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North York, Ontario M2J 1P8
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VIA Email and RESS

May 25, 2021

Ms. Christine Long
Registrar
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario, M4P 1E4

Dear Ms. Long:

**Re: Enbridge Gas Inc. (Enbridge Gas)
Ontario Energy Board (OEB) File No.: EB-2018-0097
Bathurst Reinforcement Project**

On January 3, 2019 the OEB issued its Decision and Order for the above noted proceeding which included, as Schedule B, several Conditions of Approval.

Per Schedule B, Section 5. and 6. (b) in the aforementioned Decision and Order, Enbridge Gas is to provide the OEB with the Final Monitoring and Post Construction Financial reports, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1. Please find enclosed a copy of the Post Construction Financial and Final Monitoring reports for the Bathurst Reinforcement project.

Please contact me if you have any questions.

Yours truly,

Alison Evans
Advisor Regulatory Applications
Regulatory Applications & Strategy

Bathurst Reinforcement Project:
Post-Construction Final Monitoring
Report

EB-2018-0097

Company: Enbridge Gas Inc.



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Introduction

On January 3, 2019, the Ontario Energy Board (“OEB”), in its Decision and Order for EB-2018-0097, granted Enbridge Gas Inc. (“Enbridge”) leave to construct natural gas pipeline and ancillary facilities to meet current and future natural gas demand in the North York area of the City of Toronto. This project is referred to as the Bathurst Reinforcement Project (“the Project”).

This is the Post-Construction Final Monitoring Report (“Final Report”) for the Project.

As part of the Project, Enbridge conducted the studies listed in **Table 1** to inform the design, planning and permitting process, identify environmental and socio-economic impacts potentially resulting from construction, and minimize and mitigate impacts through the application of documented mitigation measures.

Table 1: Studies Completed for Bathurst Reinforcement Project

REPORT TITLE	CONDUCTED BY:	DATE
Stage 1 Archaeological Assessment Bathurst Reinforcement Pipeline Project Part of Lots 18-25, Concession 1 West of Young St. and Lots 18-25, Concession 2 West of Young St. Geographic Township of York And Part of Lot 1, Concession 2 and Lot 26, Concession 1 West of Young St. Geographic Township of Vaughan Now the City of Toronto County of York, Ontario	Timmins Martelle Heritage Consultants Inc.	May 14, 2018
Bathurst Natural Gas Pipeline Project Final Report Environmental Report	Dillon Consulting	June 2018
Species at Risk Trees in Study Area of Pipeline Reinforcement in Bathurst Street	Dillon Consulting	April 25, 2019
Arborist Report – Bathurst St. Reinforcement – Ward 6 & 8	Fredi Buob ISA Arborist ON-0254A	May 7, 2019

Construction on the Project began on June 3, 2019 and was energized with an in-service date of December 11, 2019. Enbridge filed, in accordance with the Conditions of Approval for the project, notifications of these Project milestones with the OEB.¹

This Final Report has been prepared in accordance with the Conditions of Approval set out in the Decision and Order for EB-2018-0097, as follows:

¹ Please refer to the letters dated May 24, 2019 and November 27, 2019.

6. *Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:*
- b) *a final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:*
- i. *provide a certification, by a senior executive of the company, of Enbridge's adherence to Condition 3;*
 - ii. *describe the condition of any rehabilitated land;*
 - iii. *describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction;*
 - iv. *include the results of analyses and monitoring programs and any recommendations arising therefrom; and*
 - v. *include a log of all complaints received by Enbridge, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.*

The Certification required pursuant to condition 6 b) i) is attached as Appendix A to this Final Report.

This Final Report is limited to items that have been identified since the submission of the Post-Construction Interim Report ("Interim Report") on March 11, 2020, and prior to completion of this report. This report summarizes final restoration activities and addresses any outstanding issues, if identified.

