



# 1070-2019 ADDENDUM 3

## ELECTRICAL & HVAC UPGRADES AT MCPHILLIPS & TACHE PUMPING STATIONS

### URGENT

**PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE TENDER**

ISSUED: 2020-01-14  
BY: Vivek Elimban  
TELEPHONE NO. 204 786-8080

**THIS ADDENDUM SHALL BE INCORPORATED INTO THE TENDER AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS**

Template Version: A20190115

**Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Tender, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid may render your Bid non-responsive.**

### PART B – BIDDING PROCEDURES

Revise: B18.4 to read: Further to B18.1(c), where the Total Bid Price exceeds the estimate stated in D2.4, the City may determine that no award will be made in accordance with B19.2.1.

### PART E – SPECIFICATIONS

Revise: E1.6: Drawing table for McPhillips Regional Pumping Station and Tache Booster Pumping Station is updated as follows. Revised or additional Drawings are shown in **BOLD**.

<i>Drawings</i>			
<b>McPhillips Station</b>			
<i>Drawing Number</i>	<i>Sheet</i>	<i>Rev No.</i>	<i>Drawing Name and Title</i>
			<b>Main Pumping Station "M" MCC REPLACEMENT / HVAC Upgrade</b>
1-0640M-E0001	-001	02	ELECTRICAL SINGLE LINE DIAGRAM, LEGEND & DETAILS
1-0640M-E0002	-001	05	ELECTRICAL SINGLE LINE DIA7GRAM, 4160 V DISTRIBUTION
1-0640M-E0003	-001	05	ELECTRICAL SINGLE LINE DIAGRAM, 600V GENERATORS AND SWITCHGEAR
1-0640M-E0004	-001	05	ELECTRICAL SINGLE LINE DIAGRAM, 600V DISTRIBUTION
1-0640M-E0011	-001	05	SINGLE LINE DIAGRAM & LAYOUT, REMOVALS & INSTALLATIONS
1-0640M-E0013	-001	03	ELECTRICAL EQUIPMENT PLAN, ELECTRICAL & CONTROL ROOMS - DEMOLITION
1-0640M-E0014	-001	02	ELECTRICAL EQUIPMENT PLAN, GENERATOR ROOM
1-0640M-E0015	-001	02	ELECTRICAL EQUIPMENT ELEVATIONS, 4160V SWITCHGEAR & 600V SWITCHGEAR/MCC
<b>1-0640M-E0016</b>	<b>-001</b>	<b>02</b>	<b>CONTROL SCHEMATIC, 4160V MAIN BREAKER</b>
<b>1-0640M-E0017</b>	<b>-001</b>	<b>03</b>	<b>THREE LINE DIAGRAM, 4160V MAIN BREAKER</b>
1-0640M-E0020	-001	02	ELECTRICAL SINGLE LINE DIAGRAM, MISCELLANEOUS DISTRIBUTION
1-0640M-E0025	-001	01	CONNECTION DIAGRAM AND DETAILS, ATS-M2E, TRANSFER SWITCH
1-0640M-E0030	-001	00	ELECTRICAL SINGLE LINE DIAGRAM, OVERVIEW
1-0640M-E0032	-001	00	ELECTRICAL SINGLE LINE DIAGRAM, PUMPHOUSE, MCC-M710
1-0640M-E0033	-001	00	ELECTRICAL PANEL LAYOUT, PUMPHOUSE, MCC-M710 LAYOUT AND SCHEDULE
1-0640M-E0034	-001	00	ELECTRICAL SINGLE LINE DIAGRAM, PUMPHOUSE, MCC-M720
1-0640M-E0035	-001	00	ELECTRICAL PANEL LAYOUT, PUMPHOUSE, MCC-M720 LAYOUT AND SCHEDULE
1-0640M-E0036	-001	00	ELECTRICAL SINGLE LINE DIAGRAM, PUMPHOUSE, MCC-M730E
1-0640M-E0037	-001	00	ELECTRICAL PANEL LAYOUT, PUMPHOUSE, MCC-M730E LAYOUT AND SCHEDULE

