

Minutes – Standing Policy Committee on Finance – January 11, 2019

REPORTS

Item No. 3 Waverley Street at CN Mainline (Rivers) Grade Separation

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 – January 11, 2019

DECISION MAKING HISTORY:

Moved by Deputy Mayor Chambers,

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

Carried

ADMINISTRATIVE REPORT

**Title: Waverley Street at CN Mainline (Rivers) Grade Separation,
Project ID: 1805001413,
Quarterly Project Status Report No. 10
For the Period Ended September 30, 2018**

Critical Path: Standing Policy Committee on Finance

AUTHORIZATION

Author	Department Head	CFO	CAO
B. Neirinck, P. Eng.	J. Berezowsky	B. D'Avignon, Acting for 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 tenth quarterly report to SPC Finance on this Project. The reporting period covers five months, the period from May 1 to September 30, 2018. Expenditures to September 30, 2018 total \$46,168,845.52. The total project Estimate at Completion has been reviewed in detail since the last report, and is now estimated at \$97.923M (\$23.416M reduction since last report).

Construction on Contract 2 is ongoing. The critical stage for bridge construction was achieved on August 31, 2018. Despite bridge completion being two weeks later than originally targeted, no impact on the overall project schedule is anticipated. At writing, CN's rail contractor is working on completing all necessary rail work in order to divert rail traffic onto the new bridge structure. This work is required to be complete by the end of 2018 to keep remaining components of the project on schedule.

The City continues to work with the owner of 1360 Taylor Avenue to review site and parking alterations.

An agreement with the Winnipeg Arts Council was finalized on August 15, 2018, for a public art component on the project.

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 Waverley Street at CN Mainline (Rivers) Grade Separation 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)

Construction (Update from last report)

The project is currently in the construction phase. The project has been divided into two construction contracts designated Contract 1 (now complete) and Contract 2 (underway).

Contract 2

Contract 2 is being performed by Maple Leaf Construction and 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.

Over the weekend of July 6, 2018 starting at 10:00 AM through July 8, 2018 ending at 7:00 PM, Waverley Street (detour roadway) was completely closed to all traffic, cyclists and pedestrians in order to complete rail track reconstruction at the at-grade crossing with the detour road. The work was completed approximately 12 hours ahead of schedule.

Work has been completed on the bridge structure. Difficulties with bridge foundations due to subsurface conditions resulted in design changes to the foundations. On June 20, 2018 installation of the last of two problematic caisson foundations was concluded, marking the completion of foundation work required for the rail bridge. On August 31,

2018 the critical stage of bridge completion was achieved. Extra work associated with the design changes is approximately \$730,000.00. Minor structural work below the bridge is scheduled for summer 2019.

Bulk excavation of the underpass occurred to the extent possible while trains were still operating on the rail detour embankment. After trains are operating on the bridge structure and communication cables relocated onto the bridge, the remainder of the excavation under the new bridge will be completed over the winter of 2018-19.

Work has continued on the pump station. The deep shoring was completed, and the deep excavation reached bottom in September 2018. Work on the Pump Station will continue over the winter of 2018-19. The pump station is on schedule to be completed and commissioned prior to opening the underpass to traffic.

The reporting period also encompasses the majority of the 2018 summer construction season. During this time, significant progress was made on the following project roadwork components:

- widening of Taylor Avenue between Waverley Street and Lindsay Street Construction of new eastbound lanes for the
- widening of Hurst Way Construction of new westbound lanes for the
- Wilkes Ave. and Waverley St. Intersection improvements at the intersection of
- north and south of the bridge area. Excavation of the underpass roadway has occurred Final paving of the future (lowered) intersection of Waverley St. and Taylor Avenue commenced.
- including land drainage and water distribution has occurred in the above locations. Construction of underground infrastructure

Other

Various external utilities have been engaged to perform modification and/or relocation of their services to accommodate the proposed works.

On July 31, 2018 the property owner representative for 1360 Taylor Avenue was informed that the City will not be proceeding with construction of a retaining wall, and that the City will work with the owner to review site and parking alterations. The City continues to work with the owner of 1360 Taylor Avenue to review site and parking alterations.

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

- On September 17, 2018 the City awarded a contract to Outfront Media Canada LP to supply and install two new bus shelters required for the project.

