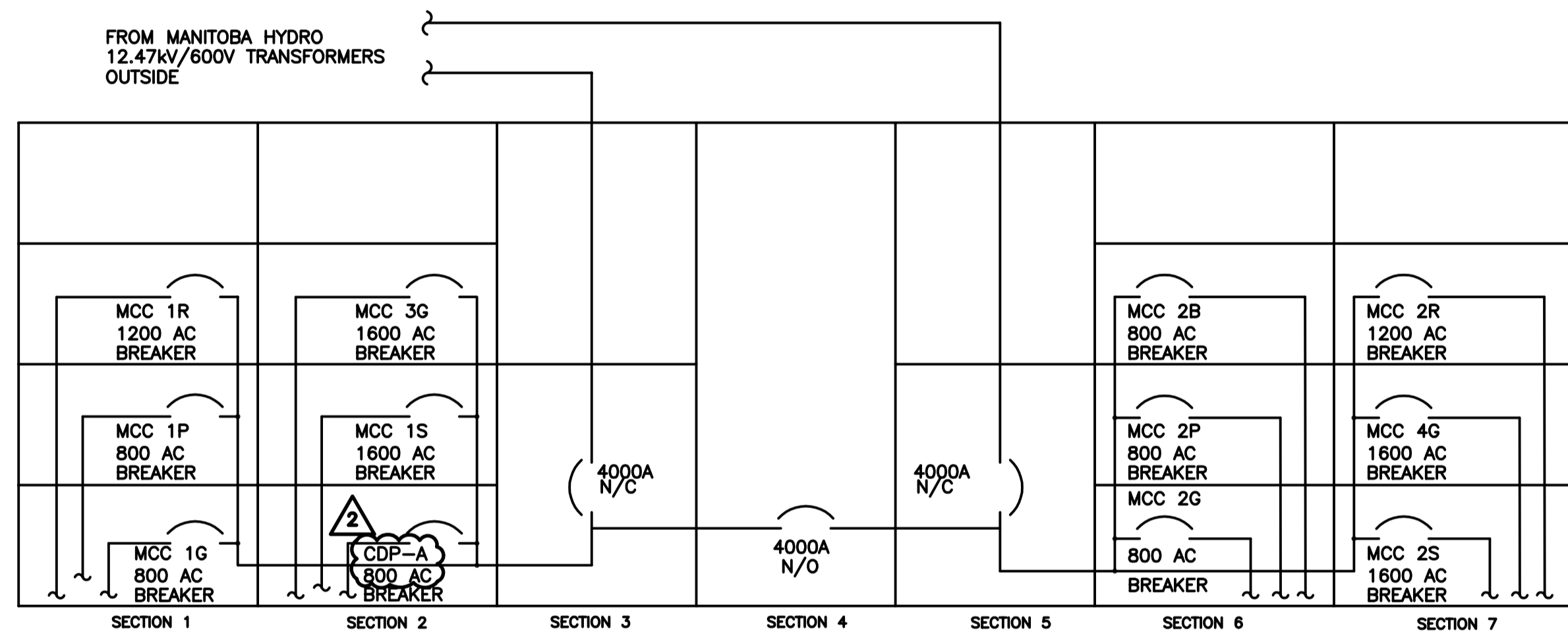
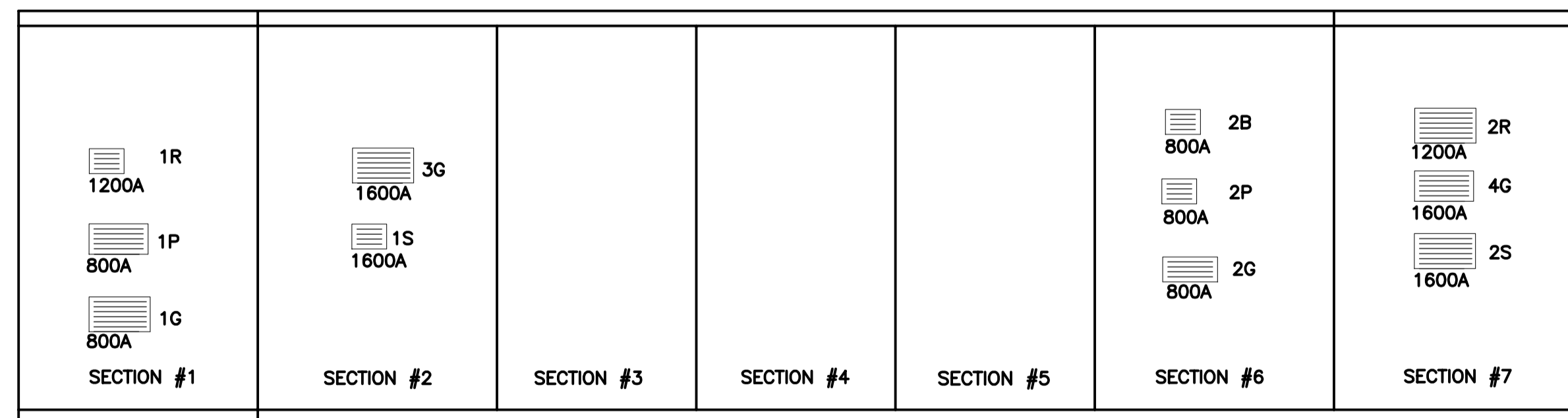


