



## REPORT N° INF2020-45

<b>Date</b>	07/12/2020
<b>Submitted by</b>	Philippe Cormier
<b>Subject</b>	Update 03 - Sewage Treatment Plant Upgrade Project
<b>File N°</b>	INF2020-45

1) **NATURE/GOAL :**

The purpose of this report is to provide members of Council with the third update on the status of the Sewage Treatment Plant Upgrade Project.

2) **DIRECTIVE/PREVIOUS POLICY :**

N/A

3) **DEPARTMENT'S RECOMMENDATION :**

**THAT** Report No. INF2020-45, in regards to the Sewage Treatment Plant Upgrade Project, be received as information.

**Que le rapport** No. INF2020-45 au sujet d'une mise à jour du projet d'amélioration de plan de traitement des eaux usées, soit reçu à titre d'information

4) **BACKGROUND :**

At it's December 2, 2020 Council meeting, Council approved an additional \$9,400,000 in funding authority bringing the project budget limit to \$22,000,000. Additionally, Council approved that City execute an agreement with Louis W Bray Limited in the amount of \$16,923,760 (excluding HST) for the construction of the sewage treatment plant upgrades.

Following the contract award, the contractor was on site the week of March 16, 2020, to conduct a pre-construction survey, prepare the site, set up the detour route and locate the underground services. On March 20, 2020, City staff, along with its consultant (R.V. Anderson) and project manager (OCWA) met with the contractor for the pre-construction meeting. Following the preconstruction meeting, the construction of the project started on March 23, 2020.

5) **DISCUSSION :**

Weekly Engineering Meetings

City staff along with its project manager, Operation / Maintenance consultant (OCWA) and Engineers (R.V. Anderson) have introduced a weekly engineering meeting with the goal of staying one step ahead of the construction schedule. These meetings will create the opportunity to analyse potential risk and develop multiple alternate solutions for

the contractor (Louis W Bray Ltd.) to consider. Meeting minutes, along with an action items list with associated timelines, are produced after each meeting.

#### Biweekly Status Meetings

City Staff along with its consultant, project manager and the contractor conduct biweekly construction meetings in order to provide timely information on project status, uncover potential risks, provide a forum for timely issue resolution, and encourage relevant information sharing. Following the biweekly status meetings, meeting minutes, along with an action items list with associated timelines, are produced and circulated to all meeting participants.

#### Special Risk Mitigation Meetings

These special meetings are held throughout the project when construction activities are near or for critical infrastructure and/or could have a negative impact on cost or schedule. Mitigation meetings are utilized for additional analysis to develop options and actions to reduce the threats to the project objectives or decrease the impact of the risk if it occurs. Typically, these meetings are held four (4) weeks prior to a specific construction activity.

#### Construction Status

- Construction of the forcemain crossing County Road 17 was completed in the allocated timeframe with no delays to report. The municipality will receive a \$128,000 credit due to changing the construction process from underground unidirectional boring to conventional open cut trenching.
- The new headworks building's foundation piles and shoring have been installed and attained the necessary bearing capacity. Concrete work will begin next week.
- Updates to Pump Station #1 will commence in the month of December
- Industrielle Street remains closed due to heavy machinery movement in a small area in regards to public safety, its planned to remain closed until the beginning of next year. A detour route has been setup directing traffic through De la Berge Road. The construction team are reviewing alternate procedures to reopen the street earlier.

#### COVID-19

In order to ensure the health and safety of City staff, consultants and workers, Louis W Bray has updated the site's Health and Safety manual to include the Ministry of Labor's and Provincial COVID-19 safety measures. Some of these measures include:

- Sanitizing common areas daily,

- Staggering breaks and lunches to limit the number of employees gathering,
- Site access forms to screen new workers on site,
- Monitor worker’s health and possible symptoms,
- Where possible, ensure our staff are working 1-2 meters apart during the work day.

Schedule

The project is currently back on schedule. Due to Covid-19, inaccurate as-builts and uncovering unclassified underground service slowed construction. However, the project team identified potential time gains in advancing future scheduled operations. COVID-19 is still identified as a significant risk.