Project Description

The Bathurst Reinforcement Project included the installation of nominal pipe size ("NPS") 12-inch high pressure steel natural gas pipeline totaling 3.2 km, the installation of NPS 8-inch intermediate pressure natural gas pipeline totaling 69 m and the installation of a district station. The Project was required to meet current and future natural gas demand in the North York area of the City of Toronto.

Refer to Appendix B - Figure 1 for Final Pipeline Location.

Construction Effects and Mitigation Measures

Mitigation measures which were implemented to minimize potential environmental effects from the construction of the Project are documented in the Interim Report filed March 11, 2019. All construction and rehabilitation activities complied with the Conditions of Approval set out in the OEB Decision and Order for EB-2018-0097, including ensuring that the requirements of all approvals, permits, licenses and certificates are fully addressed.

All activities were conducted in adherence with Enbridge Construction Policies and Procedures and the mitigation measures and inspection, and monitoring recommendations outlined in Sections 6.0 and 10.0 of the Bathurst Natural Gas Pipeline Project – Final Report (Environmental Report, "ER"). Representative conditions along the Project pipeline route and additional actions required were identified in Table 2 of the Interim Report and an update is provided below.

Photos of the Project area taken April 23, 2021 are found in Appendix C.

Table 2: Bathurst Reinforcement Project Conditions

PHOTO #	LOCATION	CURRENT CONDITION
Photo 1	Tie-in at South West corner of Steeles Ave. W. and Bathurst St. (looking north)	Permanent asphalt, sidewalk, curbs, and boulevard complete. No further action required.
Photo 2	Entry/Exit Pit on West Side of Bathurst St., South of Steeles Ave. West (looking north)	Boulevard was hydroseeded and restored. No further action required.
Photo 3	West Side of Bathurst St., South of Fisherville Rd. (looking south)	Boulevard was hydroseeded and restored to pre-construction condition. Permanent restoration of pattern concrete apron complete. No further action required.
Photo 4	West Side of Bathurst St. South of Carpenter Rd. (looking north)	Permanent restoration, including hydroseed and concrete sidewalks complete. No further action required.
Photo 5	West Side of Bathurst St., South of Rockford Rd. (looking north)	Boulevard was hydroseeded and restored to pre-construction condition. Permanent restoration, including road asphalt, pattern concrete apron and curbs complete. No further action required.
Photo 6	West Side of Bathurst St., South of Kenton Dr. (looking north)	Permanent restoration, including hydroseed, is complete. TTC bus stop pad requires repair, which is anticipated to be completed in mid-May.
Photo 7	Tie-in and District Station on East Side of Bathurst St., South of Ellerslie Ave (looking north)	Boulevard was hydroseeded, sidewalk and pattern concrete apron restored. No further action required.
Photo 8	West side of Bathurst St., South of Greenwin Village Rd. (looking north)	All visible settlements along Bathurst St. boulevard were identified and repaired. Final restoration (i.e. fill placement, installation of final road asphalt, curbs, sidewalks and hydroseed) complete. No further action required.
Photo 9	West side of Bathurst St., North of Cedarcroft Blvd. at 5998 Bathurst St. (looking southwest).	All visible settlements along Bathurst St. boulevard were identified and repaired. Final restoration (i.e. fill placement, installation of final road asphalt, curbs, sidewalks, and hydroseed/sod) complete. No further action required.

Residual Issues

Overall, construction activities were carried out with a high level of respect for the environment.

There is one unresolved issue that remains at the time of completion of this Final Report. As documented in Photo 6 and Appendix D, the TTC repairs related to a bus stop are scheduled for completion in mid-May 2021.

Other than the one unresolved issue identified above, the remainder of the action items identified in the Interim Report have been completed and no further issues related to the Project are anticipated.

Comments and Complaints

Since the filing of the Interim Report, three (3) additional complaints have been received.

A Complaint Log of the new additions since the interim report for the Project can be found in Appendix D. An update to one past complaint from the interim report is also found in Appendix D.

Summary

This Final Report has been prepared in accordance with the OEB Decision and Order in EB-2018-0097. It documents the final conditions after construction and restoration activities were completed as part of the Project.

