DISTRIBUTION PANEL 'MDP'

MOUNTING: SURFACE
SHORT CIRCUIT RATING: 42KA
FED FROM PANEL: UTILITY

VOLTS: 120/208V, 3Ph, 4W
MAINS RATING: 800
MAIN BREAKER AMPS: 800

ENCLOSURE: NEMA 1
SYSTEM: NORMAL
LOCATION: MAIN ELECTRICAL ROOM

CKT	EQUIPMENT PROTECTED	LOAD KVA	LOAD AMP	PROTECTION POLE	FRAME	C.B.	AIC	SETS	WPS	WIRE SIZE	GRD	CONDUIT (TRADE)	REMARKS
1	PANEL "H"	48.6	135.0	3	225	200	42KA	1		3/0 CU	6 CU	2"	
2	ELEVATOR 1	12.0	33.3	3	60	60	42KA	1		6 CU	10 CU	1"	SHUNT TRIP C.B.
3	ELEVATOR 2	12.0	33.3	3	60	60	42KA	1		6 CU	10 CU	1"	SHUNT TRIP C.B.
4	RTU-1	25.2	70.0	3	100	90	42KA	1		1 CU	8 CU	1-1/2"	
5	RTU-2	28.0	77.8	3	100	100	42KA	1		1 CU	8 CU	1-1/2"	
6	RTU-3	28.0	77.8	3	100	100	42KA	1		1 CU	8 CU	1-1/2"	
7	RTU-4	12.0	33.3	3	60	50	42KA	1		8 CU	10 CU	1"	
8	RTU-5	38.0	105.6	3	225	150	42KA	1		1/0 CU	6 CU	2"	
9	RTU-6	38.0	105.6	3	225	150	42KA	1		1/0 CU	6 CU	2"	
10	RTU-7	25.2	70.0	3	100	90	42KA	1		1 CU	8 CU	1-1/2"	
11	SPACE		0.0				42KA						
12	SPACE		0.0				42KA						

TOTAL CONNECTED LOAD= 267 KVA
CONNECTED AMPS = 741.7 AMPS

Note:

PANEL "201- 216" *

TYPE: SQUARE D, SIEMENS, EATON
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
SUPPLY FROM: METER CENTER

RATED VOLTAGE: 120/208V, 3Ph, 4W
BUS RATING: 125 AMPS
A.I.C. RATING: 10 KAIC
BRANCH POLES: 42 CIRCUITS

MAINS: M.L.O.
FEED LOCATION: BOTTOM
SYSTEM: NORMAL
LOCATION: SEE FLOOR PLAN

ID	LOAD SERVED	COND.	EQ. GND.	WIRE AWG	TYPE	TRIP [A]	CKT	Phase A [kVA]	Phase B [kVA]	Phase C [kVA]	CKT	TRIP [A]	TYPE	WIRE AWG	EQ. GND.	COND.	LOAD SERVED	
L	LIGHTS	1/2"	12	12	-	20	1	1.2			2						SPACE	
O	VAV	1/2"	12	12	-	15/3	3		0.7		4						SPACE	
O							5			0.7	6						SPACE	
O							7	0.7			8						SPACE	
O	VAV (++)	1/2"	12	12	-	15/3	9		0.6		10						SPACE	
O							11			0.6	12						SPACE	
O							13	0.6			14						SPACE	
	SPACE						15				16						SPACE	
	SPACE						17				18						SPACE	
	SPACE						19				20						SPACE	
	SPACE						21				22						SPACE	
	SPACE						23				24						SPACE	
	SPACE						25				26						SPACE	
	SPACE						27				28						SPACE	
	SPACE						29				30						SPACE	
	SPACE						31				32						SPACE	
	SPACE						33				34						SPACE	
	SPACE						35				36						SPACE	
	SPACE						37				38						SPACE	
	SPACE						39				40						SPACE	
	SPACE						41				42						SPACE	
								2.5	1.3	1.3								

ID:
(L) LIGHTING LOAD
(O) OTHER LOAD
(R) RECEPTACLE LOAD
(N) NON CONCURRENT LOAD
(C) A/C (COLD OR HEAT)

DEMAND LOAD CALCULATION:

TOTAL CONNECTED LOAD:	=	5.1 KVA
RECEP. LOAD	=	0.0 KVA
1ST 10 KVA @ 100%	=	0.0 KVA
REMAINING @..... 50%	=	0.0 KVA
LIGHTING LOADS @ 125%	=	1.5 KVA
OTHER LOADS @ 100%	=	3.9 KVA
TOTAL KVA A/C LOADS @..... 100%	=	0.0 KVA
TOTAL NON CONCURRENT LOADS	=	0.0 KVA
TOTAL DEMAND LOAD:	=	5.4 KVA
DEMAND AMPERES:	=	**15** AMPS

* ELECTRICAL PANEL TYPICAL FOR EACH OFFICE SPACE
++ PROVIDE BRANCH CIRCUIT FOR TENANT SPACE WITH SECOND VAV. REFER TO VAV SCHEDULE ON SHEET E121.

