

**Minutes – Standing Policy Committee on Finance – May 9, 2018**

**REPORTS**

**Item No. 2                      Fermor Avenue Bridge (Seine River), Pedestrian-Cycle Underpass  
and Roadworks**

**STANDING COMMITTEE DECISION:**

The Standing Policy Committee on Finance concurred in the recommendation of the Winnipeg Public Service and received the report as information.

**Minutes – Standing Policy Committee on Finance – May 9, 2018**

DECISION MAKING HISTORY:

Moved by Councillor Mayes,

That the report of the Winnipeg Public Service be received as information.

Carried

## ADMINISTRATIVE REPORT

**Title: Fermor Avenue Bridge (Seine River), Pedestrian-Cycle Underpass and Roadworks,  
Project ID: 1804101118 & 1805001916,  
Quarterly Project Status Report No. 1  
For the Period Ended January 31, 2018**

**Critical Path: Standing Policy Committee on Finance**

### AUTHORIZATION

Author	Department Head	CFO	CAO
B. Neirinck, P. Eng.	J. Berezowsky	M. Ruta	D. McNeil

### EXECUTIVE SUMMARY

Project On Schedule: Yes  No

Project On Adopted Budget: Yes  No

Percent of Schedule Complete:

Percent of Adopted Budget Spent:

This is the first quarterly report to the Standing Policy Committee on Finance on this Project. Council approved this project on December 12, 2017. This report has been submitted within 180 days of approval, as required by Administrative Standard FM-004.

The project, as at January 31, 2018, was at a Class 3 Estimate with an expected level of precision of -20% to +30%. Expenditures to that date totaled \$2,297,113.82. At that date, the total forecasted project Estimate at Completion was \$25,000,000. Dillon Consulting Limited was engaged for preliminary and detailed design.

Subsequent to the reporting period, the construction bid opportunity was advertised and bids have been received. Based on the low bidder, forecasted project costs have increased by \$4.5 million to a total of \$29.5 million, which is 18% over adopted budget. As detailed in the April 19, 2018 report to the Standing Policy Committee on Infrastructure Renewal and Public Works, the complexity of the bridge rehabilitation was greater than anticipated during the preliminary design and resulted in additional costs. In addition, roadwork and land drainage work was greater than anticipated at preliminary design. The revised project forecast is within the expected range of a Class 3 estimate. As construction bids have been received, the project would now be at a Class 1 estimate with an expected level of precision of -5% to +10%.

On April 19, 2018 the SPC on Infrastructure Renewal and Public Works approved a capital budget amendment in the amount of \$4.5 million for this project along with an award of a construction contract. The amended budget is now \$29.5 million.

The Real Estate Division continues to negotiate for the necessary property acquisitions and easements associated with the project.

External utilities have completed their design, with Bell MTS commencing plant relocation at the site in February 2018.

The Advisory Committee has reviewed this report and recommends that the report be sent to the Standing Policy Committee on Finance.

## **RECOMMENDATIONS**

That the financial status of the Fermor Avenue Bridge (Seine River), Underpass and Roadworks project, as contained in this report, be received as information.

## **REASON FOR THE REPORT**

The Asset Management Administrative Standard FM-004 requires all projects with a total estimated cost of \$22 million (2018) or more report quarterly to the Standing Policy Committee on Finance. This threshold is adjusted annually for construction inflation as part of the annual Capital Budget approval. The Standing Policy Committee on Finance may also request reporting on any capital project.

## **IMPLICATIONS OF THE RECOMMENDATIONS**

No implications.

## **HISTORY/DISCUSSION**

See Appendix C – Key Project Events (History)

### **Design**

The project is currently in the design phase. The construction bid opportunity was advertised on February 12, 2018, with an expected submission deadline of late March 2018, and the design phase of the project is expected to be complete in April 2018.