Measures implemented during construction and restoration activities have been successful. The one residual issue identified above is anticipated to be completed by mid-May 2021 and a technical memorandum will be provided to the OEB, once complete.

Appendix A

EXECUTIVE CERTIFICATION

**Bathurst Reinforcement Project
EB-2018-0097
Decision and Order
January 3, 2019**

I hereby certify that Enbridge Gas Inc. ("Enbridge") has constructed the facilities and restored the land in accordance with the OEB's Decision and Order in EB-2019-0097, Schedule B, Condition 6. b).

May 14, 2021

Date



Michelle George
Vice President, Engineering & STO
Enbridge Gas Inc.

Condition 6.

Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:

- b) a final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and the following May 31, the following June 1, which shall:
 - i. provide a certification, by a senior executive of the company, of Enbridge's adherence to Condition 3;*
 - ii. describe any condition of any rehabilitated land;*
 - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction;*
 - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and*
 - v. include a log of all complaints received by Enbridge, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.**

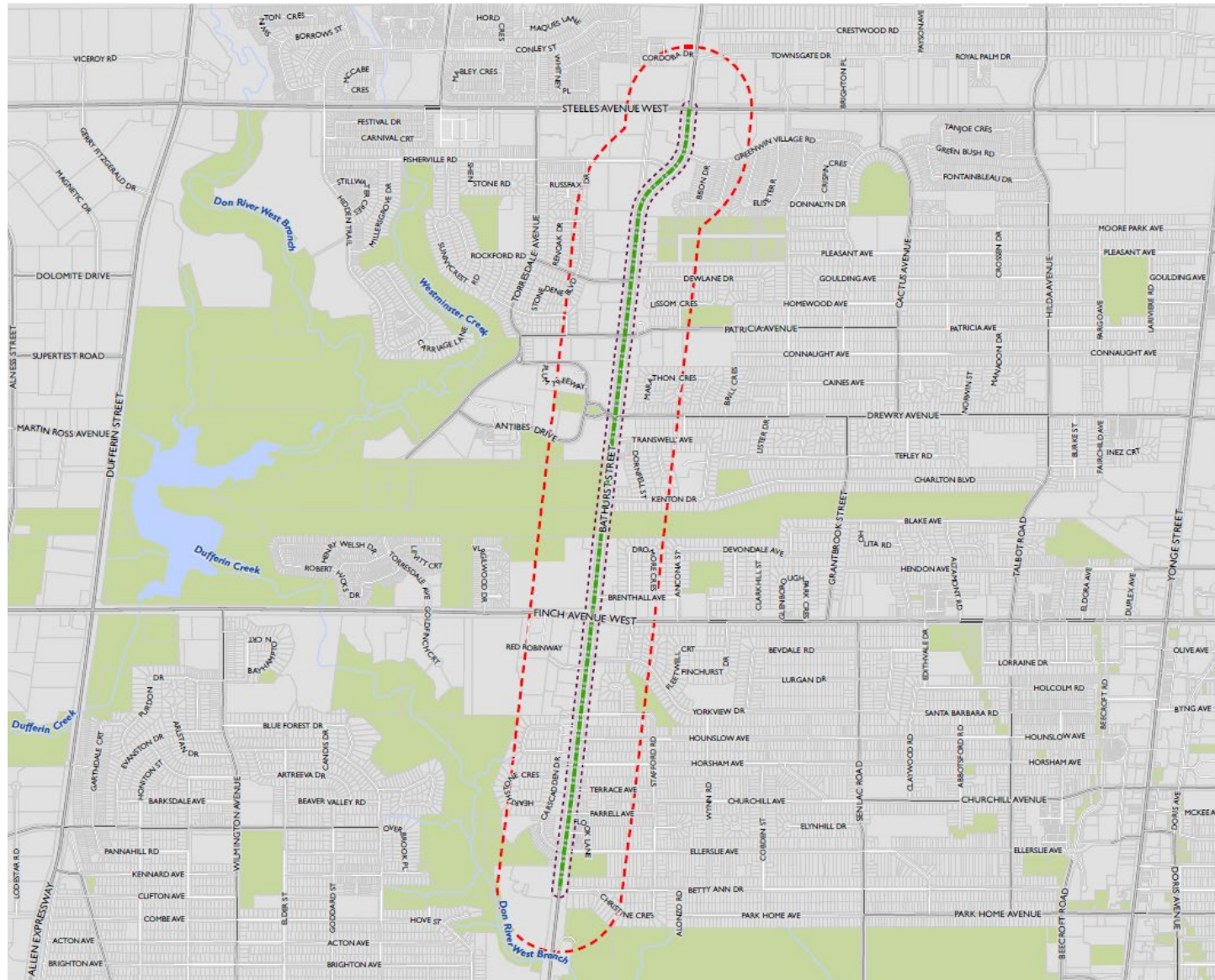
Condition 3.

