SWITCHBOARD MS1

SWITCHBOARD NOTES:

3P-2500A MAIN | INTERRUPT RATING: 100,000 A.I.C. | 3 Φ - 4 WIRE - 277/480 VOLT | DEMAND AMPS: 1709 | 2500 AMP BUS

CIRCUIT NUMBER	SERVING	FRAME SIZE	TRIP SETTING	LOAD TYPE	KVA AΦ	KVA BΦ	KVA CΦ	REMARKS
1	CH-1	600	600	LM	125.4	125.4	125.4	
2	CH-2	600	600	NC	0.0	0.0	0.0	N+1; NON-CONCURRENT LOAD
3	HGM	400	400	P	49.6	49.6	49.6	
4	ATS #1 (FP-1)	--	--	NC	7.2	7.2	7.2	TAP SECTION
5	ATS #2 (PANEL HEG)	100	100	P	17.6	14.6	14.7	
6	ATS #3 (PANEL HEL)	400	400	P	23.8	23.8	23.8	
7	ATS #4 (PANEL HSG)	600	600	P	113.7	111.2	102.9	
8	PANEL HGLA	400	250	P	57.0	59.4	46.4	
9	PANEL H1LEA	400	250	P	57.0	55.8	52.8	
10	PANEL H1LWA	200	200	P	43.0	38.6	40.7	
11	SPARE	400	--					
12	SPARE	400	--					
13	SPARE	400	--					
14								
15								
16								
17								
18								
19								
20								
21								

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	94.51	125%	118.13
NON-CONTINUOUS LOADS (NC)	639.21	100%	639.21
RECEPTACLES LOADS (R)	188.28	10KVA + 50%	99.14
KITCHEN LOADS (K)	58.12	65%	37.78
LARGEST MOTOR (LM)	376.26	125% OF LARGEST	470.33
ELEVATOR (EL)	71.50	79%	56.48

FED FROM: UTILITY — AΦ = 494.3 kVA; BΦ = 485.7 kVA; CΦ = 463.6 kVA

TOTAL CONNECTED = 1428 kVA
TOTAL DEMAND = **1421 kVA**

CIRCUIT BREAKER TYPE SWITCHBOARD

-THE SWITCHBOARD SHALL BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT, INCLUDING THE DATE THE CALCULATION WAS PERFORMED.
-REFER TO THE DISTRIBUTION DIAGRAM FOR WIRE AND CONDUIT SIZES.

PANEL H1LWA

PANEL NOTES:

M.L.O. F.T.L. | BREAKER INTERRUPT RATING: FULLY RATED | 3 Ø - 4 WIRE - 277/480 VOLT | DEMAND AMPS: 132 | 200 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
3/4"	2#10	LIGHTING	1.84			1P-20	1	C		2					SPACE		
		SPARE				I	3			4					I		
		I				I	5			6					I		
		I				I	7			8					I		
		I				I	9			10					I		
		I				I	11			12					I		
		I				I	13			14					I		
		I				I	15			16					I		
		I				I	17			18					I		
		I				I	19			20					I		
		I				I	21			22					I		
		I				I	23			24					I		
		I				I	25			26					I		
		I				I	27			28					I		
		I				I	29			30					I		
		I				I	31			32					I		
		I				I	33			34					I		
		I				I	35			36					V		
		I				I	37		P	38	3P-125	20.85			75 kVA XFMR	SEE	SEE
		I				I	39		P	40			18.84		(PANEL L1WA)	RISER	RISER
		V				V	41		P	42				17.10			

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	23.85	125%	29.81
NON-CONTINUOUS LOADS (NC)	48.64	100%	48.64
RECEPTACLES LOADS (R)	45.48	10KVA + 50%	27.74
KITCHEN LOADS (K)	4.25	90%	3.83
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: 20.3 (A Ø) | 19.8 (B Ø) | 23.6 (C Ø)
FED FROM: MS1 — A Ø = 43 kVA; B Ø = 38.6 kVA; C Ø = 40.7 kVA
H1LWA EXCLUDING FTL & SUB-PANELS = 1.8 kVA
H2LWA, L1WA = 120.4 kVA
TOTAL CONNECTED = 122 kVA
TOTAL DEMAND = **110 kVA**