1-0640M-E0039	-001	00	ELECTRICAL EQUIPMENT PLAN, ELECTRICAL & CONTROL ROOMS - FINAL CONFIGURATION
<b>1-0640M-E0040</b>	<b>-001</b>	<b>01</b>	<b>ELECTRICAL EQUIPMENT PLAN, MEZZANINE LEVEL</b>
<b>1-0640M-E0041</b>	<b>-001</b>	<b>01</b>	<b>ELECTRICAL EQUIPMENT PLAN, LOWER LEVEL</b>
1-0640M-E0042	-001	00	PANELBOARD SCHEDULE
<b>1-0640M-E0042</b>	<b>-002</b>	<b>01</b>	<b>PANELBOARD &amp; LUMINAIRE SCHEDULE</b>
1-0640M-E0043	-001	00	ELECTRICAL GROUNDING, INSTALLATION DETAILS
1-0640M-E0044	-001	00	ELECTRICAL GROUNDING, RISER DIAGRAM
<b>1-0640M-E0045</b>	<b>-001</b>	<b>01</b>	<b>ELECTRICAL GROUNDING LAYOUT, MAIN FLOOR PLAN</b>
1-0640M-E0046	-001	00	CONSTRUCTION PLAN, PHASE 1
1-0640M-E0047	-001	00	CONSTRUCTION PLAN, PHASE 2
1-0640M-E0048	-001	00	CONSTRUCTION PLAN, PHASE 3
1-0640M-E0049	-001	00	ELECTRICAL LIGHTING PLAN, PUMPHOUSE, LOWER LEVEL
1-0640M-E0050	-001	00	ELECTRICAL LIGHTING PLAN, PUMPHOUSE, MEZZANINE LEVEL
1-0640M-E0051	-001	00	ELECTRICAL FIRE ALARM PLAN, PUMPHOUSE LOWER LEVEL, DEMOLITION
1-0640M-E0052	-001	00	ELECTRICAL FIRE ALARM PLAN, PUMPHOUSE MEZZANINE LEVEL, DEMOLITION
1-0640M-E0053	-001	00	ELECTRICAL FIRE ALARM PLAN, PUMPHOUSE, LOWER LEVEL
1-0640M-E0054	-001	00	ELECTRICAL FIRE ALARM PLAN, PUMPHOUSE, MEZZANINE LEVEL
1-0640M-E0055	-001	00	ELECTRICAL FIRE ALARM, RISER DIAGRAM, DETECTION CIRCUITS
1-0640M-E0056	-001	00	ELECTRICAL FIRE ALARM, RISER DIAGRAM, NOTIFICATION CIRCUITS
1-0640M-E0057	-001	00	ELECTRICAL FIRE ALARM, LEGEND AND DETAILS
<b>1-0640M-E0058</b>	<b>-001</b>	<b>01</b>	<b>SWITCHGEAR SGR-M1 DETAILS</b>
1-0640M-E0070	-001	00	MOTOR STARTER SCHEMATIC, SP1, SUMP PUMP
1-0640M-E0071	-001	00	MOTOR STARTER SCHEMATIC, SP2, SUMP PUMP
1-0640M-E0072	-001	00	MOTOR STARTER SCHEMATIC, AC1, INSTRUMENT AIR COMPRESSOR
1-0640M-E0073	-001	00	MOTOR STARTER SCHEMATIC, AC2, INSTRUMENT AIR COMPRESSOR
1-0640M-E0074	-001	00	MOTOR STARTER SCHEMATIC, FN1, SUPPLY FAN
1-0640M-E0074	-002	00	CONNECTION DIAGRAM, FN1, SUPPLY FAN
1-0640M-E0075	-001	00	MOTOR STARTER SCHEMATIC, FN2, SUPPLY FAN
1-0640M-E0075	-002	00	CONNECTION DIAGRAM, FN2, SUPPLY FAN
1-0640M-E0076	-001	00	MOTOR STARTER SCHEMATIC, FN3, SUPPLY FAN
1-0640M-E0076	-002	00	CONNECTION DIAGRAM, FN3, SUPPLY FAN
1-0640M-E0077	-001	00	MOTOR STARTER SCHEMATIC, P-M641, CHILLED WATER PUMP
1-0640M-E0078	-001	00	MOTOR STARTER SCHEMATIC, P-M642, CHILLED WATER PUMP
1-0640M-E0079	-001	00	HEATER SCHEMATIC, HCE-M601, DUCT HEATER
1-0640M-M0005	-001	00	MECHANICAL, BUILDING CHILLER, DEMOLITION PLANS
1-0640M-M0006	-001	00	MECHANICAL, CHLR-M640, ELEV. 228.295 PART PLAN
1-0640M-M0007	-001	00	MECHANICAL, CHLR-M640, ELEV. 233.020 PART PLAN
1-0640M-M0008	-001	00	MECHANICAL, CHLR-M640, SECTIONS AND DETAILS
1-0640M-M0009	-001	00	MECHANICAL, CHLR-M640, PROCESS FLOW DIAGRAM AND EQUIPMENT SCHEDULES
		00	
<b>1-0640M-P0012</b>	<b>-001</b>	<b>02</b>	<b>PROCESS AND INSTRUMENTATION DIAGRAM, MISCELLANEOUS</b>
1-0640M-P0013	-001	00	PROCESS AND INSTRUMENTATION DIAGRAM, PUMPING STATION HVAC
1-0640M-P0014	-001	00	MECHANICAL, CHILLER SYSTEM, PROCESS AND INSTRUMENTATION DIAGRAM
1-0640M-P0015	-001	00	MECHANICAL, ELECTRICAL ROOM HVAC, PROCESS AND INSTRUMENTATION DIAGRAM
		00	
1-0640M-A0035	-001	00	PANEL LAYOUT, LCP-M500 (AC1 AND AC2), INSTRUMENT AIR COMPRESSOR CONTROL PANEL
1-0640M-A0036	-001	00	PANEL LAYOUT, LCP-M540, SUMP PUMP SP1 & SP2 CONTROL PANEL
1-0640M-A0037	-001	00	PANEL LAYOUT, JUNCTION BOXES
1-0640M-A0038	-001	00	JUNCTION BOX LAYOUT, JBA-M6144
1-0640M-A0048	-001	00	INSTRUMENTATION PLAN – DEMO & NEW WORK, MEZZANINE LEVEL
1-0640M-A0049	-001	00	INSTRUMENTATION PLAN – DEMO AND NEW WORK, LOWER LEVEL
1-0640M-A0050	-001	00	PANEL LAYOUT, HVAC CONTROL PANEL CP-M826
1-0640M-A0050	-002	00	PANEL LAYOUT, HVAC CONTROL PANEL CP-M826
<b>1-0640M-A0051</b>	<b>-001</b>	<b>01</b>	<b>POWER DISTRIBUTION, HVAC CONTROL PANEL CP-M826</b>
<b>1-0640M-A0052</b>	<b>-001</b>	<b>01</b>	<b>AUTOMATION - WIRING DIAGRAM, HVAC PANEL CP-M826, DISCRETE INPUTS RACK 0, MODULE 3</b>
1-0640M-A0053	-001	00	AUTOMATION - WIRING DIAGRAM, HVAC PANEL CP-M826, DISCRETE INPUTS RACK 0, MODULE 4
1-0640M-A0054	-001	00	AUTOMATION - WIRING DIAGRAM, HVAC PANEL CP-M826, DISCRETE INPUTS RACK 0, MODULE 5
1-0640M-A0055	-001	00	AUTOMATION - WIRING DIAGRAM, HVAC PANEL CP-M826, DISCRETE OUTPUTS RACK 0, MODULE 6
1-0640M-A0056	-001	00	AUTOMATION - WIRING DIAGRAM, HVAC PANEL CP-M826, ANALOG INPUTS RACK 0, MODULE 7&8
1-0640M-A0057	-001	00	AUTOMATION - WIRING DIAGRAM, HVAC PANEL CP-M826, ANALOG OUPUTS RACK 0, MODULE 9&10
1-0640M-A0058	-001	00	AUTOMATION CONTROL SYSTEM ARCHITECTURE
1-0640M-A0060	-001	00	LOOP DIAGRAM, TT-M6041, TT-M6042, AND TT-M6301, TEMPERATURE TRANSMITTERS

