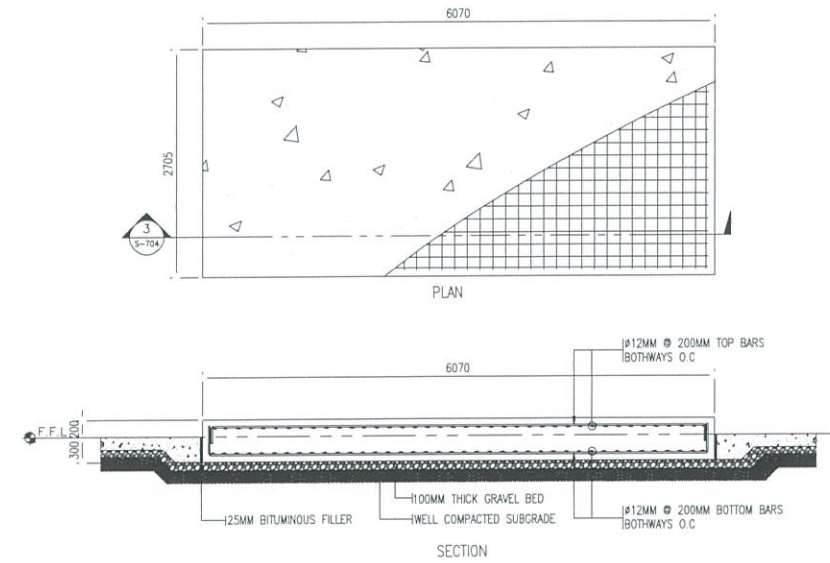


- NOTES:
- *MIN OF 150mm, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
 - IF TOP BARS OF ADJACENT SLABS DIFFER AT THEIR COMMON SUPPORT, THE SMALLER SPACING SHALL GOVERN.
 - EXTEND AT LEAST 1/2 OF BOTTOM BARS INTO SUPPORT.

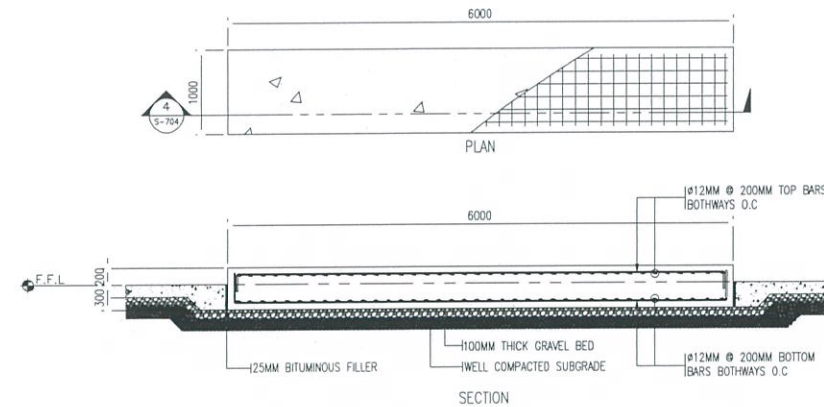
POWER HOUSE
1
S-704
SCALE: 1:15MTS
TYPICAL SLAB DETAILS

SLAB LABEL	THICK (MM)	Ø	ALONG SHORT SPAN				ALONG LONG SPAN				REMARKS
			CONTINUOUS BAR (MM)	EXTRA BAR (MM)	CONTINUOUS BAR (MM)	EXTRA BAR (MM)	CONTINUOUS BAR (MM)	EXTRA BAR (MM)	CONTINUOUS BAR (MM)	EXTRA BAR (MM)	
S-1	150	12	200	-	200	-	200	-	200	-	1W

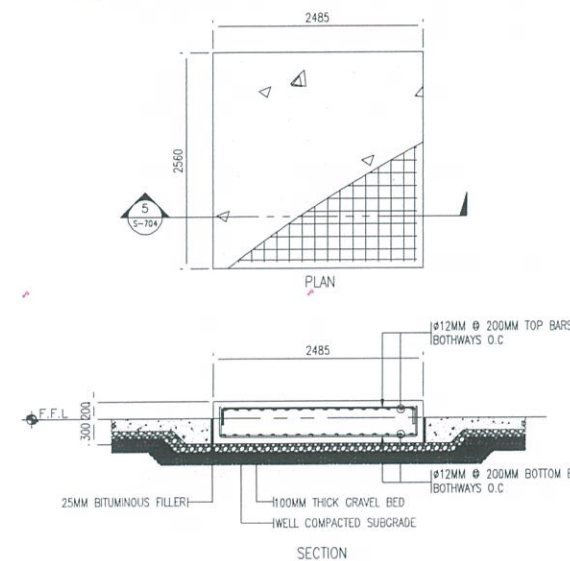
POWER HOUSE
2
S-704
SCALE: 1:15MTS
SLAB SCHEDULE



POWER HOUSE
3
S-704
SCALE: 1:15MTS
GENSET PAD DETAIL-1



POWER HOUSE
4
S-704
SCALE: 1:15MTS
GENSET PAD DETAIL-2



POWER HOUSE
5
S-704
SCALE: 1:15MTS
TRANSFORMER PAD DETAIL

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

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CHECKED BY:	

REVIEWED BY:
RAUL R. CRUCENA
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Department Manager III, AED-ADMS

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Assistant Director General II, ADMS

APPROVED BY:
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
TYPICAL SLAB DETAILS
SLAB SCHEDULE
GENSET PAD DETAIL
TRANSFORMER PAD DETAIL

DRAWING SCALE:	SHEET NO:
AS SHOWN	S-704

ALL ELECTRICAL WORKS HERE ARE DONE IN ACCORDANCE WITH THE PROVISION 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 COMPANY.

1. INCOMING PRIMARY SERVICE POWER IS 34.5KV, 3Ø, 4-WIRE 60HZ SYSTEM, AND THE BUILDING UTILIZATION VOLTAGE IS 400V, 4-WIRE 60 HZ FOR 3Ø SYSTEM AND 230V, 3-WIRE 60 HZ FOR 1Ø SYSTEM.
2. CONDUIT THAT USED FOR DIFFERENT ELECTRICAL SYSTEM ARE IMC PIPE FOR EXPOSED CONDUIT LAYOUT AND PVC FOR EMBEDDED ON SLAB AND DRY WALL, CONCEALED IN CEILING OR INSIDE SECURED EE ROOMS OR AS INDICATED ON PLANS AND RISERS.
3. SMALLEST BRANCH CIRCUIT ARE 3.5mm² THHN STRANDED FOR POWER AND LIGHTING SYSTEM IN RACEWAYS 15mmØ TRADE SIZE CONDUIT. WIRE ARE INSULATED FOR 230 VOLTS.
4. ALL BRANCH CIRCUIT HOMERUN WAS INSTALLED AS INDICATED IN THE PLAN. EXPOSED CIRCUIT RUN ARE INSTALLED PARALLEL TO OR PERPENDICULAR WITH THE BUILDING LINE AND SUPPORTED BY CONDUIT CLAMPS EVERY 1.5 METERS. DIAGONAL CONDUIT RUN ARE NOT ACCEPTED.
5. WHENEVER NECESSARY PULLBOX OF PROPER SIZE AND DIMENSION IS PROVIDED ALTHOUGH NOT INDICATED IN THE PLAN. ALL BOXES ARE PROVIDED WITH METAL PLATE COVER.
6. ALL LIGHT CONTROLLING SWITCHES ARE RATED 16 AMPS, 230 AC ONLY AND INSTALLED FOR OPERATION WITH HORIZONTAL MOTION.
7. ALL PANELBOARDS WAS PROVIDED WITH MULTIPLE TERMINAL LUGS FOR NEUTRAL AND SOLID GROUNDING, CONNECTED TO BUILDING GROUNDING SYSTEM LOCATED AT LOWEST LEVEL OF THE BUILDING.
8. ALL BRANCH CIRCUIT HOMERUN FOR POWER AND LIGHTING WAS COMBINED IN THE SAME RACEWAY.
9. FOR EACH SPARE CIRCUIT BREAKER IN PANELBOARD PROVIDE 20mmØ RACEWAY TERMINATING IN 100mm DEEP TYPE SQUARE BOX WITH COVER BELOW CEILING SLAB AND PROVIDED WITH PULL WIRES OR AS INDICATED ON LOAD SCHEDULE.
10. ALL METALLIC CONDUIT, CABINET, BOXES AND EQUIPMENT ARE PROPERLY GROUNDED AND BONDED.
11. ALL MATERIALS TO BE USED ARE NEW AND APPROVED FOR THE LOCATION AND PURPOSES. CERTIFICATE OF COMPLIANCE OR THIRD PARTY ACCREDITATION IS APPROVED MATERIALS.
12. ALL MOLDED CASE CIRCUIT BREAKERS FOR MOTORS ARE INDUSTRIAL TYPE WITH MINIMUM KAIC OF 10 OR AS INDICATED ON PLAN. FOR SWITCHGEARS, REQUIRED KAIC RATION OF BREAKERS ARE DETERMINED AND INDICATED BY SUPPLIERS. ANY ADJUSTMENTS ON RATING IS INCLUDED DURING BIDDING STAGE.
13. BOXES ARE MADE OF CODE GAUGE STEEL WITH ZINC CHROMATE PROTECTION
14. ALL RECEPTACLE OUTLET ARE PROPERLY GROUNDED TO THE BOX BY MEANS OF GROUNDING LUGS.
15. UNLESS INDICATED ON PLANS OR APPROVED BY ARCHITECT, MOUNTING HEIGHT NOT SHOWN ON SCHEDULE ARE AS FOLLOWS:

- a. LIGHT CONTROLLED SWITCHES

b. DUPLEX CONVENIENCE OUTLET

c. PANELBOARD / DISCONNECT
- 1.40 METER ABOVE FLOOR FINISH @ CENTER

0.30 METER ABOVE FLOOR FINISH @ CENTER

1.80 METER ABOVE FLOOR FINISH @ CENTER
- UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS

UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS

UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS

17. ALL WIRES AND CABLES ARE COLOR CODED AS FOLLOWS:

- LINE 1

LINE 2

LINE 3

NEUTRAL

GROUND
- RED

YELLOW

BLUE

WHITE

GREEN

18. ALL CONDUIT, BOXES AND SUPPORT ARE COLOR CODED AS FOLLOWS

- a. POWER & LIGHTING SYSTEM

GRAY

19. CONDUIT SLEEVES AND FLOOR SLOT PENETRATION THROUGH ELECTRICAL AND TELEPHONE ROOM WALLS/CLOSET SPACES ARE PROPERLY SEALED-OFF WITH FIRE RETARDANT MATERIALS TO MAINTAIN FIRE RESISTIVE RATINGS OF THE FLOOR OPENING.
20. THE ELECTRICAL CONTRACTOR SECURED ALL THE WIRING PERAMITS AND ALL FEES REQUIRED FOR THE WORK AND FURNISH THE OWNER THROUGH THE ENGINEERS. FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETE WORK.
21. THE EXACT LOCATION AND MOUNTING HEIGHT OF ALL VISIBLE WIRING DEVICES, FIXTURES AND THE LIKES ARE REFERRED BY THE ARCHITECTURAL AND INTERIOR DESIGN PLAN.
22. THE ELECTRICAL CONTRACTOR PROVIDED A SHOP DRAWING IN ANY CHANGES IN MOUNTING HEIGHT OR LOCATION FOR THE APPROVAL OF ARCHITECT OR ENGINEER.
23. IN CASE ANY CONFLICT BETWEEN PLANS OF DIFFERENT TRADES, ACTUAL SITE CONDITIONS OR SPECIFICATION IS EVIDENT, THE ELECTRICAL CONTRACTOR WAS IMMEDIATELY VERIFY THE ELECTRICAL CONSULTANT AND SUBMITTED NECESSARY SHOP DRAWING THRU RFA/RFI.
24. ALL ELECTRICAL WORKS HERE WAS DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY QUAUFIED LICENSED ELECTRICAL ENGINEER.
25. ANY MATERIALS, DEVICES, EQUIPMENT OR RELATED ACCESSORIES NOT INCLUDED ON PLANS BUT ARE REQUIRED TO COMPLETE THE SYSTEM AND INSTALLATION ARE INCLUDED BY THE ELECTRICAL AND AUXILIARY CONTRACTOR.
26. POWER CONDUITS ARE SIZED BASED ON IMC, IF PVC CONDUITS ARE USED WHEN EMBEDDED, THE STANDARD PVC SIZE EQUIVALENT TO INNER IMC AREA WAS USE.
27. ELECTRICAL CONTRACTOR PROCEEDS ANY INSTALLATION WITH PROPER SUBMITTAL AND APPROVAL.

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E-40	LIGHTING AND POWER PLAN LAYOUT (POWER HOUSE & PUMP ROOM)

SYMBOLS	DESCRIPTIONS
	200mm x 100mm GLOBE LAMP WITH 20W LED BULB INSTALLED IN 4 METERS HEIGHT LAMP POST
	ROUND RECESSED LED PINLIGHT/BULB, 12W
	7200mm x 70mm x 40mm LINEAR LED LIGHTING FIXTURE, 36WATTS/M
	1200mm x 75mm x 24mm SURFACE MOUNTED 36W LED SJM PANEL LAMP
	1200mm INDUSTRIAL TYPE LIGHTING FIXTURE WITH 2X18W (1-8) LED TUBE
	270mm x 150mm x 70mm 20W BUNKER LIGHT
	1x40W 600X600mm LED PANEL LIGHT
	1000mm X 130mm 12W BOLLARD LIGHT
	150mm X 150mm SQUARE RECESSED DWON LIGHT FIXTURE WITH 12W LED BULB
	7W/m LED STRIP LIGHT
	EMERGENCY LIGHT
	EXIT LIGHT , ONE SIDE
	EXIT LIGHT , 2 SIDES
	DOUBLE POLE SWITCH, 1-GANG SUBSCRIPT LETTER INDICATE LIGHTS TO BE CONTROLLED
	DOUBLE POLE SWITCH, 2-GANG SUBSCRIPT LETTER INDICATE LIGHTS TO BE CONTROLLED
	DOUBLE POLE SWITCH, 3-GANG SUBSCRIPT LETTER INDICATE LIGHTS TO BE CONTROLLED
	WALL MOUNTED DUPLEX CONVENIENCE OUTLET UNIVERSAL SLOTS FOR INDOOR LOCATION
	GROUND MOUNTED DUPLEX CONVENIENCE OUTLET UNIVERSAL SLOTS FOR INDOOR LOCATION
	WALL MOUNTED SINGLE CONVENIENCE OUTLET UNIVERSAL SLOTS FOR INDOOR LOCATION
	WALL MOUNTED DUPLEX OUTLET UNIVERSAL SLOTS FOR REFRIGERATOR
	WALL MOUNTED DUPLEX OUTLET UNIVERSAL SLOTS FOR RANGE HOOD
	WALL MOUNTED DUPLEX OUTLET UNIVERSAL SLOTS FOR RANGE
	SPECIAL PURPOSE OUTLET
	CIRCUIT HOMERUN TO PANELBOARD WITH INDICATED CIRCUIT NUMBER
	KILOWATT-HOUR METER
	FLEXIBLE CONDUIT
	CIRCUIT BREAKER IN NEMA ENCLOSURE
	PANELBOARD, LETTER DENOTES TYPES, FLOOR & EE ROOM LP-LIGHTING PANEL PP-POWER PANEL DP-DISTRIBUTION PANEL



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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

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PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• GENERAL NOTES, DRAWING INDEX, LEGEND & SYMBOLS

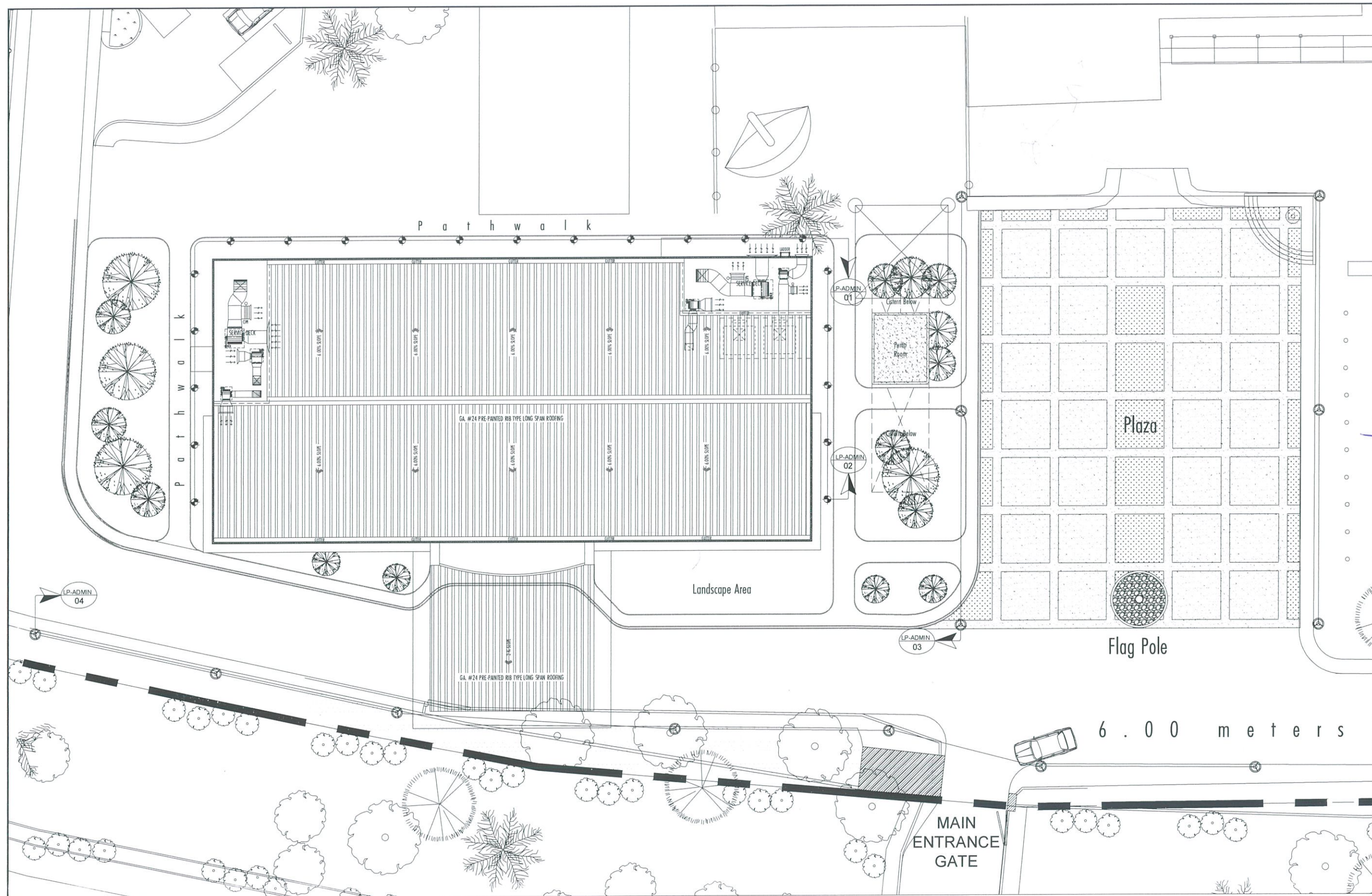
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AS SHOWN	E-01

1 GENERAL NOTES
E-01 SCALE: NTS

2 DRAWING INDEX
E-01 SCALE: NTS

3 LEGEND & SYMBOLS
E-01 SCALE: NTS

PROFESSIONAL ELECTRICAL ENGINEER:			
ENGR. FREDERICK R. CALAMLAM			
LICENSE NO.:	0003482	VALID UNTIL:	06/04/2025
PTR NO.:	2296325	ISSUED ON:	01/04/2024
TIN NO.:	214-207-361-000	ISSUED AT:	LAGUNA





REPUBLIC OF THE PHILIPPINES
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

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NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• SITE DEVELOPMENT PLAN (LAMP POST AND BOLLARD)

PROFESSIONAL ELECTRICAL ENGINEER:

ENGR. FREDERICK R. CALAMLAM

LICENSE NO.:

0003482

VALID UNTIL:

06/04/2025

PTR NO.:

2296325

ISSUED ON:

01/04/2024

TIN NO.:

214-287-341-000

ISSUED AT:

LAGUNA

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SHEET NO.:

E-03



1
E-03

SITE DEVELOPMENT PLAN

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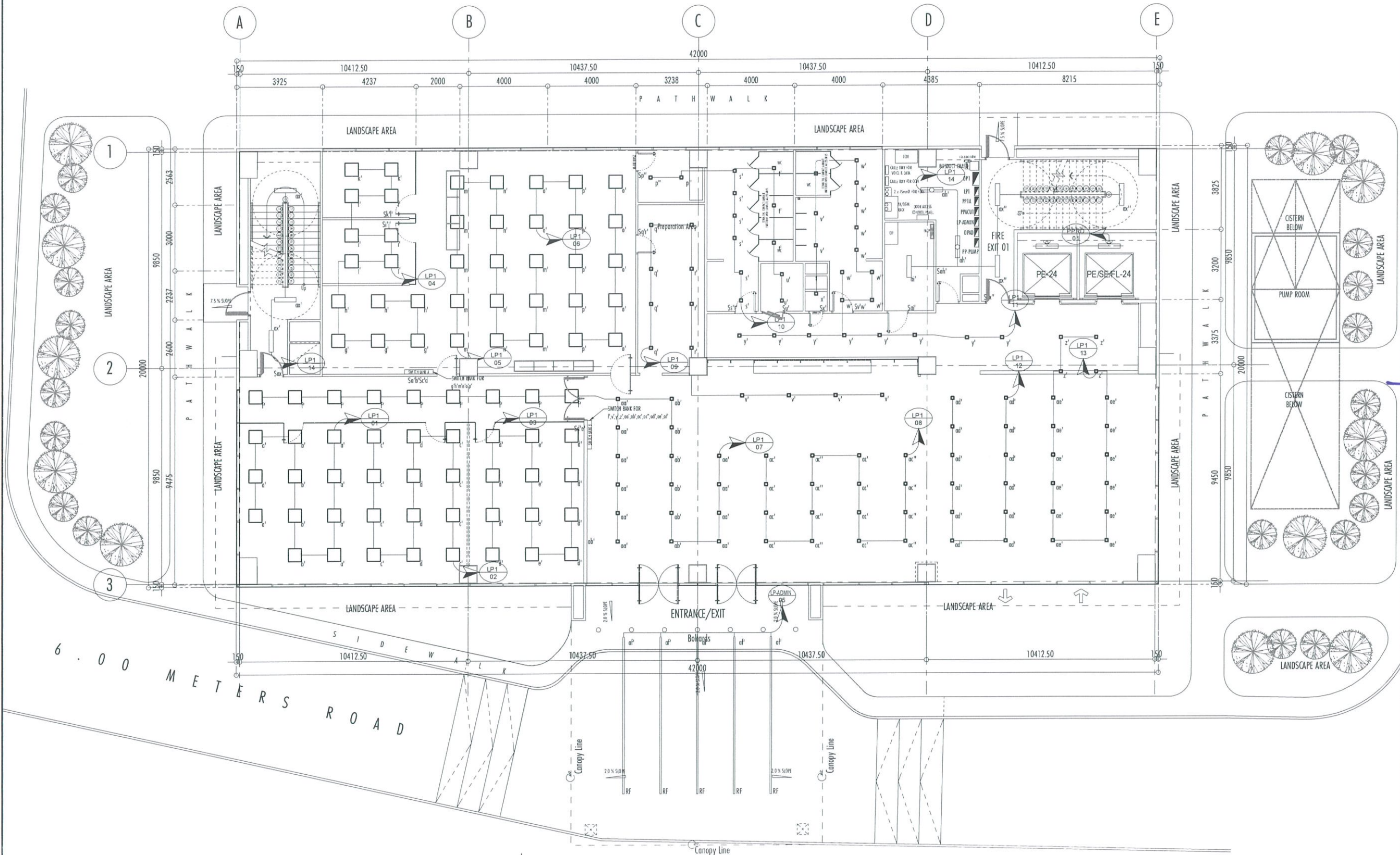
PROJECT:
 NEW CAAP BUILDING

LOCATION:
 CAAP HEAD OFFICE
 NAIA ROAD, PASAY CITY

SHEET CONTENTS:
 • GROUND FLOOR LIGHTING PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
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 LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
 PTR NO.: 2296325 ISSUED ON: 01/04/2024
 TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

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 SHEET NO.: E-04



1
 E-04 SCALE: 1:100 MTS
 GROUND FLOOR LIGHTING PLAN

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AERODROME DEVELOPMENT
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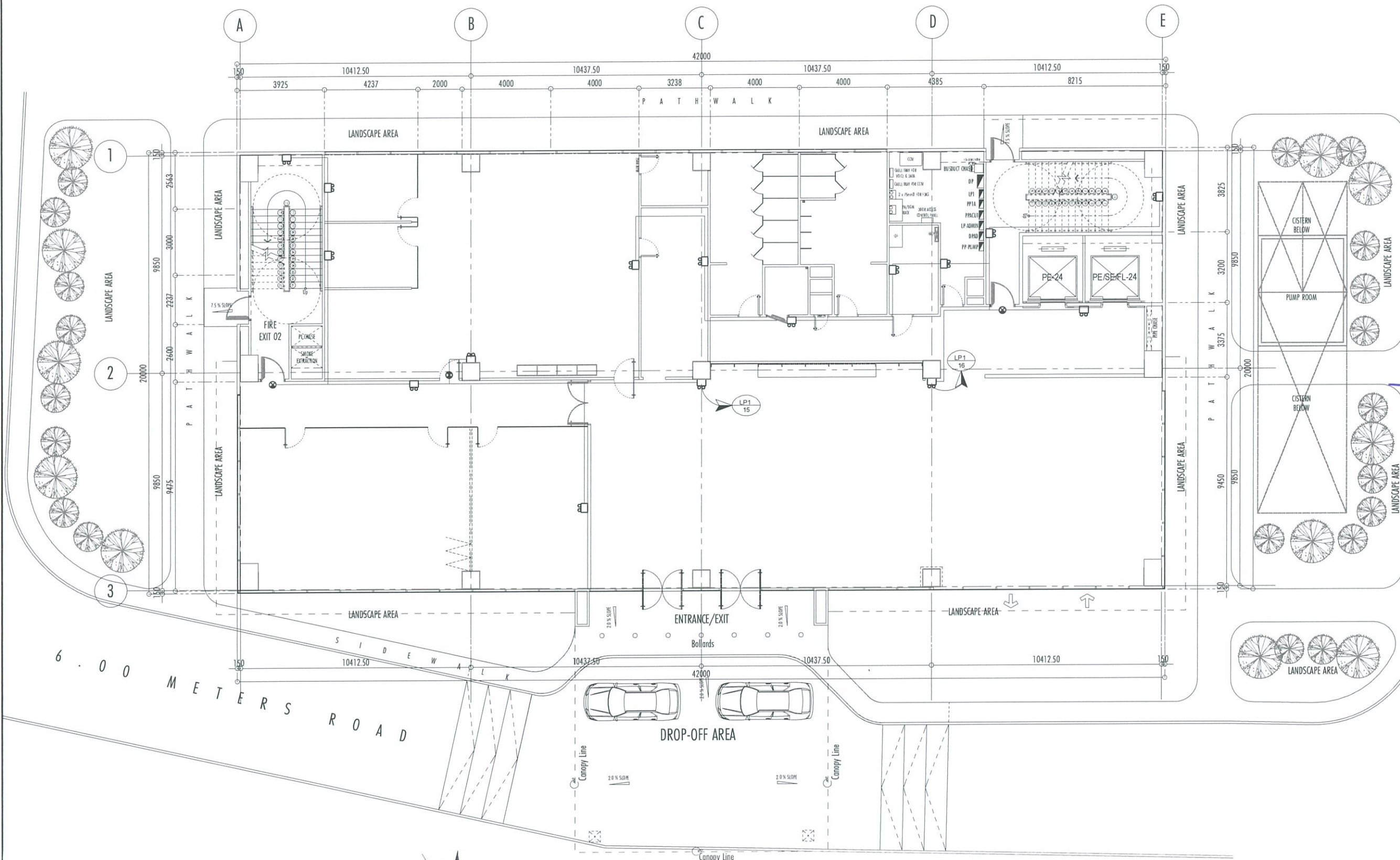
PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• GROUND FLOOR EMERGENCY & EXIT LIGHTS
PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM
LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
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E-05

