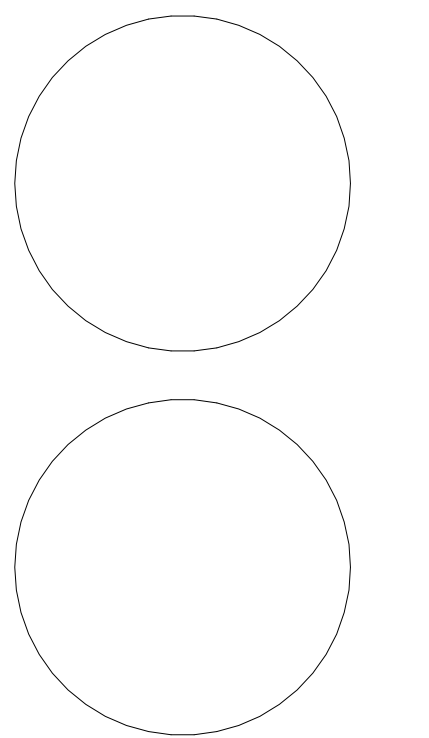


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Project  
**ST. JAMES CIVIC CENTRE**

Drawing  
**ELECTRICAL SCHEDULES**

Drawn By: JA Review By: MP  
Scale: NTS Tender No: 1176-2019  
Date: 11/06/19  
Sheet: E6.1-R1

ELECTRICAL HEATER SCHEDULE										
MARK	DESCRIPTION	WATTAGE	VOLTAGE	PHASE	LENGTH	MANUFACTURER	MODEL SERIES	CONTROL DEVICE		NOTES
								COMPONENT	FURN. INST.	
FA8.08A	ARCHITECTURAL FORCED-AIR WALL HEATER	8,000 W	208 V	1		OUELLET	OAWH	IT	---	
FF8.04A	STANDARD FAN-FORCE COMMERCIAL WALL HEATER	4,000 W	208 V	1		OUELLET	OAC	IT	---	
UA8.07	ELECTRIC UNIT HEATER COMPLETE WITH 24V REMOTE THERMOSTAT	7,500 W	208 V	1		OUELLET	OAS	LW-ID	---	SUSPENDED FROM STRUCTURE

**CONTROL DEVICES:**  
 LW-IT LINE VOLTAGE INTERNAL TAMPERPROOF BI-METAL THERMOSTAT T-STAT  
 LW-ID LINE VOLTAGE INTERNAL DIAL BI-METAL THERMOSTAT  
 LW-R LINE VOLTAGE REMOTE BI-METAL THERMOSTAT  
 LW-IT LOW VOLTAGE INTERNAL TAMPERPROOF BI-METAL THERMOSTAT  
 LW-ID LOW VOLTAGE INTERNAL DIAL THERMOSTAT  
 LW-R LOW VOLTAGE REMOTE BI-METAL THERMOSTAT  
 IT INTERNAL TAMPERPROOF THERMOSTAT  
 ID INTERNAL DIAL THERMOSTAT

**GENERAL NOTES:**  
 A. HEATER OUTPUT SHALL BE AS INDICATED AT SPECIFIED VOLTAGE.  
 B. BASEBOARD HEATERS AND FORCE FLOW HEATERS SHALL BE WHITE IN COLOUR. CONFIRM FINISH WITH ARCHITECT.  
 C. OUELLET, CHROMALOX, STELPRO, AND Q-MARK MEETING ABOVE SPECIFICATIONS ARE APPROVED EQUAL MANUFACTURERS.  
 D. WHERE BASEBOARD HEATERS ARE SPECIFIED, LINEAR CONNECTORS ARE NOT APPROVED EQUAL.  
 E. ALL DRAFT BARRIER HEATERS SHALL BE COMPLETE WITH FINISHED BACK AND PEDESTAL MOUNTS.  
 F. ALL LOW-VOLTAGE CONTROLLED HEATERS SHALL BE COMPLETE WITH LOW VOLTAGE RELAY AND TRANSFORMER KIT FOR LOW VOLTAGE THERMOSTAT CONNECTION.

