



SINGLE LINE DIAGRAM

LOAD (W)	SUMMER	WINTER
HEATING	0	18442
COOLING	15069	0
HVAC (RTU, MUA, MUA-1, MUA-2, EF)	14244	43992
EQUIP (MECH)	21274	21274
SCBA COMPR	18425	18425
LIGHTING	8477	8477
APPLIANCES	11512	11512
RECEPTACLES	20325	20325
RECEPTACLES (TRUCK CHARGERS - IRT)	8769	8769
RECEPTACLES (PARKING)	0	5200
Future EV Charging Stns (4@40A, 208V)	35472	35472
TOTAL LOAD (W)	153568	191888
AMPERES (PF=0.8)	533	666
FUTURE 25% (kVA)		300
FUTURE 25% (A) PF=0.8		832

NEW

PANEL	MOUNTING LOCATION	DESCRIPTION	LOAD WATTS	BKR	A	B	C	BKR	LOAD WATTS	DESCRIPTION	NOTES:
MD-1	ON HOUSE KEEPING PAD AGAINST WALL BASEMENT ELECTRICAL RM.										
CDP-EP1	???	BASEMENT ELECTRICAL RM.									
EP-1	(DIESEL 200kW)			100A-3P	1	2	200A-3P			EP-1 (APPARATUS RM)	
EP-2	(APPARATUS RM)			200A-3P	3	4	100A-3P			EP-2 (BSMT. ELEC. RM)	
EP-3	(BSMT. ELEC. RM)			200A-3P	5	6	150A-3P			EP-3 (BSMT. ELEC. RM)	
EP-4	(BSMT. MECH. RM)			150A-3P	7	8	100A-3P			TR-1 (BSMT. ELEC. RM) FOR SCBA COMPR. (SCBA RM. 134)	
RTU-WEST				70A-3P	9	10	80A-3P			MUA-2 (200kW)	
SPACE					11	12				SPACE	
SPACE					13	14				SPACE	
SPACE					15	16				SPACE	

NEW

PANEL	MOUNTING LOCATION	DESCRIPTION	LOAD WATTS	BKR	A	B	C	BKR	LOAD WATTS	DESCRIPTION	NOTES:
CDP-EP1	???	BASEMENT ELECTRICAL RM.									
EGEN-1	(DIESEL 200kW)			100A-3P	1	2	200A-3P			EP-4 (APPARATUS RM)	
EP-5	(APPARATUS RM)			200A-3P	3	4	100A-3P			EP-5 (BSMT. ELEC. RM)	
EP-6	(BSMT. ELEC. RM)			200A-3P	5	6	150A-3P			EP-6 (BSMT. ELEC. RM)	
EP-7	(BSMT. MECH. RM)			150A-3P	7	8	100A-3P			TR-1 (BSMT. ELEC. RM) FOR SCBA COMPR. (SCBA RM. 134)	
RTU-WEST				70A-3P	9	10	80A-3P			MUA-2 (200kW)	
SPACE					11	12				SPACE	
SPACE					13	14				SPACE	
SPACE					15	16				SPACE	

- GENERAL NOTES:**
- ALSO REFER TO DRAWING E1.0 & SPECIFICATION DRAWINGS.
 - PANEL DESIGNATIONS & CIRCUITS, (EP-X) ARE EMERGENCY POWER:
 - (EP-A) & (EP-B) ARE EXISTING PANELBOARDS INSTALLED FROM RECENT PROJECT 2019-075.
 - PROVIDE REPLACEMENT PANELBOARDS/CIRCUIT BREAKERS FOR (EP-C) TO (EP-F), INCLUSIVE. LOCATIONS SAME AS EXISTING.
 - RE-FEED ALL EXISTING LOADS NOT MEETING CODE.
 - PANEL DESIGNATIONS & CIRCUITS, (NP-X) ARE NORMAL POWER:
 - (NP-A) IS EXISTING.
 - PROVIDE REPLACEMENT PANELBOARD/CIRCUIT BREAKERS FOR (NP-B). LOCATION SAME AS EXISTING.
 - RE-FEED ALL EXISTING LOADS NOT MEETING CODE.
 - PROVIDE COMPLETE SHORT CIRCUIT COORDINATION STUDY TO INCLUDE FAULT CURRENT COORDINATION & KA RATING OF MAIN 1000A DISTRIBUTION & ALL PANELS.
 - PROVIDE LSIG SETTING FOR NEW 100% RATED MAIN BREAKER.
 - PROVIDE SHOCK AND ARC FLASH PROTECTION LABELS AS PER CSA C22.1, SECTION 2-306.

No.	REVISION/DESCRIPTION	BY	DATE
1	ISSUED FOR ADDENDUM 1	DTA	2022.12.15
0	ISSUED FOR CONSTRUCTION	DTA	2022.11.03



DRAWN	DATE	CHECKED	DESIGNED	DATE	APPROVED
	2022.10.24				

THE CITY OF WINNIPEG
 PLANNING, PROPERTY AND
 DEVELOPMENT DEPARTMENT
 MUNICIPAL ACCOMMODATIONS DIVISION
 3-65 GARRY STREET, R3C 4K4

PROJECT
 WINNIPEG FIRE PARAMEDIC SERVICES
 FIRE STATION #1
 ELECTRICAL SERVICE UPGRADE AND EMERGENCY GENERATOR
 65 ELLEN STREET BID OPP: 805-2022

SHEET TITLE
 ELECTRICAL
 SINGLE LINE DIAGRAM - RENOVATION
 SCALE AS SHOWN PROJECT No: 2019-150-01 SHEET No: E7.0-R1