Minutes – Standing Policy Committee on Finance – July 6, 2017

REPORTS

Item No. 3Waverley Street at CN Mainline (Rivers) Grade Separation -
Financial Status Report No. 5 for the Period Ending April 30, 2017

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 – July 6, 2017

DECISION MAKING HISTORY:

Moved by Councillor Lukes,

That the recommendation of the Winnipeg Public Service be concurred in.

Carried

ADMINISTRATIVE REPORT

Title: Waverley Street at CN Mainline (Rivers) Grade Separation – Project #1805001413 -Financial Status Report No. 05 for the Period Ending April 30, 2017

Critical Path: Standing Policy Committee on Finance

AUTHORIZATION

Author	Department Head	CFO	CAO					
B. Neirinck, P. Eng.	J. Berezowsky Acting Director of Public Works	M. Ruta	D. McNeil					

EXECUTIVE SUMMARY

The project is forecast to be on schedule and within Class 3 cost estimate ranges.

This is the fifth quarterly report to SPC Finance on this project. Council approved this project on February 24, 2016. This report is being submitted as required by Administrative Standard FM-004.

Expenditures to date total \$8,458,988.51. Borland Construction Inc. has substantially completed Contract 1 for preliminary underground work. Maple Leaf Construction Ltd. has been awarded Contract 2 for the majority of work related to underpass construction. They have begun construction of the temporary detour roadway.

Funding has been announced and commitment letters have been received from Infrastructure Canada and the Province of Manitoba. The Public Service is working with the other levels of government to finalize the funding agreements. On December 14, 2016, Council approved a cost-sharing arrangement for CN Rail to contribute \$9,500,000.00 as their cost apportionment for the project, to be used as a part of the City's portion of project funding. The City has finalized the crossing agreement and associated contribution with CN.

On January 12, 2017, the City of Winnipeg obtained possession of permanently expropriated lands, and the right to enter and construct on lands subject to expropriated easements.

Significant relocation of overhead and underground electrical distribution lines is required by Manitoba Hydro in several areas of the project. An overhead line running along the south side of the CN Mainline is required for construction of the rail detour, as is an overhead line which is located along Taylor Avenue. Relocation of both is critical to the project schedule.

RECOMMENDATIONS

That the financial status of the Waverley Street at CN Mainline (Rivers) Grade Separation as contained in this report be received as information.

REASON FOR THE REPORT

Administrative Standard FM-004 requires quarterly reporting to the Standing Policy Committee on Finance.

IMPLICATIONS OF THE RECOMMENDATIONS

No implications.

HISTORY/DISCUSSION

Project updates are detailed in the following sections below.

Key Project Events

Key project events that have occurred are as follows:

- On January 29, 2013 Council approved the 2013 Capital Budget that included an amount of \$1.2 million to undertake the preliminary engineering study for the Project.
- On April 20, 2014 Dillon Consulting Limited was awarded the consulting services for a preliminary engineering study under RFP 66-2014.
- On June 25, 2014 Council concurred with the Executive Policy Committee (EPC) that Waverley Underpass be identified as one of the City's top six highest priority major capital projects.
- On December 9, 2014 a public open house was held as part of the ongoing public engagement during the preliminary engineering study phase of the project.
- On March 24, 2015 EPC established Waverley Underpass as the City's highest ranking project of four significant capital projects.
- On March 25, 2015 Council approved the prioritization established by EPC.
- On May 19, 2015 the Administration submitted an application for infrastructure funding to the New Building Canada Fund.
- On January 15, 2016 the Province of Manitoba provided approval-in-principle for their portion of funding to a maximum amount of \$45.9 million under the New Building Canada Fund.
- On January 20, 2016 the Federal Government provided approval-in-principle for their portion of the funding to a maximum amount of \$45.882 million under the New Building Canada Fund.
- On February 24, 2016 Council approved the addition of the Waverley Underpass project in the 2016 Capital Budget in the amount of \$155.082 million including the Provincial and Federal funding.
- On February 29, 2016 Dillon Consulting Limited was awarded consulting services for detailed design, contract administration, and post-construction services for the Project.
- On March 22, 2016 Council approved the 2016 Capital Budget which includes the Waverley Street at CN Mainline (Rivers) Grade Separation project as noted above.
- On April 21, 2016 the project website (www.winnipeg.ca/WaverleyUnderpass) went live.
- On June 15, 2016 Council approved the expropriation of lands related to the project.