1-0640M-A0061	-001	00	LOOP DIAGRAM, FC-1, FC-2, FC-3, ELECTRICAL ROOM FAN COILS
1-0640M-A0062	-001	00	LOOP DIAGRAM, XV-M6144, OUTDOOR INTAKE AIR DAMPER
1-0640M-A0063	-001	00	LOOP DIAGRAM, FV-M6145, OUTDOOR AIR FLOW DAMPER
1-0640M-A0063	-002	00	LOOP DIAGRAM, FV-M6145, OUTDOOR AIR FLOW DAMPER
1-0640M-A0064	-001	00	LOOP DIAGRAM, DISCHARGE AIR AND PUMPING STATION, TEMPERATURE TRANSMITTERS, TT-M6011 AND TT-M6045
1-0640M-A0065	-001	00	LOOP DIAGRAM, FV-M6147, STATION RELIEF AIR FLOW DAMPER
1-0640M-A0066	-001	00	LOOP DIAGRAM, FV-M6148, STATION RELIEF AIR FLOW DAMPER
1-0640M-A0067	-001	00	LOOP DIAGRAM, FV-M6146, RETURN AIR FLOW DAMPER
1-0640M-A0067	-002	00	LOOP DIAGRAM, FV-M6146, RETURN AIR FLOW DAMPER
1-0640M-A0068	-001	00	LOOP DIAGRAM, PDS-M6021, AIR FILTER DIFFERENTIAL PRESSURE SWITCH
1-0640M-A0069	-001	00	LOOP DIAGRAM, TSL-M6043, MIX AIR (FREEZESTAT) TEMPERATURE SWITCH
1-0640M-A0070	-001	00	LOOP DIAGRAM, FSL-M6411 AND FSL-M6421, CHILLED WATER PUMP P-M641 AND P-M642 FLOW SWITCH
1-0640M-A0071	-001	00	LOOP DIAGRAM, TT-M6403 AND TT-M6404, CHILLED WATER RETURN AND SUPPLY TRANSMITTERS
1-0640M-A0072	-001	00	LOOP DIAGRAM, FSL-M6112, FSL-M6122, AND FSL-M6132, SUPPLY FANS FN1, FN2, FN3 AIR FLOW SWITCH
1-0640M-A0073	-001	00	LOOP DIAGRAM, CP-M826.UPS01, POWER SUPPLY ALARM
1-0640M-A0074	-001	00	LOOP DIAGRAM, AIT-M6901-1, AIT-M6901-2, AIT-M6901-3, METHANE LEL DETECTION - MAIN PUMP HOUSE
1-0640M-A0074	-002	00	LOOP DIAGRAM, AIT-M6901-1, AIT-M6901-2, AIT-M6901-3, METHANE LEL DETECTION - MAIN PUMP HOUSE
1-0640M-A0075	-001	00	LOOP DIAGRAM, AIT-M6902, CARBON MONOXIDE DETECTION - MAIN PUMP HOUSE
1-0640M-A0076	-001	00	LOOP DIAGRAM, AIT-M6401, CHILLER LEAK DETECTION
1-0640M-A0077	-001	00	LOOP DIAGRAM, MCC-M710 VOLTAGE PRESENT, ESL-M7101
1-0640M-A0078	-001	00	LOOP DIAGRAM, MCC-M720 VOLTAGE PRESENT, ESL-M7201
1-0640M-A0079	-001	00	LOOP DIAGRAM, MCC-M730E VOLTAGE PRESENT, ESL-M7301
1-0640M-A0080	-001	00	LOOP DIAGRAM, XFMR-M710 WINDING HIGH TEMPERATURE SWITCH, TSH-M7100
1-0640M-A0081	-001	00	LOOP DIAGRAM, XFMR-M720 WINDING HIGH TEMPERATURE SWITCH, TSH-M7200
1-0640M-A0082	-001	00	LOOP DIAGRAM, FIRE ALARM CONTROL PANEL FACP-M922
1-0640M-A0083	-001	00	LOOP DIAGRAM, CHILLER CHLR-M640
1-0640M-A0084	-001	00	LOOP DIAGRAM, SUMP PUMP CONTROLLER, LIT-M5411
1-0640M-A0085	-001	00	NETWORK DIAGRAM
1-0640M-A0085	-002	00	NETWORK DIAGRAM
1-0640M-A0086	-001	00	INSTALLATION DETAILS
D-2231		00	STATION HIGH TEMP SWITCH
D-2232		00	STATION LOW TEMP SWITCH
<b>1-0640A-S0001</b>	<b>-001</b>	<b>01</b>	<b>STRUCTURAL, CDR-M640 EQUIPMENT PAD, PLAN, SECTION AND GENERAL NOTES</b>
<b>1-0640A-S0002</b>	<b>-001</b>	<b>01</b>	<b>CIVIL, CDR-M640 FENCING LAYOUT, ELEVATION AND DETAILS</b>
1-0640A-S0002	-002	00	CIVIL, CDR-M640 FENCE, GROUNDING DETAILS
<b>1-0640A-S0003</b>	<b>-001</b>	<b>01</b>	<b>STRUCTURAL, CHILLER EQUIPMENT PAD, DEMOLITION DETAILS</b>
<b>1-0640A-S0004</b>	<b>-001</b>	<b>01</b>	<b>STRUCTURAL, LDB-G767 LOAD BANK, PLAN AND DETAILS</b>
			<b>Collection Building "B"</b>
1-0640B-E0001	-001	03	ELECTRICAL SINGLE LINE DIAGRAM, COLLECTIONS BUILDING
1-0640B-E0002	-001	01	PLAN LAYOUT AND EQUIPMENT ELEVATION, COLLECTIONS BUILDING, ELECTRICAL ROOM - DEMOLITION
1-0640B-E0003	-001	01	PLAN LAYOUT AND EQUIPMENT ELEVATION, COLLECTIONS BUILDING, ELECTRICAL ROOM - NEW WORK
1-0640B-E0004	-001	01	PANEL SCHEDULE AND LAYOUT, COLLECTIONS BUILDING DP-B701
1-0640B-E0005	-001	01	PLAN AND SECTIONS, TYPICAL HOUSEKEEPING PAD, DETAILS
1-0640B-E0006	-001	00	MCC ELEVATION AND SINGLE LINE, GENERATOR ROOM, MCC-G766
1-0640B-E0007	-001	00	ELECTRICAL SINGLE LINE DIAGRAM, COLLECTION BUILDING, 600V GENERATORS AND SWITCHGEAR
<b>1-0640B-E0008</b>	<b>-001</b>	<b>01</b>	<b>ELECTRICAL EQUIPMENT PLAN, COLLECTION BUILDING, GENERATOR ROOM AND LOAD BANK LDB-G767</b>
1-0640B-E0009	-001	00	MOTOR STARTER SCHEMATIC, GENERATOR ROOM, EF-G1 EXHAUST FAN
1-0640B-E0010	-001	00	MOTOR STARTER SCHEMATIC, GENERATOR ROOM, EF-G2 EXHAUST FAN
1-0640B-E0011	-001	00	MOTOR STARTER SCHEMATIC, GENERATOR ROOM, EF-G3 EXHAUST FAN
1-0640B-E0012	-001	00	MOTOR STARTER SCHEMATIC, GENERATOR ROOM, EF-G4 EXHAUST FAN
1-0640B-E0013	-001	00	CONNECTION DIAGRAM, LOAD BANK LDB-G767
1-0640B-A0001	-001	00	LOOP DIAGRAM, MCC-G766 VOLTAGE PRESENT, ESL-G7661
<b>1-0640B-A0002</b>	<b>-001</b>	<b>01</b>	<b>LOOP DIAGRAM, AIT-G6901, METHANE LEL DETECTION - GENERATOR ROOM</b>
<b>1-0640B-A0003</b>	<b>-001</b>	<b>00</b>	<b>LOOP DIAGRAM, AIT-G6902, CARBON MONOXIDE DETECTION - GENERATOR ROOM</b>