GROUND FLOOR EMERGENCY & EXIT LIGHTS PLAN

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AERODROME DEVELOPMENT
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PROJECT:
NEW CAAP BUILDING

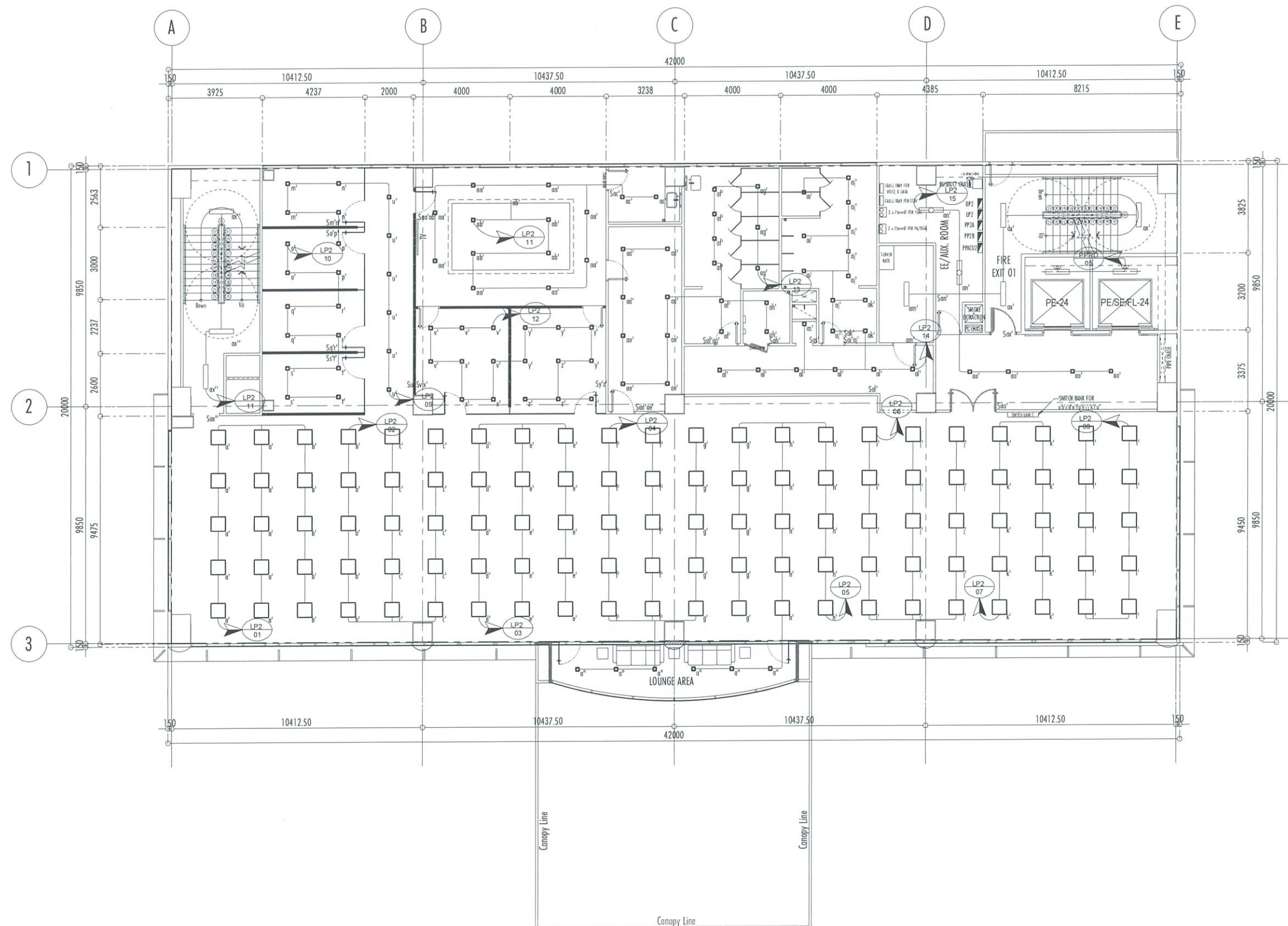
LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 2ND FLOOR LIGHTING PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
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LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
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1
E-06
2ND FLOOR LIGHTING PLAN
SCALE: 1:100 MTS

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NEW CAAP BUILDING

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NAIA ROAD, PASAY CITY

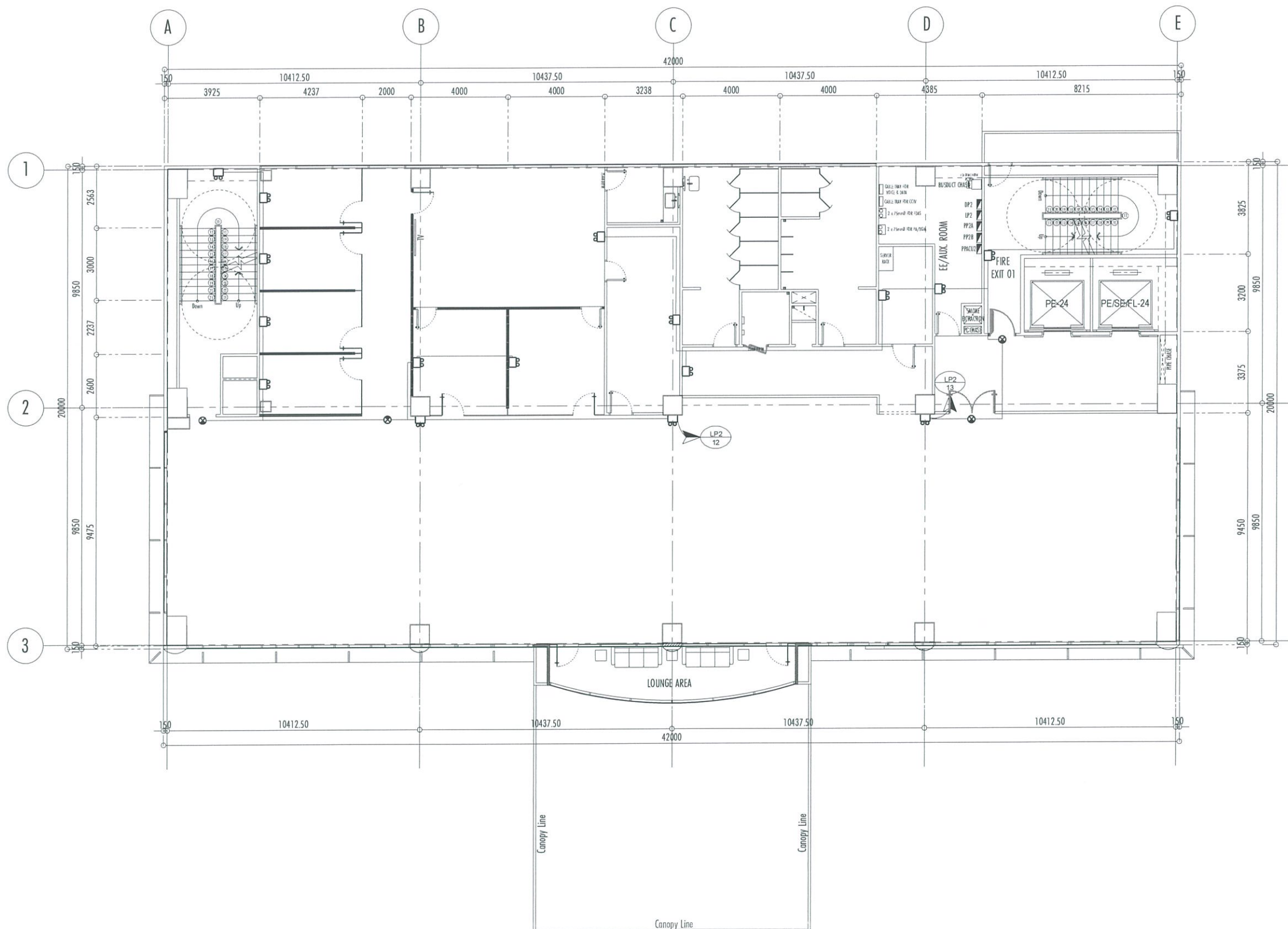
SHEET CONTENTS:

• 2ND FLOOR EMERGENCY & EXIT LIGHTS PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

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E-07

2ND FLOOR EMERGENCY & EXIT LIGHTS PLAN

SCALE:

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

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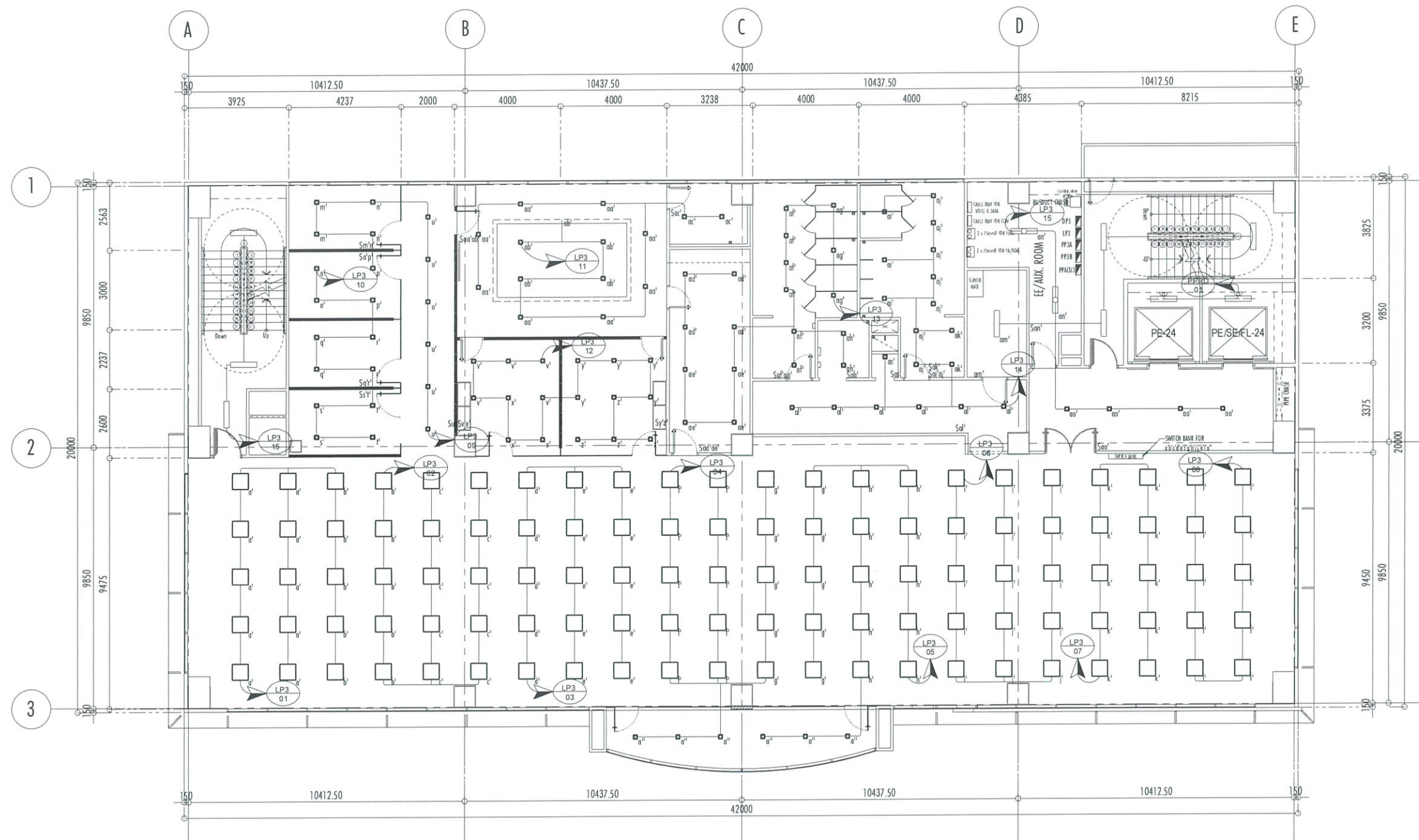
PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 3RD - 5TH FLOOR LIGHTING PLAN (TYPICAL)

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM
LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

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SHEET NO: E-08



1
E-08

3RD - 5TH FLOOR LIGHTING PLAN (TYPICAL)

SCALE: 1:100 MTS

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AERODROME DEVELOPMENT
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PROJECT:
NEW CAAP BUILDING

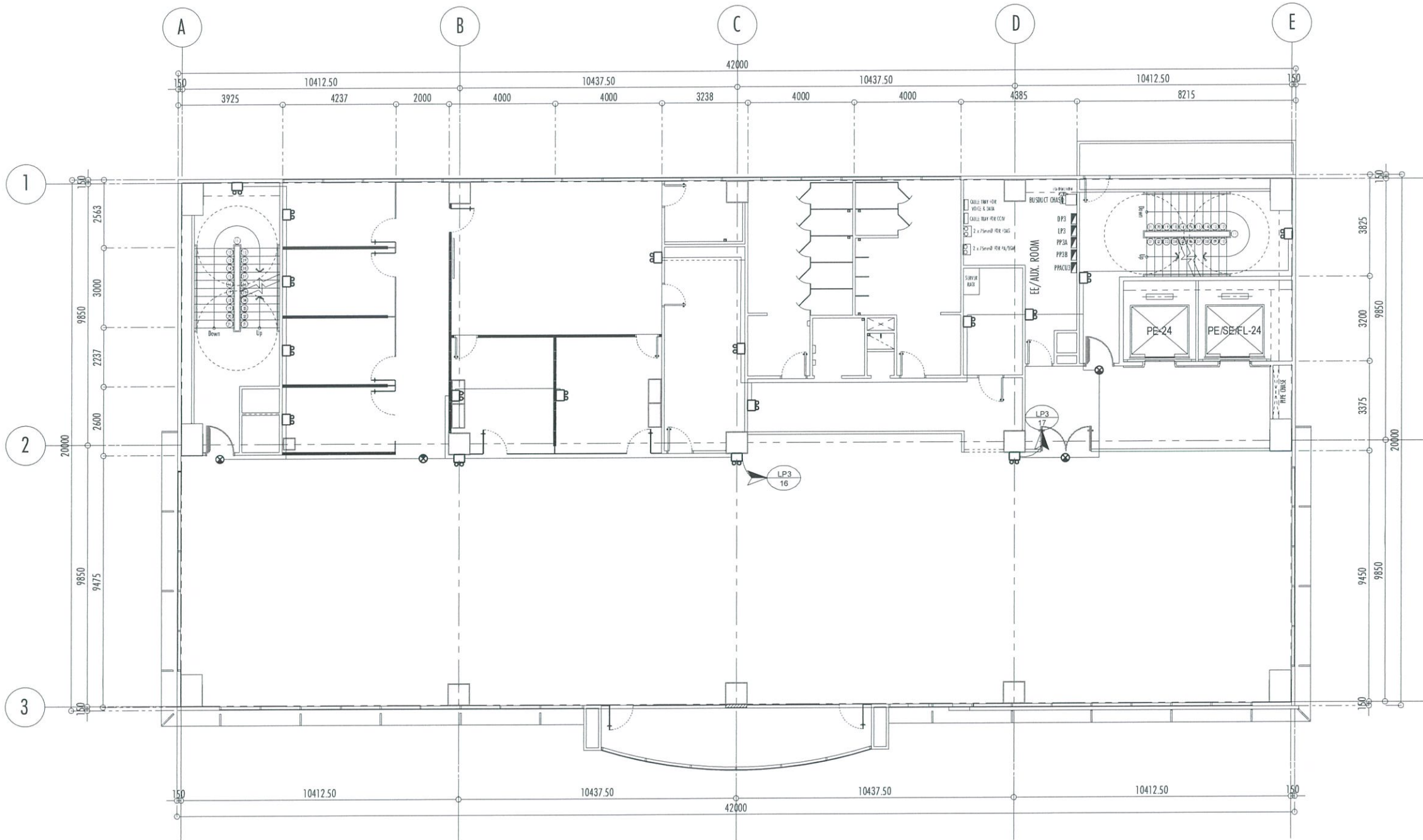
LOCATION:
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NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 3RD - 5TH FLOOR EMERGENCY & EXIT LIGHTS
PLAN (TYPICAL)

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
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DRAWING SCALE: AS SHOWN
SHEET NO: E-09



1
E-09

3RD - 5TH FLOOR EMERGENCY & EXIT LIGHTS PLAN (TYPICAL)

SCALE: 1:100 MTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

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CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

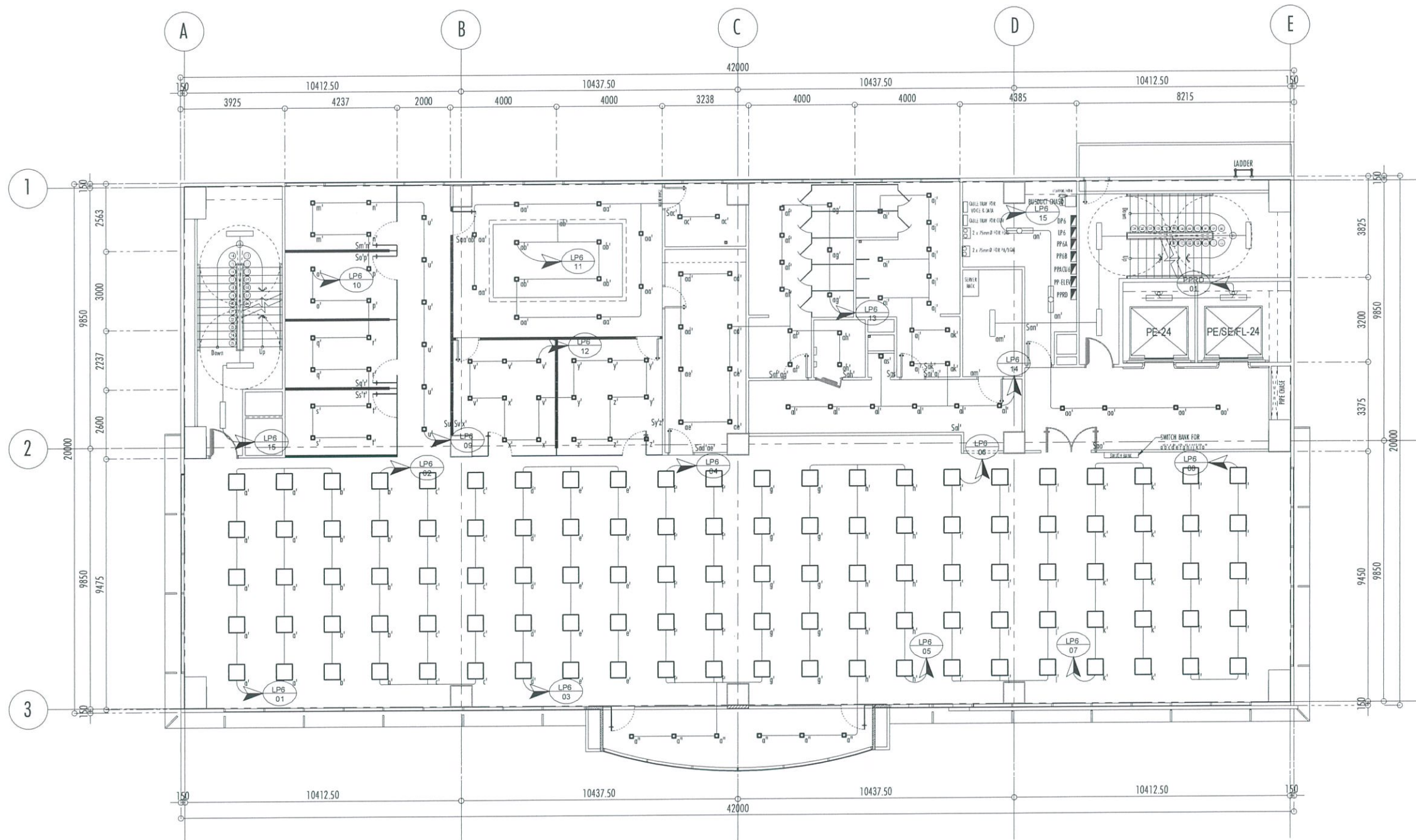
PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 6TH FLOOR LIGHTING PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM
LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO.: E-10



1
E-10
SCALE: 1:100 MTS
6TH FLOOR LIGHTING PLAN

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AERODROME DEVELOPMENT
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INFRASTRUCTURE DEVELOPMENT
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NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

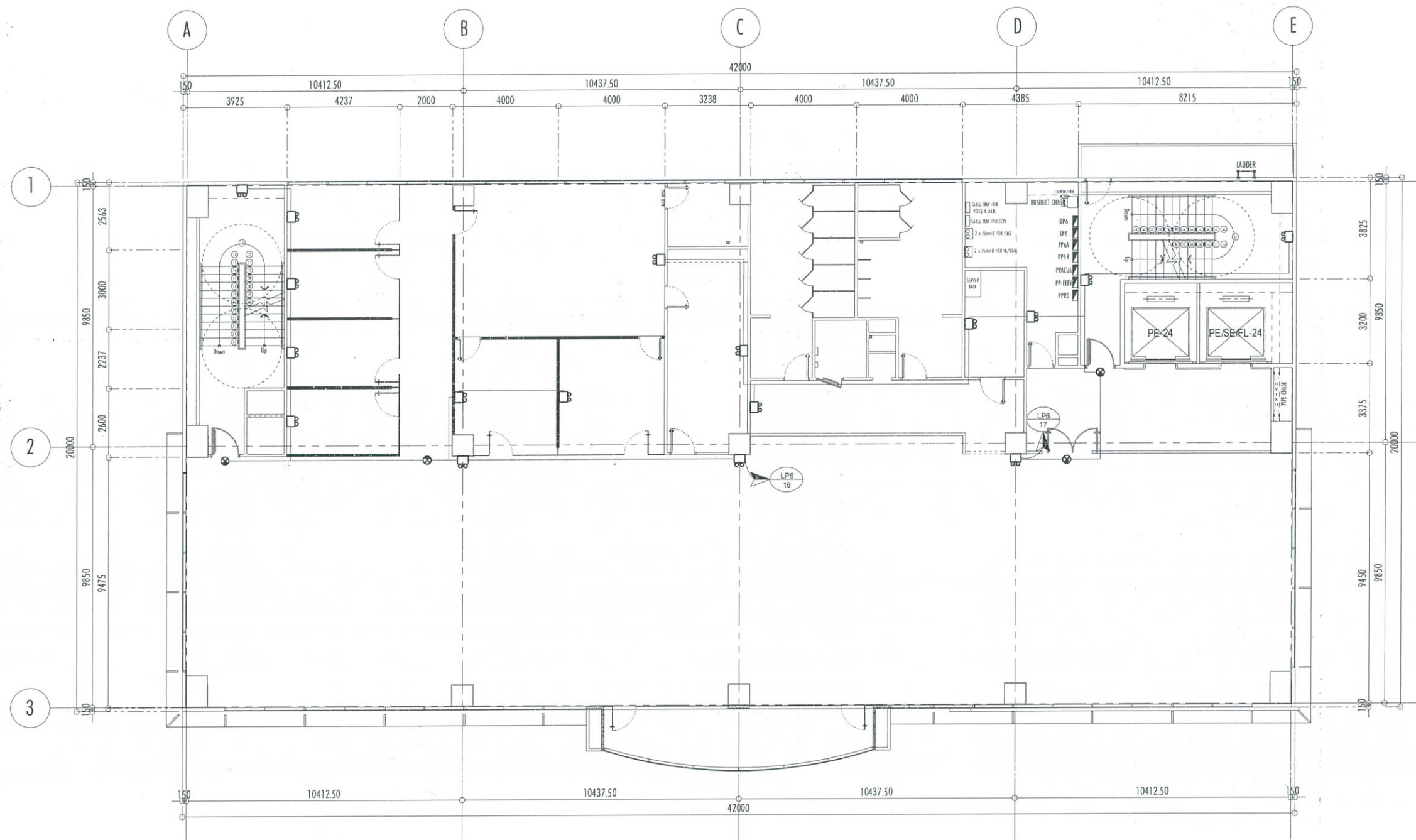
SHEET CONTENTS:

• 6TH FLOOR EMERGENCY & EXIT LIGHTS PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.:	0003482	VALID UNTIL:	06/04/2025
PTR NO.:	2296325	ISSUED ON:	01/04/2024
TIN NO.:	214-297-341-006	ISSUED AT:	LAGUNA

DRAWING SCALE:	SHEET NO:
AS SHOWN	E-11



1

E-11

6TH FLOOR EMERGENCY & EXIT LIGHTS PLAN

SCALE:

1:100 MTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
 DESIGNED BY:
 DRAWN BY: *J. R. R.*
 CHECKED BY:

REVIEWED BY:

 RAUL R. CRUCENA
 Division Chief III, IDDD-AED

SUBMITTED BY:

 ARNEL F. BORLADO
 Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

 LT COL VALENTINO A. DIONELA PAF (RET)
 Assistant Director General II, ADMS

APPROVED BY:

 CAPTAIN MANUEL ANTONIO L. TAMAYO
 Director General

NOTES/REVISIONS:

