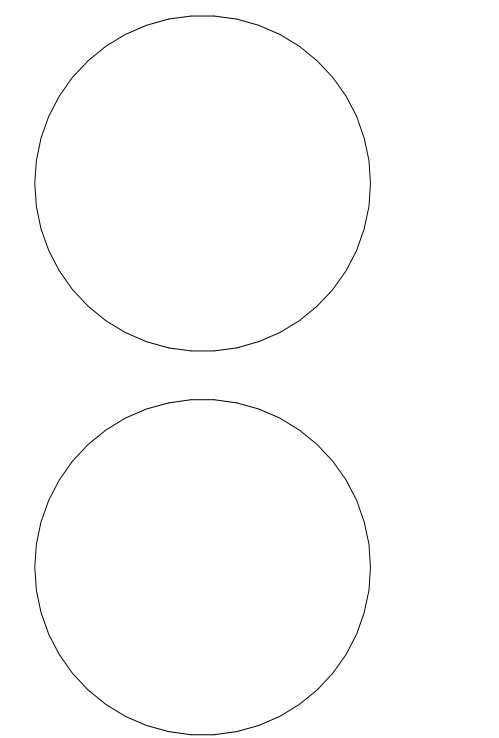


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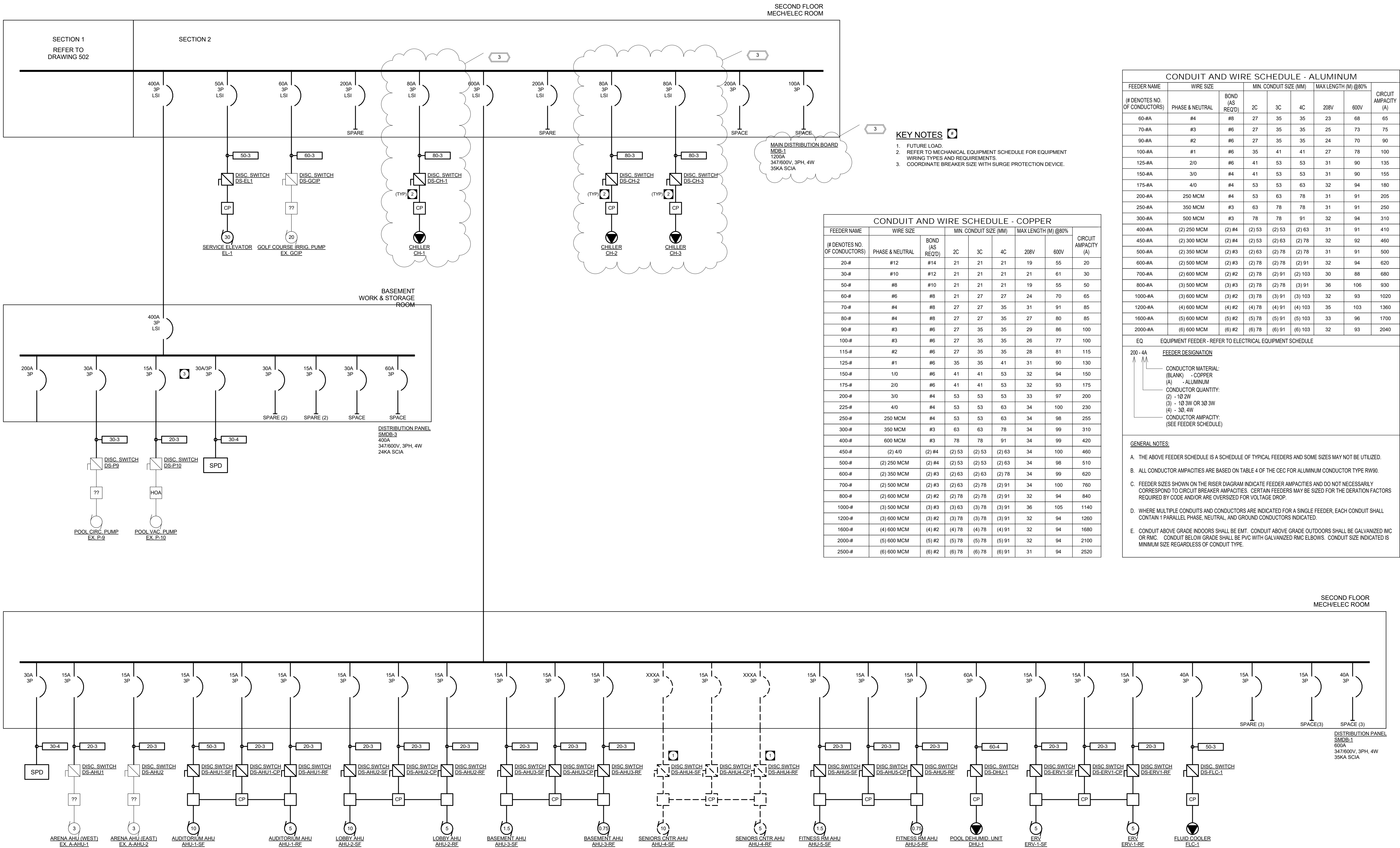


