

APPENDIX B - RELEVANT DOUMENTS

1. The following document is available for viewing at 1199 Pacific Avenue through the Project Manager:

- SNC Lavalin (March 2011) MacLean Pumping Station MCC Replacement Preliminary Design

2. The following drawings of the MacLean Pumping Station are included for information

<u>Drawing No.</u>	<u>Drawing Title</u>
1-0630M-E0001-001	Maclean Water Pumping Station - Electrical Single Line Diagram - Legend & Details
1-0630M-E0002-001	Maclean Water Pumping Station - Electrical Single Line Diagram - 4160V Distribution
1-0630M-E0003-001	Maclean Water Pumping Station - Electrical Single Line Diagram - 600V Generators and Essential Switchgear
1-0630M-E0004-001	Maclean Water Pumping Station - Electrical Single Line Diagram - 600V Non-Essential Switchgear and Distribution
1-0630M-E0012-001	Maclean Water Pumping Station - Electrical Equipment Plan – Electrical Room
1-0630M-E0013-001	Maclean Water Pumping Station - Electrical Elevations

3. The following Documents are included for information:

- Example of a MacLean Pumping Station Shutdown Protocol

4. The following Documents are included for Registration of Site Visit:

- Public Safety Verification Consent Form

September 16, 2011 – MacLean Pumping Station Example Shutdown Protocol MacLean 600V Switchgear Upgrade				
Resources:		<ul style="list-style-type: none"> • City of Winnipeg (CoW) – Operations, Electrical, and Instrumentation personnel. • AAA Contracting Ltd. - Electrical personnel. • BBB Consulting - 		
Item #	Time	Description	Responsibility	Facility Operation
1	10:00 pm	Set up battery or generator based temporary lighting in electrical room in front of 600V switchgear.	CoW Electrician	Normal
2	10:45 pm	Pre-shutdown meeting in MacLean Pumping Station Electrical Room	All	Normal
3	11:00 pm	Run pumps at Tache as required to eliminate pumping at MacLean station. Shutdown MacLean pumps.	CoW Operations	Shutdown
Part A		Powering down of station		
A-1	11:15 pm	<ul style="list-style-type: none"> • Shut down SCADA station 	CoW Instrumentation	Shutdown
A-2	11:20 pm	<ul style="list-style-type: none"> • Verify the pumps are shut down. 	CoW Electrician	Shutdown
A-3	11:30 pm to 12:00 am	<ul style="list-style-type: none"> • Switch off and lock-out the generators. • Turn off Reservoir Valve House MCC loads. • Turn off non-essential MCC and CDP loads. • Turn off essential MCC loads. • Put Man/Auto transfer control switch into Manual position. • Shutdown UPS as per posted instructions. • Open AB2 breaker. • Open B2 load break. • Lock-out B2 load break. • Open AB breaker. • Ensure ABT breaker is open (this breaker is currently out of service). • Open B1 load break. • Lock-out B1 load break. • Verify no presence of voltage on secondary sides of each PT, CT, and CPT. 	CoW Electrician	Shutdown
Part B		Controls Re-wiring		
B-1	12:00 am to 2:00 am	<ul style="list-style-type: none"> • Re-wire breaker controls as per drawing 1-111-E111. 	CoW Electrician	Shutdown

B-2	2:00 am to 2:30 am	<ul style="list-style-type: none"> Ensure all wires and components modified are labelled. 	CoW Electrician	Shutdown
Part C		Testing		
C-1	2:30 am to 2:45 am	<ul style="list-style-type: none"> Remove locks from generator breaker. Remove locks from B1 load break. 	CoW Electrician	Shutdown
C-2	2:45 am to 3:30 am	<ul style="list-style-type: none"> Perform test to confirm the power transfer operates appropriately. Perform commissioning checks as per the Commissioning Checklist 	CoW Electrician	Shutdown
Part D		Station restoration.		
D-1	3:30 am to 4:10 am	<ul style="list-style-type: none"> Ensure essential MCC is powered from utility. Power up UPS as per posted instructions. Turn on essential MCC loads. Remove lock from B2 load break switch. Close B2 load break switch. Close BT2 breaker. Ensure non-essential MCC is powered. Turn on non-essential MCC loads. Turn on the Reservoir Valve House MCC loads. 	CoW Electrician	Shutdown
D-2	4:10 am	<ul style="list-style-type: none"> Reset pump PLC panels 	CoW Operations	Shutdown
D-3	4:20 am	<ul style="list-style-type: none"> Turn on SCADA station 	CoW Instrumentation	Shutdown
D-4	4:30 am	<ul style="list-style-type: none"> Restart Pumping at MacLean Pumping Station 	CoW Operations	Normal