MAIN 600 VOLT DISTRIBUTION

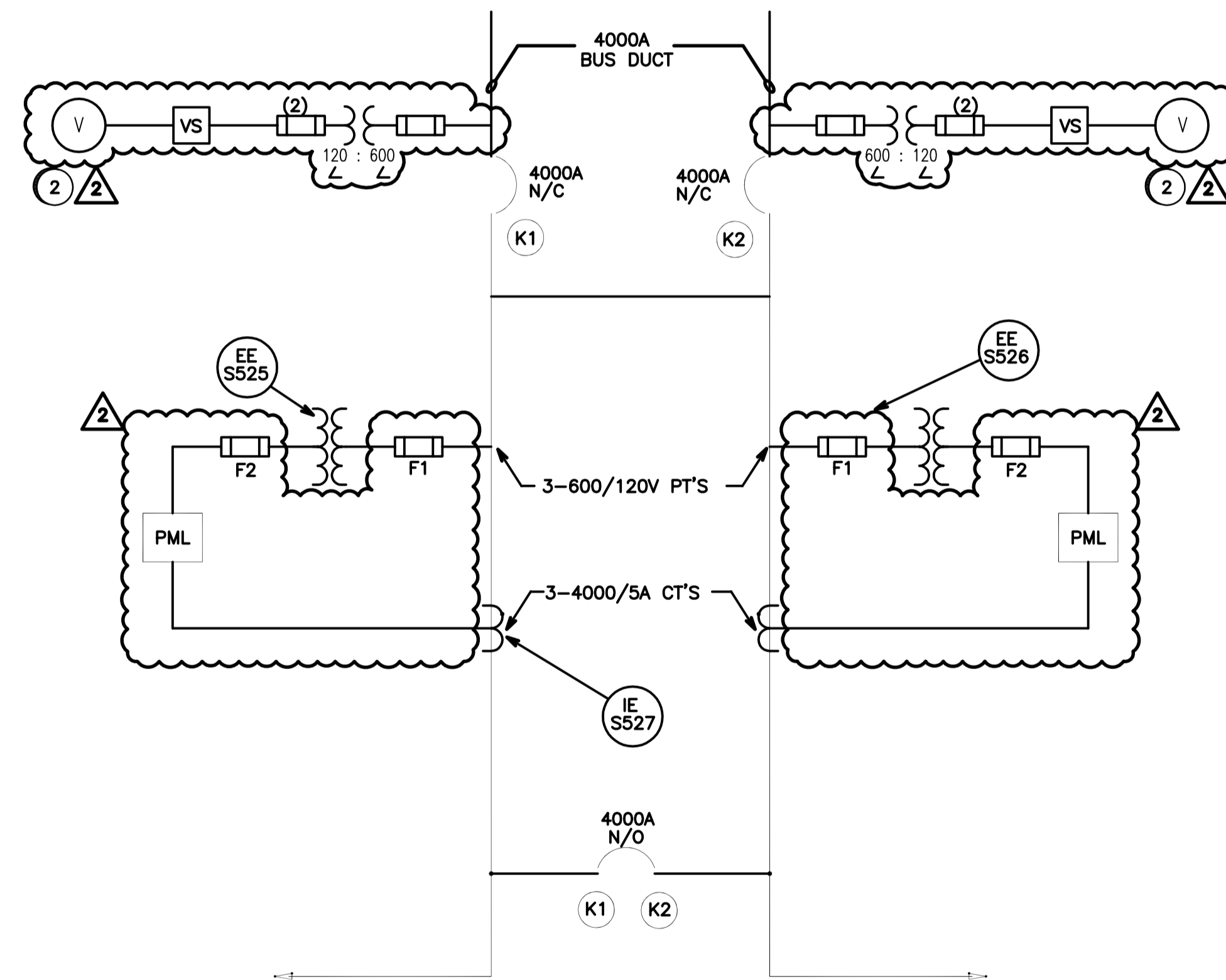
UNIT No.	DESCRIPTION	FEEDER			CIRCUIT BREAKER		
		CAP IN AMPS	DESC.	TYPE	VOLTS	FRAME SIZE	TRIP SETTING
1	HYDRO #1 TIE & METERING	4000A	—	LOW Z BUS DUCT	—	—	—
2	HYDRO #2 TIE & METERING	4000A	—	LOW Z BUS DUCT	—	—	—
3	HYDRO #1 CIRCUIT BREAKER	4000A	—	BUS BAR	600V	4000A	NON AUTO
4	HYDRO #2 CIRCUIT BREAKER	4000A	—	BUS BAR	600V	4000A	NON AUTO
5	TIE CIRCUIT BREAKER	4000A	—	BUS BAR	600V	4000A	NON AUTO
6	MISCELLANEOUS METERING	—	—	—	—	—	—
7	MCC-2B FEEDER	800A	2B	BUS DUCT	600V	1600A	800A
8	MCC-2P FEEDER	800A	2P	BUS DUCT	600V	1600A	800A
9	MCC-2G FEEDER	800A	2G	BUS DUCT	600V	1600A	800A
10	MISCELLANEOUS METERING	—	—	—	—	—	—
11	MCC-2R FEEDER	1200A	2R	BUS DUCT	600V	1600A	1200A
12	MCC-4G FEEDER	1600A	4G	BUS DUCT	600V	1600A	1600A
13	MCC-2S FEEDER	1600A	2S	BUS DUCT	600V	1600A	1600A
14	MISCELLANEOUS METERING	—	—	—	—	—	—
15	MCC-3G FEEDER	1600A	3G	BUS DUCT	600V	1600A	1600A
16	MCC-1S FEEDER	1600A	1S	BUS DUCT	600V	1600A	1600A
17	UV CDP-A FEEDER	800A	UV	CABLE	600V	1600A	—
18	MISCELLANEOUS METERING	—	—	—	—	—	—
19	MCC-1R FEEDER	1200A	1R	BUS DUCT	600V	1600A	1200A
20	MCC-1P FEEDER	800A	1P	BUS DUCT	600V	1600A	800A
21	MCC-1G FEEDER	800A	1G	BUS DUCT	600V	1600A	800A