- On July 13, 2016 Council approved By-Law No. 89/2016 for the expropriation of lands related to the project.
- On July 29, 2016 the City was informed by the Province of Manitoba that a waiver of the expropriation inquiry hearing had been granted by the Lieutenant Governor at the Cabinet meeting held on July 27, 2016.
- On September 6, 2016 the Director of Planning Property and Development approved Offers of Compensation for land acquisitions under \$25,000.
- On September 20, 2016 Standing Policy Committee on Property and Development, Heritage, and Downtown Development approved Offers of Compensation over \$25,000, to be made to land owners and other interested parties.
- On September 22, 2016, a website update occurred, providing notification of the Open House event, posting the open house materials including display boards, and posting a link for viewers to provide feedback through an online survey.
- On September 28, 2016 Council approved the consolidation/registration of land assembly corresponding to the expropriation, By-law 89/2016.
- On October 6, 2016 an Open House event was held. Two sessions were held at the Caboto Center at 1055 Wilkes Avenue, one from 3:30 pm to 5:30 pm, and a second session from 7:00 pm to 9:00 pm. The event was attended by approximately 500 members of the community. Feedback on the project was provided to the project team members. A corresponding update to the project website was made including posting of three 3D animated flythrough videos of the project.
- On October 17, 2016 Contract 1 was posted to the City of Winnipeg Bid-Opportunities website.
- On October 26, 2016 Council approved the delegation of authority to the Chief Administrative Officer to award competitively tendered construction contracts exceeding \$5,000,000, and the delegation of authority to the Chief Administrative Officer for negotiation and award of single source contracts with the Canadian National Railway Company exceeding \$5,000,000.
- On October 26, 2016 Council approved By-law 105/2016 for the opening of parts of Waverley Street and Taylor Avenue for the purposes of construction.
- On November 3, 2016, Bid-Opportunity 472-2016 closed, and the City received six responsive bid submissions for the work of Contract 1 – Preliminary Underground Works and Security Fencing.
- On November 23, 2016 Borland Construction Inc. was awarded Bid-Opportunity 472-2016 for the Waverley Street Underpass at CN Mile 3.89 Rivers Sub: Contract 1 – Preliminary Underground Works and Security Fencing, in the amount of \$2,088,994.00.
- On December 14, 2016 Council approved a cost-sharing arrangement for CN Rail to contribute \$9,500,000 as their cost apportionment for the project, to be used as a part of the City's portion of project funding.
- On January 9, 2017 Contract 2 was posted to the City of Winnipeg Bid-Opportunities website.
- On January 12, 2017 the City of Winnipeg obtained possession of permanently expropriated lands, and the right to enter and construct on lands subject to expropriated easements.
- On February 1, 2017 the first of several electronic newsletters (Construction Update #1) was issued, providing the public with an update on construction of the project.
- On February 10, 2017 the City was advised that CN property required for the project was sold to a private company. The land was identified as CN land at the start of the expropriation process, and was therefore not subject to expropriation because CN land cannot be expropriated. At that time, an interest in the required lands was expected to be obtained via the forthcoming crossing agreement between the City and CN.