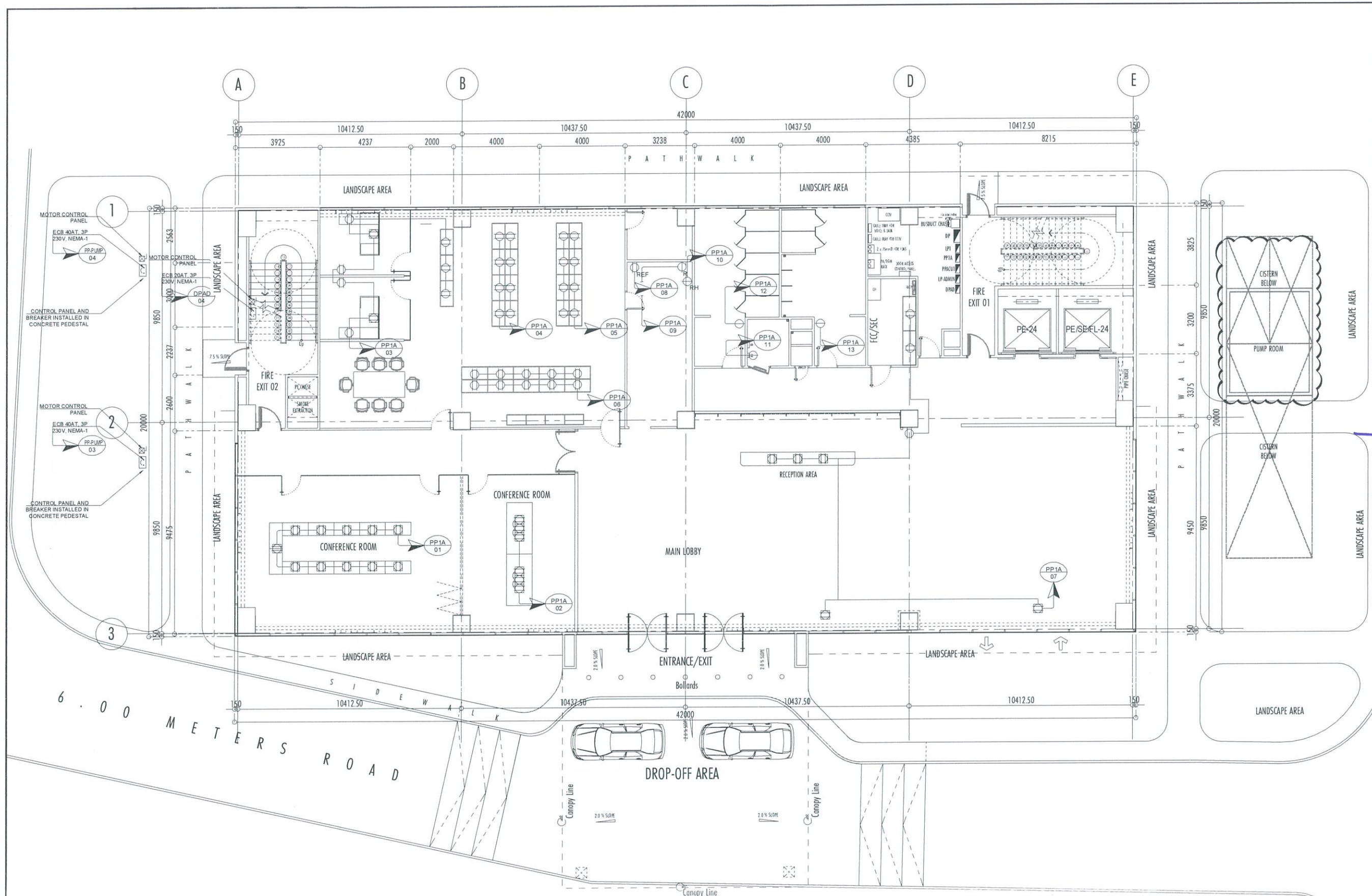
PROJECT:
 NEW CAAP BUILDING

LOCATION:
 CAAP HEAD OFFICE
 NAIA ROAD, PASAY CITY

SHEET CONTENTS:
 • GROUND FLOOR CONVENIENCE OUTLET PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
 ENGR. FREDERICK R. CALAMILAM
 LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
 PTR NO.: 2296325 ISSUED ON: 01/04/2024
 TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
 SHEET NO: E-12



1
E-12

GROUND FLOOR CONVENIENCE OUTLET PLAN

SCALE: 1:100 MTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY: *J. Borlado*
CHECKED BY:

REVIEWED BY:
Raul R. Crucena
RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
Arnel F. Borlado
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
LT Col Valentino A. Dionela PAF (RET)
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
Captain Manuel Antonio L. Tamayo
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

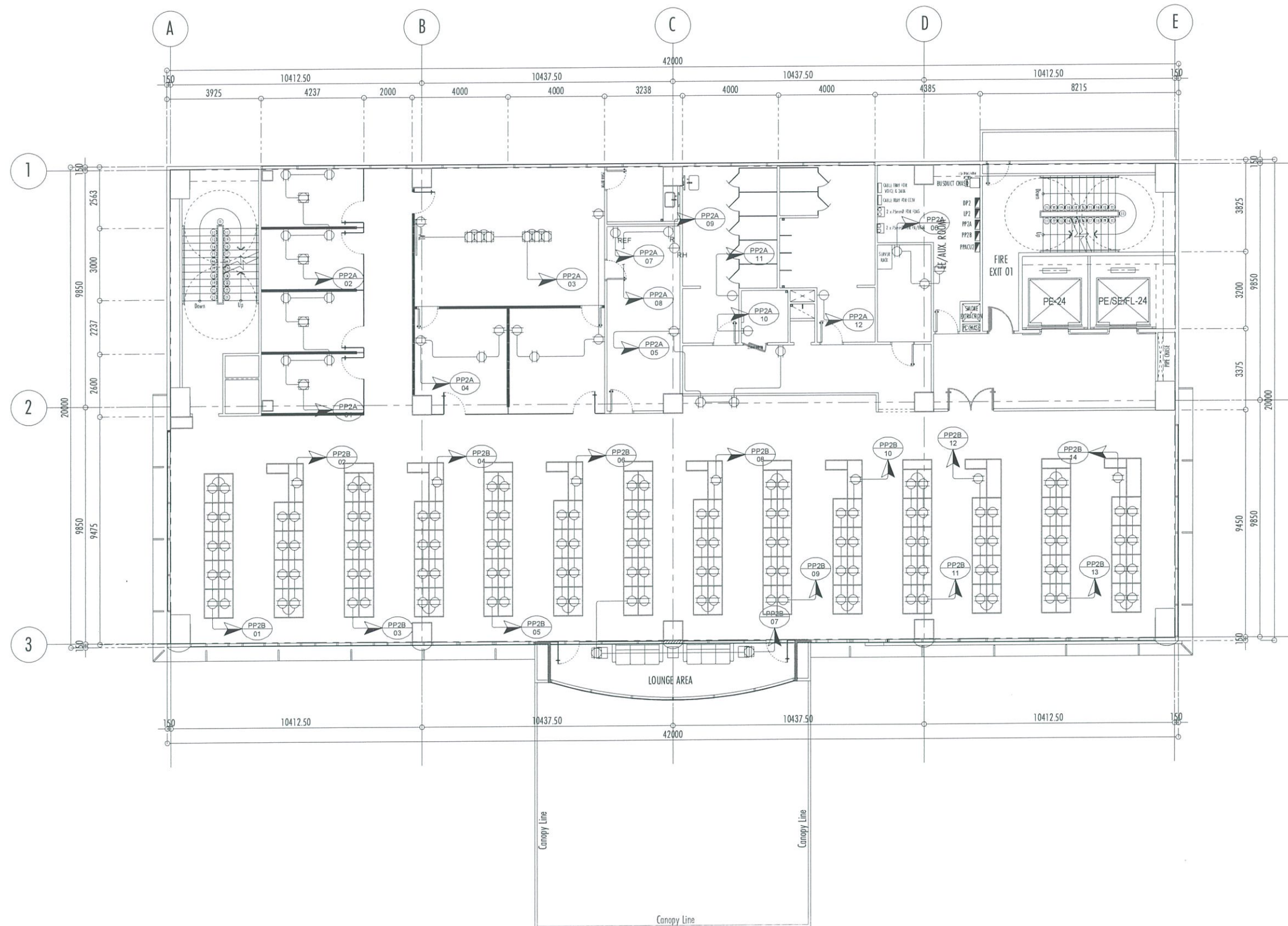
LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 2ND FLOOR CONVENIENCE OUTLET PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO: E-13



1
E-13

2ND FLOOR CONVENIENCE OUTLET PLAN

SCALE: 1:100 MTS



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CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY: *[Signature]*
CHECKED BY:

REVIEWED BY:

[Signature]
RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
[Signature]
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
[Signature]
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
[Signature]
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

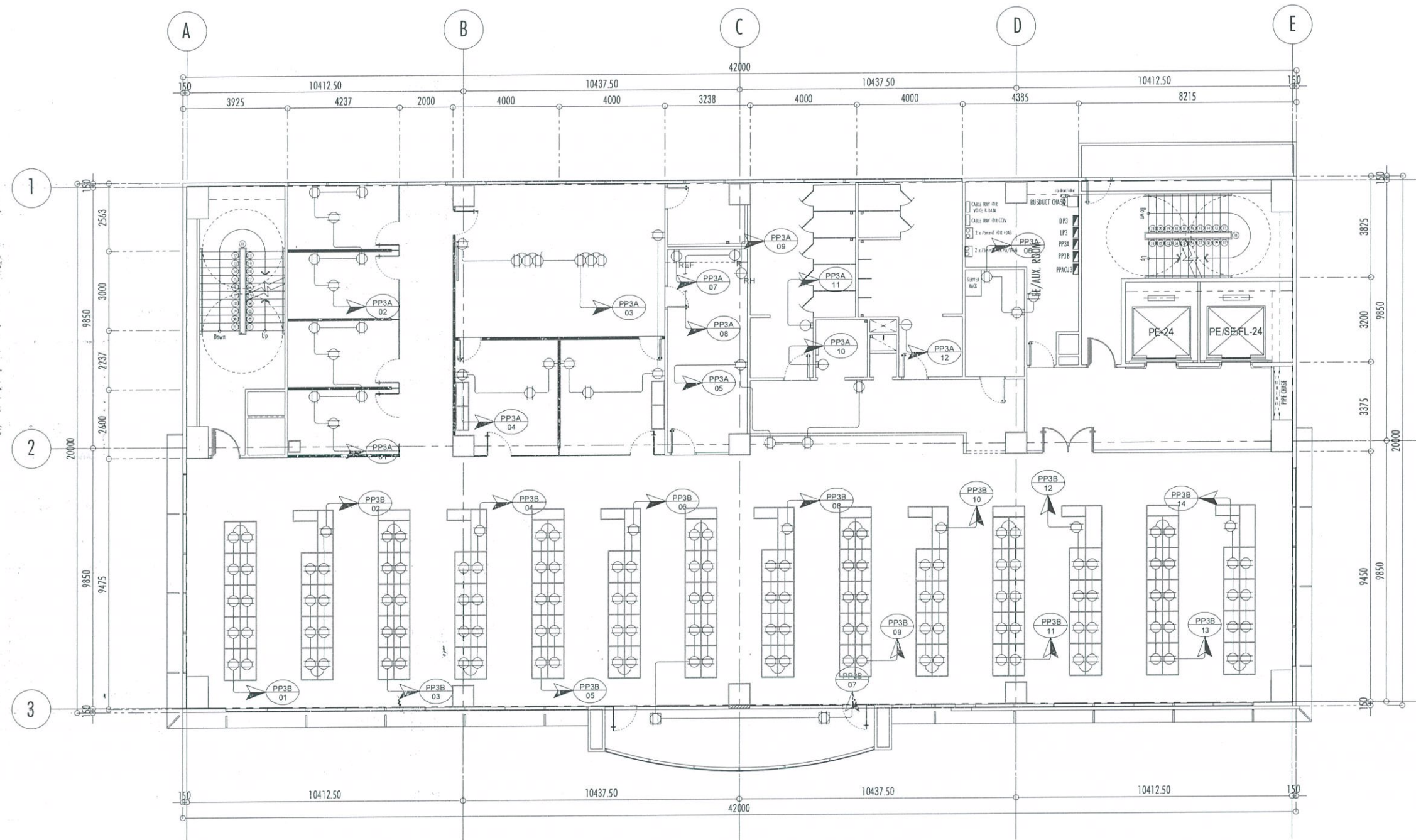
LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 3RD - 5TH FLOOR CONVENIENCE OUTLET PLAN (TYPICAL)

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO.: E-14



3RD-5TH FLOOR CONVENIENCE OUTLET PLAN (TYPICAL)

E-14

SCALE:

1:100 MTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY:
CHECKED BY:

REVIEWED BY:
RAUL R. CRUCENA
Division Chief II, IDDD-AED

SUBMITTED BY:
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
LT COL. VALENTINO A. DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

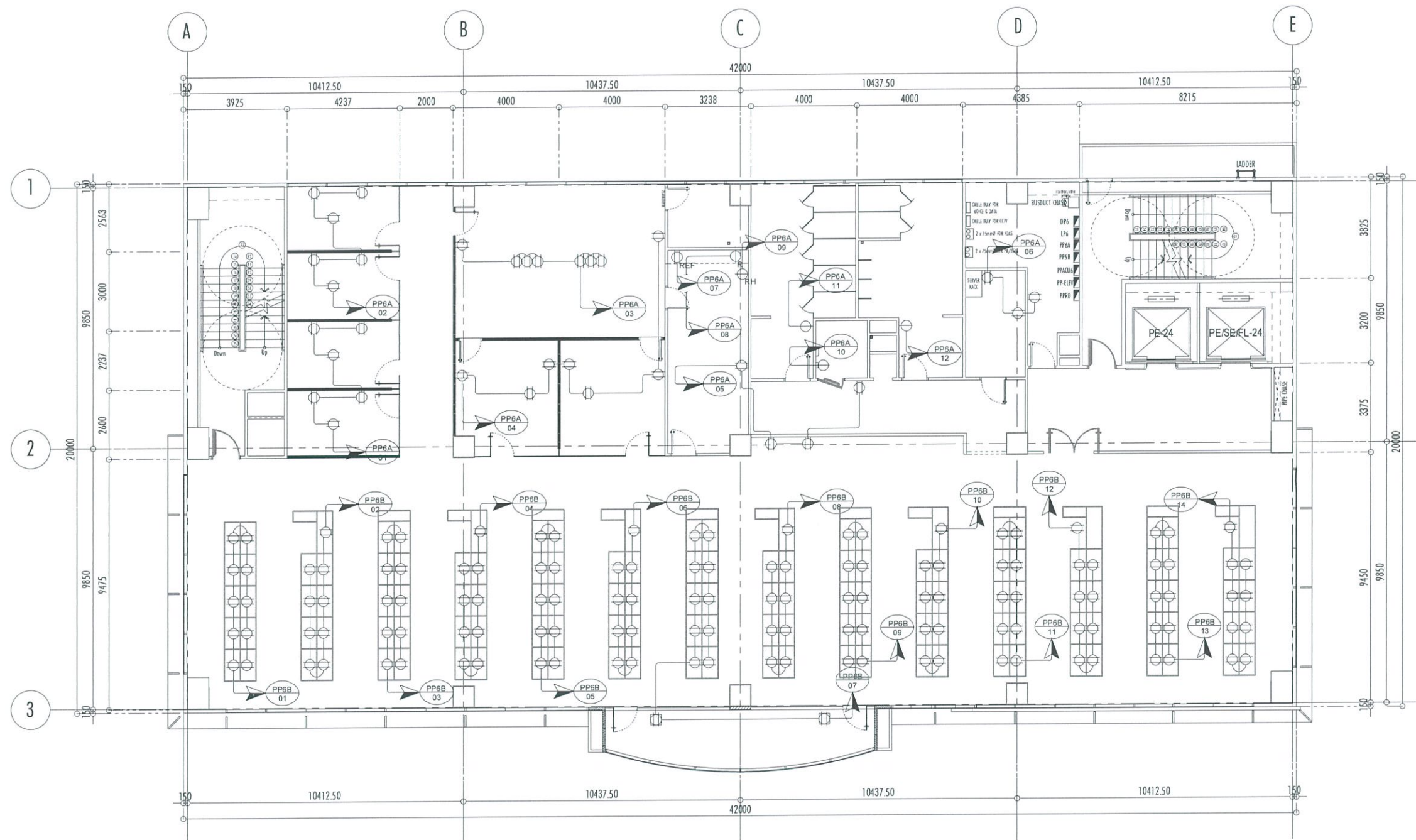
LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
6TH FLOOR CONVENIENCE OUTLET PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO: E-15



1
E-15
6TH FLOOR CONVENIENCE OUTLET PLAN
SCALE: 1:100 MTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	
DRAWN BY:	<i>[Signature]</i>
CHECKED BY:	

REVIEWED BY:

[Signature]
 RAUL R. CRUCENA
 Division Chief III, IDDD-AED

SUBMITTED BY:

[Signature]
 ARNEL F. BORLADO
 Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

[Signature]
 LT COL. VALENTINO A. DIONELA PAF (RET)
 Assistant Director General II, ADMS

APPROVED BY:

[Signature]
 CAPTAIN MANUEL ANTONIO L. TAMAYO
 Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
 NAIA ROAD, PASAY CITY

SHEET CONTENTS:

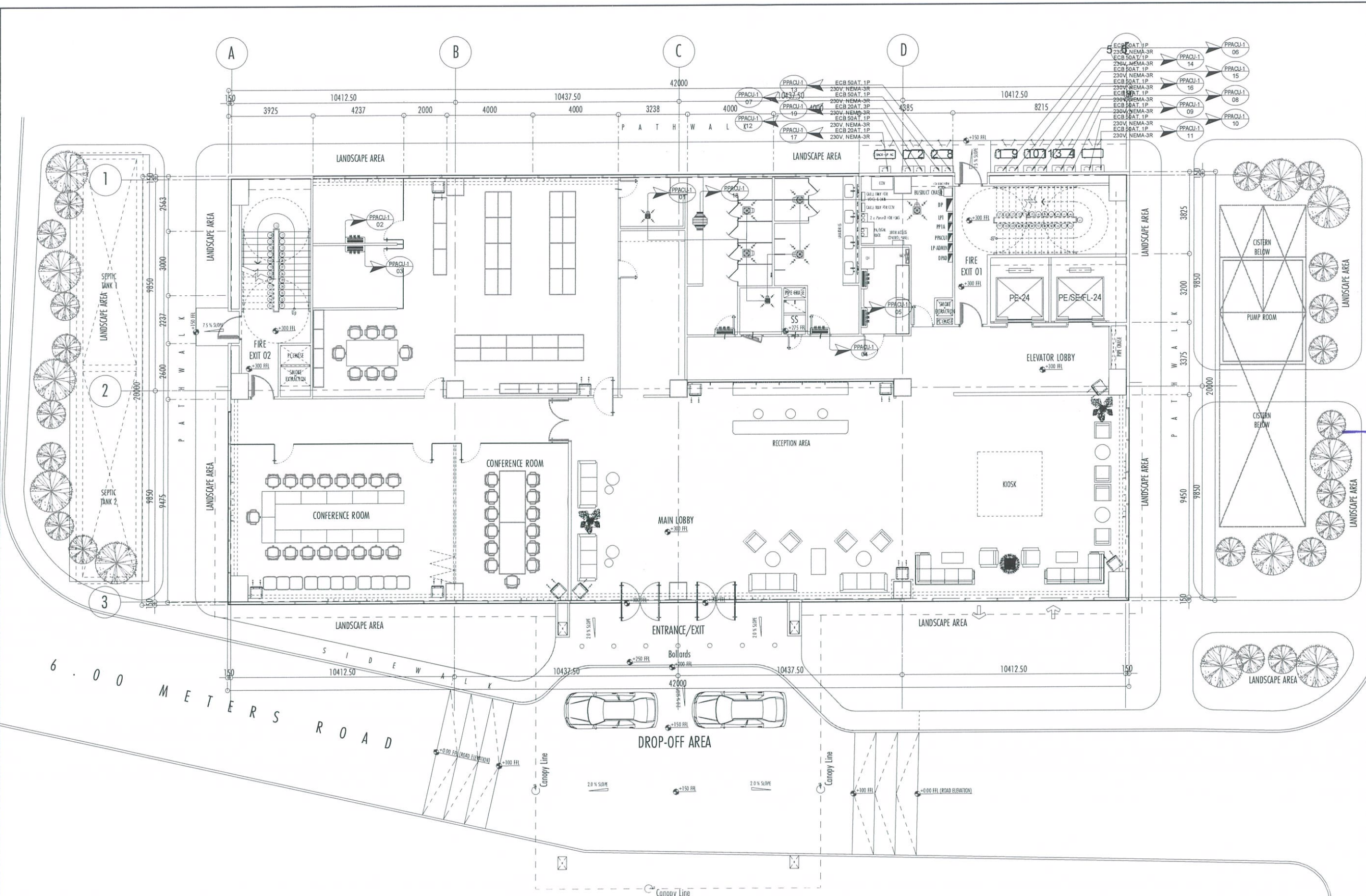
• GROUND FLOOR ACU PLAN

DRAWING SCALE:	SHEET NO:
AS SHOWN	E-16

PROFESSIONAL ELECTRICAL ENGINEER:

ENGR. FREDERICK R. CALAMLAM

LICENSE NO.:	0003482	VALID UNTIL:	06/04/2025
PTR NO.:	2296325	ISSUED ON:	01/04/2024
TIN NO.:	214-207-341-000	ISSUED AT:	LAGUNA



1
 E-16 SCALE: 1:100 MTS
GROUND FLOOR ACU PLAN



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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY: *[Signature]*
CHECKED BY:

REVIEWED BY:
[Signature]
RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
[Signature]
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
[Signature]
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
[Signature]
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

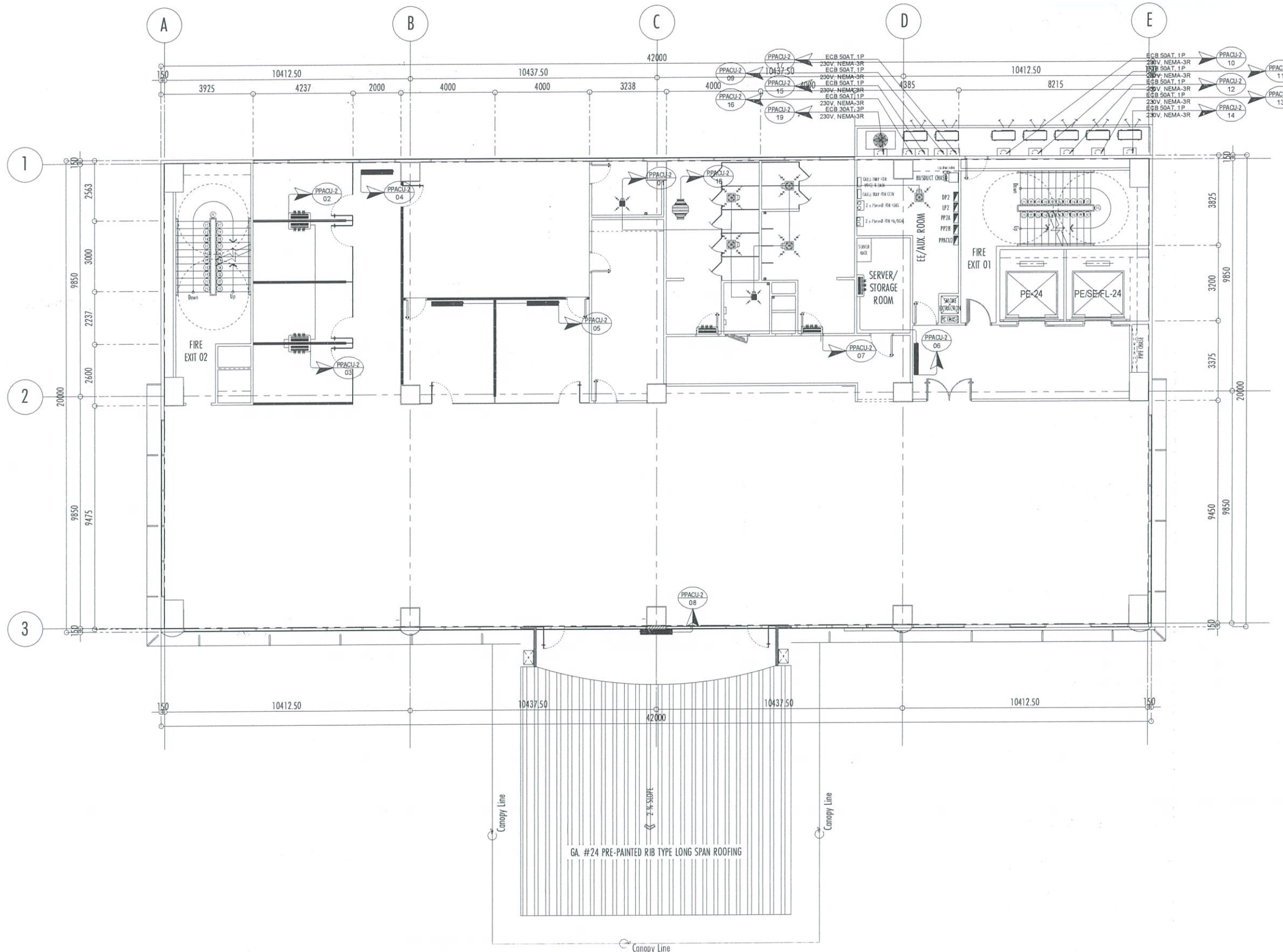
PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 2ND FLOOR ACU PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM
LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: SHEET NO:
AS SHOWN E-17



1
E-17
SCALE: 1:100 MTS
2ND FLOOR ACU PLAN (TYPICAL)

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY: *[Signature]*
CHECKED BY:

REVIEWED BY:
[Signature]
RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
[Signature]
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
[Signature]
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
[Signature]
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

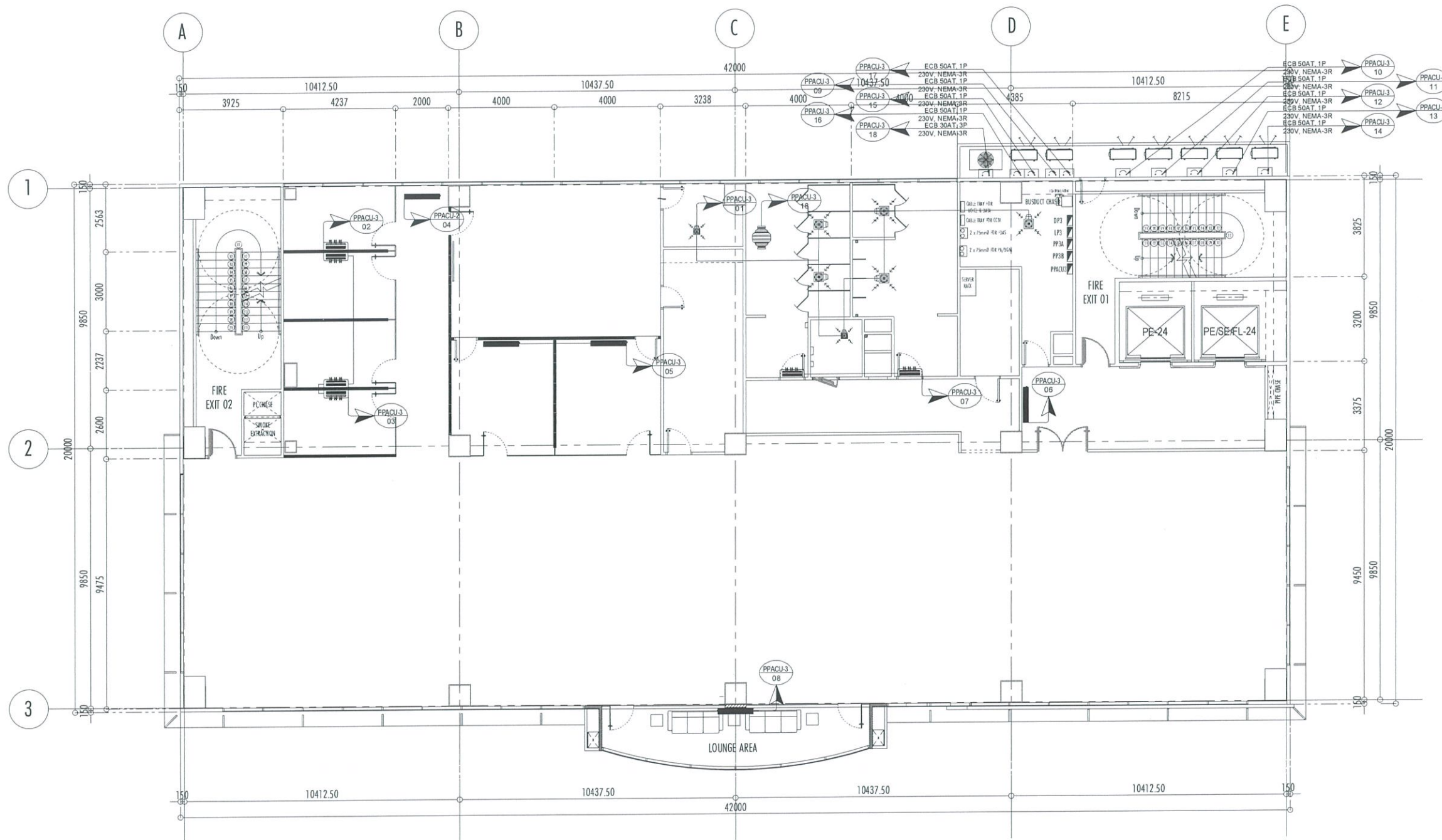
LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 3RD-5TH FLOOR ACU PLAN (TYPICAL)

