
Subject: Gross Budget Adjustment and Status Update for Contract 2015-T-109 (RN 15-09) Welland Wastewater Treatment Plant, Phase I

Report to: Public Works Committee

Report date: February 19, 2019

Recommendations

1. That the gross budget for the Welland Wastewater Treatment Plant, Phase I Upgrades **BE INCREASED** by \$654,741 and that the increase **BE FUNDED** as follows:

Capital Variance – Wastewater Project \$654,741.

Key Facts

- The purpose of this report is to provide an update to the Committee on the project progress and to request approval to increase the project budget. As indicated in the previous report (February 20, 2018, PW 6-2018), the Region agreed to a contract extension to August 17, 2018.
- A revised construction schedule was submitted by Varcon (Region's contractor) on January 10, 2019, indicating a new completion date of July 17, 2019. At the time of authoring this report, the Region had not approved the updated completion date.
- Due to this further delay, Cole (the Region's consultant) is required to spend additional time and effort to provide Contract Administration and Inspection Services. Staff recommends lengthening Cole's services contract to align with Varcon's revised construction schedule.
- Staff is further recommending a contingency allowance be approved to account for post construction services including completion of As-Built CAD drawings & Operation and Maintenance Manuals, warranty inspection services, holdback releases and project closeout.

Financial Considerations

As a result of delays and extensions with the construction contract, an additional \$662,360 (including 1.76% non-recoverable HST) has been forecasted for the Contract Administration and Inspection Services of the Welland Wastewater Treatment Plant Phase I Upgrades construction project. Appendix 1 provides a map of the project location. Of the amount above, \$465,230 relates to the schedule extension to July 17, 2019 (Completion) plus a contingency of \$197,130 for the post construction work (as-built drawings, warranty period, final inspection, and project close-out), for internal staff costs and any unforeseen expenditures that may be incurred.

The Region has been assessing Liquidated Damages at approximately \$44,000 per month (\$2,000/working day).

The total project expenditures and revenues to date are shown in the Total Estimated Project Cost Summary in Appendix 2. As outlined in the chart, there is an overall approved budget of \$21,166,463. To date, the total estimated cost of the project is \$21,158,843 including open purchase orders. Forecasted costs to complete the project total \$662,360, for a total revised project cost of \$21,821,204. This leaves a shortfall of \$654,741, therefore a budget increase in the amount of the shortfall is being requested. The amount of \$654,741 will be funded from the Wastewater Capital Variance Project. The balance of the Wastewater Capital Variance Project is \$1,794,708 as of January 21, 2019.

Any unspent surplus funds will be returned to the Wastewater Capital Reserve upon project completion so that these funds can be used to fund future capital projects.

Analysis

A construction progress update was provided in the previous report (PW 6-2018, February 20, 2018). Notwithstanding the many ongoing challenges with scheduling, construction sequencing and subcontractor liens, Staff are working with Varcon to improve construction progress and the project has been moving ahead albeit at a slower rate than previously expected.

Niagara Region's staff continue to be involved in the inspection and coordination of work. Since the Region provided Varcon a clear message back in the summer of 2017, and again in 2018, that poor quality workmanship will not be accepted, quality throughout the project has improved.

A progress update is provided below.

Construction Progress to date:

1. Lift Station Wet Well Side - 66% complete; Dry Well Side - 23% complete
2. Administration Building - 98% complete
3. Screen Building and Grit System - 72% complete
4. Primary tanks and Gallery - 75% complete
5. Secondary Building and Final Clarifier - 82% complete
6. Aeration Tanks - 60% complete

7. Chemical Storage Facility - 70% complete
8. Chlorine Building - 65% complete
9. Maintenance Building - 63% complete
10. Digester Building – 15% Complete
11. Electrical Substation - 98% complete
12. Civil Works - 75% complete

Water and Wastewater Engineering staff have been providing a significantly higher than normal amount of resources throughout the project in order to manage the contract. Enterprise Resource Management Services (legal and finance) is also providing a significant amount time on additional contract / project payments as well as lien claims. External Legal Services are also engaged to provide support as needed.

