

Project Name: Metcalfe Lift Station Upgrade
Project Number: 22-0107-004
Client: City of Winnipeg
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Rev: 3

Instrument List

NEW/EXISTING	INSTRUMENT TAG NUMBER	DESCRIPTION	LOCATION	MOUNTING METHOD	SUPPLIED UNDER FORM B LINE ITEM	SPECIFICATION	P&ID	NOTES
NEW	ESL-L528	120 VAC POWER FAIL RELAY	MAIN FLOOR	PANEL	AUTOMATION	40 95 13	N/A	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81
NEW	ESL-L712	600 VAC POWER FAIL RELAY	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	-	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	FE-L012	LIFT PUMP P-L01 DISCHARGE FLOW METER	MOTOR ROOM	PIPE	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	FE-L022	LIFT PUMP P-L02 DISCHARGE FLOW METER	MOTOR ROOM	PIPE	AUTOMATION	40 91 00	1-0161L-P0001-002	
NEW	FE-L032	LIFT PUMP P-L03 DISCHARGE FLOW METER	MOTOR ROOM	PIPE	AUTOMATION	40 91 00	1-0161L-P0001-003	
NEW	FIT-L012	LIFT PUMP P-L01 DISCHARGE FLOW TRANSMITTER	MOTOR ROOM	WALL	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	FIT-L022	LIFT PUMP P-L02 DISCHARGE FLOW TRANSMITTER	MOTOR ROOM	WALL	AUTOMATION	40 91 00	1-0161L-P0001-002	
NEW	FIT-L032	LIFT PUMP P-L03 DISCHARGE FLOW TRANSMITTER	MOTOR ROOM	WALL	AUTOMATION	40 91 00	1-0161L-P0001-003	
NEW	FV-L641	MAIN FLOOR SUPPLY FAN SF-L64 INTAKE AIR DAMPER ACTUATOR	MAIN FLOOR	DAMPER	AUTOMATION	40 92 00	1-0161L-P0002-001	MODULATING, 24VAC POWER SUPPLY, 0-10VDC
NEW	FV-L642	MAIN FLOOR SUPPLY FAN SF-L64 RETURN/RECIRCULATION AIR DAMPER ACTUATOR	MAIN FLOOR	DAMPER	AUTOMATION	40 92 00	1-0161L-P0002-001	MODULATING, 24VAC POWER SUPPLY, 0-10VDC
NEW	FV-L651	MAIN FLOOR EXHAUST FAN EF-L65 AIR DAMPER ACTUATOR	MAIN FLOOR	DAMPER	AUTOMATION	40 92 00	1-0161L-P0002-001	MODULATING, 24VAC POWER SUPPLY, 0-10VDC
NEW	HS-L100	TOGGLE SWITCH	MAIN FLOOR	PANEL	AUTOMATION	40 95 13	1-0161L-P0001-001	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81
NEW	HS-L508-1	CONTROL PANEL CP-L81 PLC SELECT PUSHBUTTON	MAIN FLOOR	PANEL	AUTOMATION	40 95 13	-	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81
NEW	HS-L508-2	CONTROL PANEL CP-L81 LOCAL SELECT PUSHBUTTON	MAIN FLOOR	PANEL	AUTOMATION	40 95 13	-	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81
NEW	HS-L522	CONTROL PANEL CP-L81 ALARM TEST SWITCH	MAIN FLOOR	PANEL	AUTOMATION	40 95 13	-	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81
NEW	HS-L524-1	CONTROL PANEL CP-L81 RESET PUSHBUTTON	MAIN FLOOR	PANEL	AUTOMATION	40 95 13	-	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81
NEW	HS-L600	STATION OCCUPIED LIGHT SWITCH	MAIN FLOOR	WALL	ELECTRICAL	26 27 26	1-0161L-P0002-001	
NEW	HSR-L010	LIFT PUMP P-L01 START PUSHBUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-001	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71