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO.: E-18



1
E-18

3RD-5TH FLOOR ACU PLAN (TYPICAL)

SCALE: 1:100 MTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY:
CHECKED BY:

REVIEWED BY:
RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
ARNEL R. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

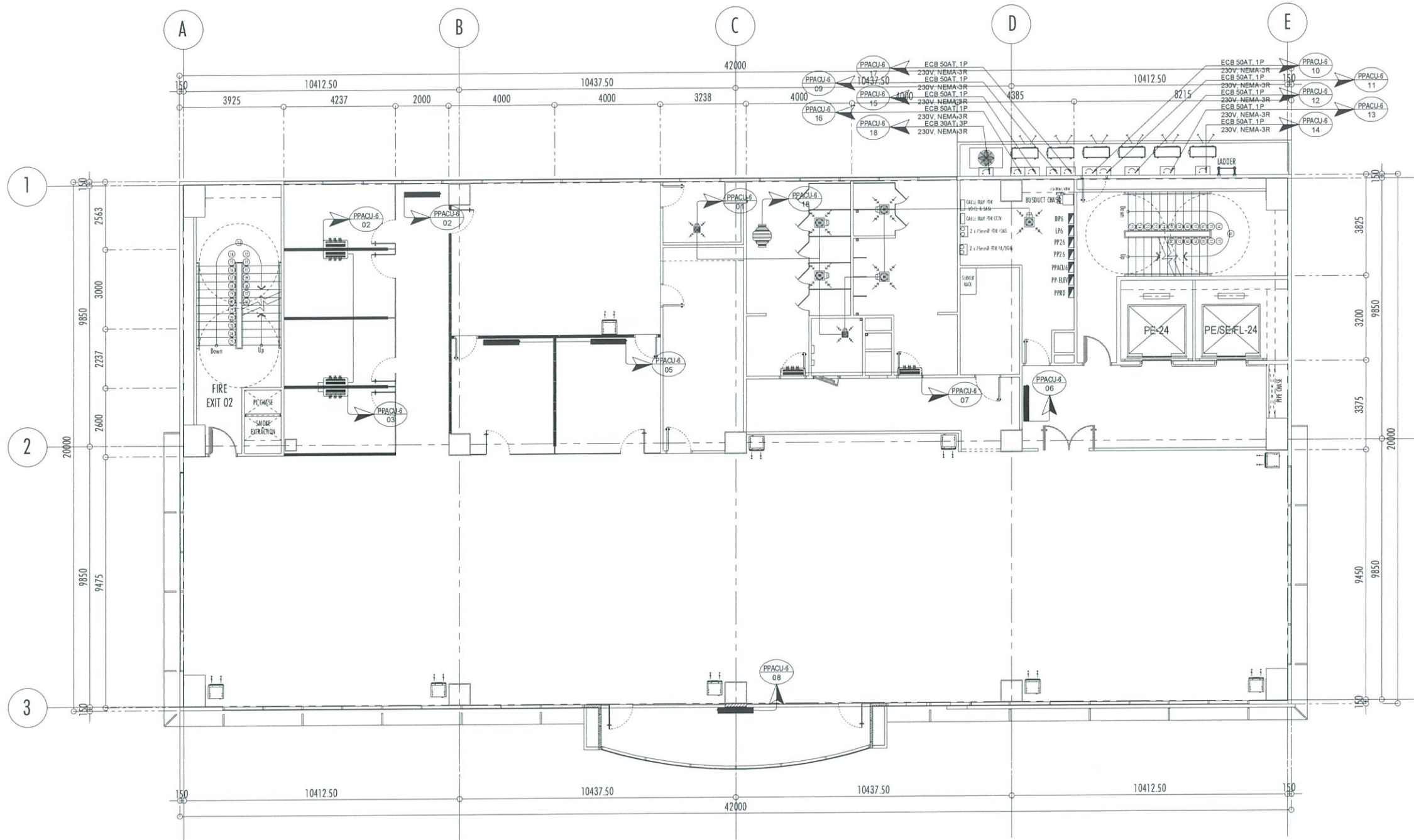
LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• 6TH FLOOR ACU PLAN

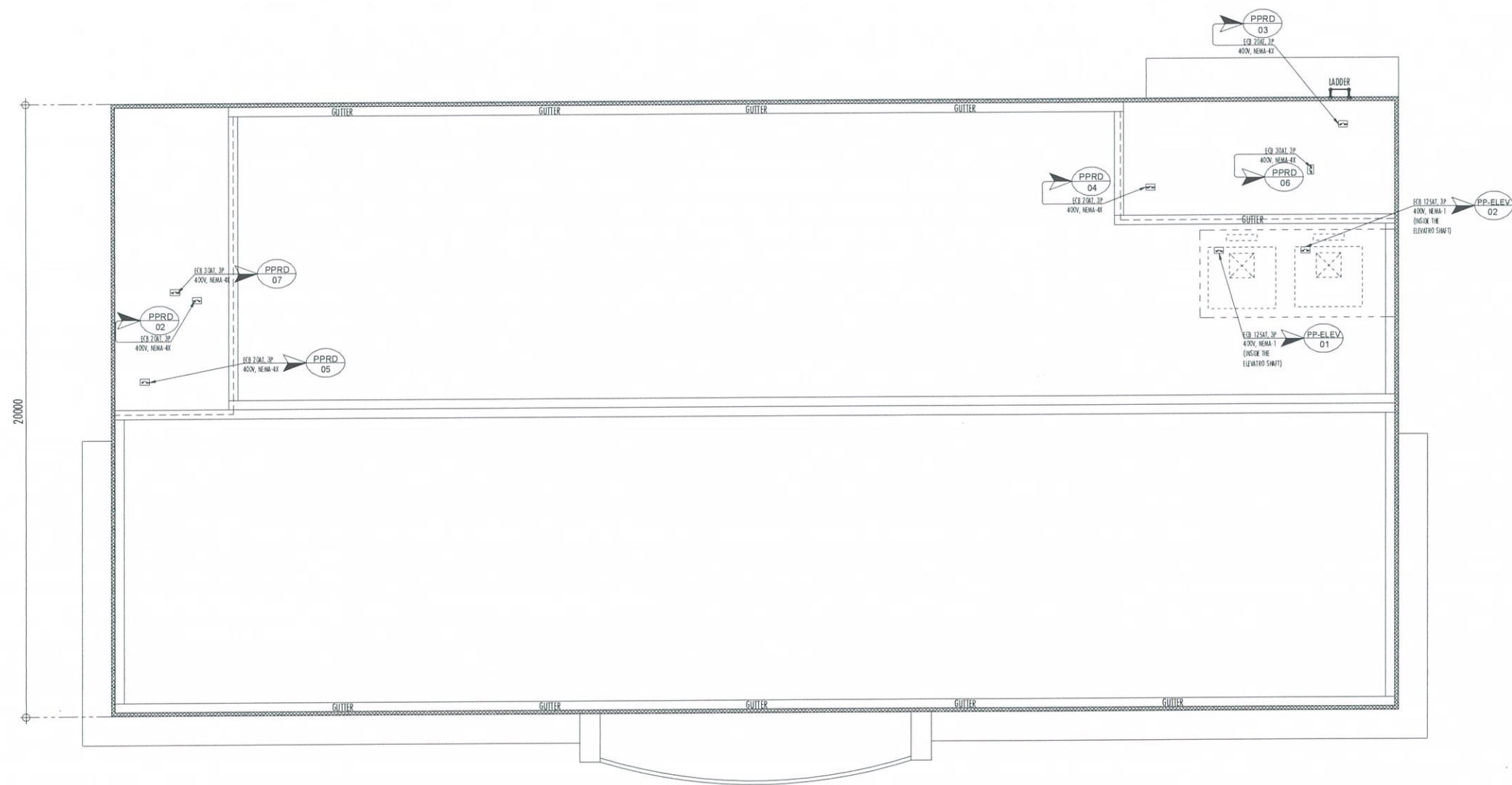
PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482
PTR NO.: 2296325
TIN NO.: 214-207-341-000
VALID UNTIL: 06/04/2025
ISSUED ON: 01/04/2024
ISSUED AT: ILAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO: E-19



1
E-19
SCALE: 1:100 MTS
6TH FLOOR ACU PLAN



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NAIA ROAD, 1300 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	
DRAWN BY:	<i>Jalung</i>
CHECKED BY:	

REVIEWED BY:

Raul R. Crucena
RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:

Arnel F. Borlado
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

LT Col. Valentino A. Dionela PAF (RET)
LT COL. VALENTINO A. DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

Captain Manuel Antonio L. Tamayo
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• ROOF DECK ACU PLAN

PROFESSIONAL ELECTRICAL ENGINEER:	
ENGR. FREDERICK R. CALAMLAM	
LICENSE NO.:	0003482
PTR NO.:	2296325
TIN NO.:	214-207-341-000
VALID UNTIL:	06/04/2025
ISSUED ON:	01/04/2024
ISSUED AT:	LAGUNA

DRAWING SCALE:	SHEET NO.:
AS SHOWN	E-20

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

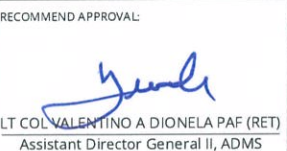
DESIGN STAFF: INITIAL / DATE
 DESIGNED BY:
 DRAWN BY: *J. Borlado*
 CHECKED BY:

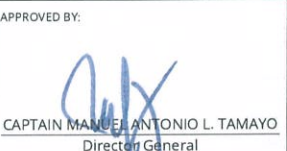
REVIEWED BY:


 RAUL R. CRUCENA
 Division Chief III, IDDD-AED

SUBMITTED BY:

 ARNEL F. BORLADO
 Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

 LT COL VALENTINO A DIONELA PAF (RET)
 Assistant Director General II, ADMS

APPROVED BY:

 CAPTAIN MANUEL ANTONIO L. TAMAYO
 Director General

NOTES/REVISIONS:

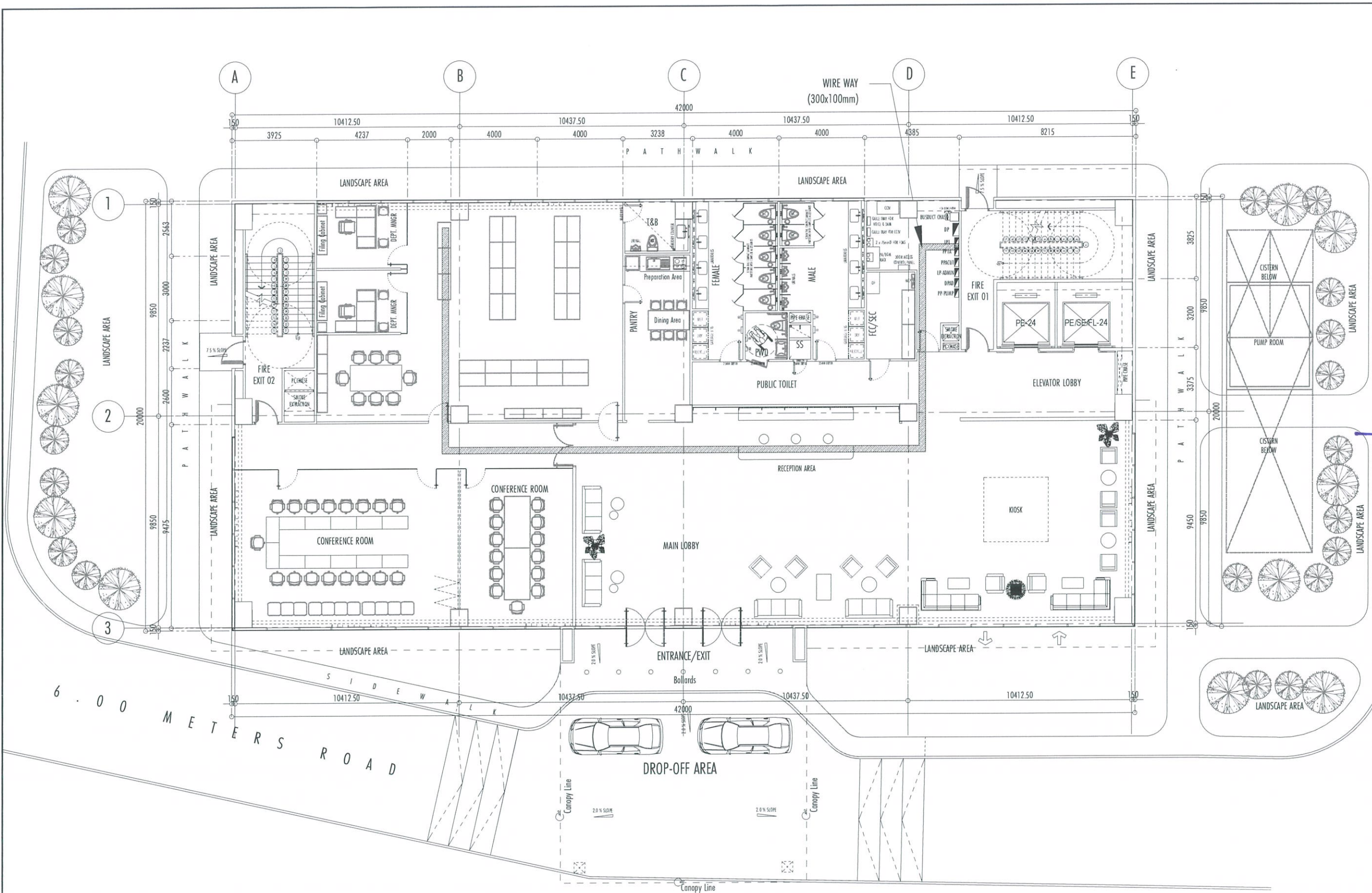
PROJECT:
 NEW CAAP BUILDING

LOCATION:
 CAAP HEAD OFFICE
 NAIA ROAD, PASAY CITY

SHEET CONTENTS:
 • GROUND FLOOR CABLE TRAY PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
 ENGR. FREDERICK R. CALAMLAM
 LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
 PTR NO.: 2296325 ISSUED ON: 01/04/2024
 TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
 SHEET NO.: E-21



1
 E-21
 SCALE: 1:100 MTS
GROUND FLOOR CABLE TRAY PLAN

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE

DESIGNED BY:

DRAWN BY:

CHECKED BY:

REVIEWED BY:

RAUL R. GRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:

ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

LT COL VALENTINO A. DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• 2ND FLOOR CABLE TRAY PLAN

PROFESSIONAL ELECTRICAL ENGINEER:

ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482
PTR NO.: 2296325
TIN NO.: 214-207-341-000

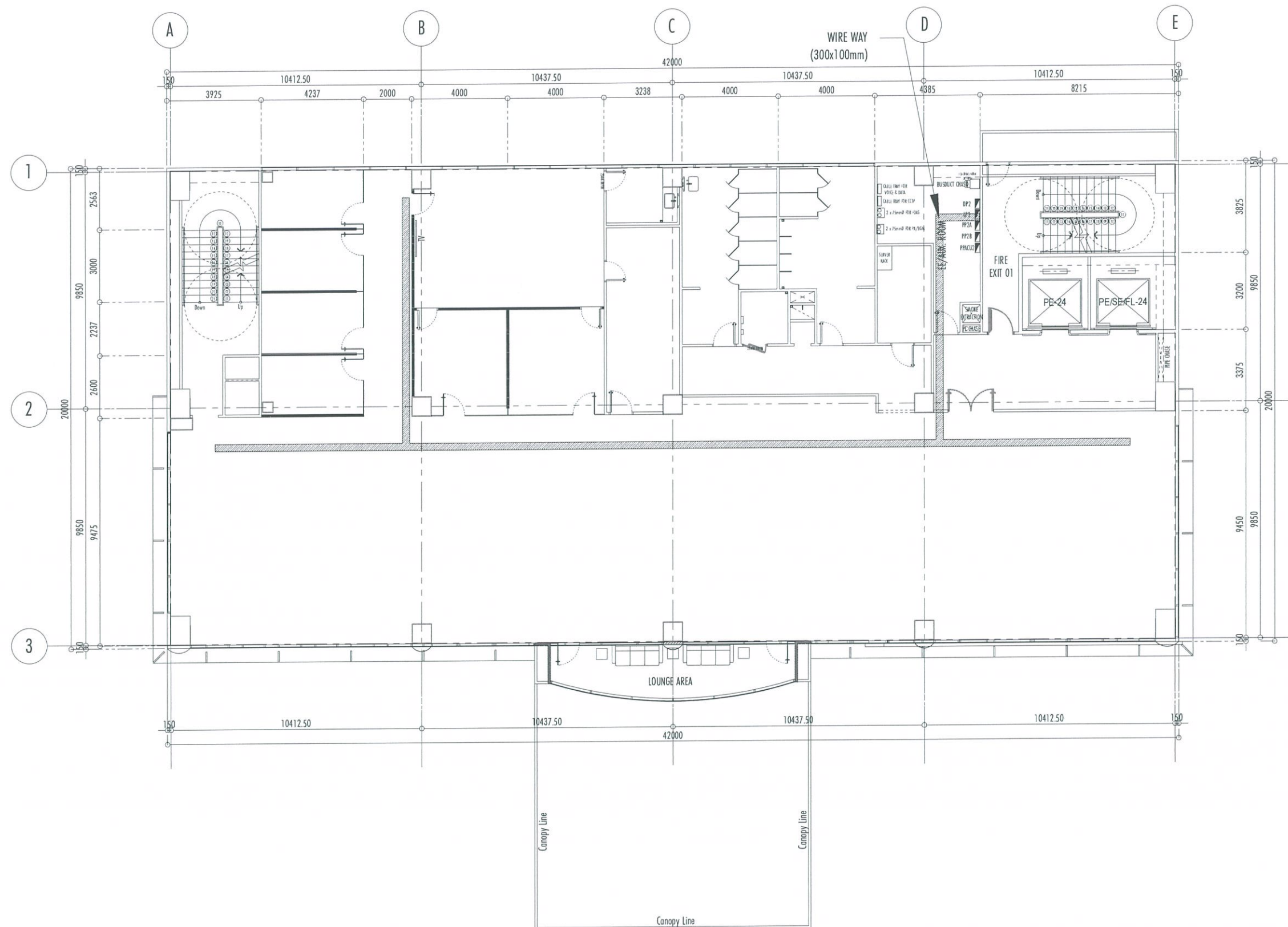
VALID UNTIL: 06/04/2025
ISSUED ON: 01/04/2024
ISSUED AT: LAGUNA

DRAWING SCALE:

AS SHOWN

SHEET NO:

E-22



1
E-22

2ND FLOOR CABLE TRAY PLAN

SCALE: 1:100 MTS



3RD - 5TH FLOOR CABLE TRAY PLAN (TYPICAL)

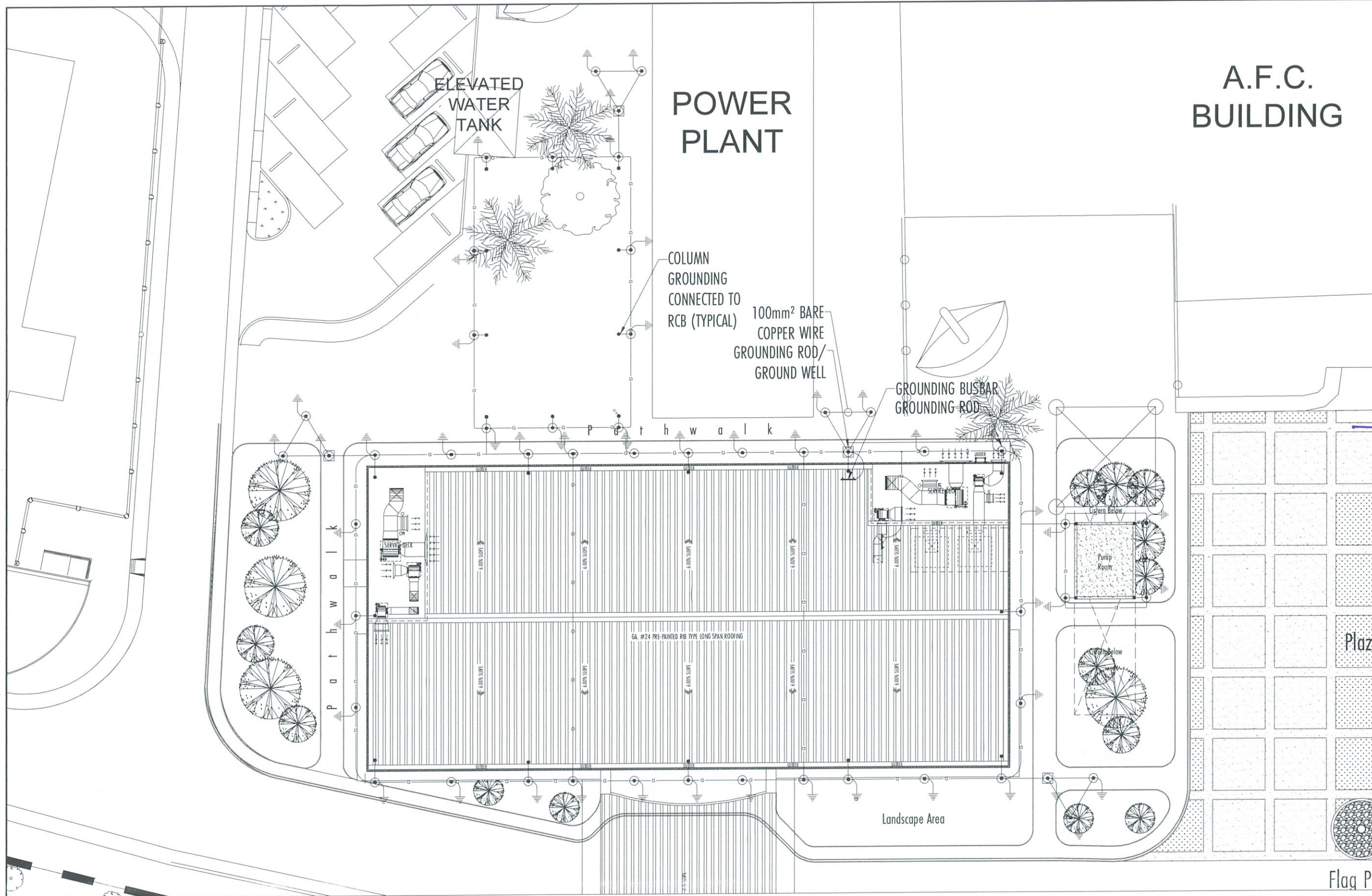
1:100 MTS

DRAWING SCALE:	SHEET NO:	
AS SHOWN	E-23	



SHEET NO:

E-23	
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REPUBLIC OF THE PHILIPPINES
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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

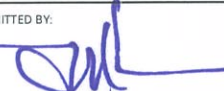
INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	

REVIEWED BY:


RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:


ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:


LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

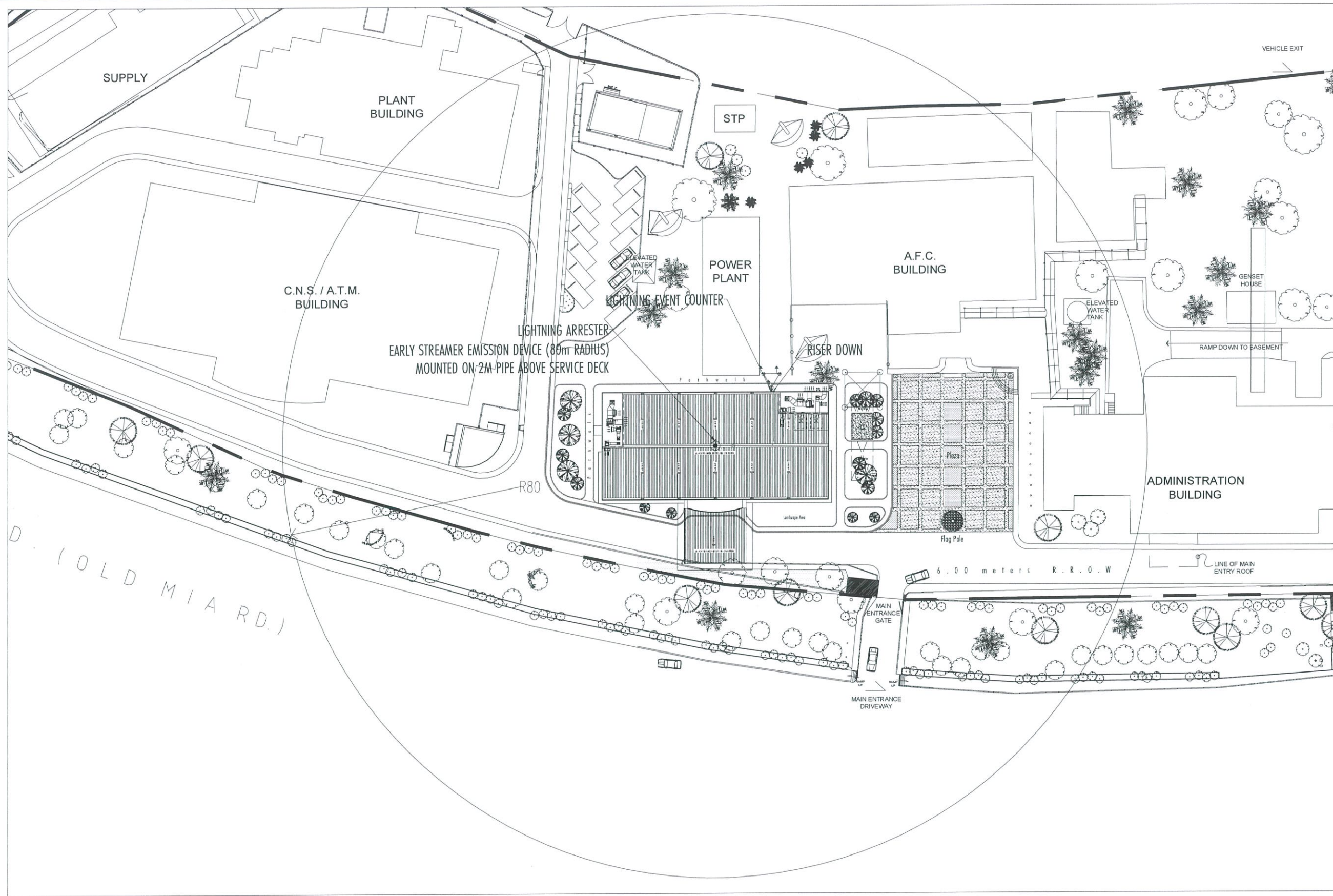

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:	NEW CAAP BUILDING
LOCATION:	CAAP HEAD OFFICE NAIA ROAD, PASAY CITY
SHEET CONTENTS:	• GROUNDING PLAN