PANEL H2LWA

PANEL NOTES:

M.L.O. F.T.L. | BREAKER INTERRUPT RATING: FULLY RATED | 3 Ø - 4 WIRE - 277/480 VOLT | DEMAND AMPS: 89 | 200 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
3/4"	2#10	LIGHTING	0.73			1P-20	1	C		2					SPACE		
		SPARE				I	3			4					I		
		I				I	5			6					I		
		I				I	7			8					I		
		I				I	9			10					I		
		I				I	11			12					I		
		I				I	13			14					I		
		I				I	15			16					I		
		V				V	17			18					I		
3/4"	4#12	EDP1 PHASE SENSE	0.00			3P-20	19			20					I		
				0.00			21			22					I		
					0.00		23			24					I		
3/4"	4#12	EDP2 PHASE SENSE	0.00			3P-20	25			26					I		
				0.00			27			28					I		
					0.00		29			30					V		
1-1/4"	4#4	DIMMING PANEL	1.48			3P-60	31	P	P	32	3P-60	3.03			DIMMING PANEL	4#4	1-1/4"
		DP1		1.34			33	P	P	34			5.73		DP3		
					4.00		35	P	P	36				5.56			
1-1/4"	4#4	DIMMING PANEL	2.95			3P-60	37	P	P	38	3P-125	13.02			75 kVA XFMR	SEE	SEE
		DP2		1.41			39	P	P	40			14.14		(PANEL L2WA)	RISER	RISER
					1.74		41	P	P	42				15.47			

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	28.66	125%	35.82
NON-CONTINUOUS LOADS (NC)	24.10	100%	24.10
RECEPTACLES LOADS (R)	17.82	10KVA + 50%	13.91
KITCHEN LOADS (K)	0.00	100%	0.00
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: A Ø | B Ø | C Ø
FED FROM: H1LWA — A Ø = 21.2 kVA; B Ø = 22.6 kVA; C Ø = 26.8 kVA
H2LWA EXCLUDING FTL & SUB-PANELS = 0.7 kVA
L2WA, DP1, DP2, DP3 = 69.8 kVA
TOTAL CONNECTED = 71 kVA
TOTAL DEMAND = **74 kVA**

PANEL LGWA

PANEL NOTES: PROVIDE DOUBLE NEUTRAL

3P-400A MCB F.T.L. | BREAKER INTERRUPT RATING: 10,000 A.I.C. | 3 Ø - 4 WIRE - 120/208 VOLT | DEMAND AMPS: 197 | 400 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
1/2"	2#12	TANKLESS WH	1.44			1P-20	1	NC	R	2	1P-20	0.36			GP RECEPTACLES	2#12	1/2"
I	I	I		1.44		I	3	NC	R	4	I		1.08		GP RECEPTACLES	2#12	1/2"
I	I	V			1.44	I	5	NC	R	6	I			0.36	EXTERIOR RECEPT	2#8	3/4"
I	I	GP RECEPTACLES	0.72			I	7	R	LM	8	I	1.18			GEF-0-1	2#10	3/4"
V	V	CATV SYSTEM		0.60		I	9	NC	NC	10	I		1.18		GEF-0-2	2#10	3/4"
		SPARE				I	11		NC	12	I			0.10	CP-1	2#12	1/2"
1/2"	2#12	CONDENSATE PUMPS	0.15			I	13	NC	NC	14	I	0.08			LIGHTING RELAY PNL	I	I
I	I	GP RECEPTACLES		1.26		I	15	R	R	16	I		0.36		CHEM. TREATMENT	V	V
I	I	AUTO VALVE			1.30	I	17	NC		18	I				SPARE		
V	V	AUTO VALVE	1.60			I	19	NC		20	I				I		
		SPARE				I	21			22	I				I		
		I				I	23			24	I				I		
		I				I	25			26	I				I		
		I				I	27			28	I				I		
		I				I	29			30	I				I		
		I				I	31			32	I				I		
		I				I	33			34	I				V		
		I				I	35			36	I			0.00	EMCS USE	2#12	1/2"
		I				I	37			38	I	0.00			I	I	I
		I				I	39			40	I		0.00		I	I	I
		V				V	41			42	V			0.00	V	V	V