			<b>Chlorine Building "C"</b>
1-0640C-E0001	-001	04	ELECTRICAL SINGLE LINE DIAGRAM, CHLORINE BUILDING
1-0640C-E0002	-001	00	EQUIPMENT PLAN & ELEVATION, CHLORINE BUILDING, DEMOLITION PLAN
1-0640C-E0003	-001	00	ELECTRICAL SINGLE LINE DIAGRAM, CHLORINE BUILDING, MCC-C710/ MCC-C720E
1-0640C-E0004	-001	00	ELECTRICAL PANEL LAYOUT, CHLORINE BUILDING, MCC-C710/ MCC-C720E LAYOUT AND SCHEDULE
1-0640C-E0005	-001	00	ELECTRICAL PANEL LAYOUT, CHLORINE BUILDING, MCC-C710/ MCC-C720E LOCATION PLAN - GALLERY LEVEL
1-0640C-E0006	-001	00	PANELBOARD SCHEDULES, CHLORINE BUILDING, PNL-C711 AND PNL C731E
1-0640C-E0007	-001	00	ELECTRICAL EQUIPMENT PLAN, CHLORINE BUILDING
1-0640C-E0008	-001	00	ELECTRICAL LIGHTING PLAN, CHLORINE BUILDING, GROUND LEVEL AND SERVICE TUNNELS
1-0640C-E0009	-001	00	ELECTRICAL FIRE ALARM PLAN, CHLORINE BUILDING, GROUND LEVEL AND SERVICE TUNNELS - DEMOLITION
1-0640C-E0010	-001	00	ELECTRICAL FIRE ALARM PLAN, CHLORINE BUILDING, GROUND LEVEL AND SERVICE TUNNELS
1-0640C-E0011	-001	00	ELECTRICAL GROUNDING DETAILS, CHLORINE BUILDING
1-0640C-E0012	-001	00	ELECTRICAL - HAZARDOUS LOCATION, CHLORINE BUILDING, GROUND LEVEL
1-0640C-A0001	-001	00	LOOP DIAGRAM, MCC-C720E VOLTAGE PRESENT, ESL-C7201
1-0640C-A0002	-001	00	LOOP DIAGRAM, MCC-C710 VOLTAGE PRESENT, ESL-C7101
			<b>Reservoir "R"</b>
1-0640R-E0001	-001	03	ELECTRICAL SINGLE LINE DIAGRAM, RESERVOIR VALVE HOUSE
			<b>Control Centre "S"</b>
1-0640S-E0001	-001	02	SINGLE LINE DIAGRAM
1-0640S-E0002	-001	00	PANEL SCHEDULES
			<b>Yard "Y"</b>
1-0640Y-E0001	-001	00	ELECTRICAL SINGLE LINE DIAGRAM, AQUEDUCT VALVE CHAMBER
1-0640Y-E0002	-001	00	PANELBOARD SCHEDULE, PNL-Y712U
1-0640Y-E0003	-001	00	ELECTRICAL EQUIPMENT PLAN, AQUEDUCT VALVE CHAMBER
<b>Drawings</b>			
			<b>Tache Booster Station</b>
<b>Drawing Number</b>	<b>Sheet</b>	<b>Rev No.</b>	<b>Drawing Name and Title</b>
			<b>Main Pumping Station "M" MCC REPLACEMENT / UPS Upgrade</b>
1-0660M-E0002	001	05	SINGLE LINE DIAGRAM & LAYOUT, UPS
1-0660M-E0006	001	00	ELECTRICAL SINGLE LINE DIAGRAM, DEMOLITION
1-0660M-E0007	001	00	ELECTRICAL SINGLE LINE DIAGRAM, MCC-M710
1-0660M-E0008	001	00	MCC ELEVATION AND SCHEDULE, MCC-M710
<b>1-0660M-E0009</b>	<b>001</b>	<b>01</b>	<b>ELECTRICAL PANEL SCHEDULE AND DETAILS</b>
1-0660M-E0010	001	00	PLAN AND SECTION, TYPICAL HOUSEKEEPING PAD, DETAILS
1-0660M-E0011	001	00	MAIN FLOOR EQUIPMENT & DEVICE LAYOUT, PUMP ROOM, DEMOLITION
1-0660M-E0012	001	00	ELECTRICAL EQUIPMENT PLAN, BASEMENT, DEMOLITION
1-0660M-E0013	001	00	ELECTRICAL EQUIPMENT PLAN, PUMP ROOM
1-0660M-E0014	001	00	ELECTRICAL EQUIPMENT PLAN, CEILING
1-0660M-E0015	001	00	ELECTRICAL EQUIPMENT PLAN, BASEMENT
1-0660M-E0016	001	00	ELECTRICAL SITE PLAN