- On February 13, 2017 the City of Winnipeg awarded a Single Source Purchase Order (Materials Management reference number 98-2017) to CN for the supply of rail materials.
- On March 14, 2017, SPC Property and Development, Heritage and Downtown Development approved the purchase of privately owned lands required for the project which were not subject to the expropriation bylaw.
- On March 20, 2017 the City of Winnipeg issued a notice in accordance with Section 8(1) of the Railway Safety Act for work related to construction of the new at-grade crossing of the Waverley Street Detour Road at the CN Rivers Subdivision Mile 3.94. Notices were issued to representatives of Grant Memorial <u>Baptist Church</u>, the Reh-Fit Center, and CN in accordance with the Act.
- On March 24, 2017, Bid-Opportunity 473-2016 closed, and the City received five responsive bid submissions for the work of Contract 2 Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works.
- On March 29, 2017 the City of Winnipeg entered into four Electric Service Agreements with Manitoba Hydro (Materials Management reference number 247-2017) for the relocation of various electrical distribution lines required for the project.
- On April 20, 2017 Maple Leaf Construction Ltd. was awarded Bid-Opportunity 473-2016 for the Waverley Street Underpass at CN Mile 3.89 Rivers Sub: Contract 2 Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works, in the amount of \$44,701,918.80.
- On April 25, 2017 the City of Winnipeg issued a notice in accordance with Section 8(1) of the Railway Safety Act for work related to alteration of the existing at-grade crossing of Waverley Street at CN Rivers Subdivision Mile 3.89. A notice was issued to CN in accordance with the Act.
- On April 26, 2017 the City issued a news release announcing the award of Contract 2 to Maple Leaf Construction Ltd.
- On May 5, 2017 a groundbreaking ceremony was held with the Mayor, <u>members of Council</u>, Federal and Provincial Ministers, and CN representatives marking the commencement of underpass construction. Construction Update #2 was posted to the project website and issued to stakeholders. The City issued a news release with details of the day's events.
- On May 9, 2017 the City of Winnipeg awarded a Single Source Purchase Order (Materials Management reference number 411-2017) to The Bell Telephone Company of Canada or Bell Canada for works associated with the project.
- On May 17, 2017 Borland Construction Inc. achieved Substantial Performance of Contract 1 works.
- On May 18, 2017 the Chief Financial Officer approved a contract over-expenditure for Contract 1 in the amount of \$871,763.57.
- On May 24, 2017 the City received a copy of the duly executed Crossing Agreement with CN, executed by CN on May 19, 2017 and effective May 1, 2017.

Major Capital Project Steering Committee

The Administrative Standard for projects with a capital cost exceeding \$20 million requires the formation of a Major Capital Project Steering Committee. Committee members currently include:

Jim Berezowsky, Acting Director of Public Works Jason Ruby, Manager of Finance and Administration Tim Shanks, Manager of Water Services Brad Neirinck, Manager of Engineering Georges Chartier, Chief Asset and Project Management Officer The Steering Committee met:

- In 2016: on March 16, April 20, August 10, and October 19;
- In 2017: on March 2 and June 1;

Staffing changes since the last report resulted in Jim Berezowsky, Acting Director of Public Works assuming the role of Committee Chair. The Committee is currently seeking a new representative from Planning, Property and Development Department, formerly held by the Manager of Real Estate.

Construction

The project is being delivered using the Design, Bid, Build (DBB) approach, which is the normal project delivery method for the City. The project is currently in the construction phase. Dillon Consulting has been engaged as the City's Professional Consulting Service Provider and is designing the facility as well as acting as the City's Contract Administrator during the project.

Project Scope includes the following:

- Underpass bridge structure, land drainage including pump station, roadways, active transportation pathways, and landscaping;
- Temporary roadway and railway detours to facilitate underpass construction;
- Twinning of Taylor Avenue from Waverley Street to Lindsay Street, and twinning of Hurst Way from Waverley Street to approximately 45 Hurst Way;
- Improvements to Waverley Street from Wilkes Avenue to Grant Avenue, including intersection improvements;
- Professional services for detailed design, contract administration, and post-construction services;
- Land acquisition; and
- Utility relocations.

The project has been divided into two construction contracts designated Contract 1 and Contract 2.

Contract 1 consists primarily of the installation of underground utilities required in advance of the underpass construction. As of May 17, 2017, Borland Construction has substantially completed the work of Contract 1.

Contract 2 consists of all the major components of the underpass project including: the underpass bridge structure; pump station; temporary detour roadways; installation of water and sewer infrastructure; and extensive improvements to the surrounding transportation network. Contract 2 was awarded to Maple Leaf Construction, who has mobilized to site and started construction of 2017 works.