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	0.52	125%	0.64
NON-CONTINUOUS LOADS (NC)	35.41	100%	35.41
RECEPTACLES LOADS (R)	37.62	10KVA + 50%	23.81
KITCHEN LOADS (K)	15.50	65%	10.08
LARGEST MOTOR (LM)	1.18	125% OF LARGEST	1.47

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: 24.5 (A Ø) | 28.3 (B Ø) | 22.8 (C Ø)
FED FROM: HGLA VIA 112.5 kVA XFMR — A Ø = 30 kVA; B Ø = 34.2 kVA; C Ø = 26 kVA
LGWA EXCLUDING FTL & SUB-PANELS = 14.6 kVA
LGWB = 75.6 kVA
TOTAL CONNECTED = 90 kVA
TOTAL DEMAND = **71 kVA**

PANEL L1WA

PANEL NOTES: PROVIDE DOUBLE NEUTRAL
*PROVIDE GFI CIRCUIT BREAKER

3P-225A MCB F.T.L. | BREAKER INTERRUPT RATING: 10,000 A.I.C. | 3 Ø - 4 WIRE - 120/208 VOLT | DEMAND AMPS: 130 | 225 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
1/2"	2#12	GP RECEPTACLES	1.26			1P-20	1	R	R	2	2P-20	1.44			SYSTEM FURNITURE	4#12	3/4"
I	I	I		0.36		I	3	R	R	4			0.72				
I	I	V			0.54	I	5	R	R	6	2P-20			1.08	SYSTEM FURNITURE	4#12	3/4"
I	I	PC RECEPTACLES	0.72			I	7	R	R	8		0.54					
I	I	PC RECEPTACLES		0.72		I	9	R	NC	10	1P-20		0.75		PRINTERS	2#12	1/2"
I	I	GP RECEPTACLES			0.54	I	11	R	NC	12	I			1.50	COPIER	I	I
I	I	WATER FILTER	0.12			I	13	NC	NC	14	I	1.40			HAND DRYER	I	I
I	I	HAND DRYER		1.40		I	15	NC	NC	16	I		1.40		HAND DRYER	I	I
I	I	GP RECEPTACLES			1.44	I	17	R	R	18	I			0.72	PC RECEPTACLES	I	I
I	I	PC RECEPTACLES	0.54			I	19	R	R	20	I	1.08			GP RECEPTACLES	I	I
I	I	I		1.08		I	21	R	NC	22	I		1.40		HAND DRYER	I	I
I	I	V			0.72	I	23	R	NC	24	I			1.40	I	I	I
I	I	GP RECEPTACLES	0.90			I	25	R	NC	26	I	1.40			I	I	I
V	V	GP RECEPTACLES		0.72		I	27	R	NC	28	I		1.40		V	I	I
3/4"	4#12	SYSTEM FURNITURE			0.54	I	29	R	NC	30	I			0.12	WATER FILTER	I	I
			1.08			I	31	R	R	32	I	0.36			PC RECEPTACLES	I	I
3/4"	4#12	SYSTEM FURNITURE		0.54		I	33	R	R	34	I		1.26		GP RECEPTACLES	I	I
					1.08	I	35	R	K	36	I			0.25	UC REFRIGERATOR	I	I
1/2"	2#12	SYSTEM FURNITURE	1.44			I	37	R	R	38	I	0.18			GP RECEPTACLES	I	I
I	I	SYSTEM FURNITURE		0.72		I	39	R	K	40	I		1.50		COFFEE MAKER	I	I
V	V	GP RECEPTACLES			1.44	V	41	R	R	42	V			0.36	GP RECEPTACLE	V	V

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	0.48	125%	0.60
NON-CONTINUOUS LOADS (NC)	24.22	100%	24.22
RECEPTACLES LOADS (R)	27.66	10KVA + 50%	18.83
KITCHEN LOADS (K)	4.25	90%	3.83
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: 8.3 (A Ø) | 5.0 (B Ø) | 5.2 (C Ø)
FED FROM: H1LWA VIA 75 kVA XFMR — A Ø = 20.7 kVA; B Ø = 18.9 kVA; C Ø = 17 kVA
L1WA EXCLUDING FTL & SUB-PANELS = 38.2 kVA
L1WB = 18.4 kVA
TOTAL CONNECTED = 57 kVA
TOTAL DEMAND = **47 kVA**