PANEL "100 - 119" *

TYPE: SQUARE D, SIEMENS, EATON
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
SUPPLY FROM: METER AND DISCONNECT

RATED VOLTAGE: 120/208V, 3Ph, 4W
BUS RATING: 125 AMPS
A.I.C. RATING: 10 KAIC
BRANCH POLES: 42 CIRCUITS

MAINS: M.L.O.
FEED LOCATION: BOTTOM
SYSTEM: NORMAL
LOCATION: SEE FLOOR PLAN

ID	LOAD SERVED	COND.	EQ. GND.	WIRE AWG	TYPE	TRIP [A]	CKT	Phase A [kVA]	Phase B [kVA]	Phase C [kVA]	CKT	TRIP [A]	TYPE	WIRE AWG	EQ. GND.	COND.	LOAD SERVED	
L	LIGHTS	1/2"	12	12	-	20	1	1.2 0.2			2	20		12	12	1/2"	BATHROOM LTS/REC	L
O	4 OR 5 TON AHU (++)	1"	10	6		60/2	3		5.4 2.4		4	20		10	10	3/4"	IWH	O
O						(++)	5			5.4	6							
N	CU 4 TON: C.B. 40/2 OR	1"	10	8		50/2	7	2.9			8							
N	CU 5 TON: C.B. 50/2					(++)	9		2.9		10							
O	4 OR 5 TON AHU (++)	1"	10	6		60/2	11			5.4	12							
O						(++)	13	5.4			14							
N	CU 4 TON: C.B. 40/2 OR	1"	10	8		50/2	15		2.9		16							
N	CU 5 TON: C.B. 50/2					(++)	17			2.9	18							
							19				20							
							21				22							
							23				24							
							25				26							
							27				28							
							29				30							
							31				32							
							33				34							
							35				36							
							37				38							
							39				40							
							41				42							
								9.7	13.6	13.7								

ID:
(L) LIGHTING LOAD
(O) OTHER LOAD
(R) RECEPTACLE LOAD
(N) NON CONCURRENT LOAD
(C) A/C (COLD OR HEAT)

DEMAND LOAD CALCULATION:

TOTAL CONNECTED LOAD:	=	37.0 KVA
RECEP. LOAD	=	0.0 KVA
1ST 10 KVA @ 100%	=	0.0 KVA
REMAINING @..... 50%	=	0.0 KVA
LIGHTING LOADS @ 125%	=	1.8 KVA
OTHER LOADS @ 100%	=	24.0 KVA
TOTAL KVA A/C LOADS @..... 100%	=	0.0 KVA
TOTAL NON CONCURRENT LOADS	=	11.6 KVA
TOTAL DEMAND LOAD:	=	25.8 KVA
DEMAND AMPERES:	=	**72** AMPS

* ELECTRICAL PANEL TYPICAL FOR EACH SHOPS SPACE
++ REFER TO FLOOR PLAN FOR TONNAGE FOR CORRESPONDING SHOP SPACE.

PANEL "200 AND 218"