Depending on how local and global economies are impacted, we might eventually encounter issues with sourcing certain materials from other countries. In order to mitigate this risk, we are reviewing and approving the purchase of all materials. This means that we are approving the purchase of materials now that are scheduled to be purchased thirteen (13) months from now.

Budget

The project is on budget at this stage, however, we have identified a risk due to COVID-19. Depending on whether or not we encounter issues with sourcing the tendered and approved materials. Alternative construction materials might increase the project’s construction costs. Louis W Bray is working diligently at sourcing alternative construction materials.

6) **CONSULTATION:**

N/A

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/A

8) **FINANCIAL IMPACT (expenses/material/etc.):**

At this stage, the project is on budget. Table 1.1 summarizes the initial budget allocation, the monies expended to date and remaining budgets.

**Table 1.1 Project Budget vs Spent to Date**

<b>Sewage Treatment Plant Upgrade</b>	
<b>Budget</b>	<b>\$22,000,000</b>
Spent to Date	\$4,666,205.24
<b>Remaining Budget</b>	<b>\$17,333,794.76</b>

Table 1.2 provides a detailed summary of the initial budget, the committed funds, projected expenses at construction completion and projected remaining budgets at construction completion (including contingency).

**Table 1.2 Project Budget vs Projected Expenses at Construction Completion**

<b>Sewage Treatment Plant Upgrade</b>	
<b>Budget</b>	<b>\$22,000,000</b>
<b>Committed Funds and Projected Expenses</b>	
<b>Construction</b>	
LW Bray Construction Contract	\$16,923,760.00
CO1 - Forcemain Material Change <b>(credit)</b>	<b>(\$41,332.49)</b>
CO2 - HydroVac to locate Forcemain and watermain	\$15,599.29
CO3 - MH Extensions at Pump Station	\$11,469.40
CO4 - Forcemain Bends and Contingency Couplings	\$27,289.80
CO5 - Additional PDA Testing	\$10,925.00
CO6 - Welding Inspections (estimate)	\$28,175.00
CO7 - Additional Forcemain Bends	\$10,220.06
CO8 - Flowmeter	\$1,801.60
CO9 - Abandon Sewer	\$2,441.66
CO10 - Fence Removal & Replacement	\$17,736.15
CO11 - Flowmeter	\$1,607.26
CO12 - Contaminated Material Removal	\$11,322.20
CO13 - Additional Watermain Work	\$28,995.58
CO14- - Additional PDA testing	\$5,198.00
CO15 - Sludge Pipe Relocation	\$3,148.05
CO16 - Open cut crossing HWY 17 <b>(credit)</b>	<b>(\$128,183.29)</b>
CO17 - Breakers and VFD's pump <b>(credit)</b>	<b>(\$11,663.00)</b>
CO18 - Rerouting Process Piping	\$13,579.88
<b>Projected Construction Expenses at Project Completion from LW Bray Construction</b>	<b>\$16,932,090.15</b>
<b>Engineering and Project Management</b>	
RVA Engineering Contract	\$948,000
C03 - Drilling (test for bedrock), Geotech/material testing	\$62,000.00
OCWA Project Management	\$153,000
<b>Projected Engineering Expenses at Project Completion</b>	<b>\$1,163,000</b>
<b>Projected Remaining Budget at Construction Completion (Including Contingency)</b>	<b>\$3,904,090.15</b>

9) **LEGAL IMPLICATIONS :**

N/A

10) **RISK MANAGEMENT :**

Implementation of this program will demonstrate the municipality's commitment to providing effective stewardship of its infrastructure. The program will assist in mitigating the negative operational issues such as odour generation at the treatment facility.

11) **STRATEGIC IMPLICATIONS :**

The installation of a preliminary screen for the sewage treatment plant will reduce odours and will allow the proper treatment of sewage prior to discharging into the Ottawa River. This will place the City in compliance with MOECC effluent discharge criteria. It will also allow the business owners in the industrial park full enjoyment of their properties and no impacts on their clients. Delaying the repair of the concrete slab could result in increased deterioration leading to an increased safety risks and future repair costs and prevent the City from using this valuable storage area. The upgrades of the Pumping Station #1 and the twinning of the sanitary sewage forcemain will allow for growth to continue. Without these upgrades further large development may be jeopardized.

12) **SUPPORTING DOCUMENTS:**

N/A