1-0660M-E0017	001	00	PANEL LAYOUT, JB-M702, TEMPORARY GENERATOR CONNECTION
1-0660M-E0018	001	00	GROUNDING INSTALLATION DETAILS
1-0660M-E0020	001	00	MOTOR STARTER SCHEMATIC, PUMP PP-1
1-0660M-E0020	002	00	CONNECTION DIAGRAM, PUMP PP-1
1-0660M-E0021	001	00	MOTOR STARTER SCHEMATIC, PUMP PP-2
1-0660M-E0021	002	00	CONNECTION DIAGRAM, PUMP PP-2
1-0660M-E0022	001	00	MOTOR STARTER SCHEMATIC, PUMP PP-3
1-0660M-E0022	002	00	CONNECTION DIAGRAM, PUMP PP-3
1-0660M-E0023	001	00	ELECTRICAL FIRE ALARM PLAN, PUMP ROOM
1-0660M-E0024	001	00	ELECTRICAL FIRE ALARM PLAN, BASEMENT
1-0660M-E0025	001	00	ELECTRICAL FIRE ALARM, RISER DIAGRAM, DETECTION AND NOTIFICATION CIRCUITS
1-0660M-E0026	001	00	ELECTRICAL FIRE ALARM, LEGEND AND DETAILS
1-0660M-A0001	001	00	LOOP DIAGRAM, MAIN CONTROL TEMPERATURE TRANSMITTER, TT-M6000
1-0660M-A0002	001	00	LOOP DIAGRAM, STATION INLET FLOW INDICATING TRANSMITTER, FIT-M0401
1-0660M-A0003	001	00	LOOP DIAGRAM, SURGE TANK DIFFERENTIAL PRESSURE LEVEL TRANSMITTER, LIT-M0402
1-0660M-A0004	001	00	LOOP DIAGRAM, MCC-M710 VOLTAGE PRESENT
1-0660M-A0005	001	00	LOOP DIAGRAM, FACP-M922 ALARMS
1-0660M-A0006	001	00	LOOP DIAGRAM, LCP-1, PP-1 ELECTRICAL PUMP DRIVE
1-0660M-A0007	001	00	LOOP DIAGRAM, LCP-2, PP-2 ELECTRICAL PUMP DRIVE
1-0660M-A0008	001	00	LOOP DIAGRAM, LCP-3, PP-3 ELECTRICAL PUMP DRIVE
D-3400		4	PUMP DISCHARGE VALVE DV-1
D-3401		4	PUMP DISCHARGE VALVE DV-2
D-3402		4	PUMP DISCHARGE VALVE DV-3
D-3404		4	PP#1 ELECTRIC PUMP DRIVE
D-3408		4	PP#2 ELECTRIC PUMP DRIVE
D-3412		4	PP#3 ELECTRIC PUMP DRIVE