TYPE: SQUARE D, SIEMENS, EATON
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
SUPPLY FROM: METER CENTER

RATED VOLTAGE: 120/208V, 3Ph, 4W
BUS RATING: 225 AMPS
A.I.C. RATING: 10 KAIC
BRANCH POLES: 42 CIRCUITS

MAINS: M.L.O.
FEED LOCATION: BOTTOM
SYSTEM: NORMAL
LOCATION: SEE FLOOR PLAN

ID	LOAD SERVED	COND.	EQ. GND.	WIRE AWG	TYPE	TRIP [A]	CKT	Phase A [kVA]	Phase B [kVA]	Phase C [kVA]	CKT	TRIP [A]	TYPE	WIRE AWG	EQ. GND.	COND.	LOAD SERVED	
L	LIGHTS	1/2"	12	12	-	20	1	1.2 0.2			2						SPACE	
O	SUITE 200:VAV 1-2 OR	1/2"	12	12	-	15/3	3		0.8		4						SPACE	
O	SUITE 218: VAV 7-2						5			0.8	6						SPACE	
O							7	0.8			8						SPACE	
O	SUITE 200: VAV 1-4 OR	1/2"	12	12	-	15/3	9		0.7		10						SPACE	
O	SUITE 218: VAV 7-3						11			0.7	12						SPACE	
O							13	0.7			14						SPACE	
O	SUITE 200: VAV 1-3 OR	1/2"	12	12	-	15/3	15		0.7		16						SPACE	
O	SUITE 218: VAV 7-4						17			0.7	18						SPACE	
O							19	0.7			20						SPACE	
	SPACE						21				22						SPACE	
	SPACE						23				24						SPACE	
	SPACE						25				26						SPACE	
	SPACE						27				28						SPACE	
	SPACE						29				30						SPACE	
	SPACE						31				32						SPACE	
	SPACE						33				34						SPACE	
	SPACE						35				36						SPACE	
	SPACE						37				38						SPACE	
	SPACE						39				40						SPACE	
	SPACE						41				42						SPACE	
								3.6	2.2	2.2								

ID:
(L) LIGHTING LOAD
(O) OTHER LOAD
(R) RECEPTACLE LOAD
(N) NON CONCURRENT LOAD
(C) A/C (COLD OR HEAT)

DEMAND LOAD CALCULATION:

TOTAL CONNECTED LOAD:	=	8.0 KVA
RECEP. LOAD	=	0.0 KVA
1ST 10 KVA @ 100%	=	0.0 KVA
REMAINING @..... 50%	=	0.0 KVA
LIGHTING LOADS @ 125%	=	1.5 KVA
OTHER LOADS @ 100%	=	6.6 KVA
TOTAL KVA A/C LOADS @..... 100%	=	0.0 KVA
TOTAL NON CONCURRENT LOADS	=	0.0 KVA
TOTAL DEMAND LOAD:	=	8.1 KVA
DEMAND AMPERES:	=	**23** AMPS

PANEL "106"

TYPE: SQUARE D, SIEMENS, EATON
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
SUPPLY FROM: METER AND DISCONNECT

RATED VOLTAGE: 120/208V, 3Ph, 4W
BUS RATING: 400 AMPS
A.I.C. RATING: 10 KAIC
BRANCH POLES: 42 CIRCUITS

MAINS: M.L.O.
FEED LOCATION: BOTTOM
SYSTEM: NORMAL
LOCATION: SEE FLOOR PLAN

ID	LOAD SERVED	COND.	EQ. GND.	WIRE AWG	TYPE	TRIP [A]	CKT	Phase A [kVA]	Phase B [kVA]	Phase C [kVA]	CKT	TRIP [A]	TYPE	WIRE AWG	EQ. GND.	COND.	LOAD SERVED	
L	LIGHTS	1/2"	12	12	-	20	1	1.2 0.2			2	20		12	12	1/2"	BATHROOM LTS/REC	L
O	5 TON AHU	1"	10	6		60/2	3		5.4 2.4		4	20		10	10	3/4"	IWH	O
O							5			5.4	6							
N	CU 5 TON	1"	10	8		50/2	7	2.9			8							
N							9		2.9		10							
O	5 TON AHU	1"	10	6		60/2	11			5.4	12							
O							13	5.4			14							
N	CU 5 TON	1"	10	8		50/2	15		2.9		16							
N							17			2.9	18							
O	5 TON AHU	1"	10	6		60/2	19	5.4			20							
O							21		5.4		22							
N	CU 5 TON	1"	10	8		50/2	23			2.9	24							
N							25	2.9			26							
O	5 TON AHU	1"	10	6		60/2	27		5.4		28							
O							29			5.4	30							
N	CU 5 TON	1"	10	8		50/2	31	2.9			32							
N							33		2.9		34							
O	5 TON AHU	1"	10	6		60/2	35			5.4	36							
O							37	5.4			38							
N	CU 5 TON	1"	10	8		50/2	39		2.9		40							
N							41	2.9			42							
								20.9	27.3	22.0								

ID:
(L) LIGHTING LOAD
(O) OTHER LOAD
(R) RECEPTACLE LOAD
(N) NON CONCURRENT LOAD
(C) A/C (COLD OR HEAT)

DEMAND LOAD CALCULATION:

TOTAL CONNECTED LOAD:	=	70.2 KVA
RECEP. LOAD	=	0.0 KVA
1ST 10 KVA @ 100%	=	0.0 KVA
REMAINING @..... 50%	=	0.0 KVA
LIGHTING LOADS @ 125%	=	1.8 KVA
OTHER LOADS @ 100%	=	45.6 KVA
TOTAL KVA A/C LOADS @..... 100%	=	0.0 KVA
TOTAL NON CONCURRENT LOADS	=	23.2 KVA
TOTAL DEMAND LOAD:	=	47.4 KVA
DEMAND AMPERES:	=	**132** AMPS

