

**LIGHTING FIXTURE SCHEDULE**

TYPE	Description	LENS-LOUVER	MOUNTING	LAMP	BALLAST	VOLT	WATT	MFR	CATALOG SERIES	NOTE
BL1	1070mm (42") HIGH LED BOLLARD C/W DARK BRONZE FINISH	GLASS LENS	BOLLARD	LED	0-10V LED DRIVER	120 V	50 W	LITHONIA	DSXB-LED-16C-700-4 0K-ASY-120-DOBXD	
EB25H5V	BATTERY BANK, STEEL CABINET COMPLETE WITH INTEGRAL VOLTAGE SENSING RELAYS, DOUBLE EMERGENCY LIGHTING HEADS AND DC TERMINAL BLOCKS.	---	WALL	2 x 5W LED 50000HR 340 LUMENS	---	120 V	250 W	LUMACELL	RG12S	
ELA25	DOUBLE HEAD EMERGENCY LIGHTING DEGRATIVE REMOTE DIE CAST ALUMINUM CONSTRUCTION, WHITE	---	WALL	2 x 5W LED 50000HR 340 LUMENS	---	12 V	10 W	LUMACELL	DR	
L1	SMALL FLOOD UP-LIGHT C/W BLACK FINISH. REFER TO ARCHITECTURAL DETAILS.	WIDE FLOOD TEMPERED GLASS	YOKE	LED	0-10V LED DRIVER	120 V	15 W	LUMENPULSE	LUMENBEAM LARGE	
PL1	24" ROUND FLAT PENDANT COMPLETE WITH SMOOTH EXTRUDED ALUMINUM SIDE WALL AND MINIMAL TRIM.	FLAT WHITE ACRYLIC	3-WAY MONOPOINT CABLE SUSPENSION	7300 LUMENS LED 82+CRI 4000K 50,000 HR	0-10V DIMMING DRIVER	120 V	110 W	PRUDENTIAL LIGHTING	P4000 SERIES	
PL2	8" DIAMETER CYLINDER WALLWASH C/W CLEAR SATIN ALZAK PARABOLIC CONE C/W DIFFUSE KICKER C/W FROSTED DIMPLED GLASS LENS	FROSTED DIMPLED GLASS LENS	PENDANT	2300 LUMENS LED 82+CRI 4000K 50,000 HR	0-10V DIMMING DRIVER	120 V	29 W	JUNO LIGHTING GROUP	LC8P-2340U-W-G3 L800WS-CS P36C-W	
PL3	8" DIAMETER CYLINDER C/W CLEAR SATIN ALZAK PARABOLIC CONE C/W DIFFUSE KICKER C/W FROSTED GLASS LENS	FROSTED DIMPLED GLASS LENS	PENDANT	4000 LUMENS LED 82+CRI 4000K 50,000 HR	0-10V DIMMING DRIVER	120 V	44 W	JUNO LIGHTING GROUP	LC8P-2340U-W-G3 L800WS-CS P36C-W	
RL2	610mm x 1220mm (2' X 4') LED COMPLETE WITH VOLUMETRIC DIFFUSOR.	ACRYLIC VOLUMETRIC DIFFUSER	RECESSED IN T-BAR	6000 LUMENS LED 82+CRI 4000K 50,000 HR	0-10V DIMMING DRIVER	120 V	55 W	LITHONIA	RTLED	
RL7	610mm x 610mm (2' X 2') LED COMPLETE WITH VOLUMETRIC DIFFUSOR.	ACRYLIC VOLUMETRIC DIFFUSER	RECESSED IN T-BAR	4000 LUMENS LED 82+CRI 4000K 50,000 HR	0-10V DIMMING DRIVER	120 V	41 W	LITHONIA	RTLED	
SL1	1220mm (4') LONG LED STRIP, CHAIN SUSPENDED C/W WIREGUARD	SNAP ON FROSTED LENS	CHAIN SUSPENDED	3000 LUMENS LED 82+CRI 4000K 50,000 HR	LED DRIVER	120 V	30 W	LITHONIA	---	
SL2	1220mm (4') LONG LED SURFACE MOUNTED LINEAR SLOT	SNAP ON FROSTED LENS	SURFACE	2100 LUMENS LED 82+CRI 4000K 50,000 HR	0-10V DIMMING DRIVER	120 V	37 W	FINELITE	---	
SL3	LED TAPE LIGHT SURFACE MOUNTED IN HANDRAIL C/W ALUMINUM EXTRUSION C/W LOW VOLTAGE DRIVER(S).	FROSTED	SURFACE	2100 LUMENS LED 82+CRI 4000K 50,000 HR	0-10V LED DRIVER	120 V	50 W	GREEN IMAGE TECH	GS-50NFX3	
WL1	4'-0" LED WALL BRACKET C/W SATIN CHROME FINISH C/W WHITE DIFFUSER	WHITE	SURFACE WALL	LED HO	0-10V DIMMING DRIVER	120 V	22 W	EUREKA	3541-47-LED,22,40-12 0-DV-SC-WH	
WL2	4'-0" LED WALL BRACKET	LINEAR FACETED REFRACTOR	SURFACE WALL	LED HO	0-10V DIMMING DRIVER	120 V	22 W	LITHONIA	WL4	
WL3	EXTERIOR WALL MOUNTED LUMINAIRE C/W DARK BRONZE FINISH AND FULL CUT-OFF	---	SURFACE WALL	---	---	120 V	50 W	LITHONIA	D SERIES	