PANEL L2WA

PANEL NOTES: PROVIDE DOUBLE NEUTRAL
*PROVIDE GFI CIRCUIT BREAKER

3P-225A MCB F.T.L. | BREAKER INTERRUPT RATING: 10,000 A.I.C. | 3 Ø - 4 WIRE - 120/208 VOLT | DEMAND AMPS: 108 | 225 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
1/2"	2#12	HAND DRYER	1.40			1P-20	1	NC	R	2	1P-20	0.72			COURTRM RECEPT	2#12	1/2"
I	I	PRINTERS		0.50		I	3	NC	R	4	I		1.08		MEZZANINE RECEPT	2#10	3/4"
I	I	COPIER			1.50	I	5	NC	R	6	I			0.54	ROOF RECEPT	2#10	3/4"
I	I	PC RECEPTACLES	0.36			I	7	R	R	8	I	1.80			FLOOR RECEPT	2#12	1/2"
I	I	GP RECEPTACLES		1.62		I	9	R	R	10	I		1.80		FLOOR RECEPT	I	I
I	I	TV/RACK			1.62	I	11	NC	NC	12	I			1.80	AV RACK	I	I
I	I	DOCKET DISPLAY	0.84			I	13	NC	NC	14	I	1.80			AV RACK	I	I
I	I	DOCKET DISPLAY		0.84		I	15	NC	R	16	I		1.80		FLOOR RECEPT	I	I
I	I	HAND DRYER			1.40	I	17	NC	R	18	I			1.80	FLOOR RECEPT	V	V
I	I	I	1.40			I	19	NC		20	I				SPARE		
I	I	I		1.40		I	21	NC	NC	22	I		0.60		FUTURE TV CAMERA	2#12	1/2"
I	I	V			1.40	I	23	NC	NC	24	I			0.60	FUTURE TV CAMERA	I	I
I	I	WATER FILTER	0.12			I	25	NC	NC	26	I	0.60			CATV	I	I
I	I	DIGITAL SIGNAGE		0.25		I	27	NC	R	28	I		0.72		GP RECEPTACLES	I	I
I	I	GP RECEPTACLES			0.90	I	29	R	R	30	I			0.36	I	I	I
I	I	GP RECEPTACLES	1.08			I	31	R	R	32	I	0.36			V	I	I
I	I	TVS		0.84		I	33	NC	NC	34	I		1.00		AUTO VALVE	I	I
I	I	COURTRM RECEPT			0.72	I	35	R	NC	36	I			1.00	AUTO VALVE	I	I
I	I	COURTRM RECEPT	1.08			I	37	R	C	38	I	0.70			LIGHTING	I	I
I	I	TVS		1.68		I	39	NC		40	I		0.00		EMCS USE	I	I
V	V	COURTRM RECEPT			1.08	V	41	R		42	V			0.00	EMCS USE	V	V

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	0.70	125%	0.88
NON-CONTINUOUS LOADS (NC)	24.10	100%	24.10
RECEPTACLES LOADS (R)	17.82	10KVA + 50%	13.91
KITCHEN LOADS (K)	0.00	100%	0.00
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: 0.8 (A Ø) | 0.0 (B Ø) | 0.8 (C Ø)
FED FROM: H2LWA VIA 75 kVA XFMR — A Ø = 13 kVA; B Ø = 14.1 kVA; C Ø = 15.5 kVA
L2WA EXCLUDING FTL & SUB-PANELS = 41.1 kVA
L2WB = 1.5 kVA
TOTAL CONNECTED = 43 kVA
TOTAL DEMAND = **39 kVA**

