

### LED LUMINAIRE SCHEDULE

<b>(DESC) DOOR:</b> FA - FLAT ALUMINUM FS - FLAT STEEL RA - REGRESSED ALUMINUM RS - REGRESSED STEEL <b>FINISH:</b> PAF - PAINT AFTER FABRICATION CFS - COLOR-FINISH SELECTION BY ARCHITECT	<b>DISTRIBUTION:</b> II - ANSIES TYPE 2 DISTRIBUTION III - ANSIES TYPE 3 DISTRIBUTION IV - ANSIES TYPE 4 DISTRIBUTION V - ANSIES TYPE 5 DISTRIBUTION	<b>BEAMWIDTH:</b> NSP - VERY NARROW SPOT SP - SPOT MD - MEDIUM WD - WIDE VWD - VERY WIDE WW - WALL WASH	<b>(L/L) LENS/LOUVER:</b> A - .125" ACRYLIC B - BAFFLE/LOUVER C - CLEAR ALZAK F - FROSTED ACRYLIC G - TEMPERED GLASS K - KSH12 .125" ACRYLIC	K19 - KSH19 .156" ACRYLIC M - MATTE DIFFUSE CLEAR N - NONE P - POLYCARBONATE R - HIGH IMPACT DR ACRYLIC SS - SEMI-SPECULAR CLEAR O - OTHER (SEE DESCRIPTION) [DESIGN SPECIFIC BLANKS]
<b>(MTG) MOUNTING:</b> CL - CEILING SURFACE CV - COVE FR - FLANGED RECESSED P - PERIMETER PL - POLE	RE - RECESSED SP - SUSPENDED SU - SURFACE UC - UNDER CABINET WL - WALL O - OTHER (SEE DESCRIPTION)	<b>(WATT) PER:</b> FIX - FIXTURE, FT - FOOT, LAMP	<b>(TYPE) LED</b> LED - LIGHT EMITTING DIODE TLED - TUBULAR LED LAMP OLED - ORGANIC LED DLED - DYNAMIC TUNABLE LED	RGB - COLOR CHANGING LED RGBW - COLOR CHANGING + WHITE RGBA - COLOR CHANGING + AMBER RLED - RETROFIT LED WLED - WARM DIM LED
<b>(TYPE) DRIVER:</b> 0-10V - 0-10V DIMMING DALI - DIGITAL ADDRESSABLE DMX - DIGITAL MULTIPLEX	EB - ELECTRONIC ELV - ELECTRONIC LOW VOLTAGE EM - EMERGENCY BATTERY	HL - HIGH/LOW (100%/50%) STEP DIM LINE - LINE VOLTAGE DIMMING ML - MULTI-LEVEL SWITCHING	MV - MULTI-VOLTAGE ELECTRONIC REM - REMOTE O - OTHER (SEE DESCRIPTION)	

CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURER LISTED IS THE BASIS OF DESIGN.

VERIFY AND COORDINATE ALL CEILING TYPES WITH LUMINAIRE MOUNTING AND TRIM REQUIREMENTS PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER. CONFIRM ALL COLORS AND FINISHES OF ALL LUMINAIRE COMPONENTS WITH ARCHITECT AND INTERIOR DESIGNER PRIOR TO THE RELEASE OF THE LUMINAIRE ORDER. UNLESS INDICATED ON LIGHTING PLANS OR BELOW, REFER TO ARCHITECTURAL AND INTERIOR DESIGN ELEVATIONS, SECTIONS AND DETAILS FOR ALL SUSPENDED AND WALL MOUNTED LUMINAIRE MOUNTING HEIGHTS.