Table 1 – Contracts

Contracts							
Bid Opportunity #	Company Name	Description	Original Contract Award Value (GST & MRST extra as applicable)	Total Approved Over-Expenditures (Over-Expenditure amount only)	Date of Award	Date of Total Completion	Estimated % Complete
RFP 928-2015	Dillon Consulting Limited	Consulting Services - Preliminary Design	\$ 796,353.00	\$ 175,085	4-Apr-16	6-Jul-17	100%
Single Source	Fireseeds North Infrastructure	Independent Road Safety Audit	\$ 53,000.00	\$ 500	22-Apr-16	26-Jul-16	100%
RFP 928-2015	Dillon Consulting Limited	Consulting Services - Detailed Design	\$ 1,195,244.00	\$ -	24-Jul-17		75%
Single Source	Manitoba Hydro	Relocation/Installation of Street Lights - Three Electrical Service Agreements	\$ 415,408.80	\$ -	28-Dec-17		0%
Bid Opp 1104-2017	Lafarge Canada Inc.	Supply of Precast Concrete Traffic Barriers	\$ 57,000.00	-	31-Jan-18		0%
Single Source	Bell MTS	Underground Plant Relocation	\$ 703,901.00	-	1-Feb-18		0%
<b>Total</b>			<b>\$ 3,220,906.80</b>	<b>\$ 175,585</b>			

**Upcoming Procurements:**

Description	Anticipated Award Date
Consulting Services - Contract Administration and Post Construction	15-Mar-18
Fermor Ave Bridge, Underpass and Roadwork (Bid Opp No. 772-2017)	20-Apr-18

**Schedule**

The project is currently forecast to be on schedule.

Bid Opportunity No. 1104-2017 for the supply of precast concrete traffic barriers was awarded to Lafarge Canada Inc. on January 31, 2018, and delivery of barriers through this contract is expected to be made by March 19, 2018. Precast concrete traffic barriers are required for staging the bridge rehabilitation work on Fermor Avenue at Seine River.

Bid Opportunity No. 772-2017, for the Fermor Avenue (Seine River) bridge rehabilitation, underpass and roadworks was advertised on February 12, 2018 for a minimum period of 30 calendar days. It is expected that this contract will be awarded by late April 2018. The work associated with Bid Opportunity No. 772-2017 will be primarily completed in the 2018 and 2019 construction seasons.

Bell MTS has completed the design for the relocation of their duct line on the north side of Fermor Avenue, west of the Seine River. Relocation of the duct line will occur in three phases, as follows:

- Phase 1 – February and March 2018 – Relocation of 90% of duct line
- Phase 2 – June 2018 – Relocation of remaining 10% of duct line (under Seine River dike)

- Phase 3 – Fall of 2018/Winter of 2018/2019 – Pull and splice new cables into duct line

Manitoba Hydro has completed design for the relocation of street lights, installation of new pathway lights and installation of temporary lights on Fermor Avenue from St. Anne’s Road to Archibald Street. Manitoba Hydro’s work at the site will occur as the project proceeds through the various construction phases.

Table 2 – Milestones

Milestones					
Deliverable		Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Date	Estimated % Complete
1	Preliminary Design	2016 Q4	2017 Q1	2017 Q2	100%
2	Detailed Design	2018 Q1	2018 Q2		75%
3	Construction Contract (B.O. No. 772-2017) Substantial Performance Bridge construction, pedestrian underpass and roadworks completed. All traffic lanes available and pedestrian underpass open.	2019 Q4			0%
4	Construction Contract (B.O. No. 772-2017) Total Performance Project is fully complete including all seasonal deficiencies and landscaping.	2020 Q3			0%

## **Risk**

A Class 3 estimate was in place when Council approved 2018/2019 funding for the project on December 12, 2017. The Class 3 estimate has an expected level of accuracy of -20% to +30%. The project is carrying contingencies which total approximately 10% of total project costs.

Negotiations for land acquisition at the Fermor Avenue and St. Anne’s Road intersection are ongoing. Should the City not be able to acquire this property early in the 2018 phase of construction, associated construction works could be deferred to 2019 or later.

Negotiations for permanent and temporary easements for a pedestrian and cycling pathway are ongoing. Should the City not be able to acquire these easements for the 2019 construction season, the pathway works could be deferred to 2020 or later.

Throughout construction, the number of travel lanes available to motorists will be reduced, which is expected to increase vehicle delay. The project traffic management plan will be implemented early in the 2018 construction season and will facilitate staging of the road construction. The City will monitor traffic signal timing and ensure coordination between projects in the area. Lane closures will be restricted during peak hour periods.