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Project
ST. JAMES CIVIC CENTRE

Drawing
ELECTRICAL SINGLE LINE DIAGRAM - RENO 2 OF 2

Drawn By: JA Review By: MP
Scale: NTS Tender No: 1176-2019
Date: 11/06/19
Sheet: **E5.3-R1**



- KEY NOTES**
1. FUTURE LOAD
 2. REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR EQUIPMENT WIRING TYPES AND REQUIREMENTS.
 3. COORDINATE BREAKER SIZE WITH SURGE PROTECTION DEVICE.

CONDUIT AND WIRE SCHEDULE - COPPER

FEEDER NAME (# DENOTES NO. OF CONDUCTORS)	WIRE SIZE PHASE & NEUTRAL	BOND (AS REQ'D)	MIN. CONDUIT SIZE (MM)						CIRCUIT AMPACITY (A)
			2C	3C	4C	208V	600V		
20-#	#12	#14	21	21	21	19	55	20	
30-#	#10	#12	21	21	21	21	61	30	
50-#	#8	#10	21	21	21	19	55	50	
60-#	#6	#8	21	27	27	24	70	65	
70-#	#4	#8	27	27	35	31	91	85	
80-#	#4	#8	27	27	35	27	80	85	
90-#	#3	#6	27	35	35	29	86	100	
100-#	#3	#6	27	35	35	26	77	100	
115-#	#2	#6	27	35	35	28	81	115	
125-#	#1	#6	35	35	41	31	90	130	
150-#	1/0	#6	41	41	53	32	94	150	
175-#	2/0	#6	41	41	53	32	93	175	
200-#	3/0	#4	53	53	53	33	97	200	
225-#	4/0	#4	53	53	63	34	100	230	
250-#	250 MCM	#4	53	53	63	34	98	255	
300-#	350 MCM	#3	63	63	78	34	99	310	
400-#	600 MCM	#3	78	78	91	34	99	420	
450-#	(2) 4/0	(2) #4	(2) 53	(2) 53	(2) 63	34	100	460	
500-#	(2) 250 MCM	(2) #4	(2) 53	(2) 53	(2) 63	34	98	510	
600-#	(2) 350 MCM	(2) #3	(2) 63	(2) 63	(2) 78	34	99	620	
700-#	(2) 500 MCM	(2) #3	(2) 63	(2) 78	(2) 91	34	100	760	
800-#	(2) 600 MCM	(2) #2	(2) 78	(2) 78	(2) 91	32	94	840	
1000-#	(3) 500 MCM	(3) #3	(3) 63	(3) 78	(3) 91	36	105	1140	
1200-#	(3) 600 MCM	(3) #2	(3) 78	(3) 78	(3) 91	32	94	1280	
1600-#	(4) 600 MCM	(4) #2	(4) 78	(4) 78	(4) 91	32	94	1680	
2000-#	(5) 600 MCM	(5) #2	(5) 78	(5) 78	(5) 91	32	94	2100	
2500-#	(6) 600 MCM	(6) #2	(6) 78	(6) 78	(6) 91	31	94	2520	