<u>Risk</u>

A Class 3 Estimate was in place when Council approved the project on February 24, 2016. The Class 3 Estimate has an expected level of accuracy of -20% to +30%. To mitigate the financial risk of the project, the project is carrying risk-specific contingencies which total approximately \$42.29M or 37% of total project costs.

The risk of schedule impacts due to land acquisition has been resolved. An expropriation bylaw was submitted to Council and was approved on July 13, 2016. On January 12, 2017 the City of Winnipeg obtained possession of permanently expropriated lands, and the right to enter and construct on lands subject to expropriated easements. Additionally, on March 14, 2017 SPC Property and Development, Heritage and Downtown Development approved the purchase of privately owned lands required for the project which were not subject to the expropriation bylaw.

The risk of failing to obtain a Crossing Agreement with CN has been resolved. On May 24, 2017 the City received a copy of the duly executed Crossing Agreement with CN, executed by CN on May 19, 2017 and effective May 1, 2017.

Several utilities will be undertaking works related to the project. These third party utilities bear an important financial and schedule risk. Significant relocation of overhead and underground electrical distribution lines is required by Manitoba Hydro in several areas of the project. An overhead line running along the south side of the CN Mainline is required for construction of the rail detour, as is an underground line which crosses the CN Mainline east of Waverley Street. Relocation of both lines has been successfully completed. However, relocation of a distribution line along Taylor Avenue remains and is required for opening the detour road to traffic. Only high level cost estimates for the relocation of third party utility infrastructure were possible during initial project planning. While the project budget includes contingencies for utility relocation, until more detailed relocation designs and cost estimates for these works are produced by various third party utilities, there is a high degree of cost uncertainty. To mitigate the risk of potential conflicts, a comprehensive soft-dig program was undertaken to determine third party utility locations with a high degree of accuracy in both alignment and elevation. A detailed utility conflict matrix is being maintained to identify and deal with potential utility conflicts.

The renewal of a large diameter water distribution feedermain is required where it passes under the CN Mainline. Renewal of this feedermain will be performed with trenchless installation methods to minimize the schedule impacts of the work. During constructability and risk reviews, it was identified that the specialized large diameter feedermain pipe and casings require significant lead time. Having these items supplied under Contract 2 would likely result in the successful contractor not having sufficient time to supply these materials. As such, the City has proceeded with procuring these items as a Change Work Order under the existing Contract 1 works, and will be supplied to the successful contractor for Contract 2 for installation only.

The material supply is currently on schedule.

With the project now in the construction phase, there is a risk that unfavorable subsurface soil and groundwater conditions may impact the construction schedule for subgrade construction, bridge and pump station foundations, trenchless pipe installations, and various excavations. Encountering unfavorable subsurface conditions poses schedule and financial risk. Comprehensive subsurface soil and groundwater investigations were carried out in the design phase to mitigate this impact; however there is always a degree of uncertainty as these investigations can never be known with complete certainty until the work is performed. The major project risks are identified in Table 1 below.

Ris	sks
Risk Statement and Explanation	Mitigation Strategy
Failure to relocate critical utilities may delay	Early engagement has occurred with third
the project.	party utilities to coordinate relocation work. A
	comprehensive soft-dig program has been
	completed and detailed utility conflict matrix
	developed. Manitoba Hydro has completed
	relocation of two distribution lines which were
	in conflict with the rail detour. Relocation of
	the Taylor Ave. distribution line is pending.
Lead time for feedermain pipe and casing	These materials have been procured as part of
supply could delay the project.	Contract 1 to ensure on time delivery.
Encountering subsurface soil and groundwater	Comprehensive subsurface soil and
conditions may delay the project and increase	groundwater investigations were carried out in
cost.	the design phase. Ongoing monitoring of
	conditions will be performed throughout
	construction.
Change in project scope increases costs	Regular monitoring and verification of the
and/or delays the project.	scope by the project management team.

Table 1 – Project Risks and Mitigation Strategies

*Risks are arranged vertically from higher to lower assessed risk

Financial

The project is currently being forecast to be within budget. The financial forecast is disclosed in Appendix A. Expenditures for the current reporting period (January 31 to April 30, 2017) were \$3,078,639.56 and primarily consist of Professional Services, Land Acquisition, and Construction work on Contract 1. Expenditures to date total \$8,458,988.51.