Coordination of various third party utilities is required to complete all proposed works.

Bell MTS will commence phase 1 of their work at the site in February 2018 with completion expected in March 2018. A delay in Bell MTS's work could lead to delays in portions of the Fermor Avenue construction contract.

Table 3 – Significant Risks and Mitigations Strategies

<b>Significant Risks and Mitigation Strategies</b>	
<b>Risk Statement and Explanation</b>	<b>Risk Mitigation Management Plan</b>
<b>New:</b>	
<b>Ongoing:</b>	
Project cost exceeding budget	City project manager to monitor project costs with regular input from consultant on all project activities.
Design cost increase	Consultant design team quality control.
Construction cost increase	Manage changes in the work.
Failure to acquire the required property and easements	Prioritize the land acquisition process.
Vehicle, pedestrian and cycling traffic negatively affected by construction (e.g. delays)	Monitoring of traffic signal timing, ongoing coordination between major construction projects in the area, restricting lane closures during peak periods.
Utility information accuracy	Coordination with utilities to maintain ongoing site utility records. Soft digging program to mitigate issues.
Failure of third party utilities to relocate plant as per the project schedule	Third party utility design has been completed. Bell MTS will be commencing the first phase of work at the site in February 2018. Manitoba Hydro will complete the relocation/installation of street and pathway lights as the construction contract proceeds through the various phases. The City, its consultants, and contractors will work closely with third party utilities to avoid schedule impacts.
Harm to fish habitat	Avoid fish habitat loss, implement an environmental protection plan, construction near waterways to avoid the period between April 1 and June 15. Dillon Consulting submitted Request for Review to Department of Fisheries and Oceans in October 2017 and will submit Waterway Permit application to City of Winnipeg in March 2018.
Clearing of trees, shrubs, and vegetation	Implement an environmental protection plan. Avoid species at risk by clearing vegetation outside of the May 15 to September 30 period.
Barn swallow management	Implement an environmental protection plan. Daily monitoring and log documentation and restricted activity period from May 15 to September 30.
Risk of flooding during and after construction	Schedule construction to avoid flood periods. Girders designed to be above flood levels and head slopes designed to avoid erosion.
High groundwater	Subsurface excavation for underpass structure and adjacent pathways to be completed when groundwater level is low.
Settlement of bridge approaches and embankments	Minimize settlements of approach slabs and embankments.
Embankment instability	Determine risk mitigation techniques for embankments west of the Seine River.
Drainage outfall erosion	Collaborate with hydraulic engineer, utilize temporary and permanent erosion protection measures.
Primary Dike Realignment	Collaborate and communicate with Geotechnical Engineer, Contractor in a timely manner to minimize any delays.
<b>Mitigated:</b>	



## **Financial**

For further information, refer to Appendix B – Financial Forecast

The financial forecast is disclosed in Appendix B. Expenditures to date primarily consist of Professional Services and total \$2,297,113.82.

## **Funding**

The project is being funded through the City of Winnipeg Capital Budget, with \$11,400,000 included in Fermor Avenue Bridge (Seine) River and \$13,600,000 included in the Regional Street Renewal Program: Funding is further broken down as follows:

Fermor Avenue Bridge (Seine River):

- 2016 Capital Budget - \$1,000,000
- 2017 Capital Budget - \$1,200,000
- 2018 Capital Budget - \$4,100,000
- 2019 Capital Budget (first charge approved) - \$5,100,000

Regional Street Renewal Program:

- 2018 Capital Budget - \$6,000,000
- 2019 Capital Budget (first charge approved) - \$7,600,000

Table 4 – Project Funding Forecast and Receivable

<b>Funding Forecast and Receivable</b>			
<b>Funding Source</b>	<b>Adopted Budget (in thousands)</b>	<b>Amended Budget (in thousands)</b>	<b>Committed (in thousands)</b>
<b>Class of Estimate</b>	<b>Class 3</b>		
Cash to Capital	500		
Province of Manitoba Roads	8,125		
Frontage Levy	8,375		
Regional Street Renewal Reserve	8,000		
<b>Total</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ -</b>

On April 19, 2018 the SPC on Infrastructure Renewal and Public Works approved a capital budget amendment in the amount of \$4.5 million for this project. The amended budget is now \$29.5 million.