Public Art Component

On May 7, 2018, the CFO authorized award of a single source contract to the Winnipeg Arts Council for a public art component for the project, in the total amount of \$450,000.00 (inclusive of GST). Of that, \$350,000.00 is to be funded by the Waverley Underpass project, and the remaining \$100,000.00 coming from the City Centre Land Dedication Reserve (River Heights – Fort Garry Ward allocation).

On August 15, 2018, the City executed an agreement with the Winnipeg Arts Council (WAC) for overall management and execution of a Public Art component on the project.

The Provincial and Federal Governments have confirmed that the Public Art component will not be considered eligible for cost sharing.

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 66-2014	Dillon Consulting Limited	Consulting Services for Preliminary Engineering Study	\$ 1,011,904.00	\$ 50,000.00	30-Apr-14	30-Sep-15	100
RFP 150-2016	Dillon Consulting Limited	Consulting Services for Detailed Design, Contract Administration, and Post-Construction Services	11,368,000.00	655,430.00	29-Feb-16		60
Single Source	Fireseeds North Infrastructure	Independent Road Safety Audit	62,347.50		27-Sep-16		50
Bid-Opp 472-2016	Borland Construction Inc.	Contract 1 - Preliminary Underground Works and Security Fencing	2,088,994.00	871,763.57	23-Nov-16	23-Nov-17	100
Single Source	Canadian National Railway Company	Supply of Rail Materials, Installation, Signals, Flagging, Railway Utility Relocation	6,800,000.00		30-Jan-17		50
Single Source	Manitoba Hydro	Relocation of Electrical Distribution - Four Electric Service Agreements	1,228,002.00		29-Mar-17		100
Bid-Opp 473-2016	Maple Leaf Construction Ltd.	Contract 2 - Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works	44,701,918.80	763,486.40	20-Apr-17		60
Single Source	Bell Canada	Communication Cable Relocation Works	800,000.00		9-May-17		50
Single Source	Manitoba Hydro	Fiber Optic Cable and Street Lighting - Two Electric Service Agreements	283,612.00		27-Jun-17	30-Sep-17	100
Single Source	Manitoba Hydro	Relocation of Various Natural Gas Pipelines	17,653.43		29-Jun-17		75
Single Source	Shaw Cablesystems G.P.	Relocation of Various Underground Services	27,821.30		29-Jun-17		100
Single Source	BellMTS (MTS Inc.)	Relocation of Communication Cables	90,160.73		18-Jul-17	30-Sep-17	100
Single Source	Manitoba Hydro	Natural Gas Service to Pump Station	49,004.00		8-Dec-17		-
Single Source	Manitoba Hydro	Electrical Service to Pump Station	140,571.04		13-Dec-17		-
Single Source	Manitoba Hydro	Relocation of Utility Pole at Grant Ave.	5,850.00		21-Feb-18		100
Single Source	Pembina Trails SD	Relocation of Fiber Optic Cable	121,880.00		24-Apr-18		-
Single Source	Winnipeg Arts Council	Public Art Component	428,571.43		7-May-18		-
Single Source	Outfront Media Canada LP	Supply and Install Bus Shelters	31,110.00		17-Sep-18		-
Single Source	Manitoba Hydro	Street Lighting - Waverley, and Distribution Relocation	755,864.09		18-Oct-18		-
Single Source	Manitoba Hydro	Street Lighting - Wilkes	10,579.04		24-Oct-18		-
Total			\$ 70,023,843	\$ 2,340,680			

Upcoming Procurements:

Description	Anticipated Award Date
N/A	

Schedule (Update from last report)

On August 31, 2018 the critical stage of bridge completion was achieved. Completion of the bridge structure was critical to the overall project schedule because adequate time was required in the fall of 2018 for CN's contractor to complete mainline rail work over the new bridge and transition train traffic off the rail detour (shoofly) and over the new bridge. At writing, CN's rail contractor is working on completing all necessary rail work in order to divert rail traffic onto the new bridge structure. Communication cable is also being relocated off the rail detour and onto the bridge. This work is required to be complete by the end of 2018 to keep remaining components of the project on schedule.

Bulk excavation of the underpass (including under the new bridge structure) is scheduled to be completed over the winter of 2018-2019.

