

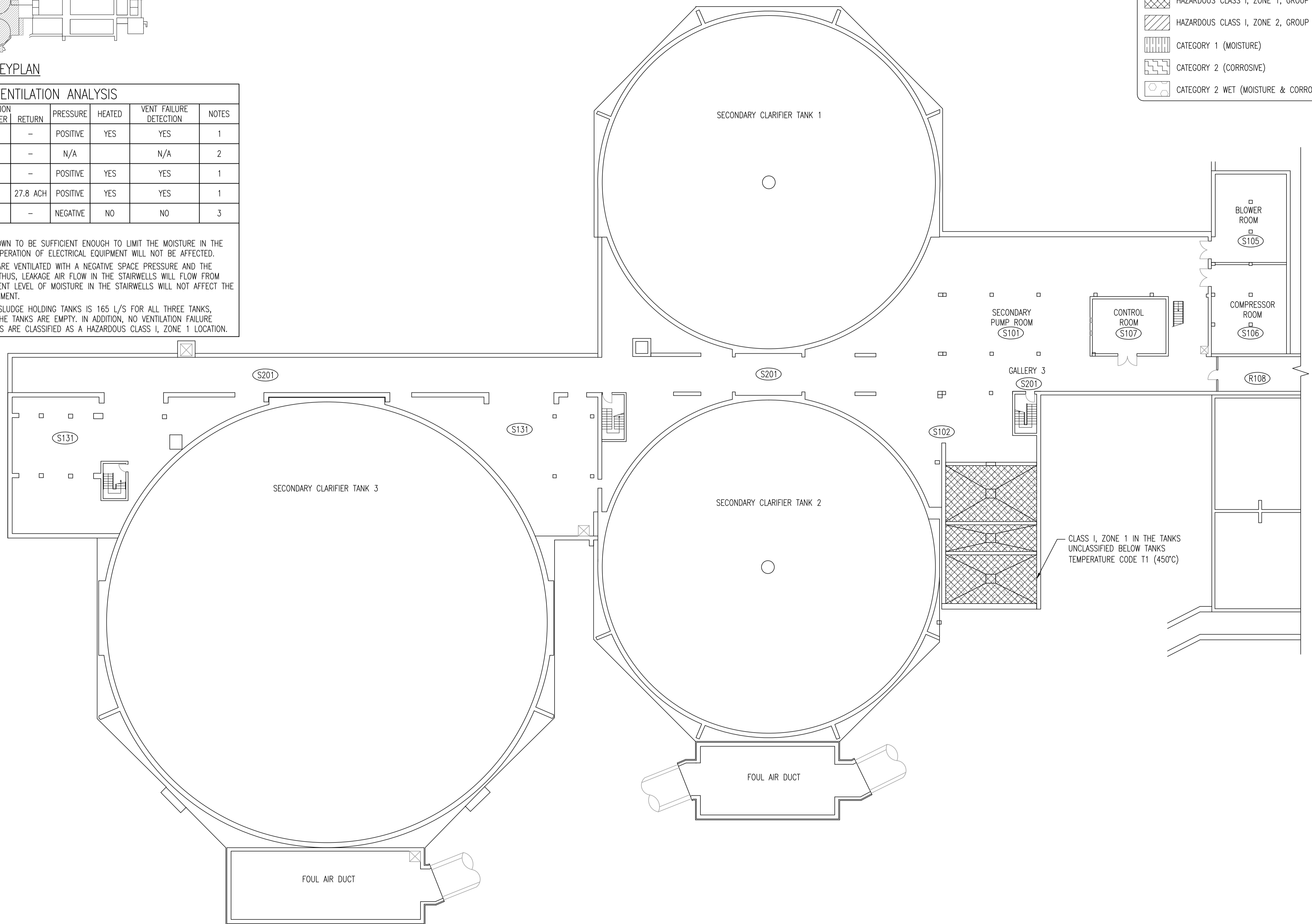
KEYPLAN

VENTILATION ANALYSIS							
SPACE	OUTDOOR	VENTILATION TRANSFER	RETURN	PRESSURE	HEATED	VENT FAILURE DETECTION	NOTES
LOWER LEVEL OF SECONDARY CLARIFIERS	~2.0 ACH	-	-	POSITIVE	YES	YES	1
STAIRWELLS	-	*	-	N/A		N/A	2
S105 BLOWER ROOM & S106 COMPRESSOR ROOM	4.4 ACH	-	-	POSITIVE	YES	YES	1
CONTROL ROOM	3.3 ACH	-	27.8 ACH	POSITIVE	YES	YES	1
SLUDGE HOLDING TANKS	165 L/S	-	-	NEGATIVE	NO	NO	3

SPECIFIC NOTES:

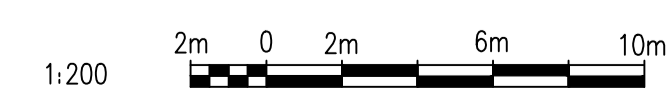
- THE EXISTING VENTILATION HAS BEEN SHOWN TO BE SUFFICIENT ENOUGH TO LIMIT THE MOISTURE IN THE SPACE TO LEVELS WHERE THE NORMAL OPERATION OF ELECTRICAL EQUIPMENT WILL NOT BE AFFECTED.
- THE SECONDARY CLARIFIER TANK AREAS ARE VENTILATED WITH A NEGATIVE SPACE PRESSURE AND THE LOWER LEVEL AT A POSITIVE PRESSURE. THUS, LEAKAGE AIR FLOW IN THE STAIRWELLS WILL FLOW FROM THE LOWER TO UPPER LEVEL. THE CURRENT LEVEL OF MOISTURE IN THE STAIRWELLS WILL NOT AFFECT THE NORMAL OPERATION OF ELECTRICAL EQUIPMENT.
- THE DESIGN VENTILATION RATE FOR THE SLUDGE HOLDING TANKS IS 165 L/S FOR ALL THREE TANKS, WHICH IS APPROXIMATELY 1 ACH WHEN THE TANKS ARE EMPTY. IN ADDITION, NO VENTILATION FAILURE DETECTION IS PROVIDED. THUS, THE TANKS ARE CLASSIFIED AS A HAZARDOUS CLASS I, ZONE 1 LOCATION.