ITEM	DESCRIPTION	L/L	MTG	DIMENSIONS				WATT		LED		DRIVER		MANUFACTURER AND MODEL	
				L	W	H	DIA.	ANSI WATTS	PER	TYPE	QTY	DELIVERED LUMENS (MIN)	VOLTS		TYPE
A	2x2' RECESSED TROFFER FOR LED SOURCE. .125" FROSTED ACRYLIC LENS. FIXTURE STEEL POST PAINTED BAKED WHITE ENAMEL. PROVIDE WITH EMERGENCY BATTERY PACK IF FIXTURE IS SHOWN AS EMERGENCY.	O	RE	2'-0"	2'-0"	4 1/2"		16 W	FIX	LED	1	3500K CCT, 2000 LUMENS, 80 CRI	120 V	EB	H.E. WILLIAMS 50 SERIES
E2	WALL PACK WITH EMERGENCY BATTERY BACKUP. BLACK FINISH. BLACK CORD.	O	WL	1'-0 7/7256"	6 13/128"	8 205/256"		16 W	FIX	LED	1	3500K CCT, 1500 NOMINAL LUMENS, 80 CRI	120 V	120V	GARDCO WALL MOUNT GEO FORM GBM LED WALL SCONCE OR APPROVED EQUAL
EM1	EMERGENCY UNIT, TWO ADJUSTABLE HEADS, HOUSING COLOR PER ARCHITECT. PROVIDE WITH BATTERY BACKUP AND SELF-DIAGNOSTIC TEST.	O	WL	1'-0 1/4"	3 3/4"	4"		2 W	FIX	LED	1	LED	120 V	EM	EMERGI-LITE EL-2SQL LED OR APPROVED EQUAL
EX1	EXIT SIGN RED LETTER, BLACK HOUSING. PROVIDE WITH BATTERY BACKUP AND SELF-DIAGNOSTIC TEST.	O	WL/CL	1'-0 3/4"	4 5/16"	7 1/2"		3.8 W	FIX	LED	1	LED	120 V	EM	LSL LSX OR APPROVED EQUAL
G	LED VAPOR TIGHT FLOODLIGHT. DURABLE DIE-CAST ALUMINUM HOUSING. IP65 RATED.	O	CL			1'-0"	6"	17.7 W	FIX	LED	1	3500K CCT, 1500 LUMENS, 80 CRI	120 V	EB	EATON ALL PRO VAPOR TIGHT FLOODLIGHT
L1	MISSION-STYLED PENDANT. CRAFTSMAN SIGNATURE FIXTURE, FOUR BEIGE ART GLASS LANTERN SHADES WITH DOUBLE BAR MISSION STYLED DESIGNS. SOLID BRASS CHANDELIER IS COMPLEMENTED WITH HARDWARE IN A CRAFTSMAN BROWN FINISH.	O	SP	1'-10 1/2"	2'-7"	2'-7"		400 W	FIX	LED	1	FURNISH WITH FOUR (4) 100 WATT LED LAMPS. 3500K, 80 CRI	120 V		MEYDA OR APPROVED EQUAL
P	WALL MOUNTED MEDIUM SCOPE SCONCE FIXTURE FOR LED SOURCE. 20 DEGREE DOWNLIGHT OPTICS. MEDIUM OUTPUT. COORDINATE FINISH WITH ARCHITECT.	O	WL			1'-0"	6"	20 W	FIX	LED	1	3000K CCT, 2001 LUMENS, 80 CRI	120 V	EB	DELTA LIGHT BOXY XL
R	LED FLOOR LIGHT MOUNTED TO CONCRETE PAD ON GROUND. MEDIUM FLOOD DISTRIBUTION. BARN DOORS ACCESSORY FOR GLARE REDUCTION. IP66 RATED. COORDINATE FINISH WITH ARCHITECT.	O	O	205/256"	1'-3"	10 51/256"		95.6 W	FIX	LED	1	3000K CCT, 9550 LUMENS, 80 CRI	120 V	EB	VISTA PRO MODEL 1059 SERIES
S4	SQUARE LENSED FIXTURE SUSPENDED AT 8'-0" AFF OR MOUNT TO CEILING, WHICHEVER IS LOWER, UNLESS NOTED OTHERWISE ON PLAN. FURNISH WITH BATTERY PACK WHERE NOTED WITH EM.	A	CL/SP/WL	4'-0"	2 3/4"	3 5/8"		7.5 W	FT	LED	1	3500K CCT, 3681 NOMINAL LUMENS, 80 CRI	120 V	120V	UTOPIA LIGHTING SS OR APPROVED EQUAL
Z1	4.5" SHALLOW PLENEM RECESSED DOWNLIGHT, MEDIUM DISTRIBUTION FLUSH LENS. CLEAR SEMI-SPECULAR ANODIZED REFLECTOR. WHITE POWDER COAT TRIM. REMODEL KIT.	O	RE			5 1/4"	4 1/2"	10.7 W	FIX	LED	1	3500K CCT, 1000 NOMINAL LUMENS, 80 CRI	120 V	120V	H.E. WILLIAMS 4PR LED OR APPROVED EQUAL