MAIN 600 VOLT DISTRIBUTION BUS DETAIL



BASE PLAN BUS DUCT ENTRIES



INCOMING SECTION OF MAIN SWITCHGEAR SCHEMATIC

N.T.S.

KEY INTERLOCK SCHEDULE	
DESCRIPTION	
KEY "K1"	REMOVABLE ONLY WHEN N.C. BREAKER IS OPENED.
KEY "K2"	REMOVABLE ONLY WHEN N.C. BREAKER IS OPENED.
N.O. BREAKER CAN ONLY BE CLOSED WHEN EITHER KEY "K1" OR "K2" IS INSERTED.	

- VS - VOLT METER SWITCH
- V - VOLT METER
- AS - AMMETER SWITCH
- AI - AMMETER
- A/I - AMPERAGE TO Ma CONVERTER
- V/I - VOLTAGE TO Ma CONVERTER
- PF - POWER FACTOR METER
- PF/I - POWER FACTOR TO Ma CONVERTER
- T - TERMINALS

PML - ION 7330 POWER MONITOR, CONNECTED TO DCS
F1, F2 - CONTROL FUSES

CONSTRUCTION NOTES	
1	REMOVE THE THREE PHASE VOLTAGE MONITOR (SSAC-WVM-011M) FROM EACH OF THE MAIN BREAKER CONTROL COMPARTMENTS.
2	ADD AC VOLTMETER, VOLTAGE TRANSFORMER, CONTROL FUSES AND VOLTAGE SELECTOR SWITCH.

APEGM
Certificate of Authorization
SNC-Lavalin Inc.
No. 4489 Expiry: April 30, 2010

DESIGNED BY: N. BRADDOO		APPROVED BY: C. REIMER	
CHECKED BY: C. REIMER		DATE: 2009/12/07	
PROJECT No. 112577	SUBJ. 0105	SERIAL 47 DD	REV. 0507 2

B.M. ELEV.			
2	REVISED AS PER EXISTING, REMOVED MAIN BREAKER VOLTAGE MONITOR, AND ADDED AC VOLTMETER	12/09	NB
1	AS CONSTRUCTED	06/93	B.T.
0	ISSUED FOR TENDER	07/90	RDJ
NO. REVISIONS	DATE	BY	DATE

DESIGNED BY: D.B.T.		CHECKED BY:	
DRAWN BY: C.N./V.R.		APPROVED BY:	
HOR. SCALE: 1:1		RELEASED FOR CONSTRUCTION:	
VERTICAL:		DATE:	

ENGINEER'S SEAL
ORIGINAL DRAWING SEALED BY:
N. BRADDOO
SNC-Lavalin MEMBER 32727
2009/12/07
REV. 02

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATERWORKS, WASTE & DISPOSAL DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SECONDARY CLARIFIER EXPANSION - ELECT.

SWITCHGEAR & DETAILS

CITY DRAWING NUMBER
SHEET OF
SEP-453

CONSULTANT DRAWING NO. 43525-24-S-E103