Table 2 – Milestones

Milestones					
	Deliverable	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Date	Estimated % Complete
1	Preliminary Design	2015 Q1		2015 Q1	100%
2	Detailed Design	2017 Q1		2017 Q1	100%
3	Contract 1 Works - Total Performance	2017 Q2	2017 Q4	2017 Q4	100%
4	Detour Roadway	2017 Q4		2017 Q4	100%
5	Underpass Bridge Structure	2018 Q3		2018 Q3	100%
6	Underpass Roadway	2019 Q3			0%
7	Contract 2 Works - Total Performance	2020 Q3			60%

Risk (Update from last report)

The critical stage for bridge completion has been achieved on August 31, approximately 2 weeks behind the original schedule. CN's contractor still had sufficient time over the fall of 2018 to complete the rail work over the new bridge. Thus, the risk of late bridge completion has been mitigated.

During installation of deep foundations for the bridge, difficult subsurface conditions were encountered. This issue contributed to a two week delay in bridge structure completion, and the design changes to deal with these difficult conditions resulted in additional costs of approximately \$730,000.00. Despite these impacts, the project schedule was able to absorb this delay, and the additional costs to modify the foundation design are within budgeted contingency amounts. Furthermore, now that bridge work is complete and the pump station excavation has reached bottom, the major geotechnical risks on this project have been mitigated. Some geotechnical and

groundwater related risks remain as they relate to bulk excavation of the underpass, roadwork, and land drainage outlet construction.

Risks related to relocation of Manitoba Hydro electrical distribution relocations are complete and have been mitigated. Relocation of third party utilities (primarily fibre optic cable within the CN right-of-way) onto the new bridge structure is required to occur prior to removal of the temporary rail detour. Bulk excavation under the new bridge cannot occur until this is completed. There is a risk that delays in this relocation lead to a delay to the start of bulk excavation advancing under the bridge.

Table 3 – Significant Risks and Mitigations Strategies

Significant Risks and Mitigation Strategies	
Risk Statement and Explanation	Risk Mitigation Management Plan
New:	
N/A	N/A
Ongoing:	
Vehicle, pedestrian and cycling traffic negatively impacted by construction (e.g. delays, wayfinding difficulty)	Continued monitoring to ensure satisfactory performance.
Failure of third party utilities to relocate services could delay the project	Third party utilities in CN right-of-way – coordination with these utilities are ongoing.
Encountering poor subsurface soil and groundwater conditions may delay the project and increase cost	Risks related to remaining project components including bulk excavation and land drainage continue to be monitored.
Mitigated:	
Encountering poor subsurface soil and groundwater conditions (Bridge component)	A highly localized bedrock fissure resulted in schedule and cost impacts to bridge construction totaling 2 weeks delay and approximately \$730,000 in additional costs; expected and are within budgeted contingency amounts.
Delay in completion of Bridge Construction delays Fall 2018 rail work, delays project 9 - 12 months.	Bridge completed on August 31, 2018. City worked with CN to compress fall 2018 rail works to maintain project schedule.
Manitoba Hydro Utility Relocations	MB Hydro - All major electrical distribution lines have successfully been relocated.
Changes to railway requirements (addition of third track) may result in increased design and construction costs and schedule impacts	Third track concept no longer being pursued. City and CN will continue to discuss future impacts.
Failure to obtain a Crossing Agreement with CN	Crossing Agreement executed by CN on May 19, 2017

Failure to assemble required land could delay the project	An expropriation by-law was approved by Council on July 13, 2016. The City took possession of expropriated lands on January 12, 2017.
Lead-time for delivery of specialized large diameter pipe material could delay Feeder Main renewal work	Procurement of the specialized materials was added to Contract 1 works, and has successfully been supplied for Contract 2.
Maintaining the project schedule (administrative)	Developed a schedule that includes contingency, ongoing schedule reviews. Delegated authority to CAO to award competitively tendered construction contracts exceeding \$5,000,000 allowed for timely award of Contract 2.

Financial (Update from last report)

For further information, refer to Appendix B – Financial Forecast

The financial forecast is disclosed in Appendix B. Expenditures for the current reporting period (May 1, 2018 to September 30, 2018) were \$16,960,637.30 and primarily consist of construction progress. Expenditures to date total \$46,168,845.52.

Currently, the total project Estimate at Completion is \$97.923M, resulting in a forecasted surplus of \$58.359M. The Estimate at Completion is \$23.416M lower than the last report (period ending April 30, 2018).

The Estimate at Completion includes \$11M in contingencies.