Enbridge shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

Appendix B

LOCATION MAP

Figure 1: Final Pipeline Location



**BATHURST REINFORCEMENT
PIPELINE PROJECT
ENBRIDGE GAS DISTRIBUTION INC.**

**PREFERRED ROUTE
FIGURE 8**

- Preliminary Preferred Route
- - - Fieldwork Study Area (30m)
- - - Desktop Study Area (250m)
- Water Body
- Parcel Boundary
- Park (City of Toronto)

1:15,000
0 100 200 300 m

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR,
CITY OF TORONTO, REGION OF YORK
MAP CREATED BY LK
MAP CHECKED BY AB
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 18-8894
STATUS: DRAFT
DATE: 2018-04-12

Appendix C

PHOTO LOG



Photo 1: Tie-in at South West corner of Steeles Ave. W. and Bathurst St. (looking north)



Photo 2: Entry/Exit Pit on West side of Bathurst St., South of Steeles Ave West (looking north)



Photo 3: West Side of Bathurst St., South of Fisherville Rd. (looking south)



Photo 4: West Side of Bathurst St., South of Carpenter Rd. (looking north)



Photo 5: West Side of Bathurst St., South of Rockford Rd. (looking north)



Photo 6: West Side of Bathurst St., South of Kenton Dr. (looking north). TTC bus stop pad requires repair.



**Photo 7: Tie-in and District Station on East Side of Bathurst St.,
South of Ellerslie Ave (looking north)**



**Photo 8: West side of Bathurst St., South of Greenwin Village Rd.
(looking north)**



Photo 9: West side of Bathurst St., North of Cedarcroft Blvd. at 5998 Bathurst St. (looking southwest).

Appendix D

COMPLAINT LOG

DATE RECEIVED	CONTACT NAME	LANDOWNER TYPE	COMMENT	RESOLUTION
2019-Jul-27	[REDACTED]	Public	A member of the public claimed they slipped in the Contractor's work area. The area had residual water and drilling fluid (bentonite) from the clean-up of an operational release of drilling fluid (bentonite). The member of the public did not claim any injuries at that time yet, provided their first name, contact number and stated they would contact the Enbridge Inspector if there was an issue. On July 30, 2019 the member of the public contacted the Enbridge Inspector and stated, they were seeking compensation for an injury and wanted to know if there was interest in settling the claim out of court.	Immediately after the incident occurred, the area was barricaded off with construction barrels and caution tape to prevent public access. NPL Canada financially settled the matter and this incident is now closed.
2020-Mar-24	Robert Gledhill	City of Toronto	City of Toronto notified Enbridge of a settlement hole on west side of Bathurst Street, north of Greenwin Village Road (identified with safety cones).	Enbridge emailed the Contractor requesting appropriate repairs on March 24, 2020. Contractor completed repairs on March 25, 2020 and the City of Toronto was notified the repairs were completed.
2020-Jul-23	Robert Gledhill	City of Toronto	Enbridge received an email from the City of Toronto regarding the discovery of a temporary section of fence tied to the guardrail at the dead end of Betty Ann Drive near Bathurst Street.	Enbridge sent an email the Contractor on July 23, 2020 to inquire if this fence was left behind as part of the Project. The Contractor removed the fence and construction sign on July 31, 2020. Enbridge sent an email on August 4, 2020 to the