The total project budget of \$156.282 million includes \$1.2 million for the preliminary engineering study approved by Council as a first charge on the 2013 Capital Budget on December 12, 2012, as well as \$155.082 million for detailed design and construction, approved by Council on March 22, 2016.

Since the previous reporting period, the following new financial commitments were established.

- On March 29, 2017 the City of Winnipeg entered into four Electric Service Agreements with Manitoba Hydro (Materials Management reference number 247-2017) for the relocation of various electrical distribution lines required for the project, in the total amount of \$1,228,002.00
- On April 20, 2017 Maple Leaf Construction Ltd. was awarded Bid-Opportunity 473-2016 for the Waverley Street Underpass at CN Mile 3.89 Rivers Sub: Contract 2 Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works, in the amount of \$44,701,918.80.
- On May 9, 2017 the City of Winnipeg awarded a Single Source Purchase Order (Materials Management reference number 411-2017) to The Bell Telephone Company of Canada or Bell Canada for works associated with the project.

Major contracts awarded to date are identified in Table 2 below.

Request for Proposal or Bid Opportunity	Description	inal Contract rd Value (G.S.T & S.T extra as icable)	Total Approved Over-Expenditures (Over-Expenditure amount only)						
RFP 66-2014	Consulting Services for Preliminary Engineering Study	Awarded to Dillon Consulting Limited	\$	1,011,904.00	\$	50,000.00			
RFP 150-2016 *	Consulting Services for Detailed Design, Contract Administration, and Post-Construction Services	Awarded to Dillon Consulting Limited	\$	11,368,000.00	\$	158,530.00			
Single Source	Independent Road Safety Audit	Awarded to Fireseeds North Infrastructure	\$	62,347.50	\$	-			
Bid-Opp 472-2016	Contract 1 – Preliminary Underground Works and Security Fencing	Awarded to Borland Construction Inc.	\$	2,088,994.00	\$	871,763.57			
Single Source**	Supply of Rail Materials	Awarded to Canadian National Railway Company	\$	6,800,000.00					
Single Source	Relocation of Electrical Distribution – Four Electric Service Agreements	Awarded to Manitoba Hydro	\$	1,228,002.00					
Bid-Opp 473-2016	Contract 2 - Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works.	Awarded to Maple Leaf Construction Ltd.	\$	44,701,918.80					
Single Source	Communication Cable Relocation Works	Awarded to Bell Canada	\$	800,000.00					
		Total	\$	68,061,166.30	\$	1,080,293.57			

Table 2 – Major Contracts Table

*Authority delegated to the CAO to award Single Source Consulting Engineering Services approved by Council, February 24, 2016, Recommendation #7

**Authority delegated to the CAO to award Single Source Contracts to CN, approved by Council October 26, 2016, Recommendation #2

Funding

The project is being funded by the three levels of government with the City's share being budgeted at 41% of total project costs factoring in ineligible cost not covered by the other levels of Government. It should be noted that funding for the project has been budgeted without reliance on contributions from the railway. On December 14, 2016 Council approved a cost-sharing arrangement for CN Rail to contribute \$9,500,000.00 as their cost apportionment for the project. With this contribution, the City's share of project costs is estimated to be 35%.

The majority of the City's share of project cost is to be funded by debt. No debt has been issued to date on the project. Contribution agreements are currently under negotiation with Infrastructure Canada and the Province of Manitoba.

Property

Approximately 13 private landowners will be impacted by the expropriation process associated with this project. The impacts include partial takings, temporary easements, and permanent easements. Meetings were held with individual property owners during the preliminary engineering study, and ongoing meetings are occurring as the land acquisition process progresses. Two landowners have reached negotiated settlements. Negotiations are ongoing with the remaining landowners. Failure to reach a negotiated settlement will result in the matter being referred to the Land Value Appraisal Commission (LVAC). The LVAC is an independent tribunal which determines the due compensation payable for government land purchases and expropriations.