### LIGHTING SEQUENCE OF OPERATION

NOTES:  
1. (L#) DENOTES THE LIGHTING SEQUENCE OF OPERATIONS FOR THIS SPACE.  
2. (B#) PUSH BUTTON REFERS TO SCENE QUANTITY. CONTROL STATION SHALL BE CAPABLE OF [RAISE/LOWER AND] SWITCHING ON/OFF FOR MULTIPLE SCENES AS INDICATED ON SHEETS AND THE LIGHTING SEQUENCE OF OPERATIONS (L#). COORDINATE QUANTITIES OF BUTTONS FOR CONTROL STATIONS WITH LIGHTING CONTROL MANUFACTURER.  
3. (Z#) DENOTES LIGHTING CONTROL ZONE. PROVIDE SEPARATE CONTROL OF EACH CONTROLLED ZONE. LUMINAIRES ASSOCIATED WITH THE SAME ZONE SHALL OPERATE TOGETHER WITHIN THE SAME PROGRAMMED SCENE.  
4. a = SWITCH DESIGNATION FOR LIGHTING CONTROL  
5. VERIFY AND COORDINATE ALL TIME CLOCK SETTINGS WITH OWNER PRIOR TO FINAL PROGRAMMING.  
6. VERIFY AND COORDINATE ALL PUSH BUTTON WALL DEVICES AND QUANTITIES OF INDIVIDUAL BUTTONS WITH SCENES AND ZONES PER LOCATION.  
7. VERIFY AND COORDINATE ALL PUSH BUTTON QUANTITIES AND SCENE NAMES WITH OWNER PRIOR TO SUBMITTING ENGRAVING TEMPLATE TO MANUFACTURER.

PLAN ID	LIGHTING SWITCHED
(LS1)	Sequence: Switched lights are vacancy controlled in this space. ON: The lights turn on manually via lighting switch. OFF: After the space has been vacant for 20 minutes, the lights will turn off automatically via occupancy sensor or manually via lighting switch.
(LS2)	Sequence: Switched lights are controlled in this space. ON: The lights turn on using switches. OFF: The lights turn off using switches.
(LS3)	Sequence: Switched lights are vacancy controlled in this space. ON: The lights turn on automatically via occupancy sensor. OFF: After the space has been vacant for 20 minutes, the lights will turn off automatically via occupancy sensor.
(PC1)	Sequence: Switched lights are controlled in this space. ON: The lights turn on using photocell. OFF: The lights turn off using photocell.

### SWITCHBOARD MSB

ENCLOSURE: NEMA 3R  
FED FROM: 0 A/OP @  
LOCATION: EXTERIOR

SOLID NEUTRAL  
GROUND BUS

MAIN: 1,200 A MCCB  
VOLTS: 120/208 Wye  
PHASE: 3  
WIRE: 4  
SCCR: 35 kA  
ISC: 26.00 kA

NOTES: 1. ALL CIRCUIT BREAKERS SHALL HAVE LSI ADJUSTMENT. 2. SELECTIVE COORDINATION IS REQUIRED WITH EXTERIOR MAIN CIRCUIT BREAKER. 3. PROVIDE WITH METERING FOR ALL CIRCUIT BREAKERS.

CKT	LOAD DESCRIPTION	Load	POLES	FRAME	TRIP	TYPE	ACC.	WIRE AND RACEWAY	CIRCUIT KEY
1	CHILLER	182.65 kVA	3	800 A	600 A			(2) SETS OF 3#350 & 1#1 EGC EACH IN 3" C.	
2	MDP	142.05 kVA	3	1,000 A	1,000 A			(3) SETS OF 4#500 & 1#210 EGC EACH IN 3-1/2" C.	
3	ELEVATOR: ELEV MACHINE B22	31.9 kVA	3	250 A	200 A			3#310 & 1#6 EGC IN 2" C.	A
4	SPD	0 kVA	3	100 A	60 A	--	--	--	--
5	SPARE	0 kVA	3	400 A	400 A	--	--	--	--
6	SPARE	0 kVA	3	200 A	200 A	--	--	--	--

#### LOAD SUMMARY (INCLUDES ALL TUBS IN THIS PANEL)

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	TOTALS*
Lighting	5.934 kVA	100.00%	5.934 kVA	
Power	340.563 kVA	100.00%	340.563 kVA	<b>TOTAL CONNECTED LOAD:</b> 356.60 kVA
Receptacles	10.1 kVA	99.50%	10.05 kVA	<b>TOTAL ESTIMATED DEMAND LOAD:</b> 356.547 kVA
				<b>TOTAL CONNECTED AMPS:</b> 989.81 A
				<b>TOTAL ESTIMATED DEMAND AMPS:</b> 989.7 A

\*TOTAL DEMAND CALCS SUBTRACT ANY REDUNDANT LOAD AND THE SMALLER OF ANY NONCOINCIDENT HVAC LOADS. THIS CALC IS DONE AT EACH PANEL.

CIRCUIT KEY NOTES: A - FURNISH WITH SHUNT-TRIP CIRCUIT BREAKER.

### DISTRIBUTION PANEL MDP

ENCLOSURE: NEMA 1  
FED FROM: 1,000 A/3P @ MSB  
LOCATION: ELECTRICAL B01D

SOLID NEUTRAL  
GROUND BUS

MAIN: 1,000 A MCB  
VOLTS: 120/208 Wye  
PHASE: 3  
WIRE: 4  
SCCR: 35 kA  
ISC: 21.11 kA

NOTES: PROVIDE METERING FOR ALL CIRCUIT BREAKERS.