DATE RECEIVED	CONTACT NAME	LANDOWNER TYPE	COMMENT	RESOLUTION
				City of Toronto advising the fence was removed.
2021-Jan-05	Sohrab Kiani	Toronto Transit Commission (TTC)	TTC completed a site visit and noticed that the new pad that was built as part of the Project restoration was only 2.2 meters (m) deep vs. the original depth of 2.4m. Also, the concrete connection to the existing sidewalk was less than 2.0m vs. the original depth of 2.0m. The TTC requested these deficiencies be repaired as they have made this bus stop inaccessible.	Enbridge sent an email to Contractor (BevCon Construction) January 5, 2021 to investigate the concern. Enbridge emailed the TTC on January 13th to inquire how Enbridge can meet the TTC requirements. Enbridge received an email back from TTC on January 19, 2021 advising how to meet the TTC requirements. BevCon Construction to complete repairs in Spring 2021.

Bathurst Street Reinforcement Project

EB -2018-0097

Post Construction Financial Report on Costs and Variances

April 23, 2021

Introduction

Enbridge Gas Inc. (then Enbridge Gas Distribution Inc) (Enbridge) filed an application with the Ontario Energy Board (OEB) under sections 90 and 97 of the Ontario Energy Board Act, 1998 (OEB Act) on August 1, 2018 for an order granting a Leave to Construct to install a natural gas pipeline in the City of Toronto (the Bathurst Reinforcement Project, or the Project).

The project, a) Under section 90 of the OEB Act, encompassed installing 3.2 kilometers of Nominal Pipe Size (NPS 12) High Pressure (HP) steel natural gas pipeline, 69 meters of Nominal Pipe Size (NPS 8) Intermediate Pressure (IP) steel natural gas pipeline and b) Under section 97 of the OEB Act, an associated pressure regulating equipment (District Regulator Station) in the City of Toronto.

The proposed route begins at the intersection of Bathurst Street and Steeles Avenue West, travels south along the west side of Bathurst Street, and terminates on the east side of Bathurst Street, south of the intersection of Bathurst Street and Eglinton Avenue. The Project will supply gas to meet current demand and future growth in the area.

The OEB assigned the file number EB -2018-0097 to the application and granted Leave to Construct on January 3, 2019.

Pipeline construction activities for the Bathurst Street Reinforcement Project commenced in June 2019 and was completed in December 2019. Most of the soft surface restoration activities were completed by November 2019. One section of hard surface restoration (sidewalk, curb, pattern concrete apron and road) was completed on the east and west side of Bathurst Street south of Eglinton Avenue in 2019. All remaining hard surface restorations (sidewalk, pattern concrete, curb and asphalt) and soft surface restorations were completed by the fall of 2020.

This Post Financial Construction Report summarizes the actual capital costs of the project and provides an explanation of significant variances from the original estimates.

A comparison of actual versus estimated project costs is shown in Table 1 below.

Table 1 – Total Project Costs

Bathurst Street Reinforcement Project

Item No.	Item	Project Estimate (\$)	Actual Cost (\$)	Variance (\$)
1.0	Material Cost	\$ 800,232	\$ 575,427	\$ (224,805)
2.0	Labour and Construction Cost	\$ 5,501,110	\$ 7,936,442	\$ 2,435,332
3.0	External Costs (Geotechnical, Environmental, Surveying, External Engineering, Insurance)	\$ 272,000	\$ 415,973	\$ 143,973
4.0	Land	\$ 10,000	\$ 81,170	\$ 71,170
5.0	Internal Costs	\$ 272,300	\$ 144,416	\$ (127,885)
6.0	Station Cost	\$ 60,000	\$ 200,672	\$ 140,672
	Project Subtotal	\$ 6,915,642	\$ 9,354,100	\$ 2,438,458
7.0	Contingency	\$ 2,074,692	\$ -	\$ (2,074,692)
8.0	Interest During Construction	\$ 157,317	\$ 88,514	\$ (68,803)
	Total Project Costs	\$ 9,147,651	\$ 9,442,615	\$ 294,964