PANEL LGWB

PANEL NOTES: PROVIDE DOUBLE NEUTRAL

M.L.O. F.T.L. | BREAKER INTERRUPT RATING: 10,000 A.I.C. | 3 Ø - 4 WIRE - 120/208 VOLT | DEMAND AMPS: 164 | 400 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
1/2"	2#12	PC RECEPTACLES	0.72			1P-20	1	R	R	2	1P-20	1.26			GP RECEPTACLES	2#12	1/2"
I	I	I		1.44		I	3	R	R	4	I		0.72		GP RECEPTACLES	I	I
I	I	I			1.44	I	5	R	NC	6	I			1.50	COPIER	I	I
I	I	I	1.44			I	7	R	R	8	I	0.36			GP RECEPTACLES	I	I
I	I	I		1.44		I	9	R	NC	10	I		0.50		PRINTER	I	I
I	I	V			0.72	I	11	R	R	12	I			1.44	SYSTEM FURNITURE	I	I
I	I	GP RECEPTACLES	0.54			I	13	R	R	14	I	0.72			SYSTEM FURNITURE	I	I
I	I	I		0.72		I	15	R	NC	16	I		1.44		TV/RACK	I	I
I	I	I			0.72	I	17	R	K	18	I			0.80	REFRIGERATOR	I	I
I	I	I	1.44			I	19	R	NC	20	I	1.50			HAND DRYER	I	I
I	I	I		1.44		I	21	R	NC	22	I		1.50		I	I	I
I	I	I			1.44	I	23	R	NC	24	I			1.50	I	I	I
I	I	I	0.54			I	25	R	NC	26	I	1.50			I	I	I
I	I	V		0.90		I	27	R	NC	28	I		1.50		I	I	I
I	I	PC RECEPTACLES			0.72	I	29	R	NC	30	I			1.50	I	I	I
I	I	PC RECEPTACLES	0.72			I	31	R	NC	32	I	1.50			I	I	I
I	I	GP RECEPTACLES		0.72		I	33	R	NC	34	I		1.50		I	I	I
I	I	I			0.72	I	35	R	NC	36	I			1.50	V	I	I
I	I	I	1.26			I	37	R	R	38	I	0.90			GP RECEPTACLES	I	I
I	I	I		0.72		I	39	R	NC	40	I		0.25		DIGITAL DISPLAY	I	I
V	V	V			0.36	V	41	R	NC	42	V			0.50	PRINTERS	V	V

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	0.52	125%	0.64
NON-CONTINUOUS LOADS (NC)	26.08	100%	26.08
RECEPTACLES LOADS (R)	33.48	10KVA + 50%	21.74
KITCHEN LOADS (K)	15.50	65%	10.08
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: 10.1 (A Ø) | 13.5 (B Ø) | 7.9 (C Ø)
FED FROM: LGWA — A Ø = 24.5 kVA; B Ø = 28.3 kVA; C Ø = 22.8 kVA
LGWB EXCLUDING FTL & SUB-PANELS = 44.1 kVA
LGWC = 31.5 kVA
TOTAL CONNECTED = 76 kVA
TOTAL DEMAND = **59 kVA**