## **DRAWINGS**

The following modifications were made which require the Drawings listed below to be addended and added.

- Provide a new carbon monoxide detector, controller and sensor in the Generator Room in the Collections Building. Provide alarm signals to the HVAC PLC in the McPhillips Regional Pumping Station.  
 Replace: 1070-2019 Drawing 1-0640B-E0008-001-00 with 1070-2019 Addendum 3 Drawing 1-0640B-E0008-001-01  
 1070-2019 Drawing 1-0640B-A0002-001-00 with 1070-2019 Addendum 3 Drawing 1-0640B-A0002-001-01,  
 1070-2019 Drawing 1-0640M-A0051-001-00 with 1070-2019 Addendum 3 Drawing 1-0640M-A0051-001-01  
 1070-2019 Drawing 1-0640M-A0052-001-00 with 1070-2019 Addendum 3 Drawing 1-0640M-A0052-001-01  
 1070-2019 Drawing 1-0640M-P0012-001-01 with 1070-2019 Addendum 3 Drawing 1-0640M-P0012-001-02  
  
 Add: 1070-2019 Drawing 1-0640B-A0003-001-00
- Provide a new anti-pump relay in the main switchgear (SGR-M1) main breaker control circuit in the McPhillips Regional Pumping Station.  
 Replace: 1070-2019 Drawing 1-0640M-E0058-0001-00 with 1070-2019 Addendum 3 Drawing 1-0640M-E0058-001-01  
  
 Add: 1070-2019 Drawing 1-0640M-E0016-001-02

- Demolished cooling tower fans are located on the ground floor, not the lower level at the McPhillips Regional Pumping Station.  
Replace: 1070-2019 Drawing 1-0640M-E0040-001-00 with 1070-2019 Addendum 3 Drawing 1-0640M-E0040-001-01  
1070-2019 Drawing 1-0640M-E0041-001-00 with 1070-2019 Addendum 3 Drawing 1-0640M-E0041-001-01
- Ground rods shall be located at least 5 meters away from the centerline of station suction and discharge pipes at the McPhillips Regional Pumping Station.  
Replace: 1070-2019 Drawing 1-0640M-E0045-001-00 with 1070-2019 Addendum 3 Drawing 1-0640M-E0045-001-01
- It was discovered that the existing 4160V main breaker cell schematic on Drawing 1-0640M-E0017-001-02 did not match the existing configuration at the McPhillips Regional Pumping Station. The Drawing update does not affect the scope of Work, but the Drawing was updated to represent the existing configuration.  
Replace: 1070-2019 Drawing 1-0640M-E0017-001-02 with 1070-2019 Addendum 3 Drawing 1-0640M-E0017-001-03.
- The following structural Drawings were updated to show the existing underground fiber optic cable and 600V power feeds at the McPhillips Regional Pumping Station.  
Replace: 1070-2019 Drawing 1-0640A-S0001-001-00 with 1070-2019 Addendum 3 Drawing 1-0640A-S0001-001-01  
1070-2019 Drawing 1-0640A-S0002-001-00 with 1070-2019 Addendum 3 Drawing 1-0640A-S0002-001-01
- The following structural Drawings were updated with additional notes for the McPhillips Regional Pumping Station.  
Replace: 1070-2019 Drawing 1-0640A-S0003-001-00 with 1070-2019 Addendum 3 Drawing 1-0640A-S0003-001-01  
1070-2019 Drawing 1-0640A-S0004-001-00 with 1070-2019 Addendum 3 Drawing 1-0640A-S0004-001-01
- The following Drawings were updated to include the approved equals for wall pack lighting, emergency lighting, and exit signs for the McPhillips Regional Pumping Station and Tache Booster Pumping Station.  
Replace: 1070-2019 Drawing 1-0640M-E0042-002-00 with 1070-2019 Addendum 3 Drawing 1-0640M-E0042-002-01.  
1070-2019 Drawing 1-0660M-E0009-001-00 with 1070-2019 Addendum 3 Drawing 1-0660M-E0009-001-01.

