E3

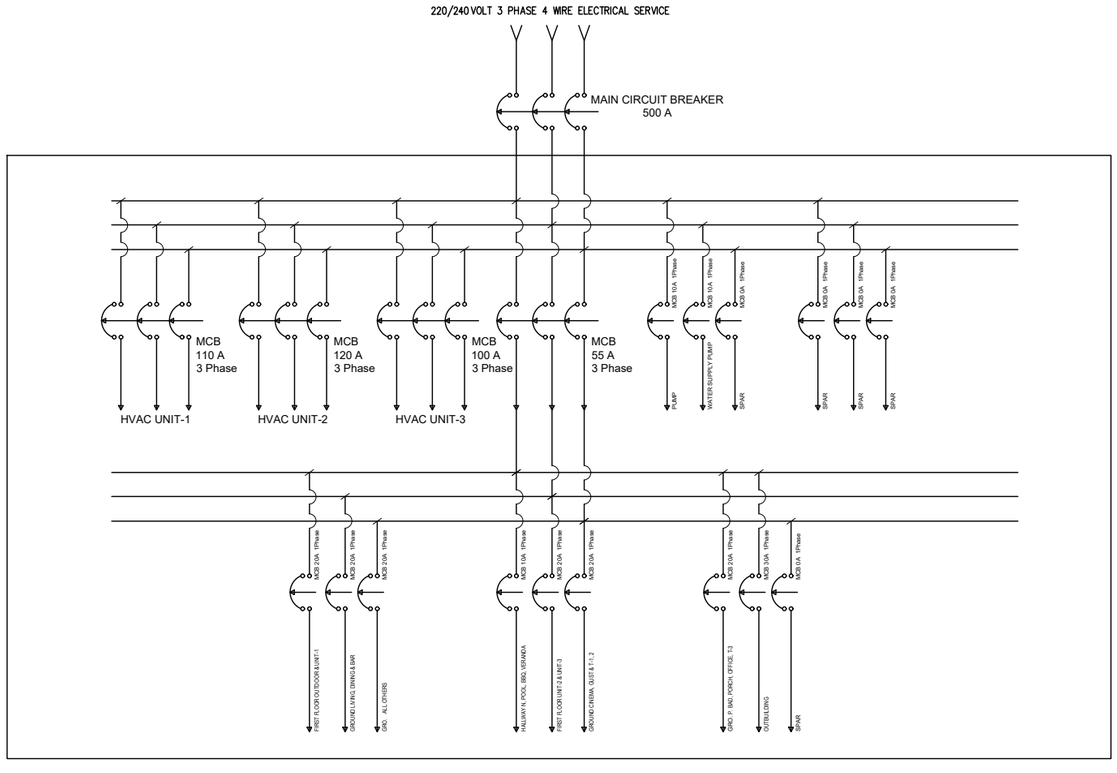
ELECTRICAL PANEL M															
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE A	PHASE B	PHASE C	PHASE A	PHASE	PHASE C	WIRE SIZE	BKR TRIP	TYPE	CKT #	LOAD SERVED
HVAC UNIT-1, 8.5 TONs	1		40	#8	8800			9320			#8	40		2	
	3		40	#8		8800			9320		#8	40		4	HVAC UNIT-2, 9 TONs
	5		40	#8			8800			9320	#8	40		6	
ELECTRICAL PANEL A	7		50	#6	10171			6212			#10	30		8	
	9		25	#10		5440			6212		#10	30		10	HVAC UNIT-3, 6 TONs
	11		20	#14			3641			6212	#10	30		12	
SPAR	13		10	#14	0			1500			#14	10		14	PUMP 2 HP
	13		10	#14		0			1119		#14	10		14	WATER SUPPLY PUMP 1.5 HP
	13		10	#14			0			0	#14	10		14	SPAR
TOTAL VA PHASE A					12856			17032							29888
TOTAL VA PHASE B						14200			16651						30851
TOTAL VA PHASE C							12341			15532					27873
TOTAL VOLT-AMPS															88612
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE TO PHASE)								240		AMPS					369
DIVIDE AMPS BY 3 PHASE MULTIPLIER								1.732		3 PHASE AMPS					213
TOTAL CONNECTED LOAD (AMPS)															213
TOTAL CONNECTED LOAD (AMPS) @ 125%								266							
MAIN TYPE AND AMPERE RATING								479 - 500 AMP MCB							
PANEL FEEDER SIZE - SEE RISER DIAGRAM															

