

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED WITH REPORT	2011/04/29	-	CJR

		SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
DESIGNED BY:	EXISTING	CHECKED BY:	C. REIMER
DRAWN BY:	S. FUNK	APPROVED BY:	C. REIMER
SCALE:	NTS	RELEASED FOR CONSTRUCTION BY:	
DATE:	2010/05/11	DATE:	
CONSULTANT NO.:		113291-0002-470D-0001	

ENGINEER'S SEAL

PRELIMINARY
NOT TO BE
USED FOR
CONSTRUCTION

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

MONTCALM WASTEWATER PUMPING STATION
 PUMPING UPGRADES
 ELECTRICAL SINGLE LINE DIAGRAM
 EXISTING

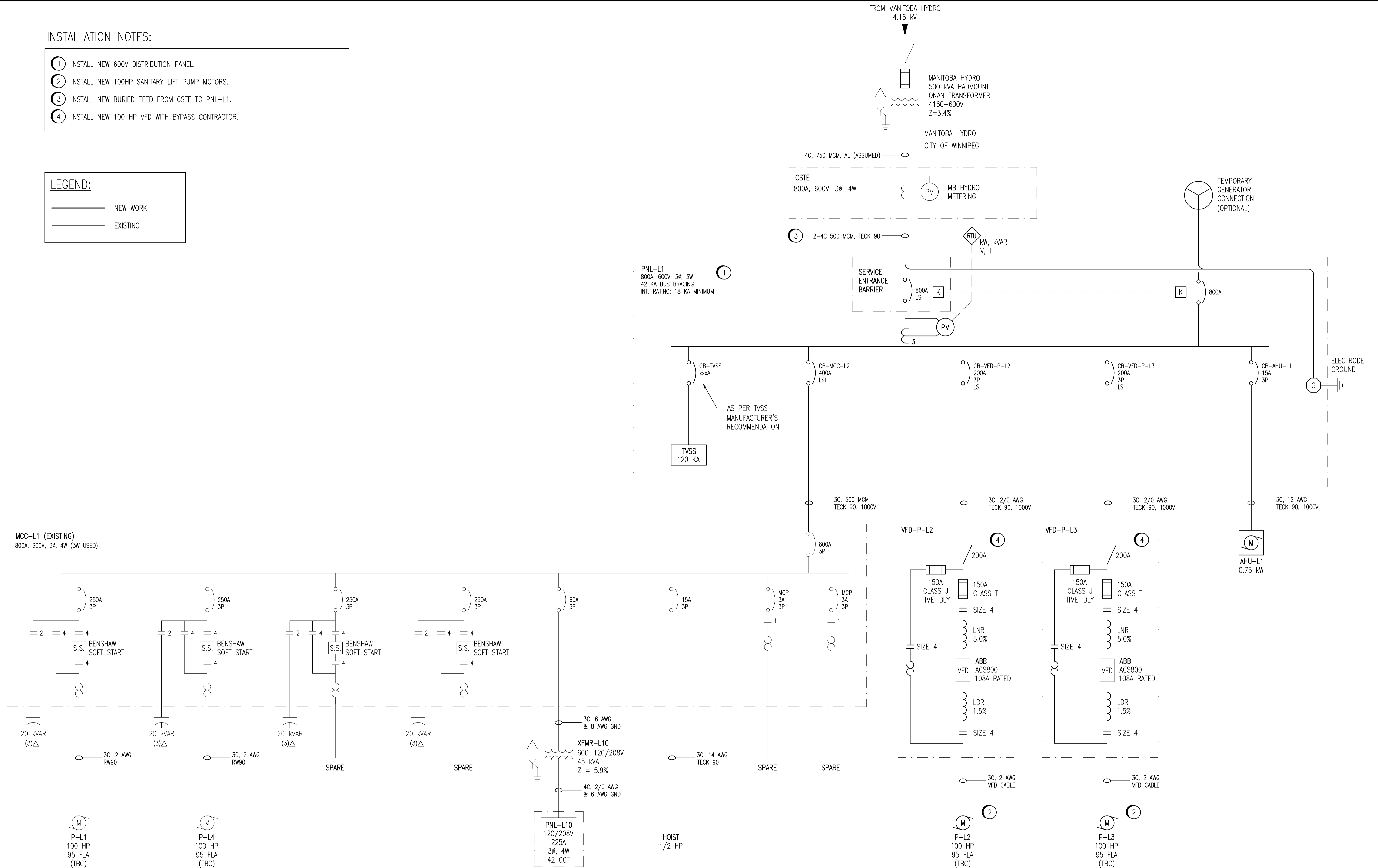
CITY DRAWING NUMBER	SHEET	REV.	SIZE
SK-001	001	00	A1

INSTALLATION NOTES:

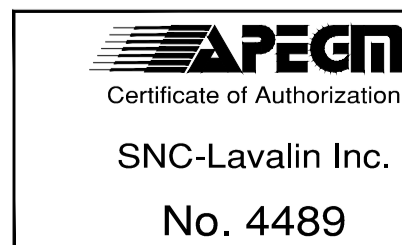
- 1 INSTALL NEW 600V DISTRIBUTION PANEL.
- 2 INSTALL NEW 100HP SANITARY LIFT PUMP MOTORS.
- 3 INSTALL NEW BURIED FEED FROM CSTE TO PNL-L1.
- 4 INSTALL NEW 100 HP VFD WITH BYPASS CONTRACTOR.