PROFESSIONAL ELECTRICAL ENGINEER:	
ENGR. FREDERICK R. CALAMLAM	
LICENSE NO.:	0003482
PTR NO.:	2296325
TIN NO.:	214-287-341-000
VALID UNTIL:	06/04/2025
ISSUED ON:	01/04/2024
ISSUED AT:	LAGUNA

DRAWING SCALE:	SHEET NO.:
AS SHOWN	E-25



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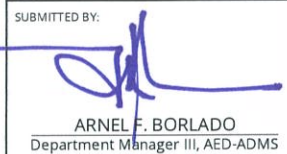
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY:
CHECKED BY:

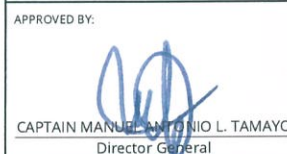
REVIEWED BY:


RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:

ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

LT COL. VALENTINO A. DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• ROOF DECK LIGHTNING PROTECTION SYSTEM PLAN

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-287-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO: E-26

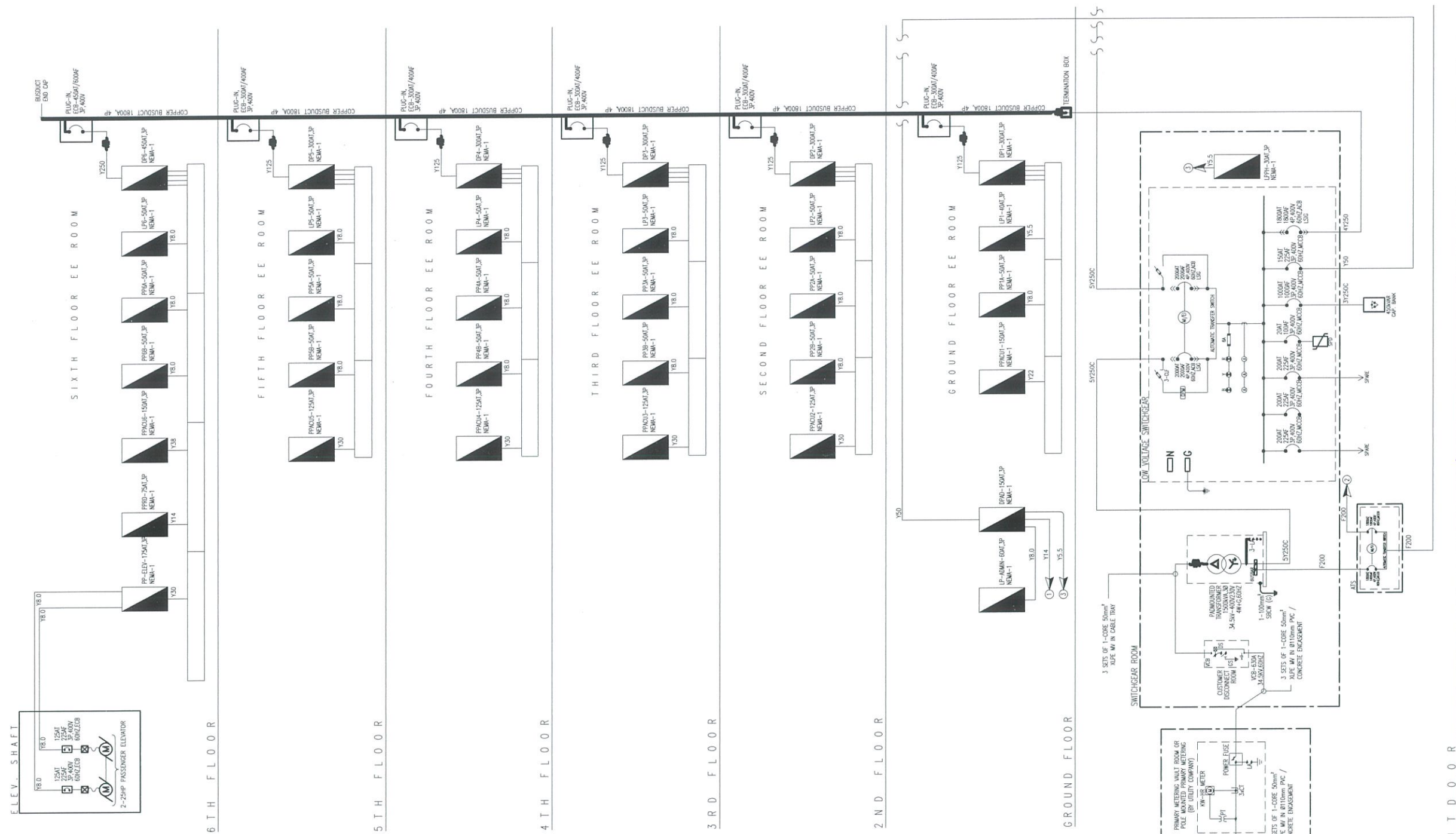


1
E-26

ROOF DECK LIGHTNING PROTECTION SYSTEM PLAN

SCALE: 1:400 MTS

R 0 0 F



1 SINGLE LINE DIAGRAM
E-28 SCALE: NTS

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM
LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY: *[Signature]*
CHECKED BY:
REVIEWED BY:

RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
[Signature]
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
[Signature]
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
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CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• SINGLE LINE DIAGRAM

DRAWING SCALE: AS SHOWN
SHEET NO.: E-28

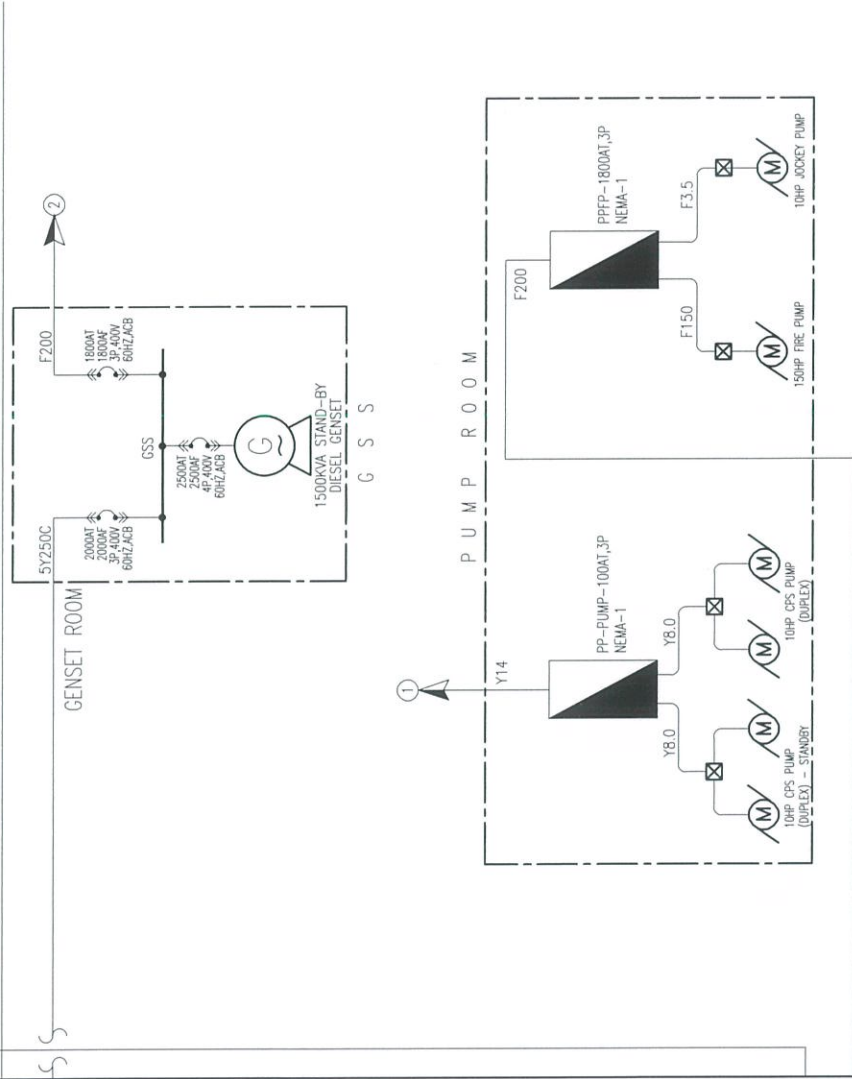
WIRING CODE:

WIRE CODE:	SINGLE PHASE WIRES, 230V 2W+G	AMPACITY THHN/THWN	GROUND WIRES	CONDUIT CODE EMT/IMC
X3.5	2-3.5mm. sq. THHN/THWN-2	30	1-2.0mm. sq. THHN/THWN-2	15mm. dia.
X5.5	2-5.5mm. sq. THHN/THWN-2	40	1-5.5mm. sq. THHN/THWN-2	15mm. dia.
X8.0	2-8.0mm. sq. THHN/THWN-2	55	1-5.5mm. sq. THHN/THWN-2	20mm. dia.
X14	2-14mm. sq. THHN/THWN-2	75	1-5.5mm. sq. THHN/THWN-2	25mm. dia.
X22	2-22mm. sq. THHN/THWN-2	95	1-8.0mm. sq. THHN/THWN-2	32mm. dia.
X30	2-30mm. sq. THHN/THWN-2	115	1-8.0mm. sq. THHN/THWN-2	32mm. dia.
X38	2-38mm. sq. THHN/THWN-2	130	1-14mm. sq. THHN/THWN-2	40mm. dia.
X50	2-50mm. sq. THHN/THWN-2	150	1-14mm. sq. THHN/THWN-2	40mm. dia.
X60	2-60mm. sq. THHN/THWN-2	170	1-14mm. sq. THHN/THWN-2	50mm. dia.
X80	2-80mm. sq. THHN/THWN-2	205	1-14mm. sq. THHN/THWN-2	50mm. dia.
X100	2-100mm. sq. THHN/THWN-2	240	1-14mm. sq. THHN/THWN-2	65mm. dia.
X125	2-125mm. sq. THHN/THWN-2	285	1-22mm. sq. THHN/THWN-2	65mm. dia.
X150	2-150mm. sq. THHN/THWN-2	320	1-22mm. sq. THHN/THWN-2	65mm. dia.
X175	2-175mm. sq. THHN/THWN-2	345	1-22mm. sq. THHN/THWN-2	80mm. dia.
X200	2-200mm. sq. THHN/THWN-2	360	1-22mm. sq. THHN/THWN-2	80mm. dia.
X250	2-250mm. sq. THHN/THWN-2	425	1-30mm. sq. THHN/THWN-2	90mm. dia.

WIRE CODE:	THREE PHASE WIRES, 400V 3W+N+G	AMPACITY THHN/THWN	GROUND WIRES	CONDUIT CODE EMT/IMC
Y3.5	4-3.5mm. sq. THHN/THWN-2	30	1-2.0mm. sq. THHN/THWN-2	15mm. dia.
Y5.5	4-5.5mm. sq. THHN/THWN-2	40	1-5.5mm. sq. THHN/THWN-2	15mm. dia.
Y8.0	4-8.0mm. sq. THHN/THWN-2	55	1-5.5mm. sq. THHN/THWN-2	20mm. dia.
Y14	4-14mm. sq. THHN/THWN-2	75	1-5.5mm. sq. THHN/THWN-2	25mm. dia.
Y22	4-22mm. sq. THHN/THWN-2	95	1-8.0mm. sq. THHN/THWN-2	32mm. dia.
Y30	4-30mm. sq. THHN/THWN-2	115	1-8.0mm. sq. THHN/THWN-2	32mm. dia.
Y38	4-38mm. sq. THHN/THWN-2	130	1-14mm. sq. THHN/THWN-2	40mm. dia.
Y50	4-50mm. sq. THHN/THWN-2	150	1-14mm. sq. THHN/THWN-2	40mm. dia.
Y60	4-60mm. sq. THHN/THWN-2	170	1-14mm. sq. THHN/THWN-2	50mm. dia.
Y80	4-80mm. sq. THHN/THWN-2	205	1-14mm. sq. THHN/THWN-2	50mm. dia.
Y100	4-100mm. sq. THHN/THWN-2	240	1-14mm. sq. THHN/THWN-2	65mm. dia.
Y125	4-125mm. sq. THHN/THWN-2	285	1-22mm. sq. THHN/THWN-2	65mm. dia.
Y150	4-150mm. sq. THHN/THWN-2	320	1-22mm. sq. THHN/THWN-2	65mm. dia.
Y175	4-175mm. sq. THHN/THWN-2	345	1-22mm. sq. THHN/THWN-2	80mm. dia.
Y200	4-200mm. sq. THHN/THWN-2	360	1-22mm. sq. THHN/THWN-2	80mm. dia.
Y250	4-250mm. sq. THHN/THWN-2	425	1-30mm. sq. THHN/THWN-2	90mm. dia.
Y250C	4-250mm. sq. THHN/THWN-2	425	1-30mm. sq. THHN/THWN-2	CABLE TRAY

WIRING CODE:

WIRE CODE:	FIRE RATED CABLE 3W+N+G	AMPACITY THHN/THWN	GROUND WIRES	CONDUIT CODE EMT/IMC	PVC
F3.5	4-3.5mm. sq. FRC	30	1-3.5mm. sq. FRC	15mm. dia.	20mm. dia.
F200	4-150mm. sq. FRC	360	1-22mm. sq. FRC	80mm. dia.	100mm. dia.
F200	4-200mm. sq. FRC	360	1-22mm. sq. FRC	80mm. dia.	100mm. dia.



PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-381-000 ISSUED AT: LAGUNA

• SINGLE LINE DIAGRAM

DRAWING SCALE: AS SHOWN SHEET NO: E-28A

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AERODROME DEVELOPMENT
AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT
AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE

DESIGNED BY:

DRAWN BY:

CHECKED BY:

REVIEWED BY:

RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:

ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

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LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• SCHEDULE OF LOADS

DRAWING SCALE: SHEET NO:

AS SHOWN E-29

PANEL DESIGNATION : LP1 (LIGHTING PANEL GF)							MOUNTING : SURFACE MOUNTED						
SYSTEM VOLTAGE : 400/230V, 3PHASE, 3-WIRE + N + G, 60HZ							PANEL ENCLOSURE : NEMA-1						
LOCATION : GROUND FLOOR ELECTRICAL RM							MIN KAIC : 10 KAIC						
CKT No	LOAD DESCRIPTION	VA	CONNECTED LOAD				BRANCH CIRCUIT BREAKER RATING			WIRE SIZE (THHN/THWN-2)	GROUND SIZE	CONDUIT SIZE	
			VOLT - AMPERE				AT	AF	P				
			AN	BN	CN	ABC							
1	CONFERENCE RM LIGHTING (11)	1,100	1,100				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
2	CONFERENCE RM LIGHTING (12)	1,200	1200				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
3	CONFERENCE RM LIGHTING (12)	1,200		1200			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
4	DEPT. MANAGER LIGHTING (14)	1,400		1400			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
5	OFFICE LIGHTING (13)	1,300			1300		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
6	OFFICE LIGHTING (12)	1,200			1200		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
7	PANTRY AREA LIGHTING (1200)	1,200	1,200				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
8	RECEP. AREA LIGHTING (16)	1,600	1600				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
9	MAIN LOBBY LIGHTING (25)	2,500		2500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
10	FEMALE TOILET LIGHTING (13)	1,300		1300			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
11	MALE TOILET LIGHTING (21)	2,100			2100		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
12	LOBBY AREA LIGHTING (12)	1,200			1200		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
13	LOBBY AREA LIGHTING (16)	1,600	1,600				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
14	EE ROOM / FIRE EXIT LIGHTING (9)	900	900				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
15	EMERGENCY LIGHT / EXIT LIGHT (9)	500		500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
16	EMERGENCY LIGHT / EXIT LIGHT (9)	500		500			20	100	1	2-3.5mm ²	1-3.0mm ²	Ø15mm EMT / CT	
17	SPARE	1,000			1000		20	100	1				
18	SPARE	1,000			1000		20	100	1				
TOTAL		22,800	7,600	7,400	7,800								
DEMAND FACTOR : 1.00													
DEMAND VA : 22800 VA													
I _T : ((7,800x3/(√3x400)))x1 = 33.78 Amps													
I _{WIRE} : ((7,800x3/(√3x400)))x1 = 33.78 Amps													
I _{CIRCUIT BREAKER} : ((7,800x3/(√3x400)))x1 = 33.78 Amps													
MAIN FEEDER : 4-5.5mm ² THHN/THWN-2 (LINE TO NEUTRAL) & 1-5.5mm ² THHN/THWN-2 (GROUND)													
RACEWAY : Ø15mm EMT PIPE / CABLE TRAY													
MAIN CB : 40AT/100AF, 3P, 400/230V, 60HZ, MCCB													

PANEL DESIGNATION : PP1A (POWER PANEL GF - A)							MOUNTING : SURFACE MOUNTED					
SYSTEM VOLTAGE : 400/230V, 3-PHASE, 3-WIRE + N + G, 60HZ							ENCLOSURE : NEMA-1					
LOCATION : GROUND FLOOR ELECTRICAL RM							MIN KAIC : 10 KAIC					
CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	VOLT - AMPERE									
			AN	BN	CN	ABC	AT	AF	POLE			
1	CONVENIENCE OUTLET (11)	1,980	1,980				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
2	CONVENIENCE OUTLET (6)	1,080	1,080				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	CONVENIENCE OUTLET (9)	1,620		1,620			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
4	CONVENIENCE OUTLET (8)	1,440		1,440			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	CONVENIENCE OUTLET (8)	1,440			1,440		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	CONVENIENCE OUTLET (10)	1,800			1,800		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
7	CONVENIENCE OUTLET (8)	1,440	1,440				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
8	REFRIGERATOR	1,500	1,500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
9	ELECTRIC RANGE	3,500		3,500			40	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
10	RANGE HOOD	500		500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
11	HAND DRYER	1,500			1,500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
12	HAND DRYER	1,500			1,500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
13	HAND DRYER	1,500	1,500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
14	SPARE	2,500	2,500				30	100	1			
15	SPARE	2,500		2,500			30	100	1			
16	SPARE	2,500		2,500			30	100	1			
T O T A L		28,300	10,000		6,240							
DEMAND FACTOR : 80%							MAIN FEEDER : 4-8.0mm ² THHN/THWN-2 (LINE - NEUTRAL) & 1-5.5mm ² THW (GROUND)					
DEMAND VA : 22,640 VA							RACEWAY : Ø20mm EMT PIPE / CABLE TRAY					
LOAD COMPUTATION							MAIN CB : 50AT/100AF, 3P, 400/230V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER					
I _{TOTAL} : (((12,060x3)/(√3x400)))x80% = 41.78 AMPS												
I _{WIRE} : (((12,060x3)/(√3x400)))+(25%x(6.52)))x80% = 43.08 AMPS												
I _{CIRCUIT BREAKER} : (((12,060x3)/(√3x400)))+(150%x(6.52)))x80% = 49.60 AMPS												

PANEL DESIGNATION : PPACU-1 (ACU POWER PANEL GF)							MOUNTING : SURFACE MOUNTED					
SYSTEM VOLTAGE : 400/230V, 3-PHASE, 3-WIRE + N + G, 60HZ							ENCLOSURE : NEMA-1					
LOCATION : GROUND FLOOR ELECTRICAL RM							MIN KAIC : 18 KAIC					
CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THIN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	V O L T - A M P E R E									
			AN	BN	CN	ABC	AT	AF	POLE			
1	TEF-2F / EF-2F (7 UNITS)	500	500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
2	DEPT. MANAGER FCU-GF (1 UNIT)	500	500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	DEPT. MANAGER FCU-GF (1 UNIT)	500		500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
4	MALE/FEMALE T&B FCU-GF (2 UNITS)	500		500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	FCC/CCTV/SEC RM FCU-GF (1 UNITS)	500			500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	OFFICE AREA FCU-GF (4.49KW)	5,282			5,282		50	100	1	2-5.5mm ²	1-5.5mm ²	Ø15mm EMT / CT
7	OFFICE AREA FCU-GF (4.49KW)	5,282	5,282				50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
8	MAIN LOBBY FCU-GF (4.49KW)	5,282	5,282				50	100	1	2-5.5mm ²	1-5.5mm ²	Ø15mm EMT / CT
9	MAIN LOBBY FCU-GF (4.49KW)	5,282		5,282			50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
10	MAIN LOBBY FCU-GF (4.49KW)	5,282		5,282			50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
11	MAIN LOBBY FCU-GF (4.49KW)	5,282			5,282		50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
12	MAIN LOBBY FCU-GF (4.49KW)	5,282			5,282		50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
13	MAIN LOBBY FCU-GF (4.49KW)	5,282	5,282				50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
14	CONFERENCE-1 FCU-GF (4.49KW)	5,282	5,282				50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
15	CONFERENCE-1 FCU-GF (4.49KW)	5,282		5,282			50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
16	CONFERENCE-2 FCU-GF (4.49KW)	5,282		5,282			50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
17	FCC/CCTV/SEC RM FCU-GF (1,024KW)	1,205			1,205		20	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
18	PUBLIC TOILET FAB-2F (0.35KW)	500			500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
19	VRF TYPE ACCU-2F (3.78KW)	4,447	1,482	1,482	1,482		20	100	3	4-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
20	SPARE	2,500	2,500				30	100	1			
21	SPARE	2,500		2,500			30	100	1			
22	SPARE	2,500		2,500			30	100	1			
T O T A L		74,258	26,112	28,612	19,534							

MOUNTING SURFACE MOUNTED												
PANEL ENCLOSURE NEMA-1												
MIN KA/C 10 KA/C												
CKT No.	LOAD DESCRIPTION	CONNECTED LOAD				BRANCH CIRCUIT BREAKER RATING			WIRE SIZE (THHN/THWN-2)		GROUND SIZE	CONDUIT SIZE
		VOLT - AMPERE										
		VA	AN	BN	CN	ABC	AT	AF	P	LINE - NEUTRAL	GROUND	RACEWAYS
1	OFFICE LIGHTING (15)	1,500	1500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
2	OFFICE LIGHTING (15)	1,500	1500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	OFFICE LIGHTING (15)	1,500		1500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
4	OFFICE LIGHTING (15)	1,500		1500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	OFFICE LIGHTING (15)	1,500			1500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	OFFICE LIGHTING (15)	1,500			1500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
7	OFFICE LIGHTING (15)	1,500	1500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
8	OFFICE LIGHTING (15)	1,500	1500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
9	DEPT. MNGR OFFICE LIGHTING (11)	1,100		1100			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
10	DEPT. MNGR OFFICE LIGHTING (11)	1,100		1100			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
11	CONFERENCE RM LIGHTING W/ COVE LIGHT (14)	1,400			1400		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
12	ADG I & II RM LIGHTING (17)	1,700			1700		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
13	PANTRY / FEMALE TOILET / PWD LIGHTING (19)	1,900	1900				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
14	MALE TOILET & HALLWAY LIGHTING (19)	1,900	1900				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
15	EE ROOM / FIRE EXIT (14)	1,400		1400			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
16	EMERGENCY LIGHT / EXIT LIGHT (11)	1,100		1100			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
17	EMERGENCY LIGHT / EXIT LIGHT (10)	1,000			1000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
18	SPARE	1,500			1500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
TOTAL		26,100	9,800	7,700	9,600							

DEMAND FACTOR	: 1.00											
DEMAND VA	: 26100 VA											
I _{total}	: ((9,800x3/(V3x400)))x1	= 42.44 Amps										
I _{wire}	: ((9,800x3/(V3x400)))+(25%((0)))x1	= 42.44 Amps										
I _{circuit breaker}	: ((9,800x3/(V3x400)))+(150%((0)))x1	= 42.44 Amps										

MAIN FEEDER : 4-8.0mm² THHN/THWN-2 (LINE TO NEUTRAL) & 1-5.5mm² THHN/THWN-2 (GROUND)
 RACEWAY : Ø20mm EMT PIPE / CABLE TRAY
 MAIN CB : 50AT/100AF, 3P, 400/230V, 60HZ, MCCB

MOUNTING SURFACE MOUNTED												
PANEL ENCLOSURE NEMA-1												
MIN KA/C 10 KA/C												
CKT No.	LOAD DESCRIPTION	CONNECTED LOAD				OVER CURRENT			WIRE SIZE (THHN/THWN-2)		GROUND SIZE	CONDUIT SIZE
		VOLT - AMPERE										
		VA	AN	BN	CN	ABC	AT	AF	P	LINE - NEUTRAL	GROUND	RACEWAYS
1	CONVENIENCE OUTLET (6)	1,080	1080				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
2	CONVENIENCE OUTLET (6)	1,080	1080				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	CONVENIENCE OUTLET (7)	1,260		1260			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
4	CONVENIENCE OUTLET (7)	1,260		1260			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	CONVENIENCE OUTLET (4)	720			720		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	CONVENIENCE OUTLET (3)	540			540		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
7	REFRIGERATOR	1,500	1500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
8	ELECTRIC RANGE	3,500	3500				40	100	1	2-5.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
9	RANGE HOOD	500		500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
10	HAND DRYER	1,500		1500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
11	HAND DRYER	1,500		1500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
12	HAND DRYER	1,500		1500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
13	SPARE	2,500	2500				30	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
14	SPARE	2,500	2500				30	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
15	SPARE	2,500		2500			30	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
16	SPARE	2,500		2500			30	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
17	SPARE	2,000			2000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
18	SPARE	2,000			2000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
TOTAL		29,940	12,160	9,520	8,260							

DEMAND FACTOR	: 0.80											
DEMAND VA	: 23952 VA											
I _{total}	: ((12,160x3/(V3x400)))x.8	= 42.12 Amps										
I _{wire}	: ((12,160x3/(V3x400)))+(25%((6.52)))x.8	= 43.43 Amps										
I _{circuit breaker}	: ((12,160x3/(V3x400)))+(150%((6.52)))x.8	= 49.95 Amps										

MAIN FEEDER : 4-8.0mm² THHN/THWN-2 (LINE TO NEUTRAL) & 1-5.5mm² THHN/THWN-2 (GROUND)
 RACEWAY : Ø20mm EMT PIPE / CABLE TRAY
 MAIN CB : 50AT/100AF, 3P, 400/230V, 60HZ, MCCB

MOUNTING SURFACE MOUNTED												
PANEL ENCLOSURE NEMA-1												
MIN KA/C 22 KA/C												
CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD				BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)		GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VOLT - AMPERE										
		VA	AN	BN	CN	ABC	AT	AF	POLE	LINE - NEUTRAL	GROUND	RACEWAYS
1	LP2 (LIGHTING PANEL 2F) TYPICAL UPTO 6F	26,100	9,800	7,700	8,600		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
2	PP2A (POWER PANEL 2F - A) TYPICAL UPTO 6F	29,940	12,160	9,520	8,260		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
3	PP2B (POWER PANEL 2F - B) TYPICAL UPTO 6F	29,300	10,620	11,840	6,840		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
4	PPACU-2 (ACU POWER PANEL 2F) TYP. UPTO 5F	64,750	18,468	25,532	20,750		125	225	3	4-30mm ²	1-8.0mm ²	Ø32mm IMC / CT
5	SPARE	20,000	6,667	6,667	6,667		75	100	3			
6	SPARE	20,000	6,667	6,667	6,667		75	100	3			
TOTAL		190,090	64,381	67,925	57,783							