ELECTRICAL PANEL A															
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE A	PHASE B	PHASE C	PHASE A	PHASE	PHASE C	WIRE SIZE	BKR TRIP	TYPE	CKT #	LOAD SERVED
FIRST FLOOR OUTDOOR & UNIT-1	1		20	#14	2084			830			#14	10		2	HALLWAY N, POOL, BBQ, VERANDA
GROUND LIVING, DINING & BAR	3		20	#14		1780			3660		#12	20		4	FIRST FLOOR UNIT-2 & UNIT-3
GRO. ALL OTHERS	5		20	#12			2357			1284	#14	20		6	GROUND CINEMA, GUST & T-1, 2
GRO. P. BAD, PORCH, OFFICE, T-3	7		20	#14	1282			5975			#10	30		8	OUTBUILDING
TOTAL VA PHASE A					3366			6805							10171
TOTAL VA PHASE B						1780			3660						5440
TOTAL VA PHASE C							2357			1284					3641
TOTAL VOLT-AMPS															19252
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE TO PHASE)								240		AMPS					80
DIVIDE AMPS BY 3 PHASE MULTIPLIER								1.732		3 PHASE AMPS					46
TOTAL CONNECTED LOAD (AMPS)															46
TOTAL CONNECTED LOAD (AMPS) @ 125%								58							
MAIN TYPE AND AMPERE RATING								104 - 110 AMP MCB							
PANEL FEEDER SIZE - SEE RISER DIAGRAM															

HOUSE AT SEABROOK NEC ART 220 LOAD ANALYSIS - 400 AMP 220/240 VOLT 3 PHASE 4 WIRE ELECTRICAL SERVICE				
ITEM	CONN. LOAD (VA)	DEMAND F.	DEMAND LOAD (WATTS)	TOTAL (AMPS)
LIGHTING	19252	125%	24065	
WATER HEATERS	0	100%	0	
KITCHEN EQUIPMENT	3500	65%	2275	
DINNING EQUIPMENT	2000	65%	1300	
HVAC LOADS	72996	100%	72996	
SUB-TOTAL			100636	
LARGEST MOTOR	2619	125%	3273.75	
TOTAL @ 220/240V/3PH	75616		103909.75	157 ~ 160

1 E200 PANEL SCHEDULE & SERVICE CALCULATION

Material	
Name	Watt
110V ELECTRICAL DUPLEX RECEPTACLE WATERPROOF/110V DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER	20W
2X2 FT LED LIGHT FLAT PANEL	40W
CEILING FAN WITH LIGHT AND REMOTE	55W
CEILING VENTILATION BATHROOM EXHAUST FAN WITH LED LIGHT	50W
VANITY LIGHT FIXTURES ADJUSTABLE BATHROOM LED LIGHT	22W
4 INCH ULTRA THIN LED RECESSED CEILING LED LIGHT	10W



1 E200 SINGLE LINE DIAGRAM

NOTES

Contractor to check all dimensions and levels on site prior to commencement of construction work on site.

Any discrepancies or variations are to be notified to the Designer before work commences.

Do not scale drawings for measurement.

Foundations, floors, walls, roof and stairs construction to Structural Engineer's Design and Details

Rev	Description	Drawn By	Date

Drawing Title
GROUND & FIRST FLOOR ELECTRICAL LAYOUT PLANS

Project
MARK STEVEN HOUSE
CARDIFF HALL, ST. ANNS

Signature Date

Drawn By: MM AUGUST 2023

Checked:

Authorised:

Project No. JAM/232 | Drawing Status CONCEPT DESIGN | Scale (at A1) 1 : 100

Drawing No JAM/276/03 | Revision