LEGEND:

— NEW WORK
 - - - EXISTING



DRAWING NUMBER	REFERENCE DRAWINGS
--	--

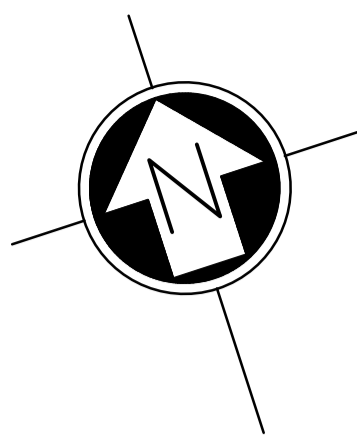


01	REVISED FOR VFDs	2011/06/07	BC	CJR
00	ISSUED WITH REPORT	2011/04/29	BC	CJR
NO.	REVISIONS	DATE	DESIGN	CHECK

SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
DESIGNED BY:	CHECKED BY:
B. CLEVEN	C. REIMER
DRAWN BY:	APPROVED BY:
S. FUNK	C. REIMER
SCALE:	RELEASED FOR CONSTRUCTION BY:
NTS	
DATE:	DATE:
2010/05/11	
CONSULTANT NO.:	
113291-0002-4700-0002	

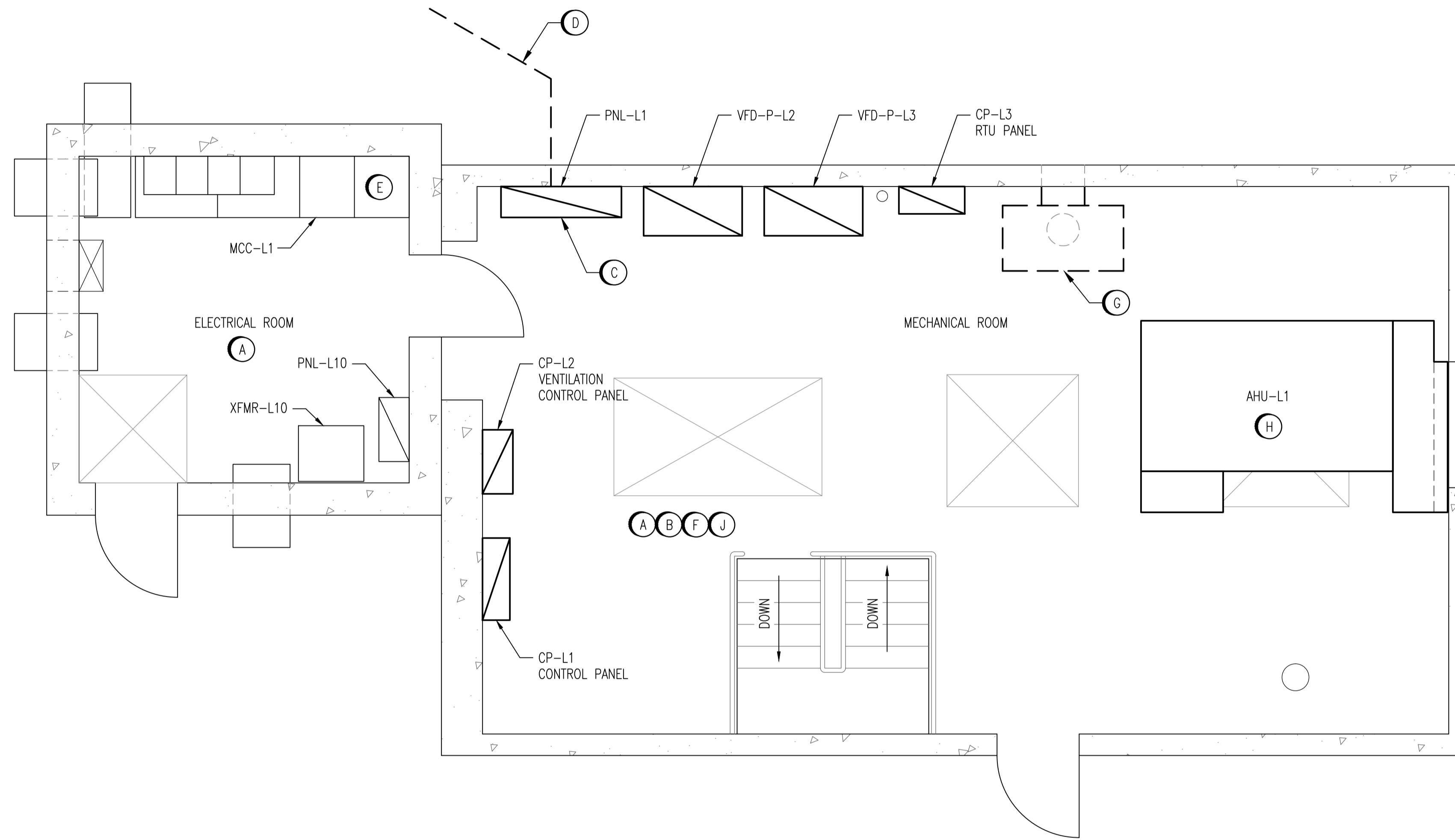
ENGINEER'S SEAL
PRELIMINARY
 NOT TO BE
 USED FOR
 CONSTRUCTION

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT		
MONTCALM WASTEWATER PUMPING STATION PUMPING UPGRADES ELECTRICAL SINGLE LINE DIAGRAM PROPOSED 600V DISTRIBUTION PRELIMINARY DESIGN		
CITY DRAWING NUMBER	SHEET	REV.
SK-002	001	01
SIZE	A1	



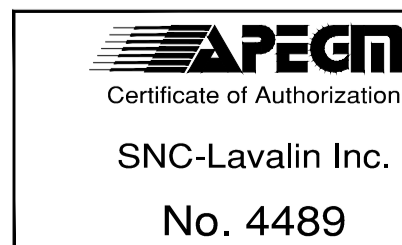
CONSTRUCTION NOTES:

- (A) RESTORE INTERIOR WALL AND FLOOR SURFACES.
- (B) REPLACE EXISTING RECEPTACLES.
- (C) INSTALL NEW DISTRIBUTION PANEL, PNL-L1.
- (D) INSTALL NEW DIRECT BURIED TECK 90 FEEDER CABLES FROM CSTE TO PNL-L1.
- (E) FEED EXISTING MCC-L1, FROM PNL-L1.
- (F) INSTALL NEW EMERGENCY LIGHTING BATTERY UNITS.
- (G) DEMOLISH THE EXISTING BLOWER.
- (H) INSTALL NEW AIR HANDLING UNIT.
- (I) INSTALL AIR INTAKE LOUVRE IN PLACE OF THE EXISTING DOOR.
- (J) REPLACE EXISTING INCANDESCENT LIGHTING WITH FLUORESCENT LIGHTING.