On February 10, 2017 the City was advised that CN property required for the project was sold to a private company. The land was identified as CN land at the start of the expropriation process, and was therefore not subject to expropriation because CN land cannot be expropriated. At that time, an interest in the required lands was expected to be obtained via the forthcoming crossing agreement between the City and CN. On March 14, 2017 SPC Property and Development, Heritage and Downtown Development approved the purchase of the privately owned lands.

Schedule

The project is currently forecast to be on schedule. Construction on Contract 1 began in January of 2017 and was substantially complete as of May 17, 2017. Work on Contract 2 began on May 5, 2017. Risks relating to schedule have been previously discussed in the Risks section of this report.

Communications

Project details continue to be updated on the project website: www.winnipeg.ca/WaverleyUnderpass.

Ongoing project newsletters and project website updates are summarized as follows:

- On February 1, 2017 the first of several electronic newsletters (Construction Update #1) was issued, providing the public with an update on construction of the project.
- On May 5 2017, Construction Update #2 was posted to the project website and issued to stakeholders informing the public of upcoming work on the detour road.

On April 26, 2017 the City issued a news release announcing the award of Contract 2 to Maple Leaf Construction Ltd. On May 5, 2017 a groundbreaking ceremony was held with the Mayor, <u>members of Council</u>, Federal and Provincial Ministers, and CN representatives marking the commencement of underpass construction. The City issued a news release with details of the day's events.

FINANCIAL IMPACT

Financial Impact Statement	Date: J	une 12, 2017
Project Name:	First Year of Program	2017
Waverley Street at CN Mainline (Rivers) Grad	le Separation – Project # 18050014	113 - Financial
Status Report No. 05 for the Period Ending Ap	pril 30, 2017	

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 and Administration

CONSULTATION

In preparing this report there was 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 WorksDivision:EngineeringPrepared by:C.D. Ward, P. Eng., Bridge Projects EngineerDate:June 8, 2017

Attachment - Appendix A – Financial Forecast

Appendix A – Financial Forecast (in thousands)

Waverley Street at CN Mainline (Rivers) Grade Separation Financial Forecast Peoplesoft Project ID 1805001413 As at April 30, 2017

AS	at April	30, 2017	

		Buc	dget (i	in thou	s ands)			Expenditure Forecast (in thousands)																	
Project Component	0	Priginal	Adjı	ıstmen	t 1	Revised	Actual 2016		ual Costs To I 30, 2017	Re	mainder of 2017		2018		2019		2020	F	Total Forecast	(l Fro	Surplus Deficit) m Revised Budget	L	iance ast port	Chai ir Varia	กั
Professional Services		11,422	\$	-	\$	11,422	\$ 4,693	\$	5,854	\$	778	\$	3,320	\$	1,400	\$	70	\$	11,422	\$	-	\$	-	\$	-
Construction External Utilities and Rail	\$ ¢	74,610 13,670		-	\$ \$	74,610 13,670		\$ \$	1,547 5	\$ \$	10,793 12,445	\$ \$	43,400 60	\$ ¢	17,970 1,160		900	\$ ¢	74,610 13,670		-	\$ \$	-	\$ ¢	-
Subtotal	\$	88,280		-	\$	88,280		\$	1,552	э \$	23,238	Ŧ	43,460	\$,	\$		\$	88,280		-	\$ \$	-	\$	-
Land Acquisition	\$	4,200	\$	-	\$	4,200	\$ 5	\$	546	\$	854	\$	1,400	\$	1,400	\$	-	\$	4,200	\$	-	\$	-	\$	-
Overheads and Other	\$	10,090	\$	-	\$	10,090	\$ 235	\$	507	\$	2,143	\$	2,840	\$	3,770	\$	830	\$	10,090	\$	-	\$	-	\$	-
Contingencies	\$	42,290	\$	-	\$	42,290	\$-	\$	-	\$	16,174	\$	17,328	\$	8,350	\$	438	\$	42,290	\$	-	\$	-	\$	-
	\$	156,282	\$	-	\$	156,282	\$ 4,938	\$	8,459	\$	43,187	\$	68,348	\$	34,050	\$	2,238	\$	156,282	\$	-	\$	-	\$	-