## **APPENDICES**

Add: Appendix\_H Issued for Information Only Drawings

- The following historical drawings are being provided for information only in Appendix H. The City or SNC-Lavalin Inc. makes no claim or liability to the accuracy of the information provided.
  - Q-MCP-183 (Provided to show the overall layout of the McPhillips Regional Pumping Station. Note this is an older drawing, so the Branch I Aqueduct Valve Chamber is not shown on the drawing)
  - Q-MCP-187 (Provided to show where the Generator Room is located in the Collection Building at the McPhillips Regional Pumping Station)
  - D-629-04, D-629-06, D-629-07, and D-629-09 (Provided to show the Tache Booster Pumping Station structural information in relation to Question Q4 in the Questions and Answers section)

Add: Appendix\_I Photograph Log - McPhillips Regional Pumping Station

## **NMS SPECIFICATIONS**

### Section 28 31 02 Automation – Multiplex Fire Alarm System

- Revise: 2.4.5. to read: Acceptable manufacturer: Edwards iO1000 Intelligent Fire Alarm System, equivalent Notifier Fire Alarm System, or approved equal in accordance with B7.
- Revise: 2.7.4. to read: Acceptable Material: Edwards SIGA-CRH, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.8.4. to read: Acceptable Material: Edwards model SIGA-UM, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.14.3. to read: Acceptable Materials: Edwards models SIGA-270, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.15.1.5. to read: Acceptable Materials: Edwards model CF200-2, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.15.2.6. to read: Acceptable Materials: Edwards model CR135-2 in Nema 4X rated enclosure, equivalent Notifier device (in Nema 4X rated enclosure), or approved equal in accordance with B7.
- Revise: 2.15.3.7. to read: Acceptable Material: Edwards model SIGA-HFD, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.15.4.7. to read: Acceptable Material: Edwards model SIGA-HRD, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.15.6.7. to read: Acceptable Material: Edwards model SIGA-OSD, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.15.7.4. to read: Acceptable Material: Edwards model SIGA-SD, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.16.3. to read: Acceptable Material: Edwards model SIGA-IM, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.17.2.2. to read: Acceptable Materials: Edwards models G1AVWF, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.18.1.4. to read: Acceptable Material: Edwards model G1VRF, equivalent Notifier device, or approved equal in accordance with B7.
- Revise: 2.19.4. to read: Acceptable Material: Edwards model EOL-P1, equivalent Notifier device, or approve equal in accordance with B7.
- Revise: 2.20.5. to read: Acceptable Manufacturer: Edwards RLCD-C Annunciator c/w with RLED24 Remote Expander in a RA-ENC2 Enclosure, equivalent Notifier devices, or approved equal in accordance with B7.
- Revise: 2.22.1.1 to read: Acceptable Material: Edwards SIGA-CRH, equivalent Notifier device, or approved equal in accordance with B7.

### Section 40 91 00 Automation – Process Measurement Devices

- Revise: 2.2.2.1 to read: Siemens SITRANS TH300 or Magnetrol Autrol Series Temperature Transmitter.
- Revise: 2.3.2.1 to read: Siemens SITRANS TH300 or Magnetrol Autrol Series Temperature Transmitter.
- Revise: 2.4.2.1 to read: Siemens SITRANS TH300 or Magnetrol Autrol Series Temperature Transmitter.
- Revise: 2.5.2.1 to read: Siemens SITRANS TH300 or Magnetrol Autrol Series Temperature Transmitter.

Revise: 2.9.2.1 to read: Rosemount 3051 Series or Magnetrol Autrol Series Differential Pressure Transmitter.

Revise: 2.10.2.1 to read: Rosemount 3051 Series or Magnetrol Autrol Series Differential Pressure Transmitter.

## **QUESTIONS AND ANSWERS**

### **McPhillips Regional Pumping Station, Chlorine Building, Collections Building and Control Centre:**

Q1: McPhillips Regional Pumping Station: Mezzanine Area: Can the overhead crane be used for the Work under this Contract? Are any upgrades to the crane required?