DEMAND FACTOR	: 80%											
DEMAND VA	: 152,072 VA											
LOAD COMPUTATION												
I _{total}	: ((67,925x3/(V3x400)))x80%	= 235.31 AMPS										
I _{wire}	: ((67,925x3/(V3x400)))+(25%((12.87)))x80%	= 237.88 AMPS										
I _{circuit breaker}	: ((67,925x3/(V3x400)))+(150%((12.87)))x80%	= 250.75 AMPS										

MAIN FEEDER : 4-125mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-22mm² THW (GROUND)
 RACEWAY : Ø65mm IMC PIPE / CABLE TRAY
 MAIN CB : 300AT/400AF, 3P, 400V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER

PANEL DESIGNATION : PP2B (POWER PANEL 2F - B) TYPICAL UPTO 6F							MOUNTING SURFACE MOUNTED						
SYSTEM VOLTAGE : 400/230V, 3PHASE, 3-WIRE + N + G, 60HZ							PANEL ENCLOSURE NEMA-1						
LOCATION : 2ND FLOOR ELECTRICAL RM TYP UPTO 6F							MIN KA/C 10 KA/C						
CKT No.	LOAD DESCRIPTION	CONNECTED LOAD					OVER CURRENT			WIRE SIZE (THHN/THWN-2)	GROUND SIZE	CONDUIT SIZE	
		VA	VOLT - AMPERE										
			AN	BN	CN	ABC	AT	AF	P	LINE - NEUTRAL	GROUND	RACEWAYS	
1	CONVENIENCE OUTLET (10)	1,800	1800				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
2	CONVENIENCE OUTLET (9)	1,620	1620				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
3	CONVENIENCE OUTLET (10)	1,800		1800			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
4	CONVENIENCE OUTLET (9)	1,620		1620			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
5	CONVENIENCE OUTLET (10)	1,800			1800		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
6	CONVENIENCE OUTLET (9)	1,620			1620		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
7	CONVENIENCE OUTLET (12)	2,160	2160				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
8	CONVENIENCE OUTLET (9)	1,620	1620				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
9	CONVENIENCE OUTLET (10)	1,800		1800			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
10	CONVENIENCE OUTLET (9)	1,620		1620			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
11	CONVENIENCE OUTLET (10)	1,800			1800		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
12	CONVENIENCE OUTLET (9)	1,620			1620		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
13	CONVENIENCE OUTLET (10)	1,800	1800				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
14	CONVENIENCE OUTLET (9)	1,620	1620				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT	
15	SPARE	2,500		2500			30	100	1				
16	SPARE	2,500		2500			30	100	1				
17	SPACE												
18	SPACE												
19	SPACE												
20	SPACE												
T O T A L		29,300	10,620	11,840	6,840								

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AERODROME DEVELOPMENT
AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT
AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE

DESIGNED BY:

DRAWN BY:

CHECKED BY:

REVIEWED BY:

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RECOMMEND APPROVAL:

LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• SCHEDULE OF LOADS

PROFESSIONAL ELECTRICAL ENGINEER:

ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482
PTR NO.: 2296325
TIN NO.: 214-207-341-000

VALID UNTIL: 06/04/2025
ISSUED ON: 01/04/2024
ISSUED AT: IAGUNA

DRAWING SCALE:

SHEET NO:

AS SHOWN

E-31

PANEL DESIGNATION : PPACU-6 (ACU POWER PANEL 6F)
SYSTEM VOLTAGE : 400/230V, 3-PHASE, 3-WIRE + N + G, 60HZ
LOCATION : 6TH FLOOR ELECTRICAL RM
MOUNTING : SURFACE MOUNTED
ENCLOSURE : NEMA-1
MIN KAIC : 18 KAIC

CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	VOLT - AMPERE				AT	AF	POLE	LINE - NEUTRAL	GROUND	RACEWAYS
			AN	BN	CN	ABC						
1	TEF-2F / EF-2F (7 UNITS)	500	500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
2	DEPT. MANAGER FCU-2F (1 UNIT)	500	500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	DEPT. MANAGER FCU-2F (3 UNIT)	500		500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
4	HALLWAY FCU-2F (1 UNITS)	500		500			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	ADG I & II RM FCU-2F (2 UNITS)	500			500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	ELEVATOR LOBBY FCU-2F (1 UNIT)	500			500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
7	MALE/FEMALE T&B FCU-2F (2 UNITS)	500	500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
8	LOUNGE FCU-2F (1 UNIT)	500	500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
9	OFFICE AREA FCU-2F (4.49KW)	5,282		5,282			50	100	1	2-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
10	OFFICE AREA FCU-2F (4.49KW)	5,282		5,282			50	100	1	2-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
11	CONFERENCE RM FCU-2F (4.49KW)	5,282			5,282		50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
12	OFFICE AREA FCU-2F (4.49KW)	5,282			5,282		50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
13	OFFICE AREA FCU-2F (4.49KW)	5,282	5,282				50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
14	OFFICE AREA FCU-2F (4.49KW)	5,282	5,282				50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
15	OFFICE AREA FCU-2F (4.49KW)	5,282		5,282			50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
16	OFFICE AREA FCU-2F (4.49KW)	5,282		5,282			50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
17	OFFICE AREA FCU-2F (4.49KW)	5,282			5,282		50	100	1	2-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
18	PUBLIC TOILET FAB-2F (0.35KW)	500			500		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
19	VRF TYPE ACCU-2F (10.89KW)	11,869	3,956	3,956	3,956		40	100	3	4-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
20	SPARE	2,500	2,500				30	100	1			
21	SPARE	2,500		2,500			30	100	1			
22	SPARE	2,500		2,500			30	100	1			
TOTAL		71,411	19,021	31,086	21,304							

DEMAND FACTOR : 80%
DEMAND VA : 57,128 VA
LOAD COMPUTATION
I_{TOTAL} : ((31,086x3)/(√3x400))x80% = 107.69 AMPS
I_{WIRE} : ((31,086x3)/(√3x400))+(25%((14.74)))x80% = 110.64 AMPS
I_{CIRCUIT BREAKER} : ((31,086x3)/(√3x400))+(150%((14.74)))x80% = 125.38 AMPS
MAIN FEEDER : 4-38mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-14mm² THW (GROUND)
RACEWAY : Ø40mm IMC PIPE / CABLE TRAY
MAIN CB : 150AT/225AF, 3P, 400/230V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER

PANEL DESIGNATION : DP6 (DISTRIBUTION PANEL 6F)
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ
LOCATION : 6TH FLOOR ELECTRICAL RM
MOUNTING : SURFACE MOUNTED
ENCLOSURE : NEMA-1
MIN KAIC : 22 KAIC

CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	VOLT - AMPERE				AT	AF	POLE	LINE - NEUTRAL	GROUND	RACEWAYS
			AN	BN	CN	ABC						
1	LP2 (LIGHTING PANEL 2F) TYPICAL UPTO 6F	26,100	9,800	7,700	8,600		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
2	PP2A (POWER PANEL 2F - A) TYPICAL UPTO 6F	29,940	12,160	9,520	8,260		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
3	PP2B (POWER PANEL 2F - B) TYPICAL UPTO 6F	29,300	10,620	11,840	6,840		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
4	PPACU-6 (ACU POWER PANEL 6F)	71,411	19,021	31,086	21,304		150	225	3	4-38mm ⁴	1-14.0mm ²	Ø32mm IMC / CT
5	PPRD (POWER PANEL ROOF DECK)	49,358	17,252	16,052	16,052		75	100	3	4-14mm ²	1-5.5mm ²	Ø25mm EMT / CT
6	PP-ELEV (POWER PANEL ELEVATOR)	60,966	20,322	20,322	20,322		175	225	3	4-30mm ²	1-8.0mm ²	Ø32mm IMC / CT
7	SPARE	10,000	3,333	3,333	3,333		40	100	3			
8	SPARE	10,000	3,333	3,333	3,333		40	100	3			
TOTAL		287,075	95,842	103,187	88,045							

DEMAND FACTOR : 80%
DEMAND VA : 229,660 VA
LOAD COMPUTATION
I_{TOTAL} : ((103,187x3)/(√3x400))x80% = 357.46 AMPS
I_{WIRE} : ((103,187x3)/(√3x400))+(25%((44)))x80% = 366.26 AMPS
I_{CIRCUIT BREAKER} : ((103,187x3)/(√3x400))+(150%((44)))x80% = 410.26 AMPS
MAIN FEEDER : 4-250mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-30mm² THW (GROUND)
RACEWAY : Ø90mm IMC PIPE / CABLE TRAY
MAIN CB : 450AT/600AF, 3P, 400V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER

PANEL DESIGNATION : PPRD (POWER PANEL ROOF DECK)
SYSTEM VOLTAGE : 400/230V, 3-PHASE, 3-WIRE + N + G, 60HZ
LOCATION : 6TH FLOOR ELECTRICAL RM
MOUNTING : SURFACE MOUNTED
ENCLOSURE : NEMA-1
MIN KAIC : 18 KAIC

CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	VOLT - AMPERE				AT	AF	POLE	LINE - NEUTRAL	GROUND	RACEWAYS
			AN	BN	CN	ABC						
1	ELEVATOR SHAFT LIGHTING	1,200	1,200				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
2	1.SHP FAB (FRESH AIR BLOWER)	2,286	762	762	762		20	100	3	4-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	2.OHP LPF (LIFT PRESSURIZATION FAN)	2,979	993	993	993		20	100	3	4-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
4	3.OHP SEF (SMOKE EXTRACTION FAN)	4,226	1,409	1,409	1,409		20	100	3	4-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	3.OHP SEF (SMOKE EXTRACTION FAN)	4,227	1,409	1,409	1,409		20	100	3	4-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	5.OHP SPF (STAIR PRESSURIZATION FAN)	6,720	2,240	2,240	2,240		30	100	3	4-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
7	5.OHP SPF (STAIR PRESSURIZATION FAN)	6,720	2,240	2,240	2,240		30	100	3	4-5.5mm ²	1-3.5mm ²	Ø15mm EMT / CT
8	SPARE	5,000	1,667	1,667	1,667		30	100	3			
9	SPARE	5,000	1,667	1,667	1,667		30	100	3			
10	SPARE	5,000	1,667	1,667	1,667		30	100	3			
11	SPARE	3,000	1,000	1,000	1,000		20	100	3			
12	SPARE	3,000	1,000	1,000	1,000		20	100	3			
TOTAL		49,358	17,252	16,052	16,052							

DEMAND FACTOR : 80%
DEMAND VA : 39,486 VA
LOAD COMPUTATION
I_{TOTAL} : ((17,252x3)/(√3x400))x80% = 59.77 AMPS
I_{WIRE} : ((17,252x3)/(√3x400))+(25%((9.70)))x80% = 61.71 AMPS
I_{CIRCUIT BREAKER} : ((17,252x3)/(√3x400))+(150%((9.70)))x80% = 71.41 AMPS
MAIN FEEDER : 4-14mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-5.5mm² THW (GROUND)
RACEWAY : Ø25mm EMT PIPE / CABLE TRAY
MAIN CB : 75AT/100AF, 3P, 400/230V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER

PANEL DESIGNATION : PP-ELEV (POWER PANEL ELEVATOR)
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ
LOCATION : 6TH FLOOR ELECTRICAL RM
MOUNTING : SURFACE MOUNTED
ENCLOSURE : NEMA-1
MIN KAIC : 22 KAIC

CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	VOLT - AMPERE				AT	AF	POLE	LINE - NEUTRAL	GROUND	RACEWAYS
			AN	BN	CN	ABC						
1	25HP PASSENGER ELEVATOR	30,483	10,161	10,161	10,161		125	225	3	2-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
2	25HP PASSENGER ELEVATOR	30,483	10,161	10,161	10,161		125	225	3	2-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
TOTAL		60,966	20,322	20,322	20,322							

DEMAND FACTOR : 100%
DEMAND VA : 60,966 VA
LOAD COMPUTATION
I_{TOTAL} : ((20,322x3)/(√3x400))x100% = 88.00 AMPS
I_{WIRE} : ((20,322x3)/(√3x400))+(25%((44)))x100% = 99.00 AMPS
I_{CIRCUIT BREAKER} : ((20,322x3)/(√3x400))+(150%((44)))x100% = 154.00 AMPS
MAIN FEEDER : 4-30mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-8.0mm² THW (GROUND)
RACEWAY : Ø32mm IMC PIPE / CABLE TRAY
MAIN CB : 175AT/225AF, 3P, 400V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER

1
E-31
SCALE: NTS

SCHEDULE OF LOADS

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AERODROME DEVELOPMENT
AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT
AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE

DESIGNED BY:

DRAWN BY:

CHECKED BY:

REVIEWED BY:

RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:

ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

LT COL. VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• SCHEDULE OF LOADS

PROFESSIONAL ELECTRICAL ENGINEER:

ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482
PTR NO.: 2296325
TIN NO.: 214-207-341-000

VALID UNTIL: 06/04/2025
ISSUED ON: 01/04/2024
ISSUED AT: LAGUNA

DRAWING SCALE:

AS SHOWN

SHEET NO:

E-32

PANEL DESIGNATION : LP-ADMIN (LIGHTING PANEL ADMIN)
SYSTEM VOLTAGE : 400/230V, 3PHASE, 3-WIRE + N + G, 60HZ
LOCATION : GROUND FLOOR ELECTRICAL RM

MOUNTING : SURFACE MOUNTED

PANEL ENCLOSURE : NEMA-1

MIN KAIC : 10 KAIC

CKT No.	LOAD DESCRIPTION	CONNECTED LOAD					OVER CURRENT			WIRE SIZE (THHN/THWN-2)	GROUND SIZE	CONDUIT SIZE
		VA	VOLT-AMPERE				AT	AF	P			
			AN	BN	CN	ABC						
1	BOLLARD LIGHTING (16)	1,600	1600				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
2	BOLLARD LIGHTING (5)	500	500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	PLAZA LIGHTING (6)	600		600			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
4	STREET LIGHTING (7)	700		700			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	CANOPY LIGHTING (15)	1,000			1000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	SPARE	1,000			1000		20	100	1			
7	IDF1 (Ground Floor)	3,000	3000				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
8	IDF2 (Second Floor)	3,000	3000				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
9	FDAS	2,000		2000			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
10	CCTV	2,000		2000			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
11	PA/BGM	2,000			2000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
12	DOOR ACCESS CONTROL PANEL	2,000			2000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
13	LIGHTING & CONVENIENCE OUTLET (PUMP ROOM)	1,500	1500				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
14	SPARE	1,000	1000				20	100	1			
15	IDF3 (Third Floor)	3,000		3000			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
16	IDF4 (Fourth Floor)	3,000		3000			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
17	IDF5 (Fifth Floor)	3,000			3000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
18	IDF6 (Sixth Floor)	3,000			3000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
TOTAL		33,900	10,600	11,300	12,000							

DEMAND FACTOR : 1.00
DEMAND VA : 33900 VA
I_T : ((12,900x3/(√3x400)))x1 = 51.96 Amps
I_{WIRE} : ((12,900x3/(√3x400)))+(25%((0)))x1 = 51.96 Amps
I_{CIRCUIT BREAKER} : ((12,900x3/(√3x400)))+(150%((0)))x1 = 51.96 Amps
MAIN FEEDER : 4-8.0mm² THHN/THWN-2 (LINE TO NEUTRAL) & 1-5.5mm² THHN/THWN-2 (GROUND)
RACEWAY : Ø20mm EMT PIPE / CABLE TRAY
MAIN CB : 60AT/100AF, 3P, 400/230V, 60HZ, MCCB

PANEL DESIGNATION : PP-PUMP (POWER PANEL PUMPS)
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ
LOCATION : PUMP ROOM

MOUNTING : SURFACE MOUNTED

ENCLOSURE : NEMA-1

MIN KAIC : 10 KAIC

LOCATION : PUMP ROOM		CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
CKT NO.	LOAD DESCRIPTION	VA	VOLT-AMPERE				AT	AF	POLE	LINE - NEUTRAL	GROUND	RACEWAYS
			AN	BN	CN	ABC						
1	10HP CPS PUMP (DUPLEX)	12,470	4,157	4,157	4,157		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
2	10HP CPS PUMP (DUPLEX) - STANDBY	12,470	4,157	4,157	4,157		50	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
3	SUBMERSIBLE PUMP	10,000	3,333	3,333	3,333		40	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
4	SUBMERSIBLE PUMP	10,000	3,333	3,333	3,333		40	100	3	4-8.0mm ²	1-5.5mm ²	Ø20mm EMT / CT
T O T A L		44,941	14,980	14,980	14,980							

DEMAND FACTOR : 100%
DEMAND VA : 44,941 VA
LOAD COMPUTATION
I_{TOTAL} : ((14,980x3/(√3x400)))x100% = 64.87 AMPS
I_{WIRE} : ((14,980x3/(√3x400)))+(25%((18)))x100% = 69.37 AMPS
I_{CIRCUIT BREAKER} : ((14,980x3/(√3x400)))+(150%((18)))x100% = 91.87 AMPS
MAIN FEEDER : 4-14mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-5.5mm² THW (GROUND)
RACEWAY : Ø25mm EMT PIPE / CABLE TRAY
MAIN CB : 100AT/100AF, 3P, 400/230V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER

PANEL DESIGNATION : LPPH (LIGHTING / POWER POWERHOUSE)

SYSTEM VOLTAGE : 400/230V, 3PHASE, 3-WIRE + N + G, 60HZ

LOCATION : GENSET RM

MOUNTING : SURFACE MOUNTED

PANEL ENCLOSURE : NEMA-1

MIN KAIC : 10 KAIC

LOCATION : GENSET RM		MIN KALC : 10 KALC										
CKT No.	LOAD DESCRIPTION	CONNECTED LOAD					OVER CURRENT			WIRE SIZE (THHN/THWN-2)	GROUND SIZE	CONDUIT SIZE
		VA	VOLT-AMPERE									
			AN	BN	CN	ABC	AT	AF	P			
1	GENSET LIGHTING (9)	900	900				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
1	GENSET LIGHTING (9)	900	900				20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	CONVENIENCE OUTLET (4)	1,000		1000			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
3	CONVENIENCE OUTLET (4)	1,000		1000			20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
5	PROVISION OF EXHAUST FAN	3,000			3000		20	100	1	2-3.5mm ²	1-2.0mm ²	Ø15mm EMT / CT
6	PROVISION OF EXHAUST FAN	3,000			3000		20	100	1			
7	SPARE	1,000	1000				20	100	1			
8	SPARE	1,000	1000				20	100	1			
TOTAL		11,800	3,800	2,000	6,000							

DEMAND FACTOR : 0.80
DEMAND VA : 9440 VA
I_T : ((6,000x3/(√3x400)))x1 = 20.79 Amps
I_{WIRE} : ((6,000x3/(√3x400)))+(25%((0)))x1 = 20.79 Amps
I_{CIRCUIT BREAKER} : ((6,000x3/(√3x400)))+(150%((0)))x1 = 20.79 Amps
MAIN FEEDER : 4-5.5mm² THHN/THWN-2 (LINE TO NEUTRAL) & 1-5.5mm² THHN/THWN-2 (GROUND)
RACEWAY : Ø25mm PVC PIPE
MAIN CB : 30AT/100AF, 3P, 400/230V, 60HZ, MCCB

PANEL DESIGNATION : DPAD (DISTRIBUTION PANEL ADMIN)
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ
LOCATION : GROUND FLOOR ELECTRICAL RM

MOUNTING : SURFACE MOUNTED

ENCLOSURE : NEMA-1

MIN KAIC : 22 KAIC

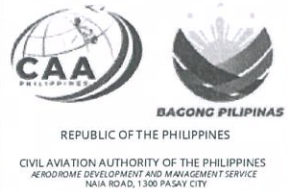
CKT NO.	LOAD DESCRIPTION	VA	CONNECTED LOAD				BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
			VOLT-AMPERE				AT	AF	POLE			
			AN	BN	CN	ABC						
1	LP-ADMIN (LIGHTING PANEL ADMIN)	33,900	10,600	11,300	12,000		60	100	3	4-8.0mm²	1-5.5mm²	Ø20mm EMT / CT
2	PP-PUMP (POWER PANEL PUMPS)	44,941	14,980	14,980	14,980		100	100	3	4-14.0mm²	1-5.5mm²	Ø25mm EMT / CT
3	LPPH (LIGHTING PANEL POWERHOUSE)	11,800	3,800	2,000	6,000		30	100	3	4-5.5mm²	1-3.5mm²	Ø15mm EMT / CT
4	3 DHP SUMP PUMP (PROVISION)	4,226	1,409	1,409	1,409		20	100	3	4-3.5mm²	1-2.0mm²	Ø15mm EMT / CT
5	1 DHP ELEVATOR PIT PUMP	1,840	1,840				20	100	1	2-3.5mm²	1-2.0mm²	Ø15mm EMT / CT
6	SPARE	6,000	2,000	2,000	2,000		30	100	3			
TOTAL		102,707	34,629	31,689	36,389							

DEMAND FACTOR : 80%
DEMAND VA : 82,166 VA
LOAD COMPUTATION
I_{TOTAL} : ((36,389x3/(√3x400)))x80% = 126.06 AMPS
I_{WIRE} : ((36,389x3/(√3x400)))+(25%((18)))x80% = 129.66 AMPS
I_{CIRCUIT BREAKER} : ((36,389x3/(√3x400)))+(150%((18)))x80% = 147.66 AMPS
MAIN FEEDER : 4-50mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-14mm² THW (GROUND)
RACEWAY : Ø40mm IMC PIPE / CABLE TRAY
MAIN CB : 150AT/225AF, 3P, 400/230V, 60HZ, BOLT-ON, MOLDED CASE CIRCUIT BREAKER

1
E-32
SCALE: NTS

SCHEDULE OF LOADS

PANEL DESIGNATION : PFPF (POWER PANEL FIRE PUMP)						MOUNTING : SURFACE MOUNTED						
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ						ENCLOSURE : NEMA-1						
LOCATION : PUMP RM						MIN KAIC : 45 KAIC						
CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (FRC)	GROUND CABLE (FRC)	CONDUIT SIZE (EMT / IMC)
		VA	VOLT - AMPERE									
			AN	BN	CN	ABC	AT	AF	POLE			
1	150HP FIRE PUMP	166,272	55,424	55,424	55,424		1600	1600	3	4-150mm²	1-22mm²	Ø65mm IMC PIPE
2	10HP JOCKEY PUMP	12,470	4,157	4,157	4,157		125	225	3	4-3.5mm²	1-3.5mm²	Ø15mm EMT PIPE
T O T A L		178,742	59,581	59,581	59,581							
DEMAND FACTOR : 100%												
DEMAND VA : 178,742 VA												
LOAD COMPUTATION												
I _{TOTAL}		: (240A + 18A)x100%		= 258.00 AMPS								
I _{WIRE}		: (FLCFP + FLCJP)x125%										
		: (240A + 18A)x125%		= 322.50 AMPS		MAIN FEEDER : 4-200mm² FRC (L-N) & 1-22mm² FRC (G) IN Ø100mm PVC PIPE						
I _{CIRCUIT BREAKER}		: (LRCPF + LRCJP)				RACEWAY : Ø100mm PVC PIPE						
		: (1441A + 107A)		= 1548.00 AMPS		MAIN CB : 1800AT/1800AF, 3P, 400V, 60HZ, MCCB						
PANEL DESIGNATION : BUSDUCT						MOUNTING : SURFACE MOUNTED						
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ						ENCLOSURE : NEMA-1						
LOCATION : ELECTRICAL RM						MIN KAIC : 45 KAIC						
CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	VOLT - AMPERE									
			AN	BN	CN	ABC	AT	AF	POLE			
1	DP1 (DISTRIBUTION PANEL 1F)	185,358	63,712	68,072	53,574		300	400	3	4-100mm²	1-14mm²	Ø65mm IMC / CT
2	DP2 (DISTRIBUTION PANEL 2F)	190,090	64,381	67,925	57,783		300	400	3	4-100mm²	1-14mm²	Ø65mm IMC / CT
3	DP3 (DISTRIBUTION PANEL 3F)	190,090	64,381	67,925	57,783		300	400	3	4-100mm²	1-14mm²	Ø65mm IMC / CT
4	DP4 (DISTRIBUTION PANEL 4F)	190,090	64,381	67,925	57,783		300	400	3	4-100mm²	1-14mm²	Ø65mm IMC / CT
5	DP5 (DISTRIBUTION PANEL 5F)	190,090	64,381	67,925	57,783		300	400	3	4-100mm²	1-14mm²	Ø65mm IMC / CT
6	DP6 (DISTRIBUTION PANEL 6F)	287,075	95,842	103,187	88,045		450	600	3	4-250mm²	1-30mm²	Ø90mm IMC / CT
T O T A L		1,232,793	417,078	442,959	372,751							
DEMAND FACTOR : 80%												
DEMAND VA : 986,234 VA												
LOAD COMPUTATION												
I _{TOTAL}		: ((442,959x3)/(√3x400))x80%		= 1534.50 AMPS								
I _{WIRE}		: ((442,959x3)/(√3x400))+(25%x(44))x80%		= 1543.30 AMPS		MAIN FEEDER : 1800 (UL) AMPERES, 3Ø, 400V, BUSWAY COPPER BUSDUCT WITH 3W+N+G BUSBAR						
I _{CIRCUIT BREAKER}		: ((442,959x3)/(√3x400))+(150%x(44))x80%		= 1587.30 AMPS		MAIN CB : 1800AT/1800AT, 4P, 400V, 60HZ, AIR CIRCUIT BREAKER						
PANEL DESIGNATION : LVSG (LOW VOLTAGE SWITCHGEAR)						MOUNTING : SURFACE MOUNTED						
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ						ENCLOSURE : NEMA-1						
LOCATION : POWERHOUSE						MIN KAIC : 65 KAIC						
CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2)	GROUND CABLE (THW)	CONDUIT SIZE (EMT / CABLE TRAY)
		VA	VOLT - AMPERE									
			AN	BN	CN	ABC	AT	AF	POLE			
1	BUSDUCT	1,232,793	417,078	442,959	372,751		1800	1800	4	1800 AMPS (UL), BUSWAY COPPER BUSDUCT		
2	DPAD (DISTRIBUTION PANEL ADMIN)	102,707	34,629	31,689	36,389		150	225	3	4-50mm²	1-14.0mm²	Ø40mm IMC / CT
3	450KVAR CAPACITOR BANK	-					1000	1000	3	3 SETS OF 4-250mm²	1-30mm²	Ø90mm IMC / CT
4	120KA TVSS/SPD	-					20	100	3			
5	SPARE	50,000	16,667	16,667	16,667		200	225	3			
6	SPARE	50,000	16,667	16,667	16,667		200	225	3			
7	SPARE	50,000	16,667	16,667	16,667		200	225	3			
T O T A L		1,485,500	501,707	524,648	459,140							
DEMAND FACTOR : 80%												
DEMAND VA : 1,188,400 VA												
LOAD COMPUTATION												
I _{TOTAL}		: ((524,648x3)/(√3x400))x80%		= 1817.49 AMPS		MAIN FEEDER : 5 SETS OF 4-250mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-30mm² THHN/THWN-2 (GROUND)						
I _{WIRE}		: ((524,648x3)/(√3x400))+(25%x(44))x80%		= 1826.29 AMPS		RACEWAY : CABLE TRAY						
I _{CIRCUIT BREAKER}		: ((524,648x3)/(√3x400))+(150%x(44))x80%		= 1870.29 AMPS		MAIN CB : 2x2000AT/2000AF, 3P, 400V, 60HZ, AIR CIRCUIT BREAKER, ATS MAIN						
TRANSFORMER CAPACITY CALCULATION:												
		: ((I _{LVSG} + I _{SPD}) x √3 x 400)/1000										
		: (((1817.49 + 258) x √3 x 400V)/1000)		= 1437.90 KVA		USE : 1.5MVA PAD MOUNTED TRANSFORMER, 34.5KV/400-230V, 60HZ						
PANEL DESIGNATION : GSS (GENSET SWITCHGEAR)						MOUNTING : SURFACE MOUNTED						
SYSTEM VOLTAGE : 400V, 3-PHASE, 3-WIRE + N + G, 60HZ						ENCLOSURE : NEMA-1						
LOCATION : POWERHOUSE						MIN KAIC : 100 KAIC						
CKT NO.	LOAD DESCRIPTION	CONNECTED LOAD					BRANCH CIRCUIT BREAKER RATING			LINE CABLE (THHN/THWN-2/FRC)	GROUND CABLE (THW/FRC)	CONDUIT SIZE (CABLE TRAY)
		VA	VOLT - AMPERE									
			AN	BN	CN	ABC	AT	AF	POLE			
1	LVSG (LOW VOLTAGE SWITCHGEAR)	1,485,500	501,707	524,648	459,140		2000	2000	3	5 SETS OF 4-250mm²	1-30mm²	CABLE TRAY
2	PFPF (POWER PANEL FIRE PUMP)	178,742	59,581	59,581	59,581		1800	1800	3	4-200.0mm²	1-22.0mm²	Ø100mm PVC PIPE
T O T A L		1,664,242	561,288	584,229	518,721							
DEMAND FACTOR : 80%												
DEMAND VA : 1,331,394 VA												
LOAD COMPUTATION												
I _{TOTAL}		: ((584,229x3)/(√3x400))x80%		= 2023.89 AMPS		MAIN FEEDER : 5 SETS OF 4-250mm² THHN/THWN-2 (LINE - NEUTRAL) & 1-30mm² THHN/THWN-2 (GROUND)						
I _{WIRE}		: ((584,229x3)/(√3x400))+(25%x(240))x80%		= 2071.89 AMPS		RACEWAY : CABLE TRAY						
I _{CIRCUIT BREAKER}		: ((584,229x3)/(√3x400))+(150%x(240))x80%		= 2311.89 AMPS		MAIN CB : 2500AT/2500AF, 4P, 400V, 60HZ, AIR CIRCUIT BREAKER						