Alternatives Reviewed

Do Nothing – this alternative does not address the need for continued and consistent contract administration and inspection services as well as the other related costs (internal and external) required to bring the upgrades of the plant to completion.

Relationship to Council Strategic Priorities

This recommendation is related to the Fostering Growth strategic priority since the planned upgrades will ensure reliable infrastructure to support growth and economic development within the Niagara Region.

Other Pertinent Reports

PW 06-2018, February 20, 2018, Budget Increase Request

PW 56-2015, October 13, 2015, Award of Contract 2015-T-109 (RN 15-09) Welland Wastewater Treatment Plant Upgrades, in the City of Welland

Confidential PW 17-2017, March 21, 2017, A Matter of Litigation or Potential Litigation, Including Matters Before Administrative Tribunals, Affecting the Municipality – Contract No. 2015-T-109 (RN 15-09) Welland WWTP Phase I Upgrades – Project Status Report

PW 35-2017, September 5, 2017, Welland Wastewater Treatment Plant, Phase I Upgrades

Prepared by:

Richard Gabel, P.Eng.
Senior Project Manager, Area 2
Water & Wastewater Services
Public Works Department

Recommended by:

Catherine Habermehl
Acting Commissioner
Public Works Department

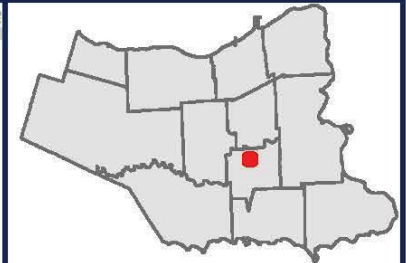
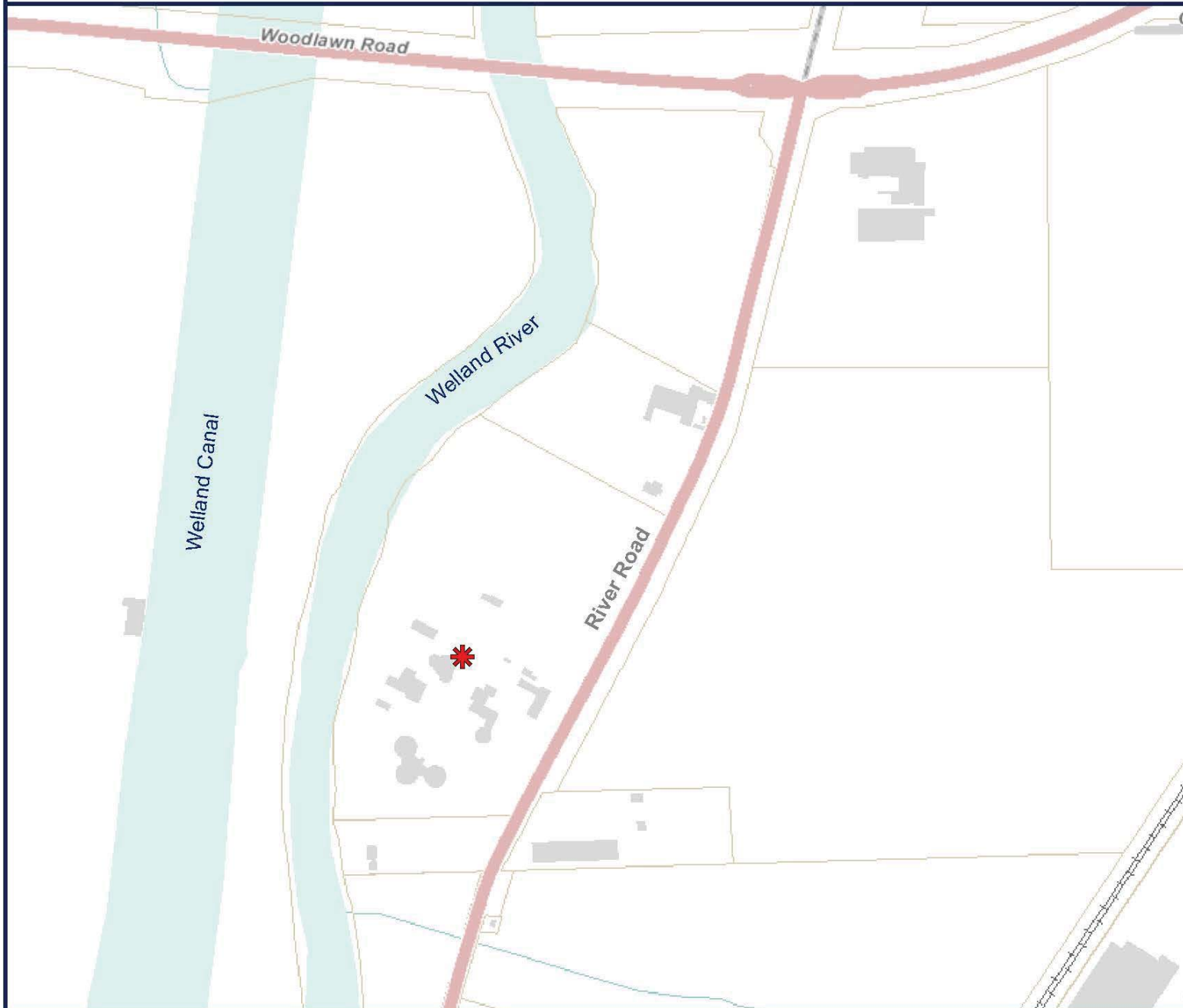
Submitted by:

Ron Tripp, P.Eng.
Acting Chief Administrative Officer

This report was prepared in consultation with Michael Leckey, Program Financial Specialist W-WW, and reviewed by Tony Cimino, Associate Director W-WW and Joseph Tonellato, P.Eng., Director W-WW.

Appendices

Appendix 1	Key Map	5
Appendix 2	Total Estimated Project Cost	6



Legend

 Project Extent

0 50 100 200m


© 2018 Niagara Region and its suppliers.
 Projection is UTM, NAD 83, Zone 17 (CSRS).

This map was compiled from various data sources and is current as of November, 2018.

Niagara Region makes no representations or warranties whatsoever, either expressed or implied, as to the accuracy, completeness, reliability, currency or otherwise of the information shown on this map.

PW 11-2019 APPENDIX 2
TOTAL ESTIMATED PROJECT COST
Budget Adjustment

Contract 2015-T-109 (RN 15-09) Welland Wastewater Treatment Plant Upgrade, Phase 1

Total Estimated Project Cost (10SW0902) *

- (a) Construction (includes contract contingency)
- (b) Project Contingency
- (c) Consulting Engineering Services (Design, Contract Administration, & Inspection)
- (d) Project Management & Internal Costs
- (e) Other Project Costs

Total Council Approved Budget	Revisions per PW 50-2018	Revised Project Budget	Expended & Committed as of January 18, 2019 **	Forecast	Budget Remaining
(A)	(B)	(C) =(A)+(B)	(D)	(E)	(F) = (C)-(D)- (E)
17,839,546	-	17,839,546	17,839,546	-	-
192,799	37,360	230,159	192,799	37,360	-
1,966,111	542,381	2,508,492	1,998,255	510,237	-
150,000	75,000	225,000	200,919	24,081	-
1,018,007		1,018,007	927,325	90,682	-
21,166,463	654,741	21,821,204	21,158,843	662,360	-

Total Estimated Project Cost

Project Funding Sources

Regional Reserves & Debt
Gas Tax Funding

(19,666,463)	(654,741)	(20,321,204)	(19,666,463)	(654,741)	-
(1,500,000)	-	(1,500,000)	(1,500,000)	-	-
(21,166,463)	(654,741)	(21,821,204)	(21,166,463)	(654,741)	-

* All costs above include the non-refundable 1.76% portion of HST.

** Includes holdbacks