A1: The Contractor may use the overhead crane under this Contract, subject to City review of a Safe Work Plan applicable to the Work. The existing crane has not been inspected for compliance with applicable safety standards, however where similar cranes exist at other City facilities, fall arrest upgrades have been required to use the crane as a work platform. The Contractor shall provide a qualified crane operator. Any lifts performed by the Contractor will need to be within the operating limit of the crane. Any modifications required to the crane to allow for its use under the Contract including fall arrest upgrades or any other repairs or maintenance as necessary will be the responsibility of the Contractor. The Contractor shall provide a Professional Engineer's stamped review of the modifications to the crane. As per C10.2 of the *General Conditions for Construction* (Revision 2019-09-01), the Contractor shall be responsible for any losses or damages to the crane during the operation.

Q2: Is Keene by Signify wall pack light equal to the specified Lumark wall pack light for McPhillips Regional Pumping Station.

A2: Keene by Signify wall pack light has been approved as an equal for McPhillips Regional Pumping Station. If the Contractor's intent is to use the Keene wall pack light, the Contractor shall update all drawings affected by using Keene instead of Lumark and cover any additional cost that arise from using a different manufacturer.

### **Tache Booster Pumping Station:**

Q3: Tache Booster Pumping Station – Can the overhead crane be used at Tache Booster Pumping Station?

A3: The Contractor may use the overhead crane under this Contract, subject to City review of a Safe Work Plan applicable to the Work. The existing crane is manually operated and may be used for equipment lifting. There is no working platform on the crane. The Contractor shall provide a qualified crane operator. Any lifts performed by the Contractor will need to be within the operating limit of the Crane. Any modifications required to the crane to allow for its use under the Contract including repairs or maintenance as necessary will be the responsibility of the Contractor. The Contractor shall provide a Professional Engineer's stamped review of the modifications to the crane. As per C10.2 of the *General Conditions for Construction* (Revision 2019-09-01), the Contractor shall be responsible for any losses or damages to the crane during the operation.

Q4: Tache Booster Pumping Station: Is the floor at Tache Booster Pumping Station rated to carry a scissor lift?

A4: The Contractor is responsible for ensuring that there is no damage to structural or facility integrity, while using any equipment (including but not limited to a scissor lift). Prior to use of a scissor lift the Contractor shall provide an engineering calculation (stamped by a Professional Engineer), which includes the lift loads, weight of equipment, load bearing surface areas, floor and structure load bearing capability, and all other applicable parameter to the Contract Administrator for review, comment and approval. The Contractor may only use a scissor lift (or other similar lifting equipment) within the facilities once he has proven that damages will not occur and obtains approval in writing from the Contract Administrator. Refer to Tache Booster Pumping Station drawings D-629-04, D-629-06, D-629-07, D-629-09 included in Appendix H for structural information at the station.

Q5: Is Magnetrol's differential flow and level pressure transmitters equal to the specified Rosemount differential flow and level transmitters for Tache Booster Pumping Station.

A5: Magnetrol's differential flow and level pressure transmitters have been approved as an equal for Tache Booster Pumping Station. If the Contractor's intent is to use Magnetrol's differential pressure transmitters, the Contractor shall update all drawings affected by using Magnetrol instead of Rosemount and cover any additional cost that arise from using a different manufacturer

**General**

Q6: Is Notifier by Vipond fire alarm devices equal to the specified Chubb Edwards fire alarm devices for both McPhillips Regional Pumping Station and Tache Booster Pumping Station.

A6: Notifier by Vipond has been approved as an equal for the fire alarm system upgrades for both McPhillips Regional Pumping Station and Tache Booster Pumping Station. If the Contractor's intent is to use Notifier by Vipond, the Contractor shall update all drawings affected by using Vipond instead of Chubb Edwards and cover any additional cost that arise from using a different manufacturer.

Q7: Is Emergi-Lite's emergency lighting battery unit, remote fixtures, and exit signs equal to the specified Ready-Lite devices for both McPhillips Regional Pumping Station and Tache Booster Pumping Station.

A7: Emergi-Lite's emergency lighting battery unit, remote fixtures, and exit signs has been approved as an equal for McPhillips Regional Pumping Station and Tache Booster Pumping Station. If the Contractor's intent is to use Emergi-Lite, the Contractor shall update all drawings affected by using Emergi-Lite instead of Ready-Lite and cover any additional cost that arise from using a different light manufacturer.

Q8: Is Magnetrol's temperature transmitter equal to the specified Siemens' temperature transmitter for McPhillips Regional Pumping Station and Tache Booster Pumping Station.

A8: Magnetrol's temperature transmitter has been approved as an equal for McPhillips Regional Pumping Station and Tache Booster Pumping Station. If the Contractor's intent is to use Magnetrol's temperature transmitter, the Contractor shall update all drawings affected by using Magnetrol instead of Siemens and cover any additional cost that arise from using a different light manufacturer.

Q9: Does the City have a parts list they would like to be salvaged from the demolition of equipment?

A9 Salvage of equipment by the City is limited to the cooling tower, chiller, pump parts and **LEL gas detection system (Main Pumphouse and Generator Room)** at the McPhillips Regional Pumping Station. The City will recover refrigerant from the existing chiller in advance of demolition