**BALLAST TYPES:**

IS-LBF	INSTANT START LOW BALLAST FACTOR	PS-LBF	PROGRAMMED START LOW BALLAST FACTOR	ARD-NBF	ARCHITECTURAL DIMMING, 3-WIRE, 1-100%
IS-NBF	INSTANT START NORMAL BALLAST FACTOR	PS-NBF	PROGRAMMED START NORMAL BALLAST FACTOR	ESD-NBF	ENERGY SAVING DIMMING, 2-WIRE, 5-100%
IS-HBF	INSTANT START HIGH BALLAST FACTOR	PS-HBF	PROGRAMMED START HIGH BALLAST FACTOR	DHD-NBF	DAYLIGHT HARVESTING DIMMING, 0-10 VDC, 5-100%
RS-NBF	RAPID START NORMAL BALLAST FACTOR	PS-NBF-2	PROGRAMMED START NORMAL BALLAST FACTOR 2-STEP		

**GENERAL NOTES:**

A. CONTRACTOR SHALL REFER TO SPECIFICATIONS REGARDING PROVIDING ADDITIONAL SPARE LAMPS, LENSES, AND GLOBES.

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:**
- NO SUBSTITUTIONS PERMITTED.
  - ADJUST OPTICS FOR WIDE DISTRIBUTION.
  - PROVIDE ADVANCE CENTIUM VCN SERIES BALLASTS POTTED FOR HAZARDOUS LOCATION.
  - EMERGENCY BALLAST SHALL ILLUMINATE TWO LAMPS FOR 1350 LUMENS MINIMUM, COMPATIBLE WITH ELECTRONIC BALLAST SPECIFIED. BODINE B50ST OR APPROVED EQUAL.
  - EMERGENCY BALLAST SHALL ILLUMINATE ONE LAMP FOR 2600 LUMENS MINIMUM, COMPATIBLE WITH ELECTRONIC BALLAST SPECIFIED. BODINE B30ST OR APPROVED EQUAL. PROVIDE REMOTE TEST/MONITOR STATION. MOUNT EMERGENCY BALLAST ON TOP OF LIGHTING FIXTURE.
  - ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL LOUVER AND ACRYLIC LENS IN ARCHITECTURAL CEILING, CUT TO SIZE IN FIELD. SEE DETAIL 21A7.01 FOR INSTALLATION.