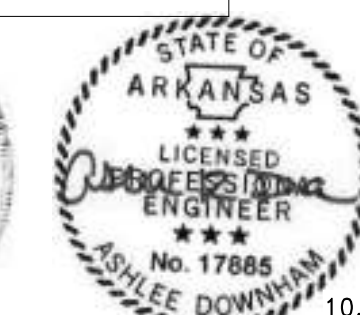
CKT	LOAD DESCRIPTION	Load	POLES	FRAME	TRIP	TYPE	ACC.	WIRE AND RACEWAY	CIRCUIT KEY
1	MLB: BASEMENT	13.68 kVA	3	150 A	100 A			4#1 & 1#8 EGC IN 2" C.	
2	ML1: FIRST FLOOR	11.94 kVA	3	150 A	100 A			4#1 & 1#8 EGC IN 2" C.	
3	ML2: SECOND FLOOR	8.38 kVA	3	150 A	100 A			4#1 & 1#8 EGC IN 2" C.	
4	ML3: THIRD FLOOR	33.22 kVA	3	150 A	100 A			4#1 & 1#8 EGC IN 2" C.	
5	AHU-1M: FIRST FLOOR	25.04 kVA	3	100 A	80 A			3#3 & 1#8 EGC IN 1 1/4" C.	
6	AHU-2M: SECOND FLOOR	11.78 kVA	3	100 A	40 A			3#8 & 1#10 EGC IN 3/4" C.	
7	AHU-3M: SECOND FLOOR	4.72 kVA	3	100 A	25 A			3#10 & 1#10 EGC IN 3/4" C.	
8	DHU-1M: BOILER RM B08	10.81 kVA	3	100 A	45 A			3#6 & 1#10 EGC IN 1" C.	
9	HWP-1M: MECH 103	6.1 kVA	3	100 A	30 A			3#10 & 1#10 EGC IN 3/4" C.	
10	HWP-2M: MECH 103	6.1 kVA	3	100 A	30 A			3#10 & 1#10 EGC IN 3/4" C.	
11	CWP-1M: MECH 203	8.8 kVA	3	100 A	50 A			3#6 & 1#10 EGC IN 1" C.	
12	ACC-2M: UTIL YARD	1.48 kVA	3	100 A	20 A			3#12 & 1#12 EGC IN 3/4" C.	
13	SPARE	0 kVA	3	150 A	100 A	--	--	--	--
14	SPARE	0 kVA	3	150 A	100 A	--	--	--	--
15	SPARE	0 kVA	3	100 A	40 A	--	--	--	--
16	SPARE	0 kVA	3	100 A	40 A	--	--	--	--
17	SPARE	0 kVA	3	100 A	30 A	--	--	--	--
18	SPACE	--	3	--	--	--	--	--	--
19	SPACE	--	3	--	--	--	--	--	--
20	SPACE	--	3	--	--	--	--	--	--
21	SPACE	--	3	--	--	--	--	--	--
22	SPACE	--	3	--	--	--	--	--	--

#### LOAD SUMMARY (INCLUDES ALL TUBS IN THIS PANEL)

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	TOTALS*
Lighting	5.934 kVA	100.00%	5.934 kVA	
Power	126.013 kVA	100.00%	126.013 kVA	<b>TOTAL CONNECTED LOAD:</b> 142.05 kVA
Receptacles	10.1 kVA	99.50%	10.05 kVA	<b>TOTAL ESTIMATED DEMAND LOAD:</b> 141.997 kVA
				<b>TOTAL CONNECTED AMPS:</b> 394.28 A
				<b>TOTAL ESTIMATED DEMAND AMPS:</b> 394.1 A

\*TOTAL DEMAND CALCS SUBTRACT ANY REDUNDANT LOAD AND THE SMALLER OF ANY NONCOINCIDENT HVAC LOADS. THIS CALC IS DONE AT EACH PANEL.

CIRCUIT KEY NOTES:



10.27.2023

A/E FIRMS  
PRIME/ARCH:  
STRATA ARCHITECTURE  
1703 OAK STREET,  
SUITE 100  
KANSAS CITY, MO  
T: 816.449.0900  
MEP/ENG:  
IMEG CORP.  
1400 BALTIMORE STREET,  
SUITE 300  
KANSAS CITY, MO  
T: 816.842.8437

DESIGNED:  
PIP  
CADD:  
WMM  
TECH. REVIEW:  
PIP  
DATE:  
10.27.2023

SUB SHEET NO.  
**01**  
**EP6.1**

TITLE OF SHEET  
**MAURICE BATHHOUSE**  
**ELECTRICAL SCHEDULES**  
REHABILITATE BATHHOUSES  
HOT SPRINGS NATIONAL PARK

DRAWING NO.  
**626**  
**180065**  
PMS/PKG NO.  
318674  
SHEET  
188 OF 286