The project budget of \$156.282M was established at project authorization by Council based on a Class 3 estimate (+30%, -20%) which was established at the conclusion of the Preliminary Design phase. The current surplus of \$58.359M is expected for the following reasons:

- The adopted budget included a number of contingency amounts totaling \$42.29M, each tied to various risk factors. As the project has progressed, ongoing project risk management has allowed for the reduction of these contingency amounts as risk factors reduce. For example, project authorization occurred such that construction could start in 2017, avoiding a budgeted contingency of approximately \$7M associated with a one year delay on the project. Furthermore, subsurface conditions were generally found to be as expected, so contingency amounts of approximately \$3M related to these risks are not expected to be required.
- The adopted budget carried significant costs associated with the relocation of Manitoba Hydro electrical distribution lines. Two major line relocations were eliminated during the detailed design stage through a process of design optimization.
- Construction market conditions were competitive at the time of tendering major contracts. A large contract size for Contract 2 works took advantage of economies of scale. Furthermore, early tendering reduced the risks of yearly construction cost

inflation, which was conservatively accounted for during initial estimating.

- Significant savings on the underpass bridge structure were realized when a less costly bridge alternative was selected. The adopted budget conservatively carried a more costly bridge type because at the time CN had not agreed to all details of the project.
- The City's overhead and administration costs are included in the adopted budget, however these costs are applied to the project as a function of actual costs incurred. Therefore, with actual project costs projected to be lower than budgeted, so will the overhead and administration costs.

Funding (Update from last report)

As of the report period end date, total claims submitted to the Federal Government was \$10,591,242.60, and total claims submitted to the Provincial Government was \$10,676,111.40.

The majority of the City's share of project cost is to be funded by debt. To-date, \$17,000,000.00 of debt has been issued on the project (no change from last report).

Table 4 – Project Funding Forecast and Receivable

Funding Forecast and Receivable			
Funding Source	Adopted Budget (in thousands)	Amended Budget (in thousands)	Committed (in thousands)
Class of Estimate	Class 3		
Cash to Capital	\$ 700	\$ 700	\$ 700
External Debt	\$ 63,332	\$ 53,832	\$ 53,832
Provincial Funding for Road Improvements	\$ 500	\$ 500	\$ 500
Provincial Building Manitoba Fund	\$ 45,875	\$ 45,875	\$ 45,875
Federal Building Canada Fund	\$ 45,875	\$ 45,875	\$ 45,875
CN Rail Contribution	\$ -	\$ 9,500	\$ 9,500
Total	\$ 156,282	\$ 156,282	\$ 156,282

Property Acquisition (Update from last report)

Approximately 13 private landowners have been 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 and are occurring as the land acquisition process progresses.

Five 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.

Stakeholder Engagements/Communications (Update from last report)

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 June 28, 2018 a news release and project website update (including Construction Update #6) were issued informing the public of an upcoming full closure of Waverley Street over the weekend of July 6 – 9, 2018 for track reconstruction.
- On September 20, 2018 a “fly through” video of the project site was posted to the project website. The video provides a bird’s eye view of the project site taken during the 2018 summer construction season, approximately mid-way through the project.

Subsequent Events after Report Period End Date

- On October 16, 2018, construction of the new eastbound lanes of Taylor Avenue were completed and traffic was diverted to these new lanes, allowing work on the existing westbound lanes of Taylor Avenue to commence.
- On October 18, 2018, the City of Winnipeg entered into three Electric Service Agreements with Manitoba Hydro (Materials Management reference number 926-2018) for the installation of street lighting along Waverley Street, and relocation of a single distribution line support pole vicinity Hurst Way
- On October 24, 2018, the City of Winnipeg entered into an Electric Service Agreement with Manitoba Hydro for the installation of street lighting along Wilkes Avenue.
- Rail work commenced in October 2018. At writing, laying of permanent track over the new bridge is occurring and is expected to be complete by the end of November, 2018. Relocation of communication cable from the rail detour to the bridge structure is also occurring and expected to be complete by the end of November, 2018.