MAIN FLOOR PLAN - ELEV. 230.798
SCALE: 1 : 30

DRAWING NUMBER	REFERENCE DRAWINGS
----------------	--------------------

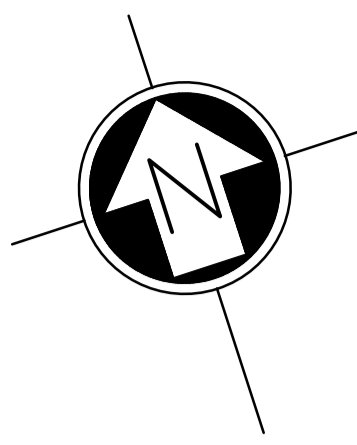


NO.	REVISIONS	DATE	DESIGN	CHECK
01	REVISED FOR VFDs	2011/06/07	BC	CJR
00	ISSUED WITH REPORT	2011/04/29	BC	CJR

 SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
DESIGNED BY: B. CLEVEN	CHECKED BY: C. REIMER
DRAWN BY: D. RAMJEET/S. FUNK	APPROVED BY: C. REIMER
SCALE: 1:30	RELEASED FOR CONSTRUCTION BY: DATE:
DATE: 2009/09/24	CONSULTANT NO.: 113291-0002-4700-0010

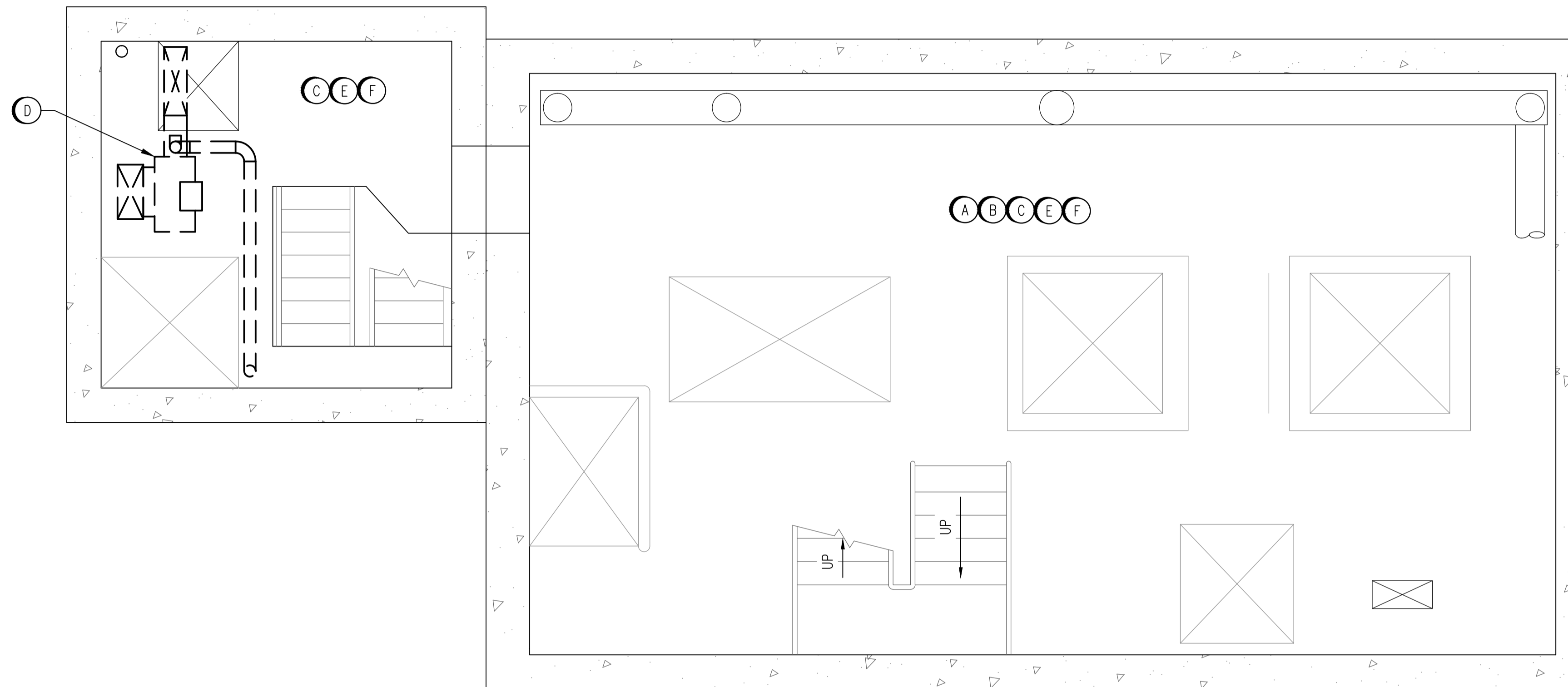
ENGINEER'S SEAL
PRELIMINARY
NOT TO BE
USED FOR
CONSTRUCTION

 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT		
MONTCALM WASTEWATER PUMPING STATION PUMPING UPGRADES EQUIPMENT LAYOUT PLAN MAIN FLOOR PRELIMINARY DESIGN		
CITY DRAWING NUMBER SK-010	SHEET 001	REV. 01
		SIZE A1



CONSTRUCTION NOTES:

- (A) RESTORE INTERIOR WALL AND FLOOR SURFACES.
- (B) REPLACE EXISTING RECEPTACLES WITH WEATHERPROOF RECEPTACLES COMPLETE WITH COVERS.
- (C) INSTALL NEW EMERGENCY LIGHTING REMOTE FIXTURES.
- (D) DEMOLISH EXISTING BLOWER TO THE PUMP/MOTOR ROOMS.
- (E) INSTALL NEW DUCTWORK AS REQUIRED.
- (F) REPLACE EXISTING INCANDESCENT LIGHTING WITH FLUORESCENT LIGHTING.