PANEL L1WB

PANEL NOTES: PROVIDE DOUBLE NEUTRAL

M.L.O. F.T.L. | BREAKER INTERRUPT RATING: 10,000 A.I.C. | 3 Ø - 4 WIRE - 120/208 VOLT | DEMAND AMPS: 53 | 225 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
1/2"	2#12	PED. GATE	0.23			1P-20	1	NC	K	2	1P-20	1.50			MICROWAVE	2#12	1/2"
I	I	TURNSTILE		0.10		I	3	NC	K	4	I		1.00		DISPOSAL	I	I
I	I	METAL DETECTOR			0.10	I	5	NC	R	6	I			1.08	GP RECEPTACLES	I	I
I	I	X-RAY	1.50			I	7	NC	NC	8	I	1.50			COPIER	I	I
I	I	CATV SYSTEM		0.60		I	9	NC	NC	10	I		0.10		METAL DETECTOR	I	I
I	I	GP RECEPTACLES			0.72	I	11	R	R	12	I			0.18	GP RECEPTACLES	V	V
I	I	TV/RACK	1.62			I	13	NC	R	14	I	0.54			EXTERIOR RECEPT	2#10	3/4"
I	I	FCU-1-1, FCU-1-2		0.29		I	15	NC	NC	16	I		1.92		SPACE SAVER	2#12	1/2"
I	I	AUTO VALVE			1.00	I	17	NC	NC	18	I			1.20	WHEELCHAIR LIFT	2#8	3/4"
I	I	AUTO VALVE	0.80			I	19	NC	NC	20	I	0.25			PRINTER	2#12	1/2"
I	I	LIGHTING		0.48		I	21	C	R	22	I		0.18		PATIO RECEPT	2#8	3/4"
I	I	SCENE SELECTOR			0.01	I	23	NC	R	24	I			0.48	PATIO RECEPT	2#8	3/4"
I	I	I	0.01			I	25	NC	NC	26	I	0.10			ENTRY DOOR	2#12	1/2"
I	I	V		0.01		I	27	NC	NC	28	I		0.10		I	I	I
I	I	FLOOR RECEPT			0.36	I	29	R	NC	30	I			0.10	I	I	I
I	I	SCENE SELECTOR	0.01			I	31	NC	NC	32	I	0.20			I	I	I
V	V	TURNSTILE		0.10		I	33	NC	NC	34	I		0.10		V	V	V
		SPARE				I	35			36	I				SPARE		
		I				I	37			38	I				SPARE		
		I				I	39			40	I		0.00		EMCS USE	2#12	1/2"
		V				V	41			42	V			0.00	EMCS USE	2#12	1/2"

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	0.48	125%	0.60
NON-CONTINUOUS LOADS (NC)	11.93	100%	11.93
RECEPTACLES LOADS (R)	3.54	10KVA + 50%	3.54
KITCHEN LOADS (K)	2.50	100%	2.50
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: A Ø | B Ø | C Ø
FED FROM: L1WA — A Ø = 8.3 kVA; B Ø = 5 kVA; C Ø = 5.2 kVA
L1WB TOTAL 18.5 kVA
TOTAL CONNECTED = 19 kVA
TOTAL DEMAND = **19 kVA**

PANEL L2WB

PANEL NOTES: PROVIDE DOUBLE NEUTRAL

M.L.O. F.T.L. | BREAKER INTERRUPT RATING: 10,000 A.I.C. | 3 Ø - 4 WIRE - 120/208 VOLT | DEMAND AMPS: 11 | 225 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
1/2"	2#12	SCENE SELECTOR	0.01			1P-20	1	NC		2	1P-20				SPARE		
I	I	SCENE SELECTOR		0.01		I	3	NC		4	I				I		
I	I	PRINTER			0.75	I	5	NC		6	I				I		
I	I	PRINTER	0.75			I	7	NC		8	I				I		
I	I	MOTOR SHADE		1.08		I	9	NC		10	I				I		
V	V	MOTOR SHADE			1.08	I	11	NC		12	I				I		
		SPARE				I	13			14	I				I		
		I				I	15			16	I				I		
		I				I	17			18	I				I		
		I				I	19			20	I				I		
		I				I	21			22	I				I		
		I				I	23			24	I				I		
		I				I	25			26	I				I		
		I				I	27			28	I				I		
		I				I	29			30	I				I		
		I				I	31			32	I				I		
		I				I	33			34	I				I		
		I				I	35			36	I				I		
		I				I	37			38	I				I		
		I				I	39			40	I				I		
		V				V	41			42	V				V		

(Revision 1 cloud around circuits 7–13.)

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	0.00	125%	0.00
NON-CONTINUOUS LOADS (NC)	3.67	100%	3.67
RECEPTACLES LOADS (R)	0.00	10KVA + 50%	0.00
KITCHEN LOADS (K)	0.00	100%	0.00
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: A Ø | B Ø | C Ø
FED FROM: L2WA — A Ø = 0.8 kVA; B Ø = 1.1 kVA; C Ø = 1.8 kVA
L2WB TOTAL 3.7 kVA
TOTAL CONNECTED = 4 kVA
TOTAL DEMAND = **4 kVA**