Facility impact during work:

- The 600V power to the station will be shutdown between 11:00 pm to 4:30 am including the essential power and emergency generators.
- Essential and non-essential lighting will be off during the work. City of Winnipeg is to provide all temporary power and lighting as required.
- During the hours of 11:00 pm to 4:30 am, the essential MCC and UPS system will be shutdown and the natural gas engine can not run during this time.

Contingency Plan

Issue		Action
#	Description	
1.	AB2 breaker will not rack in or close.	<ul style="list-style-type: none"> - Power the essential loads from B2. - CoW Electricians to immediately work to fix the problem and bring in appropriate expertise as required.
2.	Improper operation of 600V switchgear	<ul style="list-style-type: none"> - BBB Consulting will be present to analyze the operation of the system and make recommendations to CoW Electricians to fix the issue.
3.	Unforeseen Issue	<ul style="list-style-type: none"> - A City electrician and Operations will be present to help resolve unforeseen issues.

Emergency Contacts:

City of Winnipeg:			
Name	Role	Phone #	Cell #
A Smith	Emergency Contact	204-555-5555	
B Smith	Operations Engineer	204-555-5555	
C Smith	Project Director	204-555-5555	

Contractor – AAA Contracting Ltd:

Name	Role	Phone #	Cell #
D Smith	AAA Project Manager	204-555-5555	
E Smith	AAA Technician	204-555-5555	

Contract Administrator – BBB Consulting:

Name	Role	Phone #	Cell #
F Smith	BBB Contract Administrator	204-555-5555	

RFP NO. 787-2011

REQUEST FOR PROPOSAL FOR PROFESSIONAL CONSULTING SERVICES FOR THE MACLEAN PUMPING STATION MCC REPLACEMENT DETAILED DESIGN AND CONTRACT ADMINISTRATION



Consent for Disclosure of Personal Information Public Safety Verification			
<i>To ensure accuracy, you must PRINT in clear CAPITAL letters and complete this form in its entirety.</i>			
<p>In connection with my intended access to the City of Winnipeg Water Treatment Plant, I understand that the background check process includes a Public Safety Verification.</p> <p>I hereby consent to a Public Safety Verification search on behalf of City of Winnipeg Water Treatment Plant in connection with my intended access to City of Winnipeg Water Treatment Plant. I authorize BackCheck to release all personal information obtained during the above Public Safety Verification to City of Winnipeg Water Treatment Plant. I understand that my personal information may be processed outside of Canada in order to return results in a timely manner.</p>			
Given Name(s): ▼		Middle Name(s): ▼	Gender: ▼ <input checked="" type="checkbox"/> Check One <input type="checkbox"/> Male <input type="checkbox"/> Female
Surname: ▼		Maiden name: ▼	
Aliases, nicknames and any other names: ▼			
Place of Birth: ▼		Date of Birth: ▼	
City Province Country		yyyy / mm / dd	
Current Address: ▼		From: ▼	To: ▼
Unit Number	Street Number	Street Name	yyyy mm dd yyyy mm dd
Current Address Continued: ▼			
City Province Country		Postal Code	
Previous Address – if less than 5 years ago: ▼		From: ▼	To: ▼
Unit Number	Street Number	Street Name	yyyy mm dd yyyy mm dd
Previous Address – Continued: ▼			
City Province Country		Postal Code	
Telephone Number: ▼		Alternative Telephone Number: ▼	
Please PRINT your full name: ▼			
Candidate Signature: X		Date: (yyyy/mm/dd) ▼ / /	