**MECHANICAL EQUIPMENT SCHEDULE**


NO.	DESCRIPTION	ROOM	LOAD			VOLT	PH	CIRCUIT	CONDUIT & WIRE SIZE	STARTER		CONTROL DEVICE		DISCONNECT		NOTES
			HP	A	W					COMPONENT	FURN. INST.	COMPONENT	FURN. INST.	COMPONENT	FURN. INST.	
AC-1	AIR CONDITIONING UNIT	109	13 A	0 W	208 V	1		16(12)C-2#12 #12 GND	---	---	INTERLOCK	DIV. 23	NFS	DIV. 26	4	
AHU-1RF	AIR HANDLING UNIT - RETURN FAN	117	15 HP	0 A	0 W	208 V	3	CDP-A-6	27mm(1")C 3#6	VFD	DIV. 23	DDC	DDC	NFS	DIV. 26	
AHU-1SF	AIR HANDLING UNIT - SUPPLY FAN	117	20 HP	0 A	0 W	208 V	3	CDP-A-7	27mm(1")C 3#6	VFD	DIV. 23	DDC	DDC	NFS	DIV. 26	
B-1	GAS BOILER	117	5 A	0 W	120 V	1	D-13	16(12)C 2#12	---	---	DDC	DDC	NFS	DIV. 26		
B-2	GAS BOILER	117	5 A	0 W	120 V	1	D-15	16(12)C 2#12	---	---	DDC	DDC	NFS	DIV. 26		
CH-1	CHILLER	EXTERIOR	216 A	0 W	208 V	3	CDP-A-5	63mm(2-1/2)C 4#40	---	---	DDC	DDC	NFS	DIV. 26		
CU-1	CONDENSING UNIT	---	15 A	0 W	208 V	1	D-24.26	16(12)C 2#12	---	DIV. 26	THERMOSTAT	DIV. 23	NFS	DIV. 26		
DWH-1	DOMESTIC WATER HEATER	117	5 A	0 W	120 V	1	D-18	16(12)C 2#12	---	---	PACK	DIV. 23	NFS	DIV. 26		
ERV-1	ENERGY RECOVERY VENTILATOR	117	7.5 A	0 W	208 V	3	D-10,12,14	16(12)C 3#12	---	---	DDC	DDC	NFS	DIV. 26		
F-1	EXHAUST FAN	117	1/4 HP	0 A	0 W	120 V	1	D-21	16(12)C 2#12	MAG FVNR HOA RP GP	DIV. 26	DDC	DDC	NFS	DIV. 26	
F-2	FAN	106	1/4 HP	0 A	0 W	120 V	1	D-3	16(12)C 2#12	MAG FVNR HOA RP GP	DIV. 26	DDC	DDC	NFS	DIV. 26	
F-3	FAN	106	1/4 HP	0 A	0 W	120 V	1	D-5	16(12)C 2#12	MAG FVNR HOA RP GP	DIV. 26	DDC	DDC	NFS	DIV. 26	
HU-1	HUMIDIFIER	117	80 A	0 W	208 V	3	CDP-A-8	27mm(1")C 3#3	---	---	DDC	DDC	NFS	DIV. 26		
P-1	PUMP	117	2 HP	0 A	0 W	208 V	1	D-6.8	16(12)C 2#12	---	---	DDC	DDC	NFS	DIV. 26	
P-2	PUMP	117	2 HP	0 A	0 W	208 V	1	D-9.11	16(12)C 2#12	---	---	DDC	DDC	NFS	DIV. 26	
P-3	PUMP	117	1/2 HP	0 A	0 W	120 V	1	D-2	16(12)C 2#12	---	---	DDC	DDC	NFS	DIV. 26	
P-4	PUMP	117	1/2 HP	0 A	0 W	120 V	1	D-4	16(12)C 2#12	---	---	DDC	DDC	NFS	DIV. 26	
P-5	RECIRC PUMP	117	1/12 HP	0 A	0 W	120 V	1	D-1	16(12)C 2#12	---	---	DDC	DDC	NFS	DIV. 26	
P-6	SUMP PUMP	117	1/3 HP	0 A	0 W	120 V	1	D-16	16(12)C 2#12	PACK	---	DUPLEX CONTROLLER	DIV. 23	NFS	DIV. 26	
P-7	SUMP PUMP	117	1/3 HP	0 A	0 W	120 V	1	D-16	16(12)C 2#12	PACK	---	DUPLEX CONTROLLER	DIV. 23	NFS	DIV. 26	
UH-1	UNIT HEATER	117	1/8 HP	0 A	0 W	120 V	1	D-19	16(12)C 2#12	MAG FVNR HOA RP GP	DIV. 26	DDC	DDC	NFS	DIV. 26	
VAV-1	VARIABLE AIR VOLUME UNIT	112	1 A	0 W	120 V	1	D-7	16(12)C 2#12	---	---	DDC	DDC	---	---	2	
VAV-2	VARIABLE AIR VOLUME UNIT	105	1 A	0 W	120 V	1	D-7	16(12)C 2#12	---	---	DDC	DDC	---	---	2	

