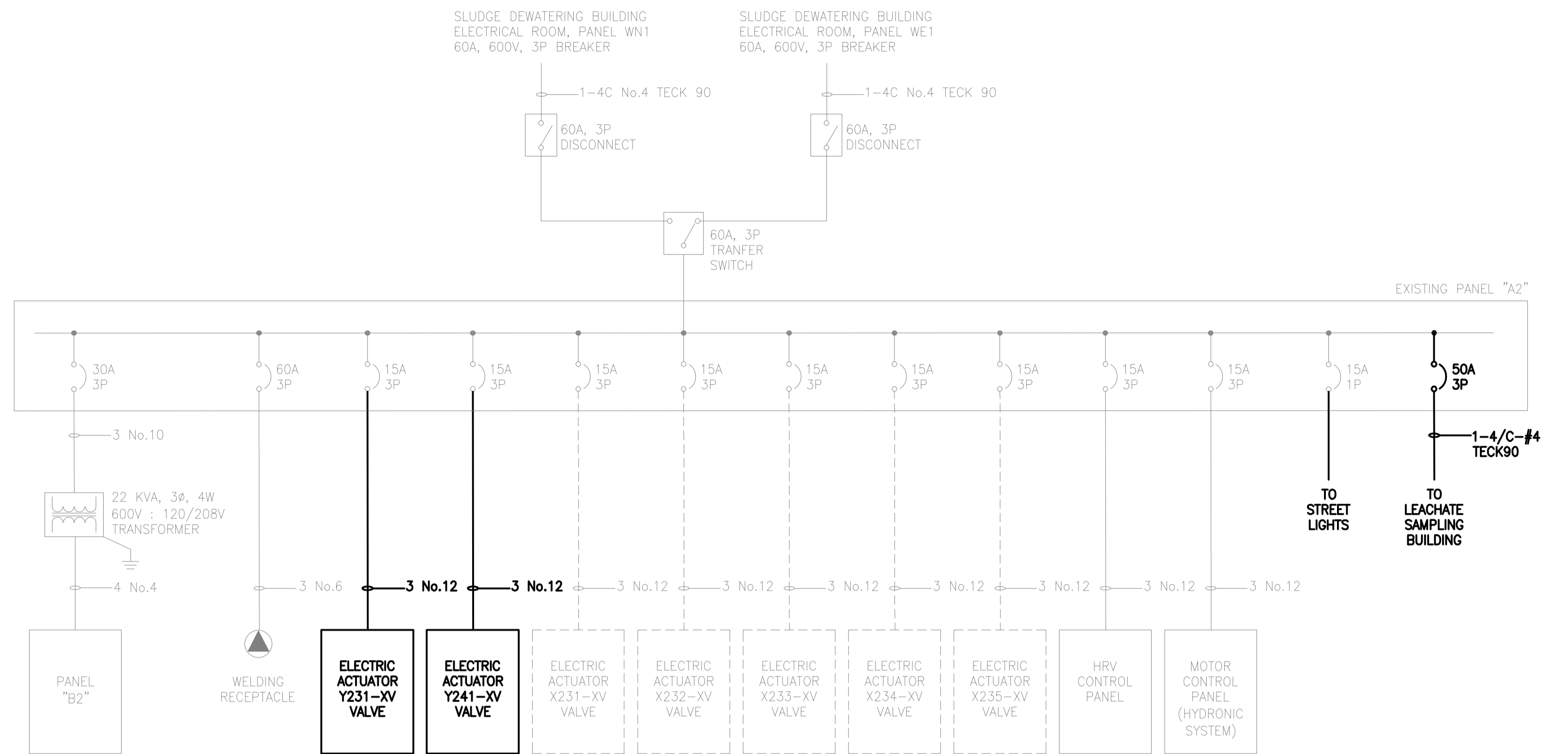


**1** HAULED WASTEWATER BUILDING NO. 1 - SINGLE LINE DIAGRAM  
E0013 N.T.S. (FORMERLY HAULED WASTEWATER BUILDING)



**2** HAULED WASTEWATER BUILDING NO. 2 - SINGLE LINE DIAGRAM  
E0013 N.T.S. (FORMERLY LEACHATE RECEIVING BUILDING)

PANEL "A1"		347/600V, 3ø, 4W				100 MAINS	
DESCRIPTION	CCT.	BRK AMP	A B C	BRK AMP	CCT.	DESCRIPTION	
TRANSFORMER 22kVA, 600/120-208V	1	30	— — —	15	2	VALVE Y221-XV ELECTRIC ACTUATOR	
VALVE Y211-XV ELECTRIC ACTUATOR	3	15	— — —	15	4		
HEAT RECOVERY VENTILATOR Y650-HRV CONTROL PANEL	5	15	— — —	15	6		
	7	15	— — —	15	8		
	9	15	— — —	15	10	MOTOR CONTROL PANEL (HYDRONIC SYSTEM)	
	11	15	— — —	15	12		
	13	15	— — —	15	14		
	15	15	— — —	60	16	WELDING RECEPTACLE	
	17	15	— — —	15	18		
	19	15	— — —	15	20	STREET LIGHTS	
	21	15	— — —	15	22		
	23	15	— — —	15	24		
	25	15	— — —	15	26		
	27	15	— — —	15	28		
	29	15	— — —	15	30		

PANEL "A1" SCHEDULE

PANEL "B1"		120/208V, 3ø, 4W				100A MAINS	
DESCRIPTION	CCT.	BRK AMP	A B C	BRK AMP	CCT.	DESCRIPTION	
INDOOR LIGHTING	1	15	— — —	15	2	INDOOR LIGHTING	
HOIST	3	15	— — —	15	4	EMERGENCY / EXIT LIGHTS	
RECEPTACLES	5	15	— — —	15	6	RECEPTACLES	
SAMPLER Y910-S REFRIGERATOR	7	15	— — —	15	8	SAMPLER Y920-S REFRIGERATOR	
SAMPLER Y910-S CONTROL PANEL	9	15	— — —	15	10	SAMPLER Y920-S CONTROL PANEL	
SPARE	11	15	— — —	15	12	BOILER Y611-B CONTROL PANEL	
TERMINATION PANEL DCS	13	15	— — —	15	14	BOILER Y612-B CONTROL PANEL	
SNOW MELTING CONTROL PANEL (DELETE)	15	15	— — —	15	16	SAMPLE ROOM RECEPTACLE	
HYDRONIC UNIT HEATER Y690-UH, Y695-UH	17	15	— — —	30	18	SUMP PUMP Y560-P	
	19	15	— — —	15	20		
AIR COMPRESSOR	21	30	— — —	15	22	EXHAUST FAN W680-EF	
	23	15	— — —	15	24		