FINANCIAL IMPACT

Financial Impact Statement

Date: **November 21, 2018**

Project Name:

Waverley Street at CN Mainline (Rivers) Grade Separation

Project ID: 1805001413

Quarterly Project Status Report No. 10

For the Period Ended September 30, 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: C.D. Ward, P. Eng., Bridge Projects Engineer

Date: November 15, 2018

Appendices

Appendix A – Key Project Facts

Appendix B – Financial Forecast

Appendix C – Key Project Events (History)

Appendix A – Key Project Facts

Appendix A – Key Project Facts	
Project Name	Waverley Street at CN Mainline (Rivers) Grade Separation
Business Owner (Department)	Public Works Department
Project ID	1805001413
Project Sponsor	Brad Neirinck, P.Eng., Manager of Engineering
Department Responsible for Project Delivery	Public Works Department
Consultant Engineer (Company Name)	Dillon Consulting Limited
Adopted Budget	\$156,282,000
Class of Estimate (Adopted)	Class 3 (-20% to +30%)
Range of Estimate (Adopted)	\$125,000,000 to \$203,167,000
Amended Budget	N/A
Class of Estimate (Amended)	N/A
Range of Estimate (Amended)	N/A
Project Scope	
<ul style="list-style-type: none"> • 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. 	
Major Capital Projects Advisory Committee Membership:	
<ul style="list-style-type: none"> - James Berezowsky, Director of Public Works (Chair) - Brad Neirinck, Manager of Engineering, Public Works (Project Sponsor) - Tim Shanks, Manager Water Services, Water and Waste - Jason Ruby, Manager of Finance, Public Works - Marc Pittet, Manager of Land Development Geomatics Info, Planning Property and Development - Gord Chappell, Administrator Real Estate, Planning Property and Development - Georges Chartier, Chief Asset and PM Officer, Chief Administrative Office - Rob Taylor, Manager of Capital Projects, Chief Administrative Office 	

Appendix B – Financial Forecast

**Appendix B - Project 1805001413 Financial Forecast
Waverley Street at CN Mainline (Rivers) Grade Separation
As at September 30, 2018**

Project Component Deliverables	Budget (in 000's)			Actual Costs To September 30, 2018	Projected Costs			Total Forecasted Costs	Surplus (Deficit) From Amended Budget
	Adopted Budget	Council Approved Change	Amended Budget		Remainder 2018	2019	2020		
Engineering, Design and Other	\$ 11,422	\$ -	\$ 11,422	\$ 10,001	\$ 288	\$ 2,451	\$ 610	\$ 13,350	\$ (1,928)
Construction	\$ 88,280	\$ -	\$ 88,280	\$ 31,739	\$ 12,161	\$ 16,774	\$ 897	\$ 61,571	\$ 26,709
Land Acquisition	\$ 4,200	\$ -	\$ 4,200	\$ 770	\$ 100	\$ 1,547	\$ 1,550	\$ 3,967	\$ 233
Internal Financing/Overhead Costs	\$ 10,090	\$ -	\$ 10,090	\$ 3,659	\$ 556	\$ 3,247	\$ 573	\$ 8,035	\$ 2,055
Contingency	\$ 42,290	\$ -	\$ 42,290	\$ -	\$ -	\$ -	\$ 11,000	\$ 11,000	\$ 31,290
Total Project Budget	\$ 156,282	\$ -	\$ 156,282	\$ 46,169	\$ 13,105	\$ 24,019	\$ 14,630	\$ 97,923	\$ 58,359

Variance Last Report	Change in Variance
\$ (2,494)	\$ 566
\$ 6,147	\$ 20,562
\$ -	\$ 233
\$ -	\$ 2,055
\$ 31,290	\$ -
\$ 34,943	\$ 23,416

% of Project Budget Spent (Actual Costs to Date / Adopted & Amended Budget)			
	30%		30%

* Amended budget and actual costs to date have been agreed to the City's general ledger and Monthly Capital Expenditures Report
This project was approved on December 12, 2012 (Preliminary Engineering Study) and February 24, 2016 (Detailed Design and Construction).

Appendix C – Key Project Events (History)

- 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 30, 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.

2016

- 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 August 26, 2016, the Director of Public Works approved an over-expenditure to Dillon Consulting Limited in the amount of \$158,530.00 for the incorporation of train and vehicle detection in the project area, to enable the use of new innovative technology to assist in the movement of traffic during construction.
- 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.

2016 continued

- 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.

2017

- 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.

