Electrical Layout Plan - General Notes

1. This electrical layout plan has been prepared in full compliance with all updated codes, regulations, and standards applicable in Dubai, AEU.

2. The design strictly adheres to the regulations of the Dubai Electricity and Water Authority (DEWA), incorporating the latest guidelines from the DEWA Electrical Regulations - 2020 Edition.

3. All installations and wiring systems follow the rules set forth by the UAE Fire and Life Safety Code of Practice (2021 Edition).

4. The plan complies with the requirements of the Emirates Authority for Standardization and Metrology (ESMA), ensuring the use of approved electrical components and equipment.

5. Proper circuit protection, load balancing, and earthing systems have been incorporated as per the latest IEC standards adopted in the UAE.

6. Electrical components, distribution boards, and cabling systems are selected based on DEWA-approved product lists and installation guidelines.

7. The layout includes detailed provisions for emergency power systems, grounding, and lightning protection as per Dubai Civil Defence and DEWA regulations.

8. Lighting and power layouts have been verified for voltage drop, diversity factor, and maximum demand calculation in accordance with DEWA and international norms.

9. All load schedules, single-line diagrams (SLDs), and panel board configurations are developed according to Dubai Municipality and DEWA requirements.

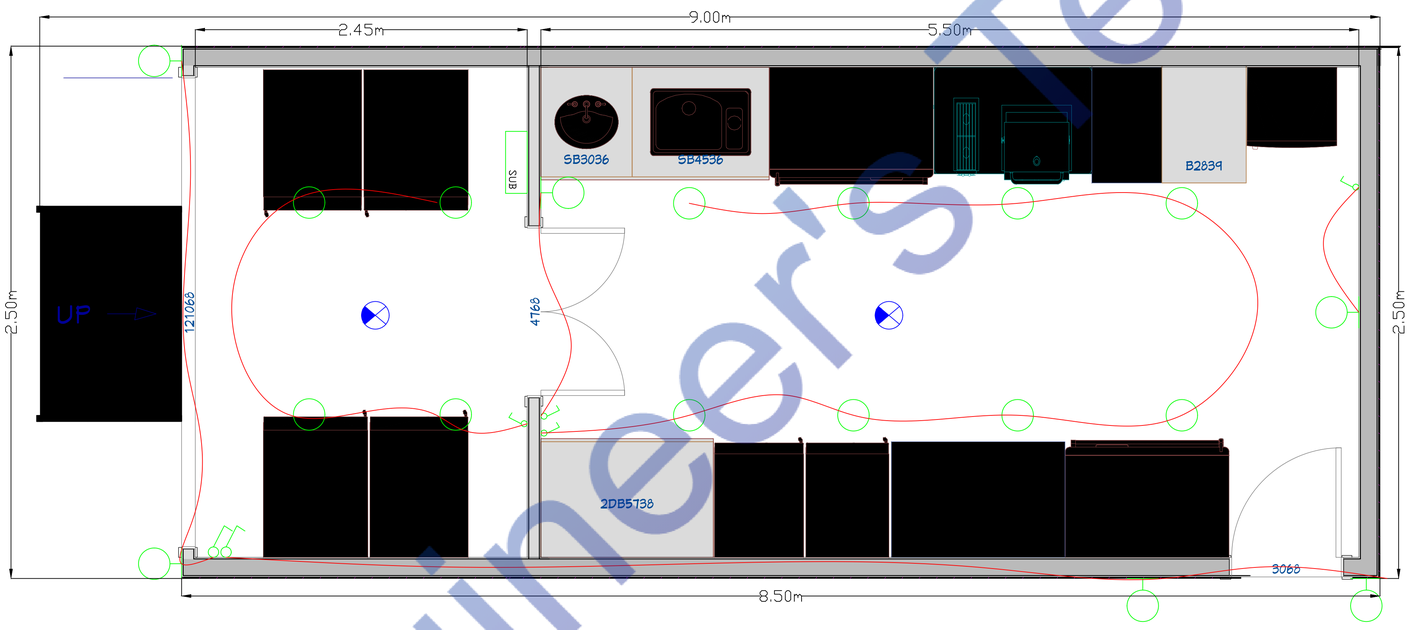
10. The plan has been reviewed and coordinated with architectural, HVAC, and plumbing layouts to ensure complete integration and avoid service conflicts.

Dubai, AEU Product Approval Codes Followed:

DEWA Approved Electrical Products List (2024 Revision)

ESMA Certified Equipment Registry

Dubai Civil Defence Approved Life Safety Equipment List



ELECTRICAL LEGEND

- 10 WATT CEILING LED LIGHT
- SMOCK DETECTOR
- 10 WATT WALL LED LIGHT
- ELECTRICAL PANEL BOX
- ELECTRICAL WIRE
- ELECTRICAL SWITCH

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For City Stamps:

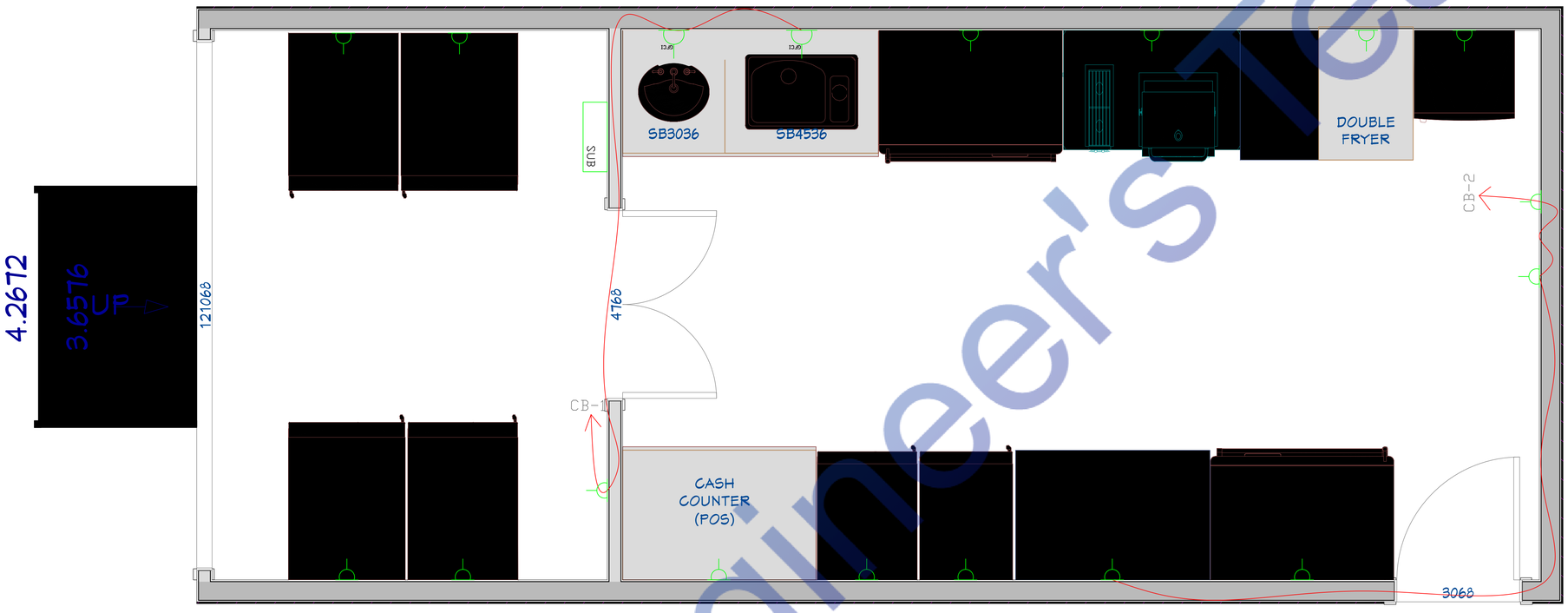
Project No:

Drawn by:

Date: 7/25/25

Sheet Name:
ELECTRICAL LIGHTING PLAN

Drawing Number:
E1



ELECTRICAL LEGEND

- MULTI SOCKET OUTLET 230V
- GFCI MULTI SOCKET OUTLET 230V
- SUB — ELECTRICAL PANEL BOX
- ELECTRICAL WIRE

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Date: 7/25/25

Sheet Name:
ELECTRICAL POWER PLAN

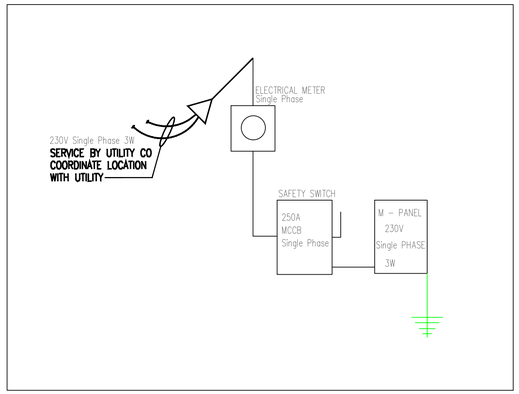
Drawing Number:
E2

MAIN PANEL

Panel Location-								Panel Location-							
Voltage (Phase-Ground/Phase-Phase)		230	400	Source of Supply-From Service Disconnect/Meter											
Phase-		1		Wire-		3									
Rated Amps-		37		AIC-		9kW									
MCCB		50 Amps MCCB		Mounting-		Wall Surface									
Circuit	Description	New/ Existing	Load Type	Breaker Size	Poles	Wire Size	A		Wire Size	Poles	Breaker Size	Load Type	New/ Existing	Description	Circuit
1	LIGHTING LOAD	N		15	1	#14	500	300	#12	1	20		N	CB-1	2
3	Frezzer x6	N		40	1	#8	5000	300	#12	1	20		N	CB-2	4
5	Refrigerator x2	N		20	1	#12	2000	0	--	--	--		--	SPARE	6
7	Cash Machine POS	N		20	1	#13	300	0	--	--	--		--	SPARE	8
9	SPARE	--	--	--		--	0	0	--	--	--		--	SPARE	10

	A
Connected Load (W)	8400
Connected Amps	37
Main Type and Amps Rating	50 Amps MCCB

Demand Load Calcultion			
Load Classification	Connected Load	Demand Factor	Estimated Demand
Lighting - Dwelling Unit	300	125%	375
Water Heater - Dwelling Unit	0	100%	0
Receptacle	25900	65%	16835
Cooling	0	100%	0
Pump	0	125%	0
Other	0	100%	0
Demand Load	26200		17210
Demand Amps			143



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Sheet Name:
ELECTRICAL LOAD SCHEDULE & SLD

Drawing Number:
E3