PANEL "H"

TYPE: SQUARE D, SIEMENS, EATON
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
SUPPLY FROM: METER CENTER

RATED VOLTAGE: 120/208V, 3Ph, 4W
BUS RATING: 225 AMPS
A.I.C. RATING: 10 KAIC
BRANCH POLES: 54 CIRCUITS

MAINS: M.L.O.
FEED LOCATION: BOTTOM
SYSTEM: NORMAL
LOCATION: SEE FLOOR PLAN

ID	LOAD SERVED	COND.	EQ. GND.	WIRE AWG	TYPE	TRIP [A]	CKT	Phase A [kVA]	Phase B [kVA]	Phase C [kVA]	CKT	TRIP [A]	TYPE	WIRE AWG	EQ. GND.	COND.	LOAD SERVED	
L	LIGHTS ENTRANCE 107	1/2"	12	12	-	20	1	1.2 0.8			2	20	-	12	12	1/2"	LIGHTS BATHROOMS 2ND FLOOR	L
R	RECEP. BATH 2ND FLOOR	1/2"	12	12	-	20	3		0.6 1.0		4	20	-	12	12	1/2"	RECP HALLWAY	L
R	FOUNTAIN DRINK	1/2"	12	12	-	20	5			1.5 1.0	6	20	-	12	12	1/2"	RECP HALLWAY	L
R	FOUNTAIN DRINK	1/2"	12	12	-	20	7	1.2 1.0			8	20	-	12	12	1/2"	ELEVATOR PIT LIGHTS/RECS	L
L	ELEVATOR #1 CAB LIGHTS	1/2"	12	12	-	20	9		0.1 0.6		10	20	-	12	12	1/2"	ELEVATOR PIT SUMP PUMP	O
L	ELEVATOR #2 CAB LIGHTS	1/2"	12	12	-	20	11			0.1 0.2	12	20	-	12	12	1/2"	NORTH STAIR LIGHTS	L
O	EF-R1	1/2"	12	12	-	15	13	0.1 0.2			14	20	-	12	12	1/2"	CENTER STAIR LIGHTS	L
O	EF-R2	1/2"	12	12	-	15	15		0.1 0.2		16	20	-	12	12	1/2"	EAST STAIR LIGHTS	L
O	ELECTRICAL ROOM IN-LINE FAN	1/2"	12	12	-	15	17			1.2 0.2	18	20	TS	12	12	1/2"	2ND FLR CORRIDOR LIGHTS	L
O	5 TON AHU	1"	10	6		60/2	19	5.4 0.2			20	20	TS	12	12	1/2"	2ND FLR CORRIDOR LIGHTS	L
O							21		5.4 0.1		22	20	12	12	12	1/2"	FACP	O
N	CU	1"	10	8		50/2	23			2.9 2.2	24	30/2		10	10	3/4"	EWH	O
N							25	2.9 2.3			26							O
R	ROOFTOP GFCI	1/2"	12	12	-	20	27		0.8 2.2		28	30/2		10	10	3/4"	EWH	O
R	ROOFTOP GFCI	1/2"	12	12	-	20	29			0.8 2.3	30							O
R	TBB REC	1/2"	12	12	-	20	31	1.2 0.1			32	20	-	12	12	1/2"	RECIRC PUMP	O
R	TBB REC	1/2"	12	12	-	20	33		1.2 0.1		34	20	-	12	12	1/2"	RECIRC PUMP	O
R	GROUND FLOOR GENERAL REC	1/2"	12	12	-	20	35			0.6 1.2	36	15/3	-	12	12	1/2"	VAV 7-1	O
O	VAV 1-1	1/2"	12	12	-	15/3	37	1.2 1.2			38							O
O							39		1.2 1.2		40							O
O							41			1.2	42						SPACE	
O	VAV 4-3	1/2"	12	12	-	15/3	43	1.2			44						SPACE	
O							45		1.2		46						SPACE	
O							47			1.2	48						SPACE	
	SPACE						49				50						SPACE	
	SPACE						51				52						SPACE	
	SPACE						53				54						SPACE	
								20.2	16.0	16.6								

ID:
(L) LIGHTING LOAD
(O) OTHER LOAD
(R) RECEPTACLE LOAD
(N) NON CONCURRENT LOAD
(C) A/C (COLD OR HEAT)