LOWER LEVEL PLAN - ELEV. 227.732
SCALE: 1 : 30

---	---
DRAWING NUMBER	REFERENCE DRAWINGS



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED WITH REPORT	2011/04/29	BC	CJR

SNC-LAVALIN INC.
148 Nature Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

DESIGNED BY: B. CLEVEN
DRAWN BY: D. RAMJEET/S. FUNK
SCALE: 1:30
DATE: 2011/02/08
CONSULTANT NO.: 113291-0002-4700-0011

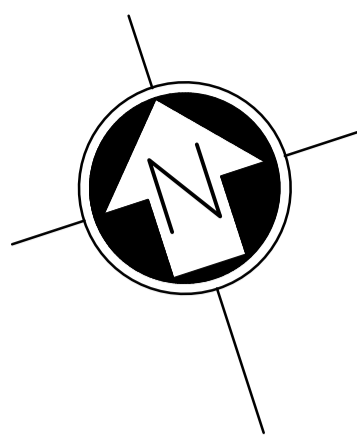
CHECKED BY: C. REIMER
APPROVED BY: C. REIMER
RELEASED FOR CONSTRUCTION BY: [Signature]
DATE: [Signature]

ENGINEER'S SEAL
**PRELIMINARY
NOT TO BE
USED FOR
CONSTRUCTION**

Winnipeg THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

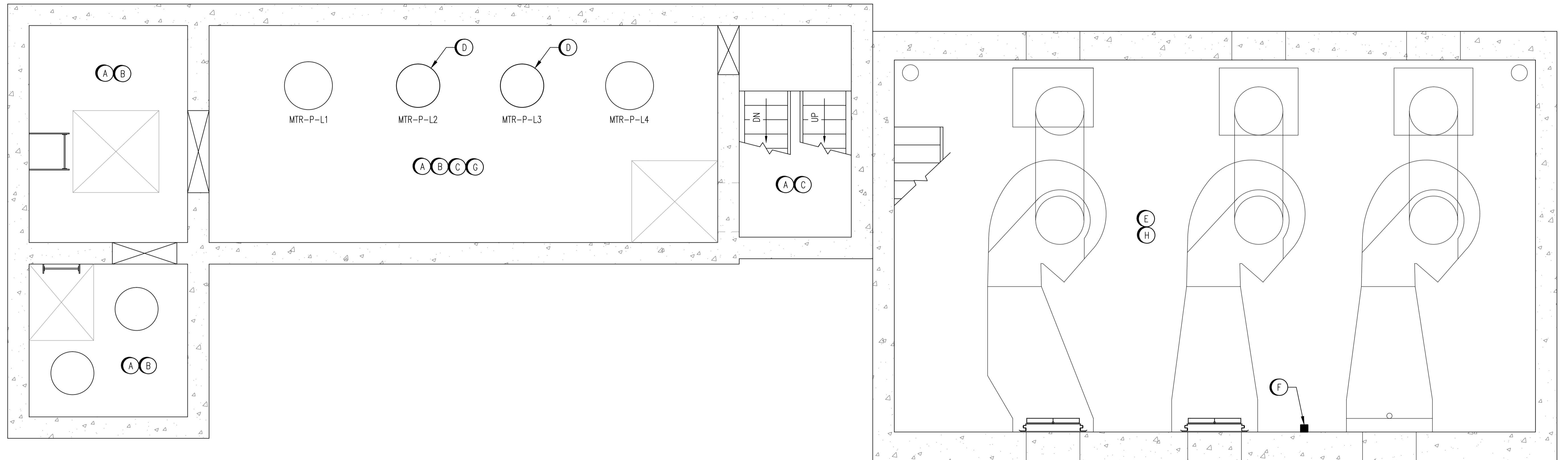
MONTCALM WASTEWATER PUMPING STATION
PUMPING UPGRADES
EQUIPMENT LAYOUT PLAN
LOWER LEVEL
PRELIMINARY DESIGN

CITY DRAWING NUMBER	SHEET	REV.	SIZE
SK-011	001	00	A1



CONSTRUCTION NOTES:

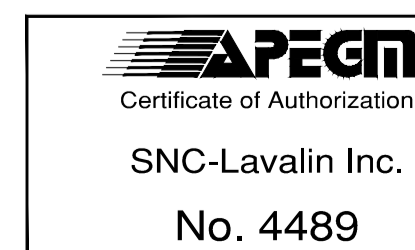
- (A) REPLACE EXISTING INCANDESCENT LIGHTING WITH FLUORESCENT LIGHTING.
- (B) REPLACE EXISTING RECEPTACLES WITH WEATHERPROOF RECEPTACLES COMPLETE WITH COVERS.
- (C) INSTALL NEW EMERGENCY LIGHTING REMOTE FIXTURES.
- (D) INSTALL NEW PUMP MOTORS.
- (E) INSTALL PIPING ACROSS COMMUNOTOR CHAMBER TO ELIMINATE WASTEWATER IN THE CHAMBER (BY MECHANICAL).
- (F) REPLACE AND REWIRE THE FLYGT BALL FLOOD SWITCH.
- (G) INSTALL NEW DUCTWORK.
- (H) INSTALL NEW FLUORESCENT LIGHTING.