## **Property Acquisition**

The Real Estate Division of the Planning Property and Development Department continues to negotiate for a portion of property to accommodate new roadway geometry at the Fermor Avenue and St. Anne's Road intersection and for easements to accommodate the upgrading of a pedestrian and cycling pathway.

Property acquisition requirements are minimal for this project. It includes one partial taking (corner cut) and a permanent easement on two parcels of land.

## **Stakeholder Engagements/Communications**

Project details continue to be updated on the project website:

[www.winnipeg.ca/Fermor](http://www.winnipeg.ca/Fermor)

Ongoing project updates are summarized as follows:

- On November 29, 2016, invitations and a news release advising the public of the upcoming information session for the preliminary design were posted to the project website.
- On December 13, 2016 the public information session for the preliminary design was held at the Southdale Community Centre.
- On January 2, 2018, invitations and a news release advising the public of the upcoming information session for the detailed design were posted to the project website.
- On January 10, 2018 the public information session for the detailed design was held at the Archwood Community Centre.

## **Subsequent Events after Report Period End Date**

- On February 1, 2018, the Acting Chief Financial Officer approved a single source negotiation with Bell MTS for adjusting manholes and relocating duct structures and cable for the Fermor Avenue bridge rehabilitation, underpass and roadwork project and the Acting Director of Public Works approved the award of contract to Bell MTS in the amount of \$703,901.
- On February 12, 2018, Bid Opportunity No. 772-2017 for the Fermor Avenue bridge rehabilitation, underpass and roadwork was advertised on the City of Winnipeg, Materials Management webpage, with an expected submission deadline of March 27, 2018.
- The City negotiated a fee for Contract Administration and Post Construction services with Dillon Consulting Limited in the amount of \$1,591,905.00. The accumulated amount related to RFP 928-2015 is estimated to be \$3,758,587.00 plus applicable G.S.T and M.R.S.T. The contract administration and post construction services contract is subject to the same terms and conditions as the original contract from 928-2015. A report has been approved by the Chief Financial Officer to authorize Dillon Consulting Limited to proceed with Contract Administration services in the amount of \$1,413,345.00 plus an allowance of \$120,000 and Post Construction services in the amount of \$58,560.00.
- Subsequent to the reporting period, the construction bid opportunity was advertised and bids have been received. Based on the low bidder, forecasted project costs have

increased by \$4.5 million to a total of \$29.5 million, which is 18% over adopted budget. The revised project forecast is within the expected range of a Class 3 estimate. As construction bids have been received, the project would now be at a Class 1 estimate with an expected level of precision of -5% to +10%.

- On April 19, 2018 the SPC on Infrastructure Renewal and Public Works approved a capital budget amendment in the amount of \$4.5 million for this project along with an award of a construction contract, amending the budget to \$29.5 million.

<b>FINANCIAL IMPACT</b>
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**Financial Impact Statement**    **Date:**    [March 22, 2018](#)

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**Project Name:**

**Fermor Avenue Bridge (Seine River), Underpass and Roadworks,  
Project ID: 1804101118 & 1805001916,  
Quarterly Project Status Report No. 1  
For the Period Ended January 31, 2018**

**COMMENTS:**

There is no financial impact associated with the recommendation of this report.

"Original signed by J. Ruby, CPA, CA"  
J. Ruby, CPA, CA  
Manager of Finance & Administration

## **CONSULTATION**

This Report has been prepared in consultation with:

n/a

## **OURWINNIPEG POLICY ALIGNMENT**

01-3 Prosperity Direction 1: Provide efficient and focused civic administration and governance. This report supports demonstration of accountability through service performance measurement and reporting.