	25	15	— — —	15	26	SAMPLE ROOM RECEPTACLE	
ELECTRIC WATER HEATER Y820-HWT (3kW)	27	15	— — —	15	28	TRAP PRIMER	
SPARE	29	15	— — —	15	30	GATES (LANE #1)	
GLYCOL TANK RECEPTACLE	31	15	— — —	15	32	GATES (LANE #2)	
FLUSHING WATER VALVE ACTUATOR Y781-XV	33	15	— — —	15	34	CARD READER + MONITOR (LANE #1)	
FLUSHING WATER VALVE ACTUATOR Y782-XV	35	15	— — —	15	36	CARD READER + MONITOR (LANE #2)	
FLUSHING WATER VALVE ACTUATOR Y783-XV	37	15	— — —	15	38	FLUSHING WATER VALVE ACTUATOR Y791-XV	
	39	15	— — —	15	40	FLUSHING WATER VALVE ACTUATOR Y792-XV	
	41	15	— — —	15	42	FLUSHING WATER VALVE ACTUATOR Y793-XV	

PANEL "B1" SCHEDULE

PANEL "A2"		347/600V, 3ø, 4W				100A MAINS	
DESCRIPTION	CCT.	BRK AMP	A B C	BRK AMP	CCT.	DESCRIPTION	
TRANSFORMER 22kVA, 600/120-208V	1	30	— — —	15	4	VALVE Y241-XV ELECTRIC ACTUATOR (REPLACE X211-XV ELECTRIC ACTUATOR)	
VALVE Y231-XV ELECTRIC ACTUATOR (REPLACE X221-XV ELECTRIC ACTUATOR)	3	15	— — —	15	6		
	5	15	— — —	15	8		
	7	15	— — —	15	10	VALVE X231-XV ELECTRIC ACTUATOR (DELETE)	
	9	15	— — —	15	12		
	11	15	— — —	15	14		
VALVE X232-XV ELECTRIC ACTUATOR (DELETE)	13	15	— — —	15	16	VALVE X233-XV ELECTRIC ACTUATOR (DELETE)	
	15	15	— — —	15	18		
	17	15	— — —	15	20		
	19	15	— — —	15	22	VALVE X234-XV ELECTRIC ACTUATOR (DELETE)	
	21	15	— — —	15	24	VALVE X235-XV ELECTRIC ACTUATOR (DELETE)	
	23	15	— — —	15	26		
	25	15	— — —	15	28		
HEAT RECOVERY VENTILATOR X650-HRV CONTROL PANEL	27	15	— — —	60	28	WELDING RECEPTACLE	
	29	15	— — —	15	30		
	31	15	— — —	15	32	STREET LIGHTS	
MOTOR CONTROL PANEL (HYDRONIC SYSTEM)	33	15	— — —	15	34		
	35	15	— — —	15	36		
	37	15	— — —	15	38		
LEACHATE SAMPLING BUILDING MAIN FEEDER	39	50	— — —	15	40		
	41	15	— — —	15	42		