CONDUIT AND WIRE SCHEDULE - ALUMINUM

FEEDER NAME (# DENOTES NO. OF CONDUCTORS)	WIRE SIZE PHASE & NEUTRAL	BOND (AS REQ'D)	MIN. CONDUIT SIZE (MM)						CIRCUIT AMPACITY (A)
			2C	3C	4C	208V	600V		
60-#A	#4	#8	27	35	35	23	68	65	
70-#A	#3	#6	27	35	35	25	73	75	
90-#A	#2	#6	27	35	35	24	70	90	
100-#A	#1	#6	35	41	41	27	78	100	
125-#A	2/0	#6	41	53	53	31	90	135	
150-#A	3/0	#4	41	53	53	31	90	155	
175-#A	4/0	#4	53	53	63	32	94	180	
200-#A	250 MCM	#4	53	63	78	31	91	205	
250-#A	350 MCM	#3	63	78	78	31	91	250	
300-#A	500 MCM	#3	78	78	91	32	94	310	
400-#A	(2) 250 MCM	(2) #4	(2) 53	(2) 53	(2) 63	31	91	410	
450-#A	(2) 300 MCM	(2) #4	(2) 53	(2) 63	(2) 78	32	92	460	
500-#A	(2) 350 MCM	(2) #3	(2) 63	(2) 78	(2) 78	31	91	500	
600-#A	(2) 500 MCM	(2) #3	(2) 78	(2) 78	(2) 91	32	94	620	
700-#A	(2) 600 MCM	(2) #2	(2) 78	(2) 91	(2) 103	30	88	680	
800-#A	(3) 500 MCM	(3) #3	(2) 78	(2) 78	(3) 91	36	106	930	
1000-#A	(3) 600 MCM	(3) #2	(3) 78	(3) 91	(3) 103	32	93	1020	
1200-#A	(4) 600 MCM	(4) #2	(4) 78	(4) 91	(4) 103	35	103	1360	
1600-#A	(5) 600 MCM	(5) #2	(5) 78	(5) 91	(5) 103	33	96	1700	
2000-#A	(6) 600 MCM	(6) #2	(6) 78	(6) 91	(6) 103	32	93	2040	

EQ EQUIPMENT FEEDER - REFER TO ELECTRICAL EQUIPMENT SCHEDULE

200 - 4A FEEDER DESIGNATION

CONDUCTOR MATERIAL:
(BLANK) - COPPER
(A) - ALUMINUM

CONDUCTOR QUANTITY:
(2) - 1Ø 2W
(3) - 1Ø 3W OR 3Ø 3W
(4) - 3Ø, 4W

CONDUCTOR AMPACITY:
(SEE FEEDER SCHEDULE)

GENERAL NOTES:

- THE ABOVE FEEDER SCHEDULE IS A SCHEDULE OF TYPICAL FEEDERS AND SOME SIZES MAY NOT BE UTILIZED.
- ALL CONDUCTOR AMPACITIES ARE BASED ON TABLE 4 OF THE CEC FOR ALUMINUM CONDUCTOR TYPE RW90.
- FEEDER SIZES SHOWN ON THE RISER DIAGRAM INDICATE FEEDER AMPACITIES AND DO NOT NECESSARILY CORRESPOND TO CIRCUIT BREAKER AMPACITIES. CERTAIN FEEDERS MAY BE SIZED FOR THE DERATION FACTORS REQUIRED BY CODE AND/OR ARE OVSIZED FOR VOLTAGE DROP.
- WHERE MULTIPLE CONDUITS AND CONDUCTORS ARE INDICATED FOR A SINGLE FEEDER, EACH CONDUIT SHALL CONTAIN 1 PARALLEL PHASE, NEUTRAL, AND GROUND CONDUCTORS INDICATED.
- CONDUIT ABOVE GRADE INDOORS SHALL BE EMT. CONDUIT ABOVE GRADE OUTDOORS SHALL BE GALVANIZED IMC OR RMC. CONDUIT BELOW GRADE SHALL BE PVC WITH GALVANIZED RMC ELBOWS. CONDUIT SIZE INDICATED IS MINIMUM SIZE REGARDLESS OF CONDUIT TYPE.