## **SUBMITTED BY**

**Department:** Public Works

**Division:** Engineering

**Prepared by:** R. Cunningham, P. Eng., Streets Project Engineer

**Date:** April 30, 2018

### **Appendices**

Appendix A – Key Project Facts

Appendix B – Financial Forecast

Appendix C – Key Project Events (History)

## Appendix A – Key Project Facts

<b>Appendix A – Key Project Facts</b>	
<b>Project Name</b>	Fermor Avenue Bridge (Seine River), Underpass and Roadworks
<b>Business Owner (Department)</b>	Public Works Department
<b>Project ID</b>	1804101118 & 1805001916
<b>Project Sponsor</b>	Brad Neirinck, P.Eng., Manager of Engineering
<b>Department Responsible for Project Delivery</b>	Public Works Department
<b>Consultant Engineer (Company Name)</b>	Dillon Consulting Limited
<b>Adopted Budget</b>	\$25,000,000
<b>Class of Estimate (Adopted)</b>	Class 3 (-20% to +30%)
<b>Range of Estimate (Adopted)</b>	\$20,000,000 to \$32,500,000
<b>Amended Budget</b>	N/A
<b>Class of Estimate (Amended)</b>	N/A
<b>Range of Estimate (Amended)</b>	N/A
<b><u>Project Scope</u></b>	
<ul style="list-style-type: none"> <li>- Fermor Avenue Bridge over Seine River Rehabilitation</li> <li>- Pedestrian and Cycling Underpass under Fermor Avenue south of Rue Des Meurons</li> <li>- Reconstruction of Fermor Avenue from St. Anne's Road to 300m east of the Seine River</li> <li>- Rehabilitation of Fermor Avenue from 300m east of the Seine River to Archibald Street</li> <li>- Upgrades to Pedestrian and Cycling pathways</li> <li>- Professional Services for preliminary design, detailed design, contract administration and post construction</li> <li>- Utility relocations</li> <li>- Land acquisition and easements</li> </ul>	
<b>Major Capital Projects Advisory Committee Membership:</b>	
<ul style="list-style-type: none"> <li>- James Berezowsky, Director of Public Works (Chair)</li> <li>- Brad Neirinck, Manager of Engineering (Project Sponsor)</li> <li>- Jason Ruby, Manager of Finance, Public Works</li> <li>- Kas Zurek, Design and Contracts Engineer, Water and Waste</li> <li>- Richard Mahe, Senior Planner, Planning, Property and Development</li> <li>- Rob Taylor, Manager of Major Capital Project Oversight, Corporate Finance</li> </ul>	

## Appendix B – Financial Forecast

### Appendix B - Project 1804101118 & 1805001916 Financial Forecast As at January 31, 2018

Project Component Deliverables	Budget (in 000's)			Actual Costs To 31-Jan-18	Expenditure Forecast (in 000's)				Total Forecasted Costs	Surplus (Deficit) From Amended Budget	Variance Last Report	Change in Variance
	Adopted Budget	Council Approved Change	Amended Budget		Projected Costs							
					2018	2019	2020	2021				
Engineering, Design and Other	\$ 3,816	\$ -	\$ 3,816	\$ 2,231	\$ 762	\$ 793	\$ 30	\$ -	\$ 3,816	\$ -	\$ -	\$ -
Construction	\$ 17,043	\$ -	\$ 17,043	\$ -	\$ 8,277	\$ 8,766	\$ -	\$ -	\$ 17,043	\$ -	\$ -	\$ -
Land Acquisition	\$ 539	\$ -	\$ 539	\$ -	\$ 276	\$ 263	\$ -	\$ -	\$ 539	\$ -	\$ -	\$ -
Internal Financing/Overhead Costs	\$ 1,065	\$ -	\$ 1,065	\$ 66	\$ 520	\$ 478	\$ 1	\$ -	\$ 1,065	\$ -	\$ -	\$ -
Contingency	\$ 2,537	\$ -	\$ 2,537	\$ -	\$ -	\$ -	\$ 2,537	\$ -	\$ 2,537	\$ -	\$ -	\$ -
<b>Total Project Budget</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ 25,000</b>	<b>\$ 2,297</b>	<b>\$ 9,835</b>	<b>\$ 10,300</b>	<b>\$ 2,568</b>	<b>\$ -</b>	<b>\$ 25,000</b>	<b>\$ -</b>		
<b>% of Project Budget Spent</b> (Actual Costs to Date / Adopted & Amended Budget)	9%		9%									

On April 19, 2018 the SPC on Infrastructure Renewal and Public Works approved a capital budget amendment in the amount of \$4.5 million for this project. The amended budget is now \$29.5 million.