LIGHTING CONTROLS SEQUENCE OF OPERATIONS SCHEDULE									
ROOM	MANUAL ON	MANUAL OFF	DIMMING SWITCH	OVERRIDE SWITCH	OCCUPANCY SENSOR ON	OCCUPANCY SENSOR OFF	OCCUPANCY SENSOR DIMMING	PHOTOCONTROL DIMMING	
Classroom/Lecture/Training	No	No	Yes	Yes	Yes	Yes	No	No	
Corridor/Transition	No	No	No	No	Yes	Yes	No	No	
Dressing/Locker/Fitting Room - Exercise Center	No	No	No	No	Yes	Yes	No	No	
Electrical/Mechanical	Yes	Yes	No	No	No	No	No	No	
Exercise Area - Gymnasium	Yes	Yes	No	No	No	No	Yes	No	
Lobby	No	No	No	No	Yes	Yes	Yes	Yes	
Office - Enclosed	No	No	Yes	Yes	Yes	Yes	No	No	
Restrooms	No	No	No	No	Yes	Yes	No	No	

**OPERATION TYPES:**  
 A. CIRCUIT(S) TURNED ON BY PHOTOCELL IN SERIES WITH TIME CONTROL SWITCH. FIXTURES CONTROLLED BY INTEGRAL MOTION SENSOR.

EMERGENCY BATTERY BANK SCHEDULE															
ID	DESCRIPTION	BATTERY SIZE	HEADS	NUMBER OF HEADS	WATTS PER HEAD	VSR	AC VOLT	DC VOLT	SUPPLIED FROM	TOTAL DC LOAD	TOTAL DC LOAD WITH SAFETY FACTOR	MAX WATT 30 MIN	MFR	MODEL	NOTES
BU1	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	200 W	YES	2	6	YES	120 V	12 V	J	97 W	121 W	200 W	LUMACELL	RG12S200	
BU2	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	200 W	YES	2	6	YES	120 V	12 V	EA	85 W	106 W	200 W	LUMACELL	RG12S200	
BU3	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	200 W	YES	2	6	YES	120 V	12 V	G	97 W	121 W	200 W	LUMACELL	RG12S200	
BU4	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	200 W	YES	2	6	YES	120 V	12 V	EB	121 W	151 W	200 W	LUMACELL	RG12S200	
BU5	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	100 W	YES	2	6	YES	120 V	12 V	P	66 W	83 W	100 W	LUMACELL	RG12S100	
BU6	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	200 W	---	0	0	YES	120 V	12 V	EA	73 W	91 W	200 W	LUMACELL	RG12S200	
BU7	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	200 W	---	0	0	YES	120 V	12 V	D	109 W	136 W	200 W	LUMACELL	RG12S200	
BU8	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	200 W	---	0	0	YES	120 V	12 V	AW	97 W	121 W	200 W	LUMACELL	RG12S200	

**GENERAL NOTES:**  
 A. EMERGENCY LIGHTING MODEL NUMBERS ARE BASED ON LUMACELL PRODUCT LINE. EMERGLITE, BEGHELLI, AND AMLITE MEETING PERFORMANCE SPECIFICATIONS ARE APPROVED EQUAL.  
 B. WHERE "APPROVED EQUAL" IS LISTED IN THE MANUFACTURER COLUMN, FIXTURES MUST BE SUBMITTED AS A SUBSTITUTION FOR APPROVAL PRIOR TO BID SUBMISSION.