MOTOR AND COMMUNOTOR ROOM PLAN - ELEV. 222.961

SCALE: 1 : 30

---	---
DRAWING NUMBER	REFERENCE DRAWINGS



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED WITH REPORT	2011/04/29	BC	CJR

SNC-LAVALIN INC.
 148 Nature Park Way
 Winnipeg, MB, Canada R3P 0X7
 204-786-8080

DESIGNED BY: B. CLEVEN
 DRAWN BY: D. RAMJEET/S. FUNK
 SCALE: 1:30
 DATE: 2009/09/24

CHECKED BY: C. REIMER
 APPROVED BY: C. REIMER
 RELEASED FOR CONSTRUCTION BY: [Signature]
 DATE: [Signature]

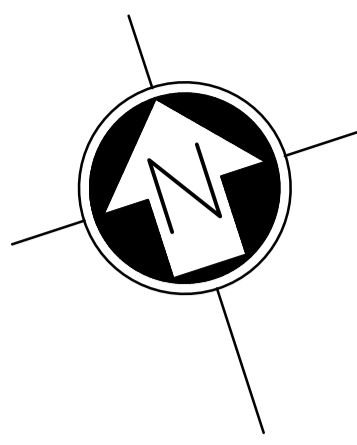
CONSULTANT NO.: 113291-0002-4700-0012

ENGINEER'S SEAL
PRELIMINARY
 NOT TO BE
 USED FOR
 CONSTRUCTION

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

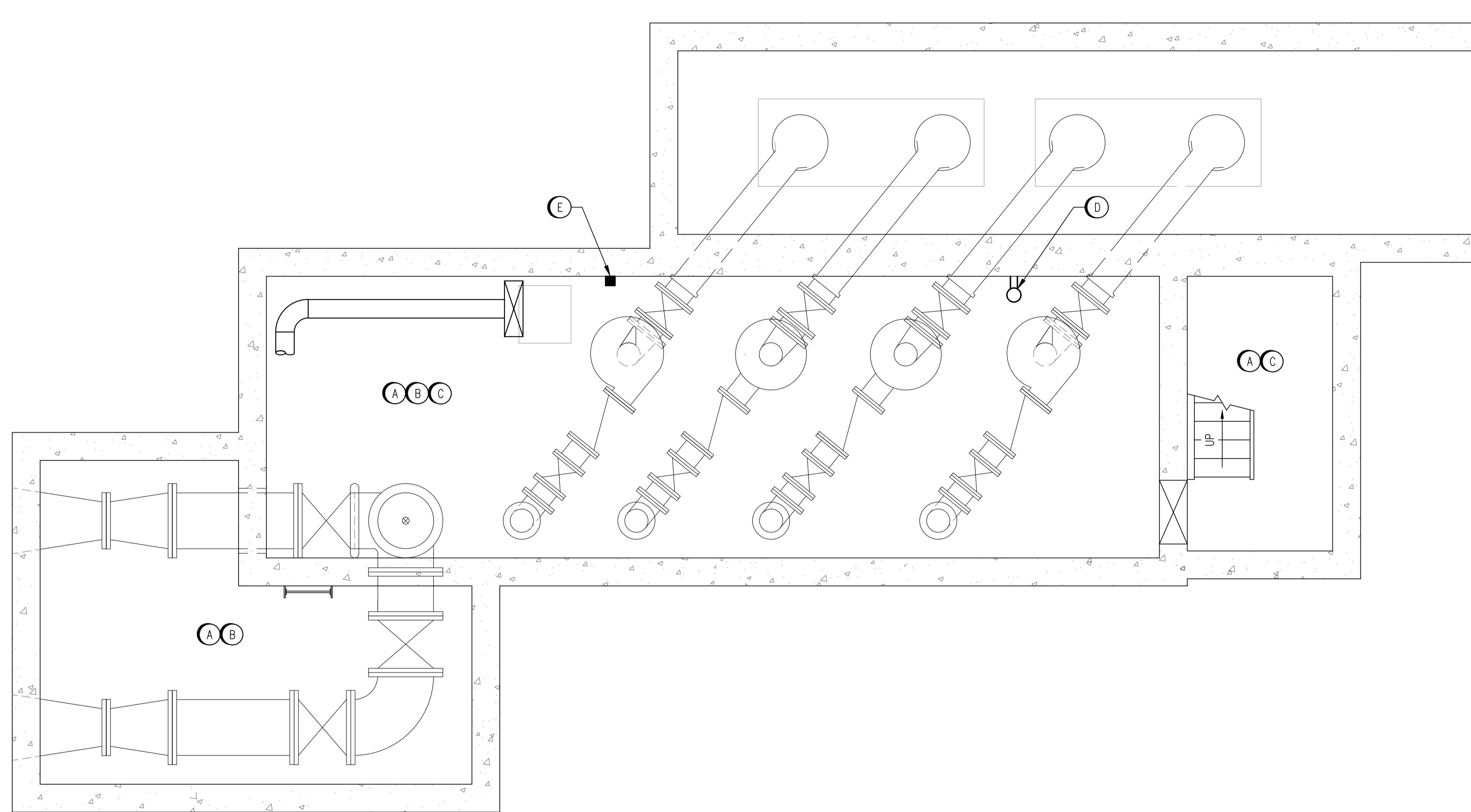
MONTCALM WASTEWATER PUMPING STATION
 PUMPING UPGRADES
 EQUIPMENT LAYOUT PLAN
 MOTOR AND COMMUNOTOR ROOM
 PRELIMINARY DESIGN

CITY DRAWING NUMBER: SK-012
 SHEET: 001
 REV.: 00
 SIZE: A1



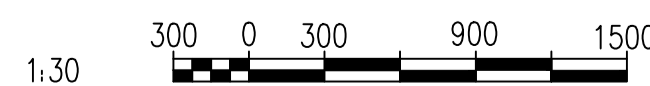
CONSTRUCTION NOTES:

- (A) REPLACE EXISTING INCANDESCENT LIGHTING WITH FLUORESCENT LIGHTING.
- (B) REPLACE EXISTING RECEPTACLES WITH WEATHERPROOF RECEPTACLES COMPLETE WITH COVERS.
- (C) INSTALL NEW EMERGENCY LIGHTING REMOTE FIXTURES.
- (D) INSTALL A NEW DIFFERENTIAL PRESSURE LEVEL SENSOR.
- (E) INSTALL A FLYGT BALL FLOOD SENSOR.