<p><b>STARTER TYPES:</b></p> <p>FVNR FULL VOLTAGE NON-REVERSING</p> <p>FVR FULL VOLTAGE REVERSING</p> <p>2-SPD TWO SPEED</p> <p>VFD VARIABLE FREQUENCY DRIVE</p> <p>RVS REDUCED VOLTAGE</p> <p>MAG MAGNETIC STARTER</p> <p>MAN MANUAL STARTER</p>	<p><b>COMBINATION DISCONNECT TYPES:</b></p> <p>FS FUSED SWITCH</p> <p>NFS NON-FUSED SWITCH</p> <p>MCP MOTOR CIRCUIT PROTECTOR</p> <p>CB CIRCUIT BREAKER</p>	<p><b>CONTROL DEVICES:</b></p> <p>HOA HAND-OFF-AUTO SWITCH</p> <p>RP RED (RUN) PILOT LIGHT</p> <p>GP GREEN (POWER) PILOT LIGHT</p> <p>00 ON-OFF SELECTOR SWITCH</p> <p>SS STOP-START PUSHBUTTONS</p>	<p><b>ABBREVIATIONS:</b></p> <p>EC ELECTRICAL SUBCONTRACTOR</p> <p>MC MECHANICAL SUBCONTRACTOR</p> <p>GC GENERAL CONTRACTOR</p> <p>TC TEMPERATURE CONTROL</p> <p>OWN CITY</p>
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- GENERAL NOTES:**
- CIRCUITING IS REPRESENTATIONAL ONLY. CONFIRM CIRCUITING ARRANGEMENTS ON SITE WITH EXISTING CONDITIONS.
  - WIRING BETWEEN VFD'S AND MOTORS SHALL BE RATED FOR VFD USE.
  - INPUT AND OUTPUT CONDUCTORS TO AND FROM VFD'S SHALL BE INSTALLED IN SEPARATE RACEWAYS, INDEPENDENT FROM ANY OTHER CONDUCTORS, AND SHALL NOT PASS THRU ANY COMMON WIREWAY OR RACEWAY.
- NOTES:**
- INSTALL, WIRE AND CONNECT VFD AS SUPPLIED BY MECHANICAL. VFD SHALL BE LOCATED AT AHU-1. CONFIRM FINAL LOCATIONS WITH MECHANICAL.
  - INSTALL, WIRE AND CONNECT LOW VOLTAGE TRANSFORMER AS SUPPLIED BY MECHANICAL.
  - WIRE AND CONNECT SUMP PUMP DUPLEX CONTROLLER C/W ASSOCIATED CONTROLS. REFER TO TYPICAL DUPLEX SUMP PUMP WIRING DETAIL.
  - INTERIOR UNIT AC-1 SHALL BE SUB-FED FROM EXTERIOR UNIT CU-1.



**Certificate of Authorization**  
Epp Siepman Engineering Inc.  
No. 4035



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2016-03-31

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**PROJECT**  
Windsor Park Library  
**ADDRESS**  
1201 Archibald Street

**DATE**  
February 28, 2016

**SCALE**  
1/8" = 1'-0"

electrical  
schedules  
**E6.1**