The cost variances in the specific categories are described below:

- 1.0 The final Material Costs was \$575,427, approximately \$225,000 less than expected at the time of filing. At the time of the filing, some material costs were estimated which contributed to the higher initial anticipated costs as compared to actual costs.
- 2.0 The final Labour and Construction Costs was \$7,936,442 approximately \$2.4 million higher than the estimate originally provided mostly for the reasons outlined below.

Construction costs were higher due to unfavourable ground conditions resulting in slower productivity. Deeper drill shots with hard ground conditions was encountered which increased actual costs. In some areas along Bathurst Street, open cut trenching had to be completed to avoid utility conflicts which further increased construction duration and costs.

When the application was originally filed with the OEB, it was anticipated that internal Company Pipeline Inspectors and Surveyors would complete the pipeline inspection and surveying on the project. However, during the time of construction, Company resources were assigned to concurrent projects requiring the use of third party inspectors and surveyors instead. Additionally, an external Engineering Company was contracted to assist in re-designing the HDD profiles for the pipeline to be installed at a deeper depth to avoid utility conflicts.

Third party approvals were required for a portion of the project that crossed the foreign oil pipelines necessitating testing in three separate sections resulting in project delays and the incurrence of additional costs.

Soft surface restorations completed in the fall of 2019 and spring of 2020 had to be recompleted because some areas did not adequately rehabilitate due to a hot and dry spring/summer.

3.0 The final External cost (Geotechnical, Environmental, Surveying, External Engineering, Insurance) was \$415,973 approximately \$144,000 higher than expected at the time of filing.

As previously mentioned, external Pipeline inspectors and surveyors were required to complete survey and inspection work and a third party Engineering Company was contracted resulting in increased costs. Also, during construction to obtain the information necessary to redesign the HDD profiles, an external resource was required onsite to GPS all underground infrastructure exposed for construction.

4.0 The final Land cost was \$81,170 approximately \$71,000 more than originally estimated at the time of filing. The additional costs are attributed to the costs of obtaining necessary permits, removal of 41 trees and replanting fees from the City of Toronto as well as external costs required for standby Inspection when working in the foreign pipeline corridor.

5.0 The final internal costs were \$144,416, approximately \$128,000 less than what was estimated.

At the time of filing, it was anticipated that internal resources would be utilized for pipeline inspection of the project but as they were unavailable during project construction these costs were offset by third party contractor costs.

6.0 The final station cost was \$200,672, approximately \$141,000 greater than what was estimated at the time of filing.

At the time of filing, the design called for two smaller district stations but it was subsequently determined that one station capable of managing the required capacity would be incorporated into the design for greater efficiency. Higher costs than anticipated were incurred for station materials and for hiring an external resource to design the station.

7.0 The contingency amount that was forecasted for this project was used.

Conclusion

The Bathurst Street Reinforcement Project was completed with a total project cost of \$9,442,615, approximately \$295,000 higher than estimated. Overall, the variance between the final actual project costs and project estimates was reasonable and prudently incurred.

The primary reasons for the higher costs can be summarized as follows:

1. Unfavourable ground conditions resulting in slower productivity and higher than anticipated construction costs.

2. Congested utilities resulting in additional costs for redesign work and additional construction costs, such as open trenching and deeper digging, associated with this issue.
3. Third party contractors were hired because internal resources were working on concurrent projects and unavailable for this project resulting in increased costs. Overall, the variance between the final actual project costs and project estimates was reasonable.