LEGEND	
	HAZARDOUS CLASS I, ZONE 1, GROUP IIA
	HAZARDOUS CLASS I, ZONE 2, GROUP IIA
	CATEGORY 1 (MOISTURE)
	CATEGORY 2 (CORROSIVE)
	CATEGORY 2 WET (MOISTURE & CORROSIVE)



DRAWING NUMBER	REFERENCE DRAWINGS

NOTES:
 1. THE INDICATED VENTILATION RATES ARE BASED ON EXISTING DOCUMENTATION AND HAVE NOT BEEN VERIFIED VIA ONSITE TESTING.



APECM
 Certificate of Authorization
 SNC-Lavalin Inc.
 No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR TENDER, BID OPP. 209-2011	2011/03/31	TMC	CJR

SNC-LAVALIN INC.
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 RELEASED FOR CONSTRUCTION BY: N. HARRINGTON
 DATE: 2009/11/06
 DATE: 2011/03/31
 CONSULTANT NO.: 112577-0113-47DD-1600

ENGINEER'S SEAL
 ORIGINAL DRAWING
 SEALED BY:
 C. J. REIMER
 SNC-LAVALIN
 MEMBER #21968
 2011/03/31
 REV. 00

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
 ELECTRICAL CLASSIFICATION UPGRADES
 ELECTRICAL CLASSIFICATION PLAN
 SECONDARY CLARIFIERS - LOWER LEVEL

CITY DRAWING NUMBER: 1-0102S-E0018
 SHEET: 001
 REV: 00
 SIZE: A1