**SCHEDULE NOTES:**  
 1. N/A

LIGHTING CONTROL DEVICE SCHEDULE				
TYPE	DESCRIPTION	MANUFACTURER	CATALOG No.	NOTES
OS	COMBINATION ULTRASONIC OCCUPANCY SENSOR/SWITCH, WALL MOUNTED, LINE VOLTAGE, WITH ON-OFF PUSHBUTTON.	WATTSTOPPER	UW-100	1
OS3, TYP	ULTRASONIC OCCUPANCY SENSOR, CEILING MOUNTED 360° COVERAGE, MINIMUM 1100 SQUARE FEET.	SENSORSWITCH	CM 10 WR-INFRARED	1, 2

**SCHEDULE NOTES:**  
 1. PROVIDE DEVICE TO MATCH OPERATING VOLTAGE OF LOADS CONTROLLED.  
 2. PROVIDE 24 VDC POWER PACK WITH INPUT TO MATCH LIGHTING FIXTURE VOLTAGE, SWITCHING CONTACT RATED FOR 20A DRIVER

LIGHTING FIXTURE SCHEDULE											
TYPE	Description	LENS-LOUVER	MOUNTING	LAMP	BALLAST / DRIVER	VOLT	WATT	MFR	CATALOG SERIES	NOTE	
ELA26	DOUBLE HEAD EMERGENCY LIGHTING DECORATIVE REMOTE, DIE CAST ALUMINUM CONSTRUCTION, WHITE		WALL	2 x 6W LED 5000HR 540 LUMENS	---	12 V	12 W	LUMACELL	DR	1	
ELE26	DOUBLE HEAD EMERGENCY LIGHTING NEMA4X REMOTE FOR SWIMMING POOL, POLYCARBONATE CONSTRUCTION, WHITE		WALL	2 x 6W LED 5000HR 540 LUMENS	---	12 V	12 W	LUMACELL	MOMP-NX	1	
EX1	LED UNIVERSAL MOUNT, UNIVERSAL VOLTAGE, UNIVERSAL SINGLE/DOUBLE FACE PICTOGRAM STYLE EXIT SIGN WITH WHITE ALUMINUM HOUSING AND CHEVRON ARROWS AS SHOWN ON PLANS.	---	UNIVERSAL	< 3W LED MIN 5000 HR	---	120 V	3 W	LUMACELL	LA-3-W-U		
EX13	LED WALL MOUNT, UNIVERSAL VOLTAGE, UNIVERSAL SINGLE/DOUBLE FACE PICTOGRAM STYLE EXIT SIGN SUITABLE FOR SWIMMING POOL APPLICATION WITH CHEVRON ARROWS AS SHOWN ON PLANS.	---	UNIVERSAL	< 3W LED MIN 5000 HR	---	120 V	3 W	LUMACELL	NEMA-4X-LN		
RL20	610mm x 610mm (2 Foot X 2 Foot) LED VOLUMETRIC SPECIFICATION GRADE.	CURVED RIBBED VOLUMETRIC ACRYLIC DIFFUSOR	RECESSED IN T-BAR	LED 2000lm 80+CRI 4000K 60000HR	(1) LED DRIVER 0-10V DIMMING	120 V	20 W	LITHONIA	BLT		
RT-1	SURFACE TRACK	---	SURFACE CEILING	N/A	N/A	120 V	0 W	JUNO	T 6FT BL		
RT-2	SURFACE TRACK	---	SURFACE CEILING	N/A	N/A	120 V	0 W	JUNO	T 8FT BL		
RT-3	SURFACE TRACK	---	SURFACE CEILING	N/A	N/A	120 V	0 W	JUNO	T 12FT BL		
SD24	6" DIAMETER LED DOWNLIGHT WITH DIE-CAST SOCKET HOUSING, LOW IRIDESCENT SPECULAR CLEAR ALZAK REFLECTOR	---	SURFACE	LED 3000lm 80+CRI 4000K 60000HR	0-10V DIMMING LED DRIVER	120 V	31 W	LITHONIA	LDN6 40/30 L06 LSS MVOLT EZ10		