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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
DESIGNED BY:
DRAWN BY:
CHECKED BY:

REVIEWED BY:
RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:
• SCHEDULE OF LOADS

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM
LICENSE NO.: 0003482
PTR NO.: 2296325
TIN NO.: 214-207-341-000
VALID UNTIL: 06/04/2025
ISSUED ON: 01/04/2024
ISSUED AT: LAGUNA

SCHEDULE OF LOADS

1
E-33

SCALE: NTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

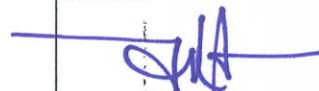
INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	

REVIEWED BY:


 RAUL R. CRUCENA
 Division Chief III, IDDD-AED

SUBMITTED BY:


 ARNEL F. BORLADO
 Department Manager III, AED-ADMS

RECOMMEND APPROVAL:


 LT COL VALENTINO A DIONELA PAF (RET)
 Assistant Director General II, ADMS

APPROVED BY:


 CAPTAIN MANUEL ANTONIO L. TAMAYO
 Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

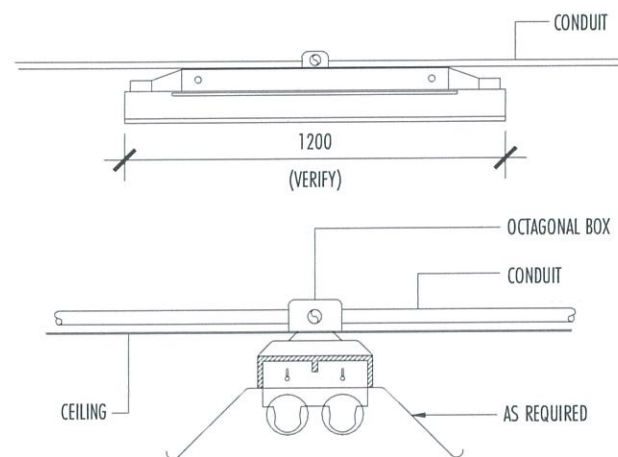
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

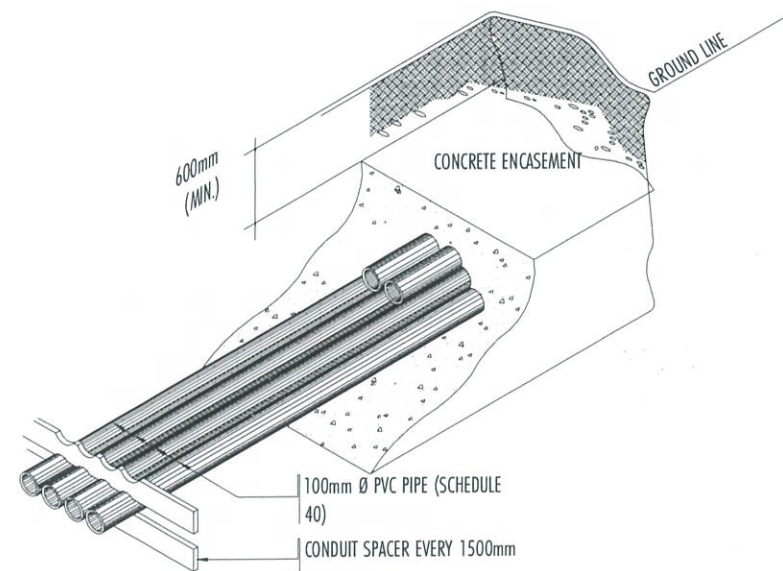
• MISCELLANEOUS DETAILS

PROFESSIONAL ELECTRICAL ENGINEER:			
ENGR. FREDERICK R. CALAMLAM			
LICENSE NO.:	0003482	VALID UNTIL:	06/04/2025
PTR NO.:	2296325	ISSUED ON:	01/04/2024
TIN NO.:	214-287-341-000	ISSUED AT:	LAGUNA

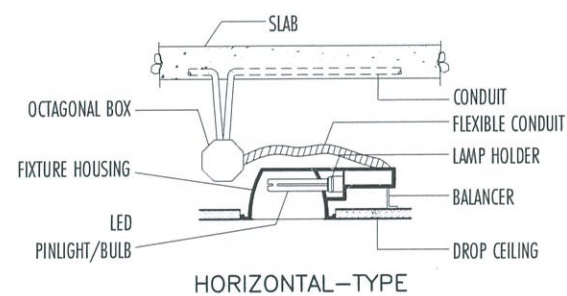
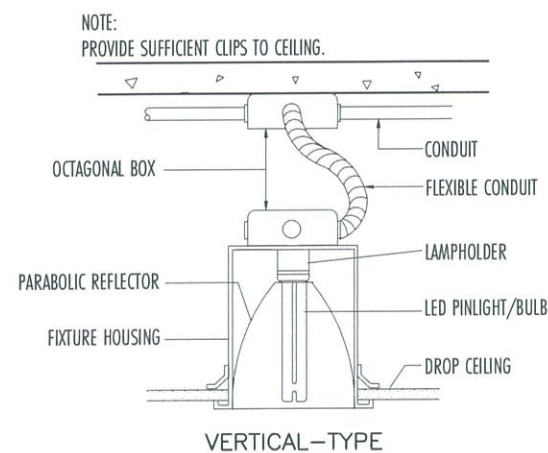
DRAWING SCALE:	SHEET NO:
AS SHOWN	E-34



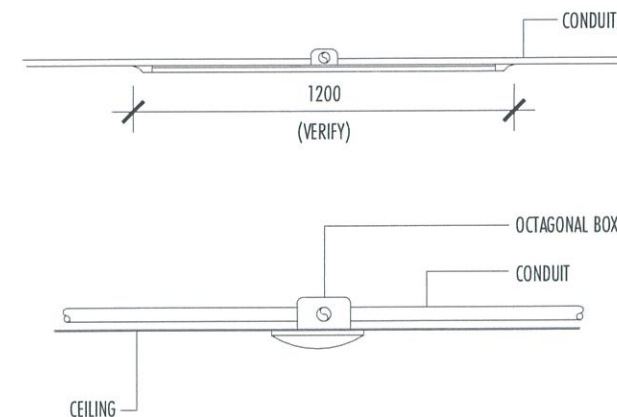
INDUSTRIAL FIXTURE MOUNTING DETAIL



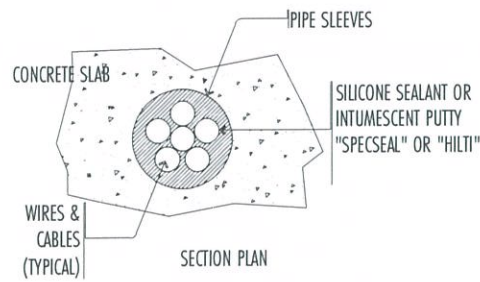
CONCRETE ENCASED CONDUIT DETAIL



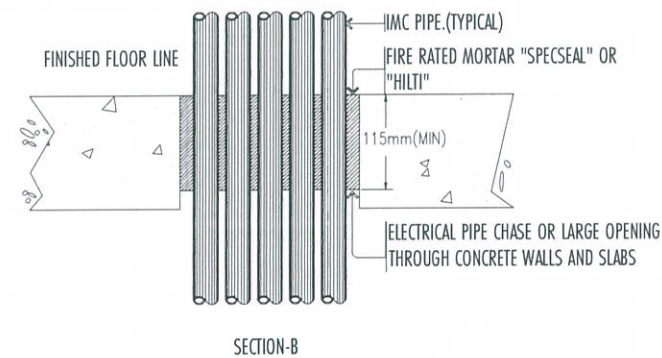
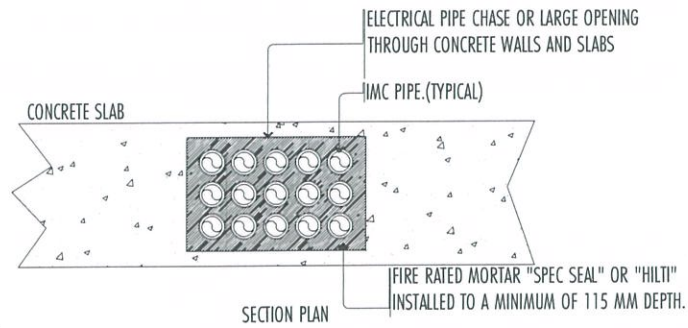
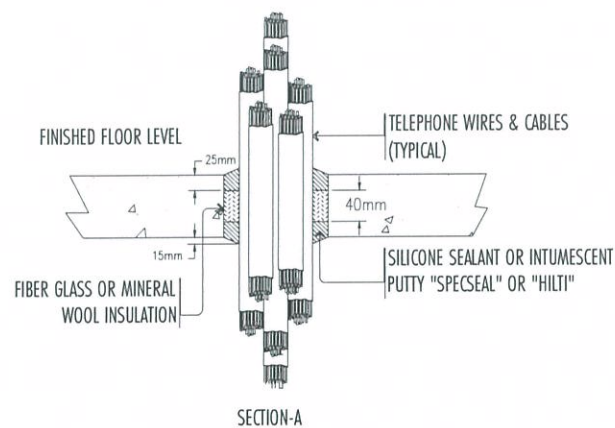
RECESSED LAMP MOUNTING DETAIL



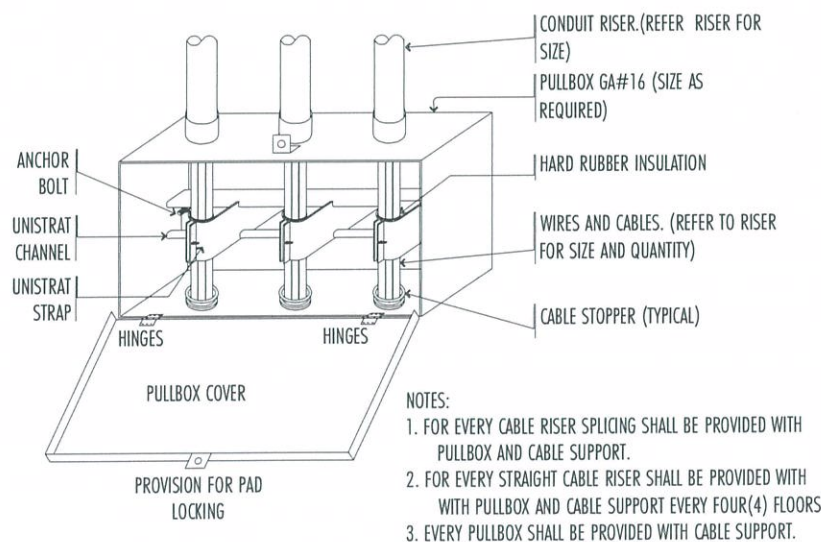
SLIM PANEL LIGHT MOUNTING DETAIL



NOTE: USE METALLIC PIPE FOR ALL PIPE SLEEVES

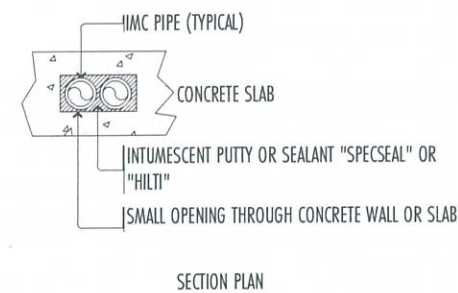
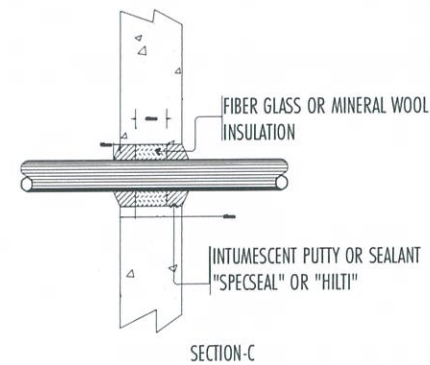


PULLBOX AND CABLE RISER SUPPORT DETAIL

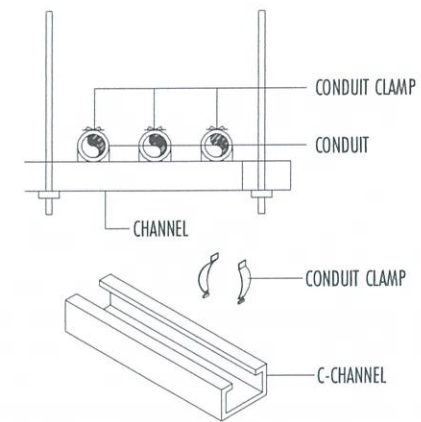


- NOTES:
1. FOR EVERY CABLE RISER SPLICING SHALL BE PROVIDED WITH PULLBOX AND CABLE SUPPORT.
 2. FOR EVERY STRAIGHT CABLE RISER SHALL BE PROVIDED WITH PULLBOX AND CABLE SUPPORT EVERY FOUR(4) FLOORS
 3. EVERY PULLBOX SHALL BE PROVIDED WITH CABLE SUPPORT.

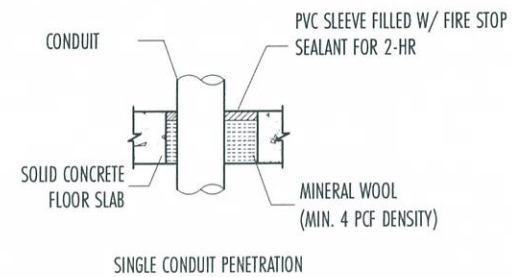
PULLBOX AND CABLE RISER SUPPORT DETAIL



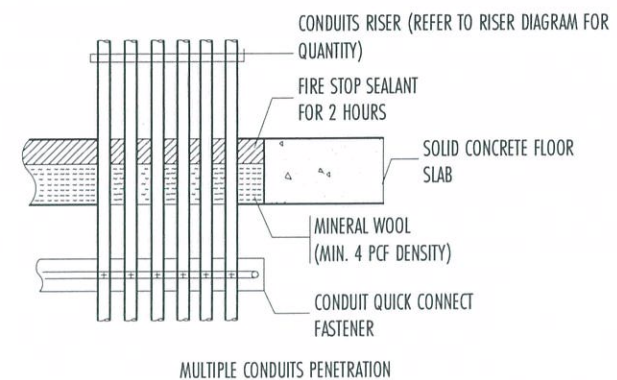
SECTION PLAN



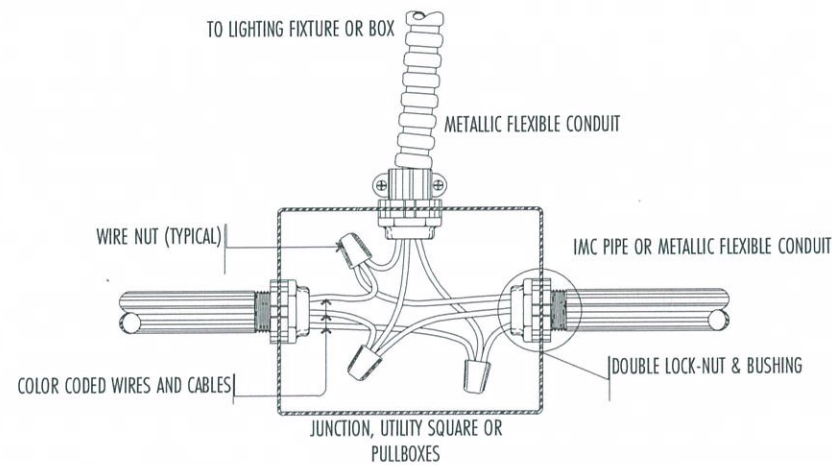
CONDUIT SUPPORT DETAIL



SINGLE CONDUIT PENETRATION



MULTIPLE CONDUITS PENETRATION



RACEWAY AND BOX CONNECTION DETAIL

MISCELLANEOUS DETAIL

1 E-35 SCALE: NTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	
DRAWN BY:	<i>Phanolo</i>
CHECKED BY:	

REVIEWED BY:
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RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
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ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
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LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
Captain Manuel Antonio L. Tamayo
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

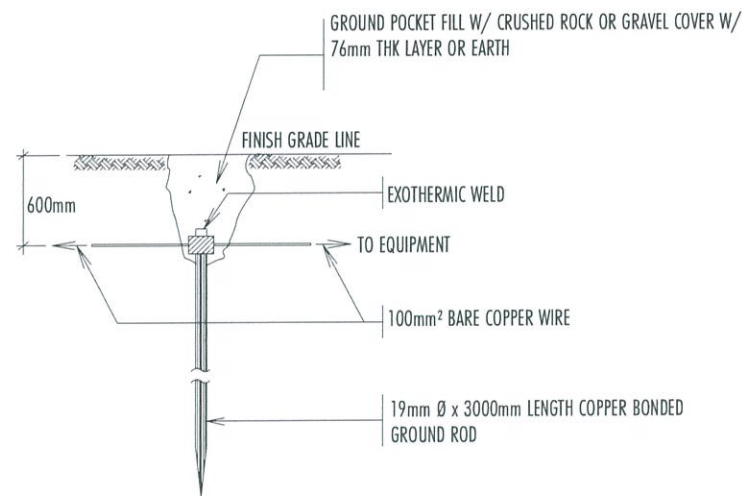
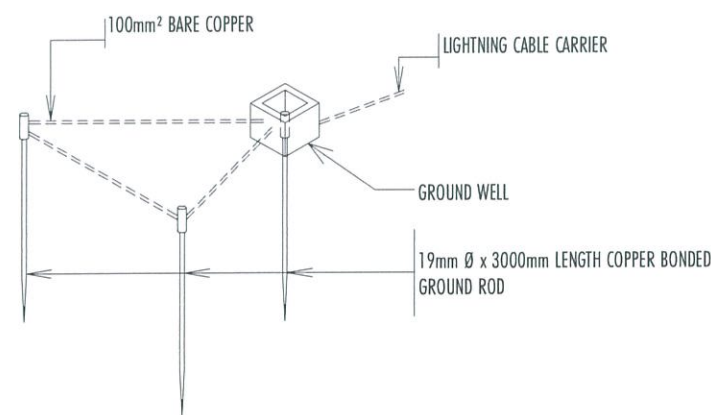
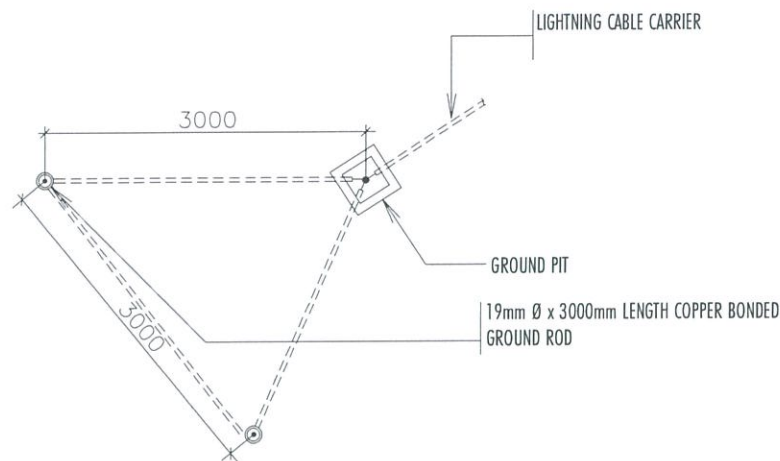
PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

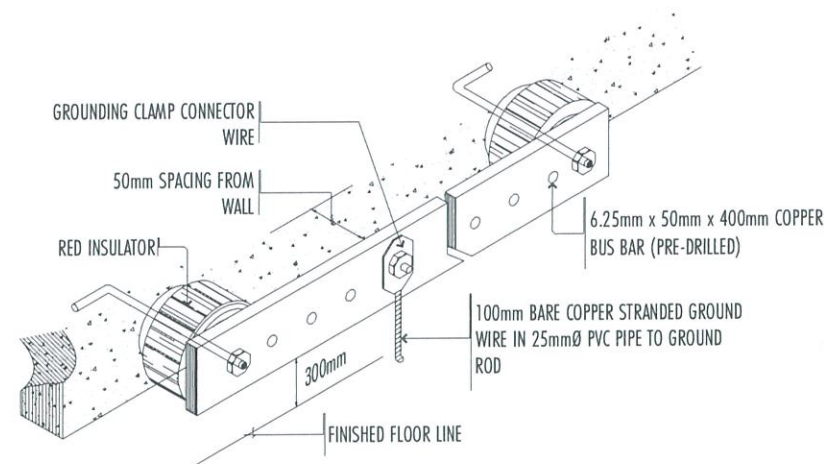
SHEET CONTENTS:
• MISCELLANEOUS DETAILS

PROFESSIONAL ELECTRICAL ENGINEER:	ENGR. FREDERICK R. CALAMLAM
LICENSE NO.:	0003482
PTR NO.:	2296325
TIN NO.:	214-207-381-000
VALID UNTIL:	06/04/2025
ISSUED ON:	01/04/2024
ISSUED AT:	LAGUNA

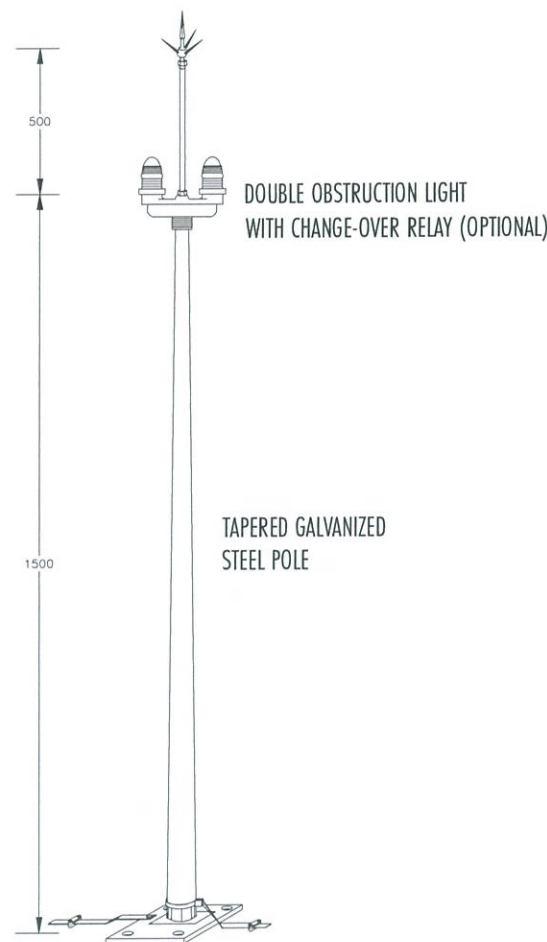
DRAWING SCALE:	SHEET NO:
AS SHOWN	E-35



GROUND ROD DETAIL

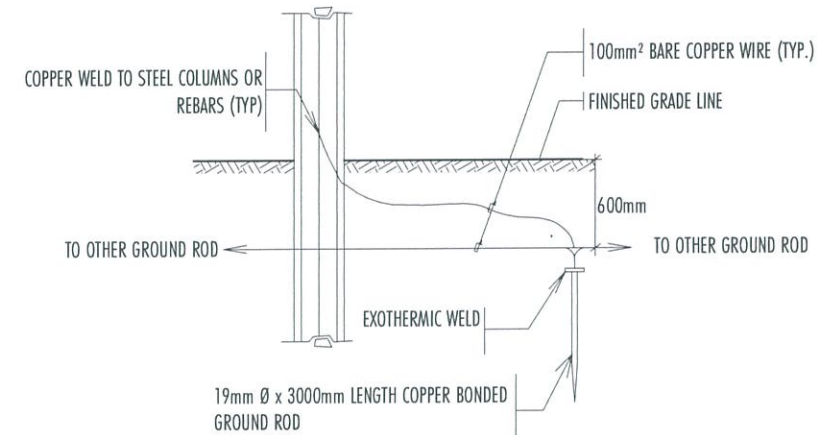


GROUNDING BUS DETAIL

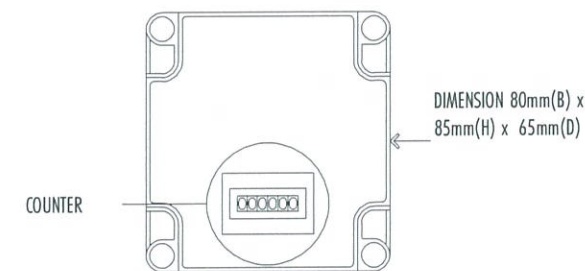


EARLY STREAMER EMISSION LIGHTNING PROTECTION SYSTEM

1 E-36 SCALE: NTS MISCELLANEOUS DETAIL



COLUMN GROUNDING



LIGHTNING EVENT COUNTER

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
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CHECKED BY:

REVIEWED BY:

RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:

ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:

LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

• MISCELLANEOUS DETAILS

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-297-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO: E-36

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
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REVIEWED BY:



RAUL R. CRUCENA
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SUBMITTED BY:



ARNEL F. BORLADO
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LT COL VALENTINO A DIONELA PAF (RET)
 Assistant Director General II, ADMS

APPROVED BY:



CAPTAIN MANUEL ANTONIO L. TAMAYO
 Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

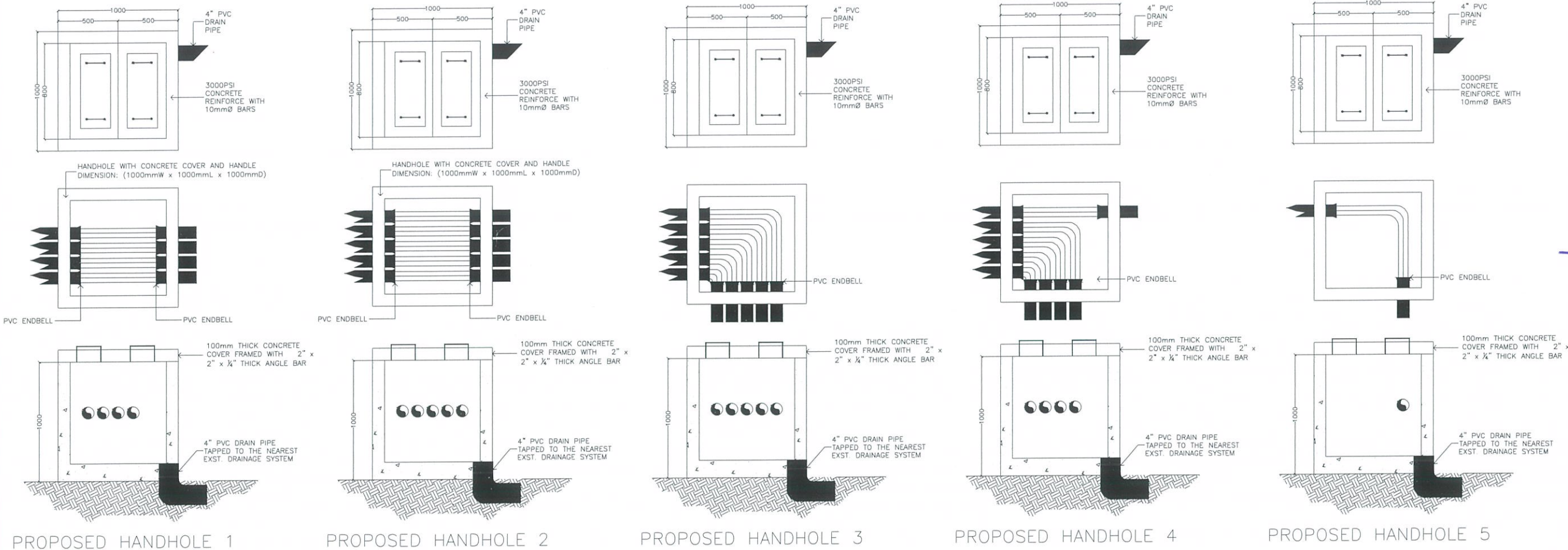
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

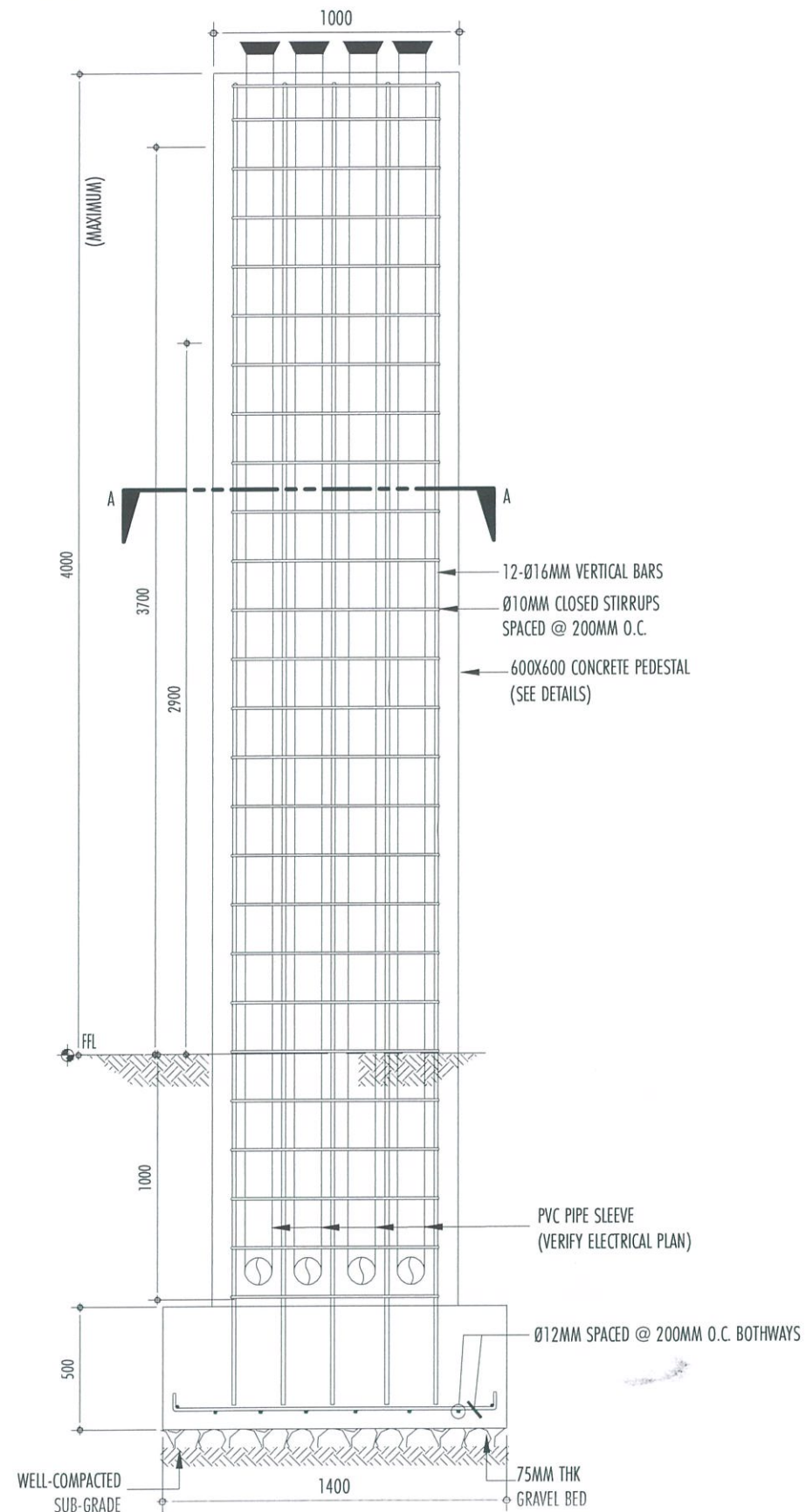
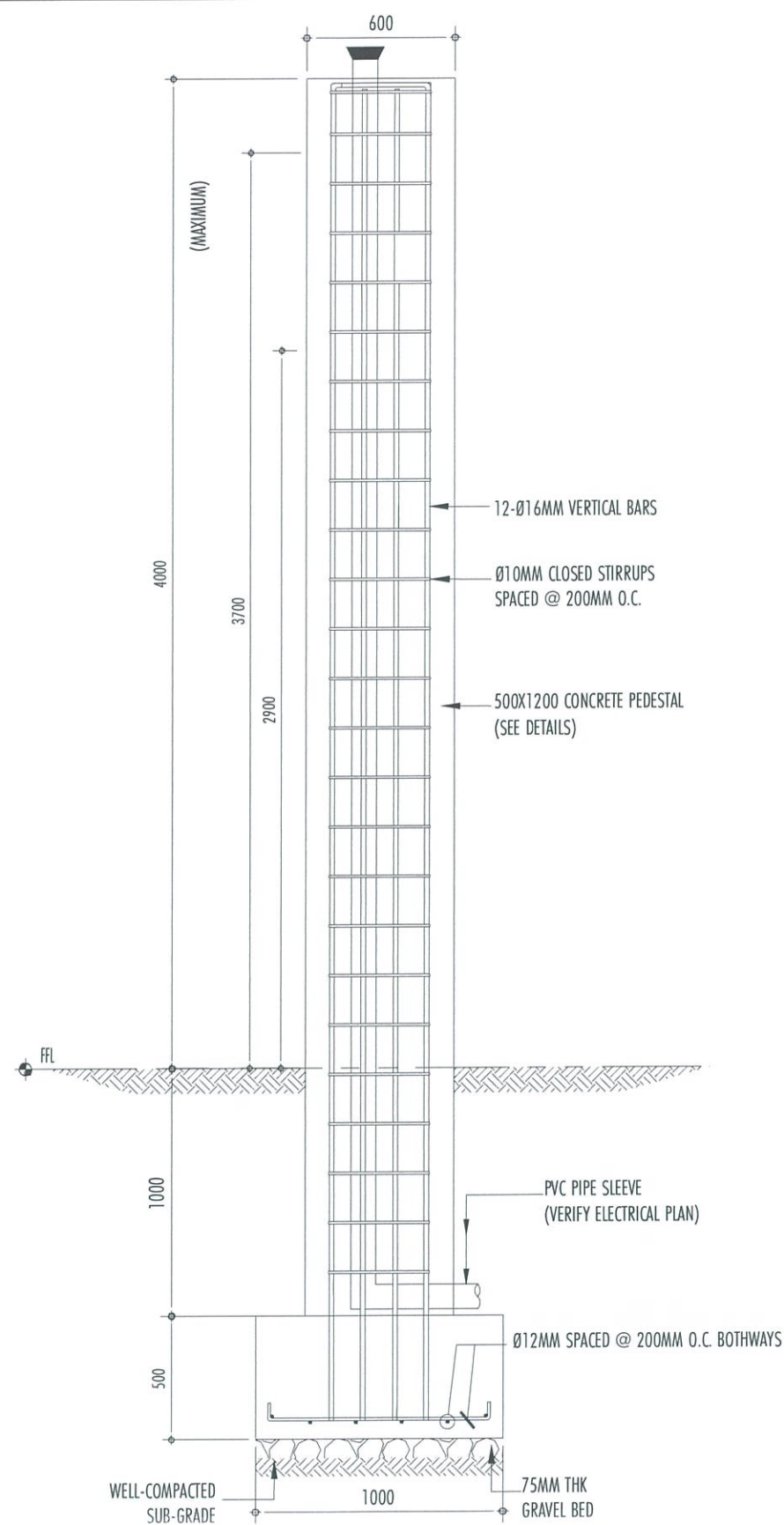
SHEET CONTENTS:

• MISCELLANEOUS DETAILS

PROFESSIONAL ELECTRICAL ENGINEER:			
ENGR. FREDERICK R. CALAMLAM			
LICENSE NO.:	0003482	VALID UNTIL:	06/04/2025
PTR NO.:	2296325	ISSUED ON:	01/04/2024
TIN NO.:	214-207-341-000	ISSUED AT:	LAGUNA

DRAWING SCALE:	SHEET NO:
AS SHOWN	E-37





1
E-38

MISCELLANEOUS DETAILS

SCALE: NTS

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF: INITIAL / DATE
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DRAWN BY:
CHECKED BY:

REVIEWED BY:
RAWL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:
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Department Manager III, AED-ADMS

RECOMMEND APPROVAL:
LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:
CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

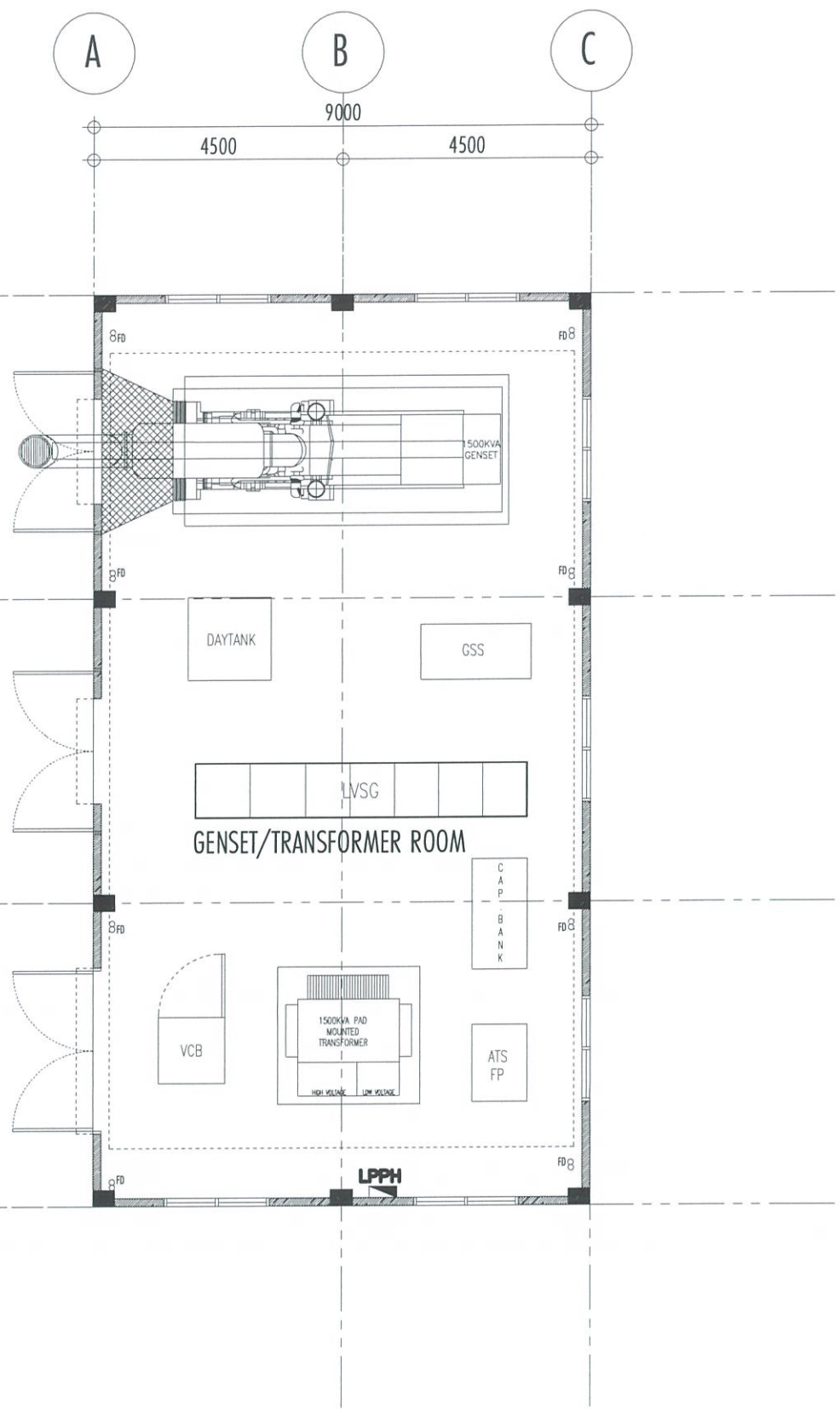
PROJECT:
NEW CAAP BUILDING

LOCATION:
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM
LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN
SHEET NO: E-38

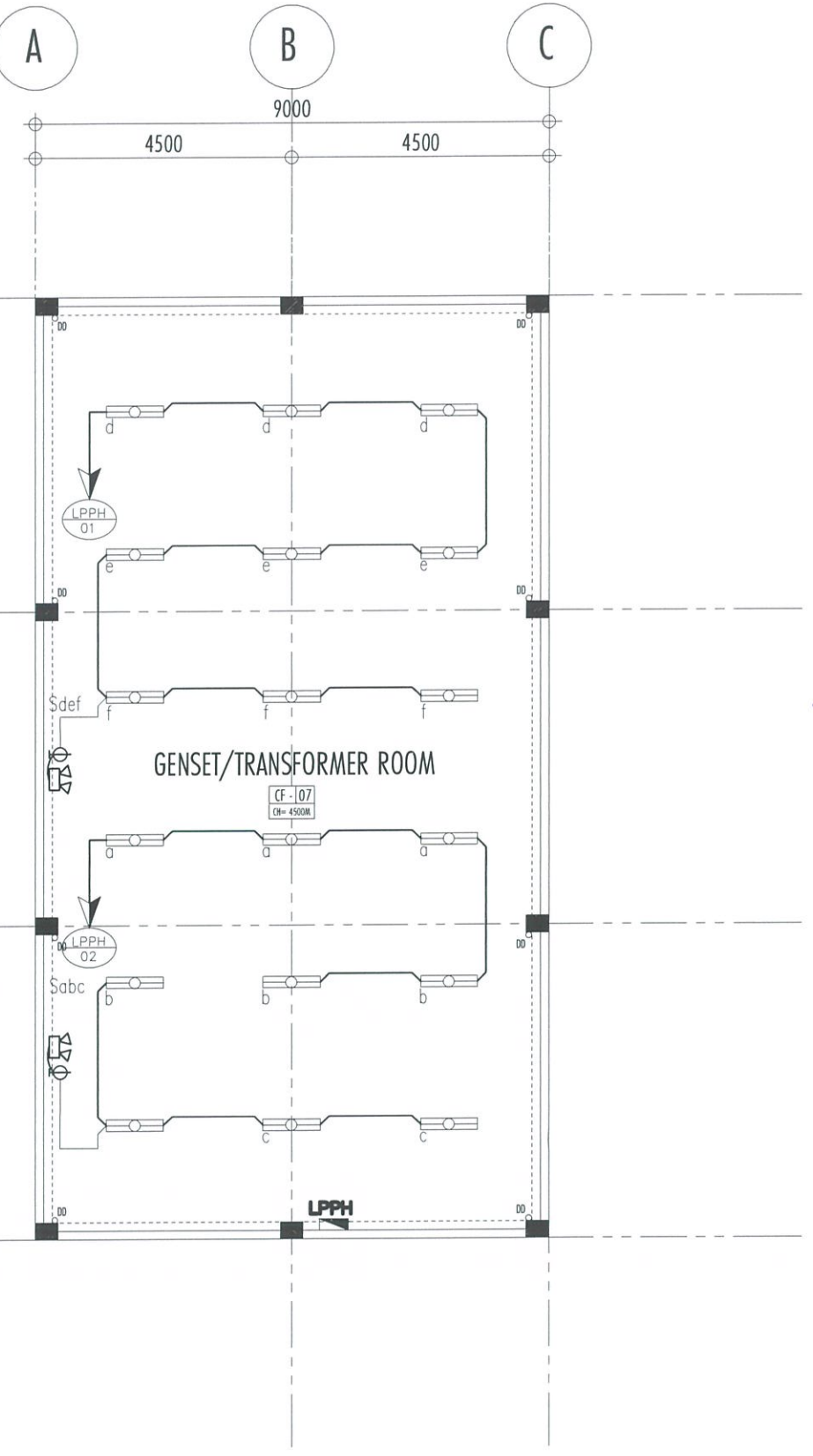


1 PROPOSED POWERHOUSE PLAN LAYOUT

1
E-39

SCALE:

1:65MTS



2 POWERHOUSE LIGHTING SYSTEM PLAN LAYOUT

2
E-39

SCALE:

1:65 MTS



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CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE

INFRASTRUCTURE DEVELOPMENT AND DESIGN DIVISION

DESIGN STAFF:	INITIAL / DATE
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	

REVIEWED BY:


RAUL R. CRUCENA
Division Chief III, IDDD-AED

SUBMITTED BY:


ARNEL F. BORLADO
Department Manager III, AED-ADMS

RECOMMEND APPROVAL:


LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

APPROVED BY:


CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

NOTES/REVISIONS:

PROJECT:

NEW CAAP BUILDING

LOCATION:

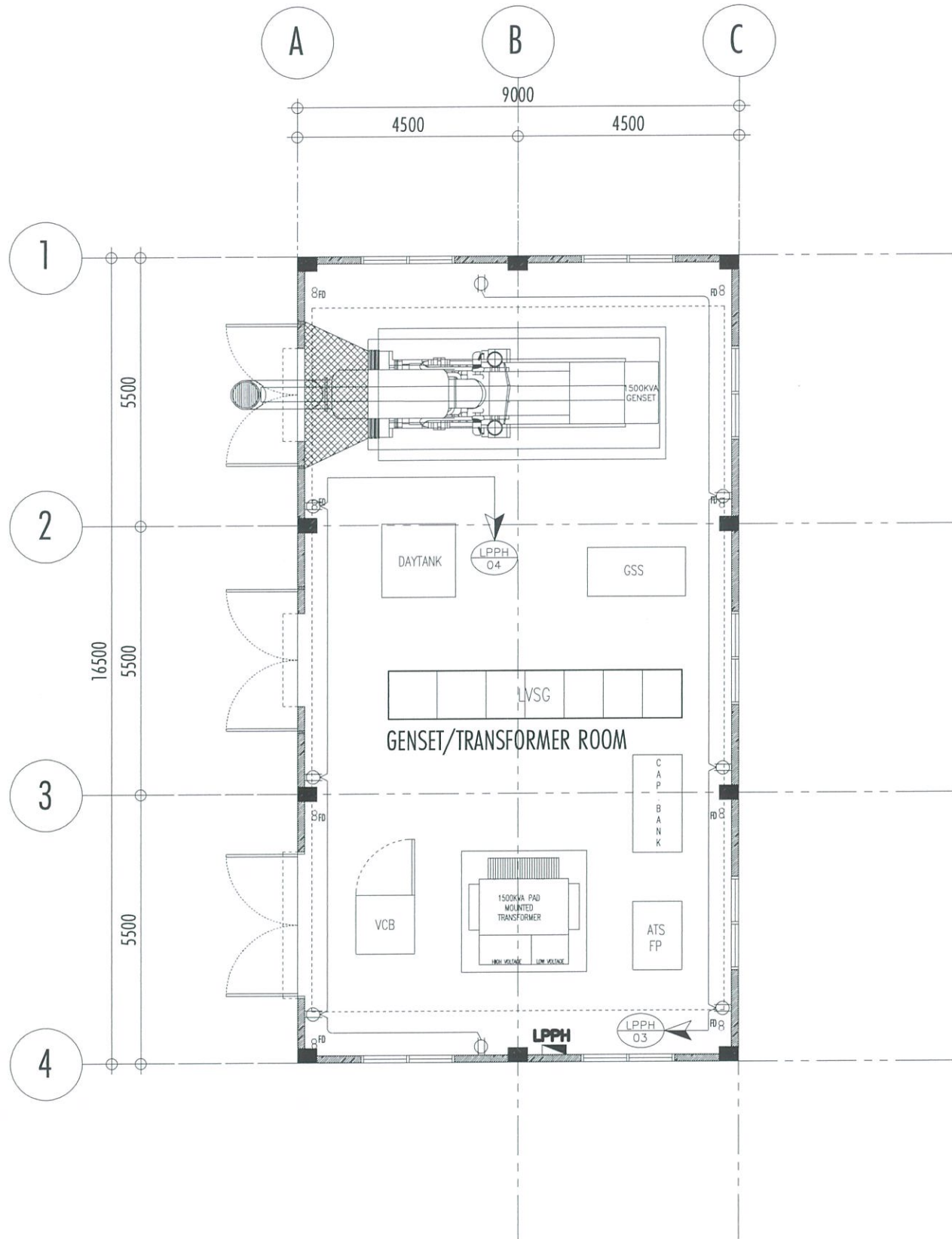
CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY

SHEET CONTENTS:

- PROPOSED POWERHOUSE AND LIGHTING PLAN LAYOUT

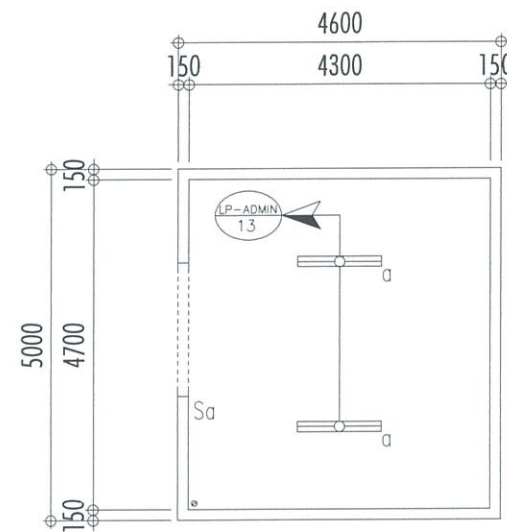
PROFESSIONAL ELECTRICAL ENGINEER:			
ENGR. FREDERICK R. CALAMLAM			
LICENSE NO.:	0003482	VALID UNTIL:	06/04/2025
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TIN NO.:	214-207-341-000	ISSUED AT:	LAGUNA

DRAWING SCALE:	SHEET NO:
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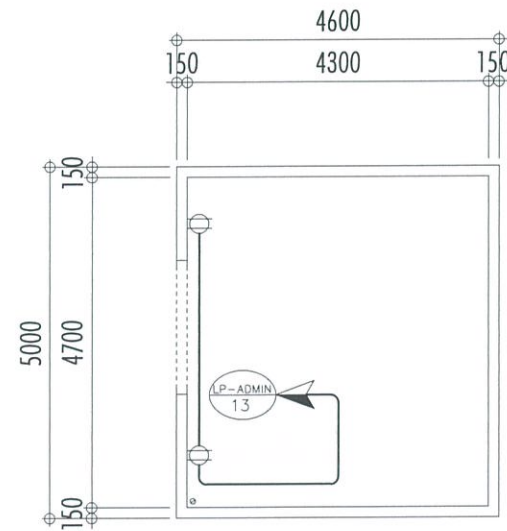
1
E-40

POWERHOUSE
POWER SYSTEM PLAN LAYOUT
SCALE: 1:65 MTS



2
E-40

PUMP ROOM
LIGHTING SYSTEM PLAN LAYOUT
SCALE: 1:60 MTS



3
E-40

PUMP ROOM
POWER SYSTEM PLAN LAYOUT
SCALE: 1:60 MTS

PROFESSIONAL ELECTRICAL ENGINEER:
ENGR. FREDERICK R. CALAMLAM

LICENSE NO.: 0003482 VALID UNTIL: 06/04/2025
PTR NO.: 2296325 ISSUED ON: 01/04/2024
TIN NO.: 214-207-341-000 ISSUED AT: LAGUNA

DRAWING SCALE: AS SHOWN

SHEET NO: E-40

• LIGHTING AND POWER PLAN LAYOUT

PROJECT:
NEW CAAP BUILDING

LOCATION:
**CAAP HEAD OFFICE
NAIA ROAD, PASAY CITY**

NOTES/REVISIONS:

CAPTAIN MANUEL ANTONIO L. TAMAYO
Director General

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LT COL VALENTINO A DIONELA PAF (RET)
Assistant Director General II, ADMS

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Department Manager III, AED-ADMS

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Division Chief III, IDDD-AED

REVIEWED BY:

DESIGNED BY:
DRAWN BY:
CHECKED BY:

INFRASTRUCTURE DEVELOPMENT
AND DESIGN DIVISION

AERODROME DEVELOPMENT
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AERODROME DEVELOPMENT AND MANAGEMENT SERVICE
NAIA ROAD, 1300 PASAY CITY

REPUBLIC OF THE PHILIPPINES