PANEL "A2" SCHEDULE

PANEL "B2"		120/208V, 3ø, 4W				100A MAINS	
DESCRIPTION	CCT.	BRK AMP	A B C	BRK AMP	CCT.	DESCRIPTION	
INDOOR LIGHTING	1	15	— — —	15	2	INDOOR LIGHTING	
HOIST	3	15	— — —	15	4	EMERGENCY / EXIT LIGHTS	
RECEPTACLES	5	15	— — —	15	6	RECEPTACLES	
SAMPLER X910-S REFRIGERATOR	7	15	— — —	15	8	SAMPLER X920-S REFRIGERATOR	
SAMPLER X910-S CONTROL PANEL	9	15	— — —	15	10	SAMPLER X920-S CONTROL PANEL	
AIR COMPRESSOR	11	15	— — —	15	12	BOILER X611-B CONTROL PANEL	
TERMINATION PANEL DCS	13	15	— — —	15	14	BOILER X612-B CONTROL PANEL	
SNOW MELTING CONTROL PANEL	15	15	— — —	15	16	SAMPLE ROOM RECEPTACLE	
HYDRONIC UNIT HEATER X690-UH, X695-UH	17	15	— — —	30	18	SUMP PUMP X560-P	
	19	15	— — —	15	20		
ELECTRIC WATER HEATER X820-HWT (3kW)	21	15	— — —	15	22	EXHAUST FAN X680-EF	
SPARE	23	15	— — —	15	24		
CARD READER + MONITOR (LANE #3)	25	15	— — —	15	26	SAMPLE ROOM RECEPTACLE	
GATES (LANE #3)	27	15	— — —	15	28	TRAP PRIMER	
CARD READER + MONITOR (LANE #4)	29	15	— — —	15	30	GLYCOL TANK RECEPTACLE	
GATES (LANE #4)	31	15	— — —	15	32		
	33	15	— — —	15	34		
	35	15	— — —	15	36		
FLUSHING WATER VALVE ACTUATOR Y784-XV	37	15	— — —	15	38	FLUSHING WATER VALVE ACTUATOR Y794-XV	
FLUSHING WATER VALVE ACTUATOR Y785-XV	39	15	— — —	15	40	FLUSHING WATER VALVE ACTUATOR Y795-XV	
FLUSHING WATER VALVE ACTUATOR Y786-XV	41	15	— — —	15	42	FLUSHING WATER VALVE ACTUATOR Y796-XV	

PANEL "B2" SCHEDULE

**WARNING**

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:  
1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.  
2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.  
SEE PROVINCIAL REGULATION 140/92 FOR DETAILS



**METRIC**

WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED UNDERGROUND STRUCTURES		B.M. ELEV.
SUPV. U/G STRUCTURES COMMITTEE	DATE	
NOTE:	LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.	

NO.	REVISIONS	DATE	BY
3	ISSUED FOR TENDER	16.03.09	D.R.
2	ISSUED FOR TENDER REVIEW	16.03.07	D.R.
1	ISSUED FOR 95% REVIEW	16.01.29	D.R.

**Stantec**  
500-311 Portage Ave, Winnipeg MB Canada  
www.stantec.com

DESIGNED BY: D.R.	CHECKED BY: S.T.
DRAWN BY: Q.H.L.	APPROVED BY: S.K.B.
HOR. SCALE: VERTICAL:	RELEASED FOR CONSTRUCTION: DATE
DATE: 2016.01.12	DATE:

ENGINEER'S SEAL

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT

**Winnipeg**

**NORTH END SEWAGE TREATMENT PLANT (NEWPC)**  
HAULED LIQUID WASTE FACILITY PHASE II UPGRADE

**HAULED WASTEWATER BUILDINGS I&2**  
SINGLE LINE DIAGRAMS AND SCHEDULES

TENDER NO. 952-2015	CITY DRAWING NUMBER I-0101A-E0013-001	SHEET 3 OF 4
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