PUMP ROOM PLAN - ELEV. 220.360
SCALE: 1 : 30

DRAWING NUMBER	REFERENCE DRAWINGS
----------------	--------------------

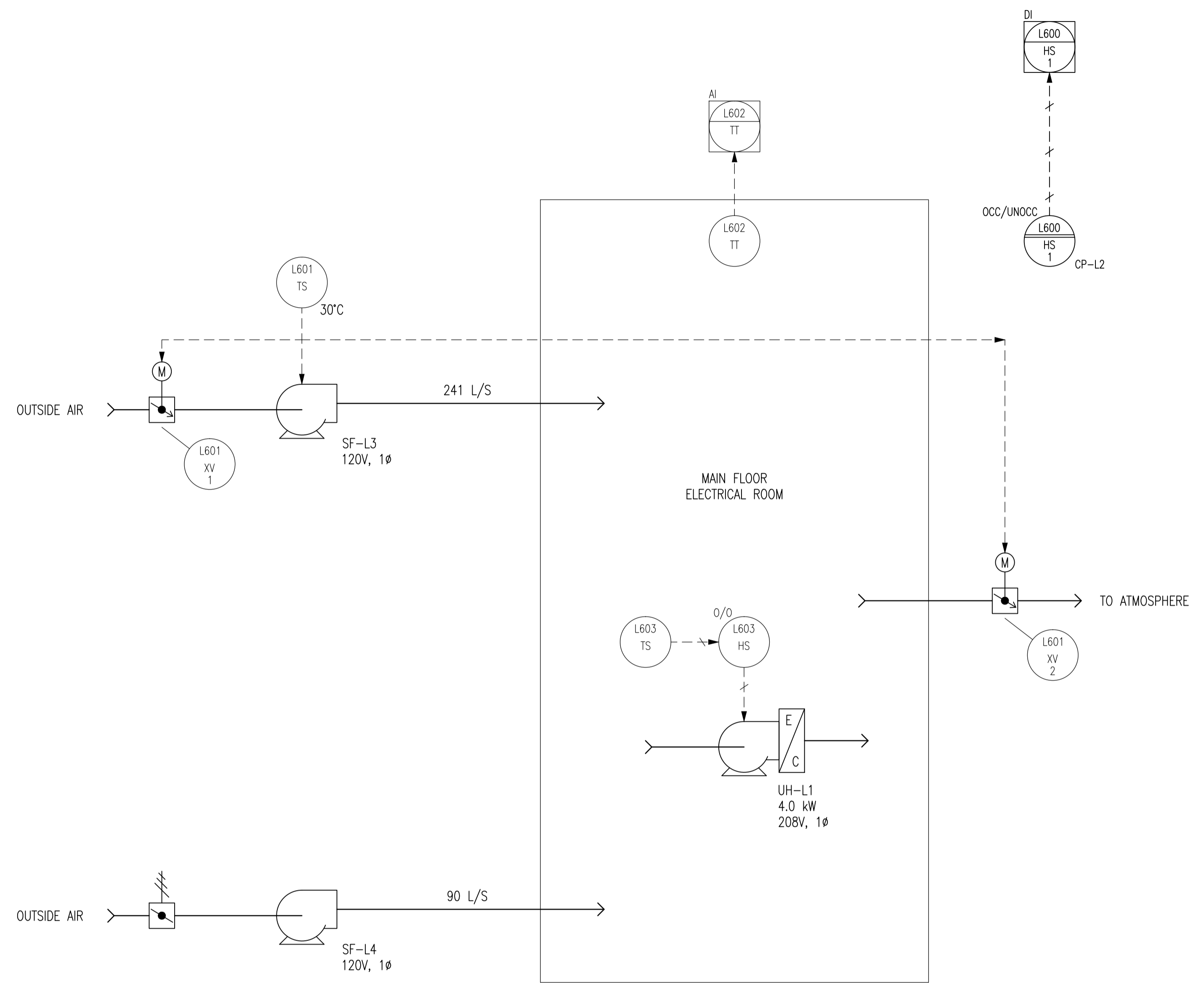


NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED WITH REPORT	2011/04/29	BC	CJR

<p>SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080</p>	
DESIGNED BY: B. CLEVEN	CHECKED BY: C. REIMER
DRAWN BY: D. RAMJEET/S. FUNK	APPROVED BY: C. REIMER
SCALE: 1:30	RELEASED FOR CONSTRUCTION BY: DATE:
DATE: 2009/09/24	DATE:
CONSULTANT NO.: 113291-0002-4700-0013	

ENGINEER'S SEAL
PRELIMINARY
NOT TO BE
USED FOR
CONSTRUCTION

<p>THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT</p>		
<p>MONTCALM WASTEWATER PUMPING STATION PUMPING UPGRADES EQUIPMENT LAYOUT PLAN PUMP ROOM PRELIMINARY DESIGN</p>		
CITY DRAWING NUMBER SK-013	SHEET 001	REV. 00
	SIZE A1	



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED WITH REPORT	2011/04/29	BC	SN

SNC-LAVALIN INC.
 148 Nature Park Way
 Winnipeg, MB, Canada R3P 0X7
 204-786-8080