TYPE:
TS - TIME SWITCH CONTROL

DEMAND LOAD CALCULATION:

TOTAL CONNECTED LOAD:	=	52.8 KVA
RECEP. LOAD	=	7.9 KVA
1ST 10 KVA @ 100%	=	7.9 KVA
REMAINING @..... 50%	=	0.0 KVA
LIGHTING LOADS @ 125%	=	7.8 KVA
OTHER LOADS @ 100%	=	32.9 KVA
TOTAL KVA A/C LOADS @..... 100%	=	0.0 KVA
TOTAL NON CONCURRENT LOADS	=	5.8 KVA
TOTAL DEMAND LOAD:	=	48.6 KVA
DEMAND AMPERES:	=	**135** AMPS

(*) VERIFY SPECS OF EQUIPMENT WITH MANUFACTURER AND OWNER PRIOR TO BID.

PANEL "112"

TYPE: SQUARE D, SIEMENS, EATON
MOUNTING: SURFACE
ENCLOSURE: NEMA 1
SUPPLY FROM: METER AND DISCONNECT

RATED VOLTAGE: 120/208V, 3Ph, 4W
BUS RATING: 400 AMPS
A.I.C. RATING: 10 KAIC
BRANCH POLES: 42 CIRCUITS

MAINS: M.L.O.
FEED LOCATION: BOTTOM
SYSTEM: NORMAL
LOCATION: SEE FLOOR PLAN

ID	LOAD SERVED	COND.	EQ. GND.	WIRE AWG	TYPE	TRIP [A]	CKT	Phase A [kVA]	Phase B [kVA]	Phase C [kVA]	CKT	TRIP [A]	TYPE	WIRE AWG	EQ. GND.	COND.	LOAD SERVED	
L	LIGHTS	1/2"	12	12	-	20	1	1.2 0.2			2	20		12	12	1/2"	BATHROOM LTS/REC	L
O	4 TON AHU	1"	10	6		60/2	3		5.4 2.4		4	20		10	10	3/4"	IWH	O
O							5			5.4	6							
N	CU 4 TON	1"	10	8		40/2	7	2.5			8							
N							9		2.5		10							
O	4 TON AHU	1"	10	6		60/2	11			5.4	12							
O							13	5.4			14							
N	CU 4 TON	1"	10	8		40/2	15		2.5		16							
N							17			2.5	18							
O	4 TON AHU	1"	10	6		60/2	19	5.4			20							
O							21		5.4		22							
N	CU 4 TON	1"	10	8		40/2	23			2.5	24							
N							25	2.5			26							
O	4 TON AHU	1"	10	6		60/2	27		5.4		28							
O							29			5.4	30							
N	CU 4 TON	1"	10	8		40/2	31	2.5			32							
N							33		2.5		34							
							35				36							
							37				38							
							39				40							
							41				42							
								19.7	26.1	21.2								

ID:
(L) LIGHTING LOAD
(O) OTHER LOAD
(R) RECEPTACLE LOAD
(N) NON CONCURRENT LOAD
(C) A/C (COLD OR HEAT)

DEMAND LOAD CALCULATION:

TOTAL CONNECTED LOAD:	=	67.0 KVA
RECEP. LOAD	=	0.0 KVA
1ST 10 KVA @ 100%	=	0.0 KVA
REMAINING @..... 50%	=	0.0 KVA
LIGHTING LOADS @ 125%	=	1.8 KVA
OTHER LOADS @ 100%	=	45.6 KVA
TOTAL KVA A/C LOADS @..... 100%	=	0.0 KVA
TOTAL NON CONCURENT LOADS	=	20.0 KVA
TOTAL DEMAND LOAD:	=	47.4 KVA
DEMAND AMPERES:	=	**132** AMPS

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PROJECT #: 230515-G
CIVIL CONSULTANT:
DESIGNER CONSULTANT:

REVISIONS:

NO.	DATE	DESCRIPTION

CLIENT:
CLIENT NAME

PROJECT NAME / LOCATION:
PROJECT NAME
PROJECT ADDRESS

DRAWING TITLE:
PANELS SCHEDULES

EXAMINER'S SIGNATURE:

PROFESSIONAL SEAL:

Digitally signed by George SanJuan
Date: 2023.12.27 11:10:00 -05'00'
GEORGE SANJUAN, P.E.
FLORIDA LICENSE #46100

SCALE: AS SHOWN
DATE:
PROJECT NO.:

DRAWING NO.: E301

BARCODE

THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECTS. DO NOT SCALE DRAWING. THE DRAWING SHALL NOT BE USED UNTIL SIGNED BY CONSULTANTS.