2017 continued

- 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, 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, 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, primarily to cover the cost associated with adding the supply of specialized feeder main materials with long lead time to Contract 2.
- 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.
- On June 19, 2017, the City entered into an easement agreement with Manitoba Hydro related to provision of an easement through the linear greenspace along Taylor Avenue, necessary for the relocation of electrical distribution lines.
- On June 29, 2017, the City of Winnipeg authorized Manitoba Hydro to proceed with adjustment of various natural gas pipeline relocations.
- On June 29, 2017, the City of Winnipeg authorized Shaw Cablesystems G. P. to proceed with relocation of various underground services to accommodate the work.
- On June 30, 2017, the City of Winnipeg entered into two Electric Service Agreements with Manitoba Hydro (Materials Management reference number 538-2017) for the renewal of street lighting in the Vicinity of Waverley Street at Grant Avenue and for the relocation of Fiber Optic Cable along Taylor Avenue.

2017 continued

- On July 5, 2017, the City received a copy of the fully executed contribution agreement between the Government of Manitoba and the City of Winnipeg.
- On July 18, 2017, the City of Winnipeg authorized Bell MTS (MTS Inc.) to proceed with relocation of communication cables required for the project.
- On July 19, 2017, Council passed By-Law No. 50/2017 to prohibit the sounding of engine whistles at CN River Subdivision Mile 3.94.
- On July 26, 2017, a news release and website update were issued corresponding to the launch of a travel time information system.
- On July 31, 2017, a project scope change was initiated to proceed with detailed design and construction of a new retaining wall structure in the vicinity of 1360 Taylor Avenue, for the purposes of maintaining parking on City owned land currently leased to Mondo Foods Co. Ltd.
- On August 24, 2017, the Acting Chief Administrative Officer approved an over-expenditure for Contract 2 (Bid-Opportunity 473-2016) in the amount of 1.71% or \$763,486.40, primarily to cover the additional costs associated to address these poor subgrade soil conditions.
- On September 13, 2017, the Chief Administrative Officer approved an over-expenditure to Dillon Consulting Limited's contract in the amount of \$290,000 for consulting services related to design and contract administration services for a retaining wall structure at 1360 Taylor Avenue.
- On September 11, 2017, Construction Update #3 was posted to the project website, serving to provide notice of the weekend closure and subsequent detour roadway configuration.
- On September 22, 2017, rehabilitation of Waverley Street in the vicinity of Grant Avenue, including intersection improvements was completed.
- On September 25, 2017, the City issued a news release announcing the upcoming weekend closure of Waverley Street and Taylor Avenue and details of the detour roadway configuration.
- On September 28, 2017, a final inspection of the temporary at-grade detour crossing at CN Rivers Subdivision Mile 3.94 occurred between CN and City representatives.
- On September 29, 2017 at 5:30 PM, Waverley Street and Taylor Avenue were completely closed to vehicular, cyclist and pedestrian traffic in the vicinity of the project area.
- On September 30, 2017, CN officially closed the existing public crossing at Mile 3.89 Rivers Subdivision.
- On October 2, 2017 at 6:00 AM, Waverley Street and Taylor Avenue were re-opened to traffic now operating on the detour configuration, which is expected to be in effect until the fall of 2019, at which time traffic is expected to be transitioned under the new underpass roadway.
- On October 2, 2017 at 6:00 AM, CN officially opened the new temporary public crossing at Mile 3.94 Rivers Subdivision, complete with anti-whistling status.
- On October 9, 2017, renewal of the Midtown Feeder Main works was completed.
- On October 20, 2017, the Chief Administrative Officer approved a third contract over-expenditure for Dillon Consulting Ltd. in the amount of \$206,900 for redesign of the in-line casing pipe installation to an offline trenchless replacement in order to mitigate the risk of project delay.
- On October 31, 2017, the City issued a news release warning drivers to expect additional delays in the project area for several days while rail traffic was being transitioned to the rail detour.
- On November 8, 2017 the rail detour was completed and successfully put into operation.