NEW/EXISTING	INSTRUMENT TAG NUMBER	DESCRIPTION	LOCATION	MOUNTING METHOD	SUPPLIED UNDER FORM B LINE ITEM	SPECIFICATION	P&ID	NOTES
NEW	HSR-L020	LIFT PUMP P-L02 START PUSHBUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-002	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	HSR-L030	LIFT PUMP P-L03 START PUSHBUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-003	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	HSS-L010-1	LIFT PUMP P-L01 STOP PUSHBUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-001	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	HSS-L010-1	LIFT PUMP P-L01 EMERGENCY STOP BUTTON	MOTOR ROOM	WALL	AUTOMATION	40 90 01	1-0161L-P0001-001	
NEW	HSS-L010-2	LIFT PUMP P-L01 EMERGENCY STOP BUTTON	PUMP ROOM	WALL	AUTOMATION	40 90 01	1-0161L-P0001-001	
NEW	HSS-L010-4	LIFT PUMP P-L01 EMERGENCY STOP BUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 24 19	1-0161L-P0001-001	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	HSS-L020-1	LIFT PUMP P-L02 STOP PUSHBUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-002	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	HSS-L020-2	LIFT PUMP P-L02 EMERGENCY STOP BUTTON	MOTOR ROOM	WALL	AUTOMATION	40 90 01	1-0161L-P0001-002	
NEW	HSS-L020-3	LIFT PUMP P-L02 EMERGENCY STOP BUTTON	PUMP ROOM	WALL	AUTOMATION	40 90 01	1-0161L-P0001-002	
NEW	HSS-L020-4	LIFT PUMP P-L02 EMERGENCY STOP BUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 24 19	1-0161L-P0001-002	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	HSS-L030-1	LIFT PUMP P-L03 STOP PUSHBUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-003	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	HSS-L030-2	LIFT PUMP P-L03 EMERGENCY STOP BUTTON	MOTOR ROOM	WALL	AUTOMATION	40 90 01	1-0161L-P0001-003	
NEW	HSS-L030-3	LIFT PUMP P-L03 EMERGENCY STOP BUTTON	PUMP ROOM	WALL	AUTOMATION	40 90 01	1-0161L-P0001-003	
NEW	HSS-L030-4	LIFT PUMP P-L03 EMERGENCY STOP BUTTON	MAIN FLOOR	MCC	ELECTRICAL	26 24 19	1-0161L-P0001-003	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	KQI-L010	LIFT PUMP P-L01 RUN TIME COUNTER	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-001	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	KQI-L020	LIFT PUMP P-L02 RUN TIME COUNTER	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-002	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	KQI-L030	LIFT PUMP P-L03 RUN TIME COUNTER	MAIN FLOOR	MCC	ELECTRICAL	26 29 10	1-0161L-P0001-003	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	LG-L100-1	WET WELL LEVEL GAUGE '1'	PUMP ROOM	WALL	MECHANICAL	N/A	1-0161L-P0001-001	REFER TO MECHANICAL DRAWING 1-0162L-M0012-001
NEW	LG-L100-2	WET WELL LEVEL GAUGE '2'	PUMP ROOM	WALL	MECHANICAL	N/A	1-0161L-P0001-001	REFER TO MECHANICAL DRAWING 1-0162L-M0012-001
NEW	LIC-L100-1	WET WELL LEVEL CONTROLLER	MAIN FLOOR	PANEL	AUTOMATION	40 92 00	1-0161L-P0001-001	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81