## Appendix C – Key Project Events (History)

- On March 22, 2016, the 2016 Capital Budget was adopted by Council and included \$1,000,000.00 for preliminary design in 2016 for the Fermor Avenue Bridge (Seine River).
- On April 4, 2016, the Chief Financial Officer awarded RFP No. 928-2015 (preliminary design) to Dillon Consulting Limited in the amount of \$796,353.00.
- On April 22, 2016, the Director of Public Works awarded a single source contract for an independent road safety audit to Fireseeds North Infrastructure in the amount of \$53,000.
- On June 22, 2016, the Director of Public Works approved an over-expenditure for preliminary design to Dillon Consulting Limited in the amount of 12.6% or \$100,000.00.
- On December 13, 2016, the 2017 Capital Budget was adopted by Council and included \$1,200,000 for detailed design and property acquisition in 2017 for the Fermor Avenue Bridge (Seine River).
- On April 3, 2017, the Director of Public Works approved an over-expenditure for the independent road safety audit completed by Fireseeds North Infrastructure in the amount of 0.9% or \$500.
- On April 20, 2017, the Chief Financial Officer approved a second over-expenditure for preliminary design to Dillon Consulting Limited in the amount of 9.4% or \$75,085.00.
- RFP No. 928-2015 contained clause D11.1 “Potential For Future Contract for Detailed Design and Contract Administration” which stated “The City of Winnipeg, in its sole discretion after consideration of the Consultant’s performance on Bid Opportunity No. 928-2015, may negotiate and enter into a contract with the Consultant, to undertake the work associated with the detailed design and contract administration for implementation of remedial measures without a public bid solicitation. No compensation will be provided to the Consultant for participating in this negotiation. The City will provide terms to the Consultant if it initiates negotiations with the Consultant. The City of Winnipeg will be under no obligation to initiate or enter into a subsequent contract and may choose to issue a public bid solicitation for the Work with respect to detailed design and contract administration, if the City of Winnipeg wishes to proceed in that manner.”
- On July 24, 2017, Acting Chief Financial Officer approved an award of contract for detailed design to Dillon Consulting Limited in the amount of \$1,195,244.00.
- On December 12, 2017, the 2018 Capital Budget was adopted by Council and included \$4,100,000 for Fermor Avenue Bridge (Seine River) and \$5,100,000 forecast for 2019 (first charge on 2019 Capital Budget authorized as part of 2018 Capital Budget).
- On December 12, 2017, the 2018 Capital Budget was adopted by Council and included \$6,000,000 for Fermor Avenue roadwork from St. Anne’s Road to Archibald St and \$7,600,000 forecast for 2019 (first charge on 2019 Capital Budget authorized as part of 2018 Capital Budget). Quarterly project status reporting will begin within 180 days of December 12, 2017, as required by Administrative Standard FM-004.
- On December 28, 2017, the Manager of Materials approved a single source negotiation with Manitoba Hydro Utility Services Ltd. for supplying and installing temporary lighting for construction, new pathway lights and new street lights for the Fermor Avenue bridge rehabilitation, underpass and roadwork project and the Acting Director of Public Works approved the award of contract to Manitoba Hydro Utility Services Ltd. in the amount of \$415,408.80.
- On January 31, 2018, the Acting Director of Public Works awarded Bid Opportunity No. 1104-2017 to Lafarge Canada Inc. for the supply of precast concrete traffic barriers in the amount of \$247,000 plus M.R.S.T., with \$57,000 plus M.R.S.T. to be charged to the Fermor Avenue project. The remaining \$190,000 plus M.R.S.T. will be charged to the



Chief Peguis Greenway Extension project.

- On February 1, 2018, the Acting Chief Financial Officer approved a single source negotiation with Bell MTS for adjusting manholes and relocating duct structures and cable for the Fermor Avenue bridge rehabilitation, underpass and roadwork project and the Acting Director of Public Works approved the award of contract to Bell MTS in the amount of \$703,901.