2017 continued

- On November 23, 2017, Borland Construction Ltd. achieved Total Performance for Contract 1 (Bid Opportunity 472-2017). The final contract amount was \$2,861,800.30.
- On November 28, 2017 the CAO concurred with the recommendation that approximately \$350,000 of the existing approved Capital Budget for this project be reallocated for Public Art on the project, together with \$100,000 from the Land Dedication Reserve Fund (subject to approval), for a total approximate Public Art budget of \$450,000.
- On November 30, 2017 Manitoba Sustainable Development issued authorization to the City under *The Water Rights Act* to divert groundwater for construction dewatering purposes for the project.
- On December 6, 2017, Construction Update #4 was posted to the project website, serving to provide the public with the current status of the project and how it is expected to proceed over the winter of 2017-2018.
- On December 7, 2017 Infrastructure Canada confirmed in writing that sole source elements of the project associated with CN rail related works will be considered eligible for the Federal funding contribution.
- On December 8, 2017 the City entered into a Natural Gas Service Agreement with Manitoba Hydro (Gas) for provision of natural gas service to the underpass pump station, required for operation of a backup generator to provide electricity for pumps in the event of power loss, in the amount of \$49,004.00.
- On December 13, 2017 the City entered into an Electric Service Agreements with Manitoba Hydro (Materials Management reference number 1076-2017) for provision of electric service to the underpass pump station, in the amount of \$140,571.04.
- On December 18, 2017 the City invoiced CN for a total of \$3,230,000.00 representing 34% of their total \$9.5M contribution to the project.
- On December 21, 2017 a quarterly progress report was submitted to the Province, along with the first claim under the Contribution Agreement in the amount of \$5,001,847.99.

2018

- On February 21, 2018 the City of Winnipeg entered into an Electric Service Agreements with Manitoba Hydro for relocation of a single wood utility pole in the vicinity of Grant Avenue and Waverley Street, in the amount of \$5,850.00.
- On February 27, 2018 the contribution agreement between the City of Winnipeg and the Federal Government was finalized.
- On March 2, 2018 the first claim was submitted to Infrastructure Canada in the amount of \$7,529,886.57. The first claim was later revised to 7,456,733.19 The second Federal claim was submitted on March 15, 2018, in the amount of \$433,389.16.
- On March 13, 2018, the City Centre Community Committee approved the application for Land Dedication Reserve funding in the amount of \$100,000.00 from the City Centre Land Dedication Reserve (River Heights – Fort Garry Ward allocation) to assist in incorporating Public Art into the Waverley Underpass project.
- On March 16, 2018, CN's existing contract for supply of rail materials was expanded to include rail construction work.
- On April 16, 2018, Construction Update #5 was posted to the project website, serving to provide the public with the current status of the project and how it is expected to proceed over the 2018 summer construction season.
- On April 16, 2018 Oversight Committee Meeting #1 was held between City of Winnipeg, Province Government, and Federal Government representatives.

2018 continued

- On April 24, 2018 the City of Winnipeg awarded a single source contract to the Pembina Trails School Division (Materials Management reference number 347-2018) for relocation of a fiber optic cable in conflict with the proposed work, in the estimated amount of \$121,880.00
- On May 7, 2018, the CFO authorized award of a single source contract to the Winnipeg Arts Council for a public art component for the project, in the total amount of \$450,000.00 (inclusive of GST). Of that, \$350,000.00 is to be funded by the Waverley Underpass project, and the remaining \$100,000 coming from the City Centre Land Dedication Reserve (River Heights – Fort Garry Ward allocation).
- On May 16, 2018, the City entered into an easement agreement with Manitoba Hydro for provision of an easement through the linear greenspace along Taylor Avenue necessary for the relocation of natural gas services.
- On June 20, 2018 installation of the last of two problematic caisson foundations was concluded, marking the completion of foundation work required for the rail bridge.
- On June 28, 2018 a news release and project website update were issued informing the public of an upcoming full closure of Waverley Street over the weekend of July 6 – 9, 2018 for track reconstruction.
- Over the weekend of July 6, 2018 starting at 10:00 AM through July 8, 2018 ending at 7:00 PM, Waverley Street (detour roadway) was completely closed to all traffic, cyclists and pedestrians in order to complete rail track reconstruction at the at-grade crossing with the detour road. The work was completed approximately 12 hours ahead of schedule.
- On July 31, 2018 the property owner representative for 1360 Taylor Avenue was informed that the City will not be proceeding with construction of a retaining wall, and that the City will work with the owner to review site and parking alterations.
- On August 15, 2018, the City executed an agreement with the Winnipeg Arts Council (WAC) for overall management and execution of a Public Art component on the project.
- On August 31, 2018 the critical stage for bridge completion was achieved.
- On September 20, 2018 a “fly through” video of the project site was posted to the project website. The video provides a bird’s eye view of the project site taken during the 2018 summer construction season, approximately mid-way through the project.