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NEW	LIC-L100-2	WET WELL LEVEL CONTROLLER	MAIN FLOOR	PANEL	AUTOMATION	40 92 00	1-0161L-P0001-001	INTEGRAL TO CP-L81, SUPPLIED WITH CONTROL PANEL CP-L81
NEW	LIT-L100-1	WET WELL LEVEL TRANSMITTER '1'	PUMP ROOM	PIPE	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	LIT-L100-2	WET WELL LEVEL TRANSMITTER '2'	PUMP ROOM	PIPE	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	LSHH-L101	WET WELL HIGH HIGH LEVEL SWITCH	WET WELL	SUSPENDED	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	LSH-L501	PUMP ROOM FLOOD SWITCH	PUMP ROOM	SUSPENDED	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	LSH-L502	COMMINUTOR CHAMBER FLOOD SWITCH	COMMINUTOR CHAMBER	SUSPENDED	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	MCC-L71.PM	MCC-L71 600 VAC POWER METER	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	-	
NEW	PDSH-L660	MAIN FLOOR SUPPLY DUCT FILTER FIL-L66 AIR FILTER PLUGGED SWITCH	MAIN FLOOR	DUCT	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	PSL-L526	STATION MAIN WATER LOW PRESSURE SWITCH	MAIN FLOOR	PIPE	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TC-L681	MAIN FLOOR AIR CONDITIONING UNIT AC-L68 THERMOSTAT	MAIN FLOOR	WALL	MECHANICAL	23 81 23	1-0161L-P0002-001	SUPPLIED WITH AIR CONDITIONING UNIT AC-L68
NEW	TE-L010-1	LIFT PUMP P-L01 UPPER BEARING (MOTOR SIDE NON-DRIVE END) TEMPERATURE SENSOR	MOTOR ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-001	
NEW	TE-L010-2	LIFT PUMP P-L01 LOWER BEARING (PUMP SIDE DRIVE END) TEMPERATURE SENSOR	PUMP ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-001	
NEW	TE-L020-1	LIFT PUMP P-L02 UPPER BEARING (MOTOR SIDE NON-DRIVE END) TEMPERATURE SENSOR	MOTOR ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-002	
NEW	TE-L020-2	LIFT PUMP P-L02 LOWER BEARING (PUMP SIDE DRIVE END) TEMPERATURE SENSOR	PUMP ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-002	
NEW	TE-L030-1	LIFT PUMP P-L03 UPPER BEARING (MOTOR SIDE NON-DRIVE END) TEMPERATURE SENSOR	MOTOR ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-003	
NEW	TE-L030-2	LIFT PUMP P-L03 LOWER BEARING (PUMP SIDE DRIVE END) TEMPERATURE SENSOR	PUMP ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-003	
NEW	TE-L600	MAIN FLOOR SUPPLY DUCT TEMPERATURE SENSOR	MAIN FLOOR	DUCT	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TIC-L600	MAIN FLOOR HVAC TEMPERATURE CONTROLLER	MAIN FLOOR	WALL	AUTOMATION	40 92 00	1-0161L-P0002-001	
NEW	TSH-L011	LIFT PUMP P-L01 MOTOR HIGH TEMPERATURE SWITCH	MOTOR ROOM	MOTOR	MECHANICAL	TENDER	1-0161L-P0001-001	
NEW	TSH-L021	LIFT PUMP P-L02 MOTOR HIGH TEMPERATURE SWITCH	MOTOR ROOM	MOTOR	MECHANICAL	TENDER	1-0161L-P0001-002	