PANEL LGWC

PANEL NOTES: PROVIDE DOUBLE NEUTRAL
*PROVIDE GFI CIRCUIT BREAKER

M.L.O. F.T.L. | BREAKER INTERRUPT RATING: 10,000 A.I.C. | 3 Ø - 4 WIRE - 120/208 VOLT | DEMAND AMPS: 75 | 400 AMP BUS

CONDUIT SIZE	WIRE SIZE	SERVING	KVA A Ø	KVA B Ø	KVA C Ø	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA A Ø	KVA B Ø	KVA C Ø	SERVING	WIRE SIZE	CONDUIT SIZE
3/4"	4#12	SYSTEM FURNITURE	1.08			2P-20	1	R	R	2	1P-20	0.18			GP RECEPTACLE	2#12	1/2"
				0.54			3	R	K	4	I		1.50		DISHWASHER	I	I
3/4"	4#12	SYSTEM FURNITURE			1.08	2P-20	5	R	K	6	I			1.00	DISPOSAL	I	I
			0.54				7	R	K	8	I	1.50			COFFEE MAKER	I	I
1/2"	2#12	TV/RACK		1.44		1P-20	9	NC	K	10	I		1.50		MICROWAVE	I	I
I	I	VENDING MACH.			1.00	1P-20	11	NC	K	12	I			1.10	REFRIGERATOR	I	I
I	I	WATER FILTER	0.12			I	13	NC	K	14	I	1.50			DISHWASHER	I	I
I	I	TV/RACK		1.44		I	15	NC	R	16	I		0.36		GP RECEPTACLE	I	I
I	I	GP RECEPTACLES			0.72	I	17	R	K	18	I			1.00	DISPOSAL	I	I
I	I	CATV RECEPTACLE	0.60			I	19	NC	K	20	I	1.50			COFFEE MAKER	I	I
I	I	HAND DRYER		1.50		I	21	NC	K	22	I		1.50		MICROWAVE	I	I
I	I	FCU-01, FCU-02			0.29	I	23	NC	K	24	I			1.10	REFRIGERATOR	I	I
I	I	FLOOR RECEPT.	0.72			I	25	R	R	26	I	0.90			GP RECEPTACLE	I	I
I	I	FLOOR RECEPT.		0.72		I	27	R	C	28	I		0.52		RESTROOM LIGHTS	I	I
I	I	SHREDDER			0.25	I	29	NC	R	30	I			0.36	GP RECEPTACLE	I	I
I	I	FLOOR RECEPT.	0.72			I	31	R	NC	32	I	0.75			SHREDDER/PRINT	I	I
V	V	VENDING MACH.		1.00		I	33	NC	K	34	I		1.50		MICROWAVE	V	V
		SPARE				I	35			36	I				SPARE		
		I				I	37			38	I				I		
		I				I	39			40	I				I		
		V				V	41			42	V				V		

	CONNECTED kVA	NEC DIVERSITY	DEMAND (kVA)
CONTINUOUS LOADS (C)	0.52	125%	0.64
NON-CONTINUOUS LOADS (NC)	8.39	100%	8.39
RECEPTACLES LOADS (R)	7.92	10KVA + 50%	7.92
KITCHEN LOADS (K)	14.70	65%	9.56
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00

SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS ABOVE

FEED THRU LUGS: A Ø | B Ø | C Ø
FED FROM: LGWB — A Ø = 10.1 kVA; B Ø = 13.5 kVA; C Ø = 7.9 kVA
LGWC TOTAL 31.5 kVA
TOTAL CONNECTED = 32 kVA
TOTAL DEMAND = **27 kVA**

PANELS

MS1	H1LWA	H2WLA
-	LGWA	L1WA
L2WA	LGWB	L1WB
L2WB	LGWC	-

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LOUDOUN COUNTY
Loudoun County Phase III Expansion - New Courthouse
2 Church Street
Leesburg, VA 20176
ISSUED FOR BID - VOLUME II

SEAL

SEAL

KEY PLAN

SCALE

SCALE: AS NOTED

No.	Description	Date
1	ADDENDUM 3	06/18/19

REVISIONS

DRAWN BY: WKR
APPROVED BY: BJG
CHECKED BY: SPB
DATE: APRIL 08, 2019

TITLE
ELECTRICAL PANEL SCHEDULES

PROJECT NO. 50062915

E-601

SHEET NO.

Jun 18, 2019 - 1:36pm