DESIGNED BY: B. CLEVEN
 DRAWN BY: S. COATES
 SCALE: NTS
 DATE: 2010/05/21

CHECKED BY: S. NORSWORTHY
 APPROVED BY: C. REIMER
 RELEASED FOR CONSTRUCTION BY:
 DATE:

CONSULTANT NO.: 113291-0002-49DD-0020

ENGINEER'S SEAL

PRELIMINARY
 NOT TO BE
 USED FOR
 CONSTRUCTION

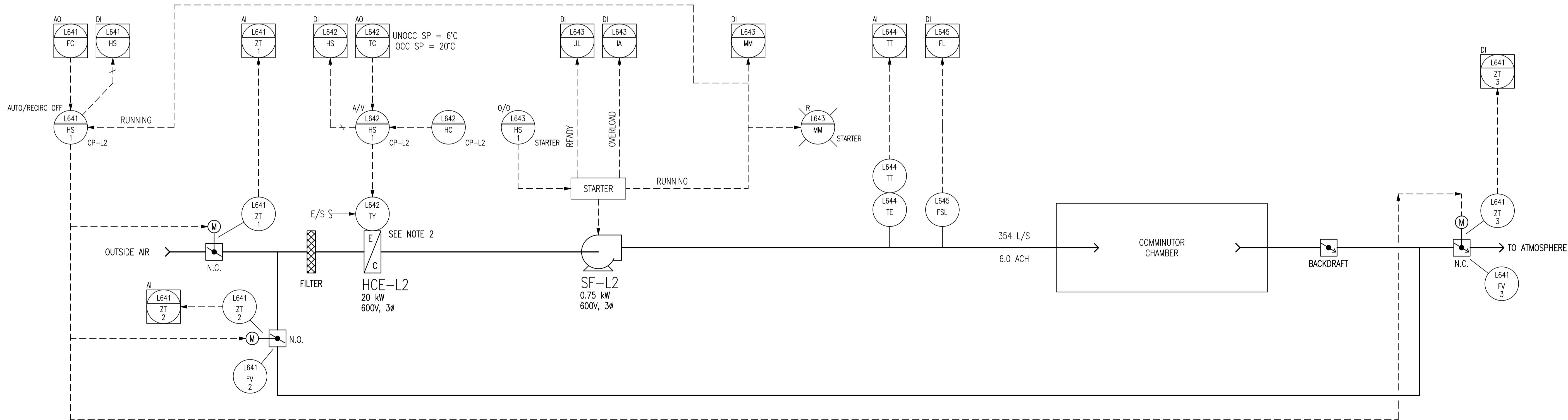
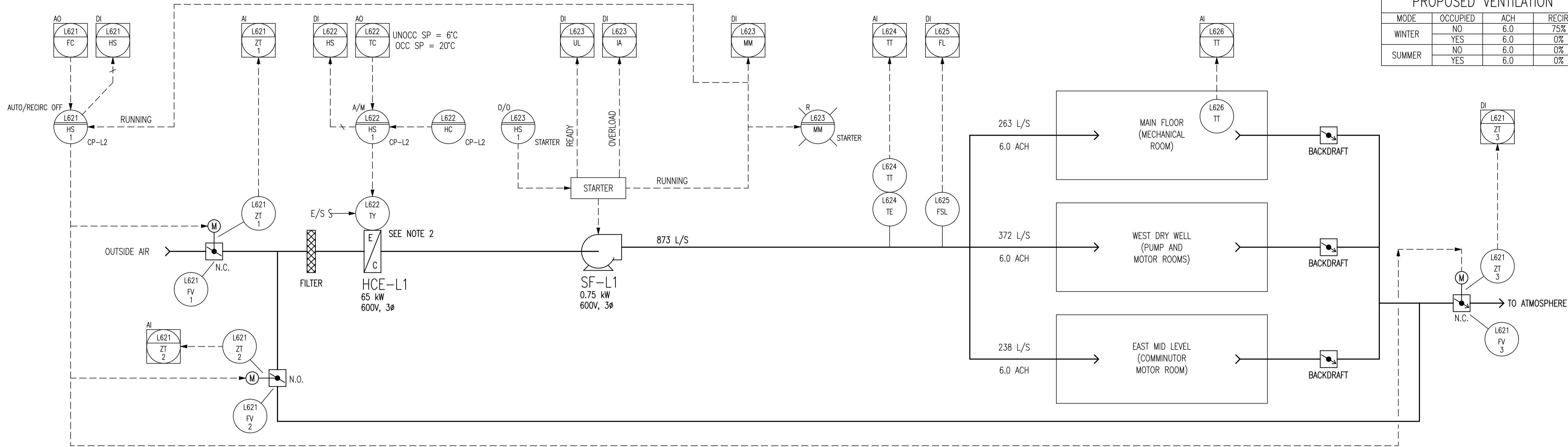
THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

MONTCALM WASTEWATER PUMPING STATION
 PUMPING UPGRADES
 PROCESS AND INSTRUMENTATION DIAGRAM
 VENTILATION - ELECTRICAL ROOM

CITY DRAWING NUMBER	SHEET	REV.	SIZE
SK-020	001	00	A1

SK-020.dwg

PROPOSED VENTILATION			
MODE	OCCUPIED	ACH	RECIRC
WINTER	NO	6.0	75%
	YES	6.0	0%
SUMMER	NO	6.0	0%
	YES	6.0	0%



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED WITH REPORT	2011/04/29	BC	SN

SNC-LAVALIN INC.
 148 Nature Park Way
 Winnipeg, MB, Canada R3P 0X7
 204-798-8080

DESIGNED BY: B. CLEVEN
 DRAWN BY: S. FUNK
 SCALE: NTS
 DATE: 2010/05/21

CHECKED BY: S. NORSWORTHY
 APPROVED BY: C. REIMER
 RELEASED FOR CONSTRUCTION BY:
 DATE:

CONSULTANT NO.: 113291-0002-49DD-0021

ENGINEER'S SEAL

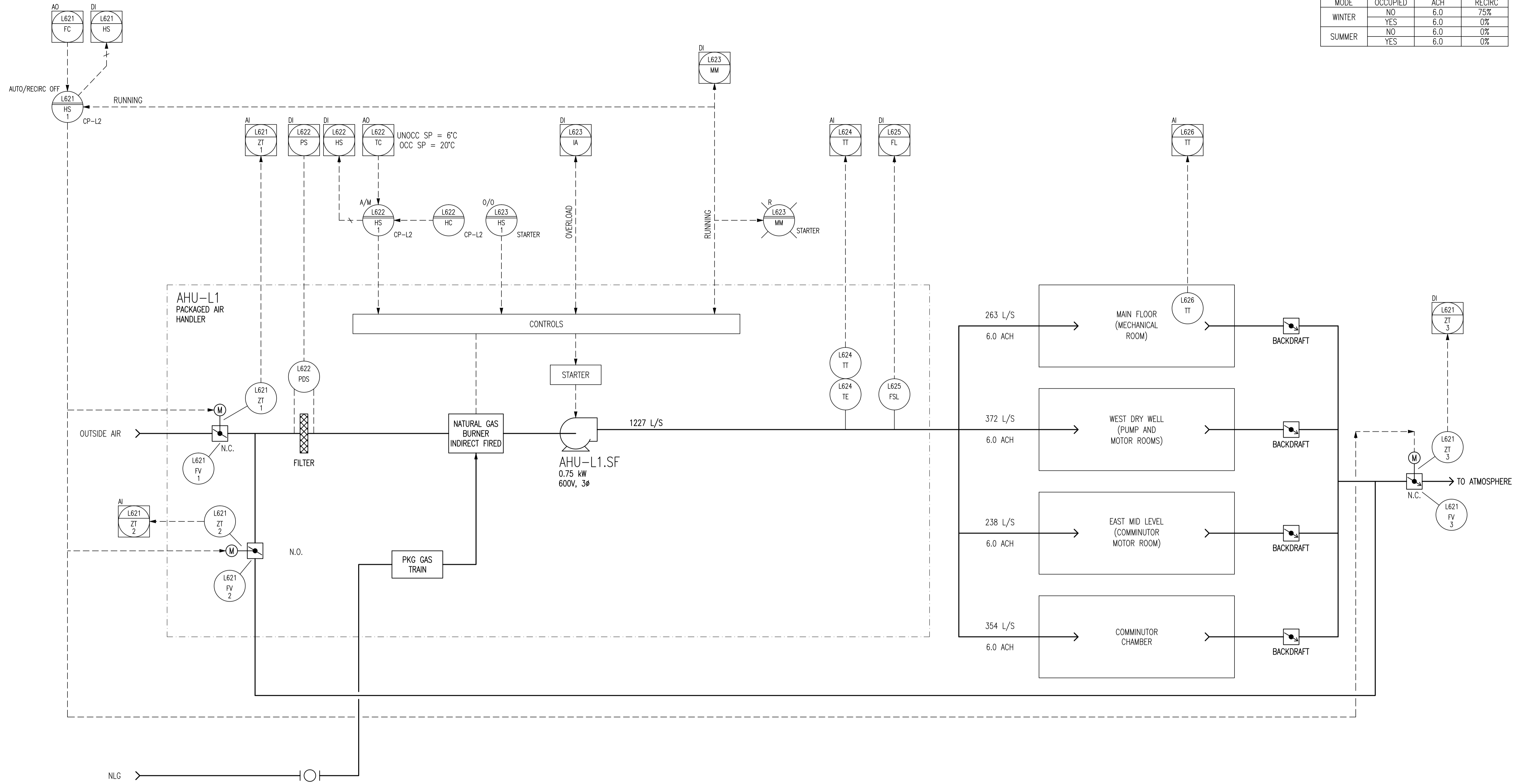
PRELIMINARY
 NOT TO BE
 USED FOR
 CONSTRUCTION

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

MONTCALM WASTEWATER PUMPING STATION
 PUMPING UPGRADES
 PROCESS AND INSTRUMENTATION DIAGRAM
 VENTILATION - SF-L1 AND SF-L2
 ELECTRIC HEAT ALTERNATIVE

CITY DRAWING NUMBER: SK-021
 SHEET: 001
 REV: 00
 SIZE: A1

PROPOSED VENTILATION			
MODE	OCCUPIED	ACH	RECIRC
WINTER	NO	6.0	75%
	YES	6.0	0%
SUMMER	NO	6.0	0%
	YES	6.0	0%



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED WITH REPORT	2011/04/29	CJR	SN

SNC-LAVALIN INC.
 148 Nature Park Way
 Winnipeg, MB, Canada R3P 0X7
 204-798-8080

DESIGNED BY: C. REIMER
 CHECKED BY: S. NORSWORTHY
 DRAWN BY: S. FUNK
 APPROVED BY: C. REIMER
 SCALE: NTS
 RELEASED FOR CONSTRUCTION BY: [Signature]
 DATE: 2011/02/10
 CONSULTANT NO.: 113291-0002-49DD-0022

ENGINEER'S SEAL
PRELIMINARY
 NOT TO BE USED FOR CONSTRUCTION

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

MONTCALM WASTEWATER PUMPING STATION
 PUMPING UPGRADES
 PROCESS AND INSTRUMENTATION DIAGRAM
 VENTILATION - AHU-L1
 NATURAL GAS HEAT ALTERNATIVE

CITY DRAWING NUMBER: SK-022
 SHEET: 001
 REV: 00
 SIZE: A1