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NEW	TSH-L031	LIFT PUMP P-L03 MOTOR HIGH TEMPERATURE SWITCH	MOTOR ROOM	MOTOR	MECHANICAL	TENDER	1-0161L-P0001-003	
NEW	TSH-L600	MAIN FLOOR HIGH TEMPERATURE SWITCH	MAIN FLOOR	CEILING	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TS-L631	PUMP ROOM UNIT HEATER UH-L63 THERMOSTAT	MOTOR ROOM	WALL	MECHANICAL	23 82 40	1-0161L-P0002-001	SUPPLIED WITH UNIT HEATER UH-L63
NEW	TSL-L600	MAIN FLOOR OUTDOOR LOW TEMPERATURE SWITCH	MAIN FLOOR	CEILING	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TT-L010-1	LIFT PUMP P-L01 UPPER BEARING (MOTOR SIDE NON-DRIVE END) TEMPERATURE TRANSMITTER	MOTOR ROOM	PANEL	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	TT-L010-2	LIFT PUMP P-L01 LOWER BEARING (PUMP SIDE DRIVE END) TEMPERATURE TRANSMITTER	PUMP ROOM	PANEL	AUTOMATION	40 91 00	1-0161L-P0001-001	
NEW	TT-L020-1	LIFT PUMP P-L02 UPPER BEARING (MOTOR SIDE NON-DRIVE END) TEMPERATURE TRANSMITTER	MOTOR ROOM	PANEL	AUTOMATION	40 91 00	1-0161L-P0001-002	
NEW	TT-L020-2	LIFT PUMP P-L02 LOWER BEARING (PUMP SIDE DRIVE END) TEMPERATURE TRANSMITTER	PUMP ROOM	PANEL	AUTOMATION	40 91 00	1-0161L-P0001-002	
NEW	TT-L030-1	LIFT PUMP P-L03 UPPER BEARING (MOTOR SIDE NON-DRIVE END) TEMPERATURE TRANSMITTER	MOTOR ROOM	PANEL	AUTOMATION	40 91 00	1-0161L-P0001-003	
NEW	TT-L030-2	LIFT PUMP P-L03 LOWER BEARING (PUMP SIDE DRIVE END) TEMPERATURE TRANSMITTER	PUMP ROOM	PANEL	AUTOMATION	40 91 00	1-0161L-P0001-003	
NEW	TT-L671	MOTOR ROOM TEMPERATURE TRANSMITTER	MOTOR ROOM	WALL	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TT-L681	PUMP ROOM TEMPERATURE TRANSMITTER	PUMP ROOM	WALL	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TT-L691	MAIN FLOOR TEMPERATURE TRANSMITTER	MAIN FLOOR	CEILING	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TT-L692	MAIN FLOOR OUTDOOR TEMPERATURE TRANSMITTER	OUTDOOR	WALL	AUTOMATION	40 91 00	1-0161L-P0002-001	
NEW	TY-L611	MAIN FLOOR DUCT HEATER HCE-L61 SCR CONTROLLER	MAIN FLOOR	DUCT	MECHANICAL	23 82 40	1-0161L-P0002-001	
NEW	VE-L010-1	LIFT PUMP P-L01 UPPER BEARING (MOTOR SIDE NON-DRIVE END) VIBRATION SENSOR	MOTOR ROOM	MOTOR BEARING	MECHANICAL	TENDER	1-0161L-P0001-001	
NEW	VE-L010-2	LIFT PUMP P-L01 LOWER BEARING (PUMP SIDE DRIVE END) VIBRATION SENSOR	PUMP ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-001	
NEW	VE-L020-1	LIFT PUMP P-L02 UPPER BEARING (MOTOR SIDE NON-DRIVE END) VIBRATION SENSOR	MOTOR ROOM	MOTOR BEARING	MECHANICAL	TENDER	1-0161L-P0001-002	
NEW	VE-L020-2	LIFT PUMP P-L02 LOWER BEARING (PUMP SIDE DRIVE END) VIBRATION SENSOR	PUMP ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-002	
NEW	VE-L030-1	LIFT PUMP P-L03 UPPER BEARING (MOTOR SIDE NON-DRIVE END) VIBRATION SENSOR	MOTOR ROOM	MOTOR BEARING	MECHANICAL	TENDER	1-0161L-P0001-003	

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NEW	VE-L030-2	LIFT PUMP P-L03 LOWER BEARING (PUMP SIDE DRIVE END) VIBRATION SENSOR	PUMP ROOM	PUMP BEARING	MECHANICAL	TENDER	1-0161L-P0001-003	
NEW	VIC-L010-1	LIFT PUMP P-L01 UPPER BEARING (MOTOR SIDE NON-DRIVE END) VIBRATION INDICATING CONTROLLER	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	1-0161L-P0001-001	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	VIC-L010-2	LIFT PUMP P-L01 LOWER BEARING (PUMP SIDE DRIVE END) VIBRATION INDICATING CONTROLLER	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	1-0161L-P0001-001	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	VIC-L020-1	LIFT PUMP P-L02 UPPER BEARING (MOTOR SIDE NON-DRIVE END) VIBRATION INDICATING CONTROLLER	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	1-0161L-P0001-002	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	VIC-L020-2	LIFT PUMP P-L02 LOWER BEARING (PUMP SIDE DRIVE END) VIBRATION INDICATING CONTROLLER	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	1-0161L-P0001-002	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	VIC-L030-1	LIFT PUMP P-L03 UPPER BEARING (MOTOR SIDE NON-DRIVE END) VIBRATION INDICATING CONTROLLER	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	1-0161L-P0001-003	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	VIC-L030-2	LIFT PUMP P-L03 LOWER BEARING (PUMP SIDE DRIVE END) VIBRATION INDICATING CONTROLLER	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	1-0161L-P0001-003	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71
NEW	XS-L711	MCC-L72 TRANSIENT VOLTAGE SURGE SUPPRESSOR SWITCH	MAIN FLOOR	PANEL	ELECTRICAL	26 24 19	-	INTEGRAL TO MCC-L71, SUPPLIED WITH MCC-L71