SL15K	HIGH BAY LED.	SEMI-DIFFUSE ACRYLIC	CHAIN SUSPENDED	LED 5000lm 81+CRI 3500K L90@ 10000HR	0-10V DIMMING LED DRIVER	120 V	125 W	LITHONIA	IBL-15L-WD-SD125-LP840		
SL23A	1' X 4' VOLUMETRIC SPECIFICATION GRADE.	CURVED SMOOTH VOLUMETRIC ACRYLIC DIFFUSOR	STEM MOUNTED	LED 2200lm 80+CRI 4000K 60000HR	0-10V DIMMING LED DRIVER	120 V	20 W	PACO	PUTX-L-14-LED-30-40-MVOLT-DIM		
SL23B	1' X 4' VOLUMETRIC SPECIFICATION GRADE.	CURVED RIBBED VOLUMETRIC ACRYLIC DIFFUSOR	SURFACE MOUNTED	LED 2200lm 80+CRI 4000K 60000HR	0-10V DIMMING LED DRIVER	120 V	20 W	LITHONIA	BLTX4-20L-ADP-LP840		
SL23C	1' X 4' VOLUMETRIC SPECIFICATION GRADE.	CURVED RIBBED VOLUMETRIC ACRYLIC DIFFUSOR	RECESSED IN T-BAR	LED 2200lm 80+CRI 4000K 60000HR	0-10V DIMMING LED DRIVER	120 V	20 W	LITHONIA	BLT4-20L-ADP-LP840		
SL32	4' LED STRIP LIGHT.	FROSTED DIFFUSER	SURFACE MOUNTED	LED 3200lm 80+CRI 4000K L70@ 60000HR	LED DRIVER	120 V	25 W	LITHONIA	ZL1N-L48-3000LM-FST-120-40K-80CRI		
SL32U	4' LED STRIP LIGHT COMPLETE WITH WIREGUARD.	FROSTED DIFFUSER	CHAIN SUSPENDED	LED 3200lm 80+CRI 4000K L70@ 60000HR	LED DRIVER	120 V	25 W	LITHONIA	ZL1N-L48-3000LM-FST-120-40K-80CRI-WGZ48		
TL1	ALUMINUM TRACK HEAD COMPLETE WITH UV GLASS LENS	ETCHED WHITE GLASS	TRACK	LED 600 LUMENS 85+CRI 50,000 HRS	---	120 V	52 W	JUNO	T267L G2 35K 90CRI PDIM SP BL		
W1	2' WALL MOUNTED LED VALENCE FIXTURE.	PRISMATIC ACRYLIC FLUSH DIFFUSER	SURFACE WALL	LED 700lm 80+CRI 4000K 60000HR	0-10V DIMMING LED DRIVER	120 V	12 W	FINELITE	HP-2 WM D-2-S-840-F-120V-MB-FE-SC		
W2	4' WALL MOUNTED LED VALENCE FIXTURE	PRISMATIC ACRYLIC FLUSH DIFFUSER	SURFACE WALL	LED 1400lm 80+CRI 4000K 60000HR	0-10V DIMMING LED DRIVER	120 V	56 W	FINELITE	HP-2 WM D-4-S-840-F-120V-MB-FE-SC		

**GENERAL NOTES:**  
 A. EMERGENCY LIGHTING MODEL NUMBERS ARE BASED ON LUMACELL PRODUCT LINE. EMERGLITE, BEGHELLI, AND AMLITE MEETING PERFORMANCE SPECIFICATIONS ARE APPROVED SUBSTITUTIONS.  
 B. WHERE "APPROVED EQUAL" IS LISTED IN THE MANUFACTURER COLUMN, FIXTURES MUST BE SUBMITTED AS A SUBSTITUTION FOR APPROVAL PRIOR TO BID SUBMISSION.

**SCHEDULE NOTES:**  
 1. ADJUST OPTICS FOR WIDE DISTRIBUTION.