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.
DECISION MAKING HISTORY:

Moved by Councillor Chambers,

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

Carried
ADMINISTRATIVE REPORT

Title: Waverley Street at CN Mainline (Rivers) Grade Separation,
Project ID: 1805001413,
Quarterly Project Status Report No. 11
For the Period Ended December 31, 2018

Critical Path: Standing Policy Committee on Finance

AUTHORIZATION

<table>
<thead>
<tr>
<th>Author</th>
<th>Department Head</th>
<th>CFO</th>
<th>CAO</th>
</tr>
</thead>
</table>

EXECUTIVE SUMMARY

<table>
<thead>
<tr>
<th>Project On Schedule: Yes ✓ No ☐</th>
<th>Project On Adopted Budget: Yes ✓ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Schedule Complete: 65%</td>
<td>Percent of Adopted Budget Spent: 36%</td>
</tr>
</tbody>
</table>

This is the eleventh quarterly report to SPC Finance on this Project. The reporting period covers the period from October 1 to December 31, 2018. Expenditures to December 31, 2018 total $56,040,405. The total project Estimate at Completion is estimated at $97.923M (no change since last report).

Construction work on Contract 2 is ongoing. A significant project milestone was achieved on December 14, 2018 when train traffic was completely diverted over the new rail carrying bridge structure. With this milestone achieved, the project will proceed with excavation of the underpass underneath the bridge structure over the winter of 2018-19, followed by construction of land drainage and roadway components over the 2019 summer construction season.

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.

On October 17, 2018 rail work commenced for construction of permanent rail track over the new bridge structure. On December 14, 2018 all train traffic was diverted off the temporary rail detour and onto the new rail carrying bridge structure, marking substantial completion of the rail work. The temporary rail detour was decommissioned in the following days.

Bulk excavation of the underpass occurred to the extent possible while trains were still operating on the rail detour embankment. Bulk excavation under the new bridge commenced immediately following transitioning of all train traffic to the new bridge. Excavation of the underpass will continue over the winter of 2018-19.

Work has continued on the pump station. Forming and pouring concrete for the pump station substructure has progressed. On December 21, 2018, backfilling around the pump station substructure was completed and operation of the groundwater depressurization system ceased. 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 2018 summer construction season was concluded at the end of October, 2018. During this time, surface construction work wrapped up on the following project roadwork components:

- Completed construction of new eastbound lanes for the widening of Taylor Avenue between Waverley Street and Lindsay Street
- Completed construction of new westbound lanes for the widening of Hurst Way
- Intersection improvements at the intersection of Wilkes Ave. and Waverley St.
- Construction of underground infrastructure including land drainage and water distribution throughout the project site.

On October 16, 2018, construction of the new eastbound lanes of Taylor Avenue was completed and traffic was diverted to these new lanes, allowing work on the existing westbound lanes of Taylor Avenue to commence. The completion of construction on westbound lanes of Taylor Avenue will occur in the summer of 2019.

Other

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

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 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.

Surplus goods were recovered during the decommissioning of the temporary rail detour. Surplus rail ballast was salvaged and purchased by the Water and Waste Department for use on the Greater Winnipeg Water District Railway. The project is currently considering disposal of surplus track and ties via an offer of surplus goods tender, or via direct negotiations with railway companies.

Public Art Component

On October 23, 2018 The Winnipeg Arts Council received submissions in response to a national call to artists for expressions of interest and qualifications. The Selection Committee subsequently shortlisted four artists who were invited to develop an artwork
proposal. Proposals are expected to be received in early April 2019 at which time the Selection Committee will select a single artist to advance the public art component to completion. Installation of the public art component is expected to occur in 2020.
# Table 1 – Contracts

<table>
<thead>
<tr>
<th>Bid Opportunity #</th>
<th>Company Name</th>
<th>Description</th>
<th>Original Contract Award Value (GST &amp; MRST extra as applicable)</th>
<th>Total Approved Over-Expenditures (Over-Expenditure amount only)</th>
<th>Date of Award</th>
<th>Date of Total Completion</th>
<th>Estimated % Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFP 66-2014</td>
<td>Dillon Consulting Limited</td>
<td>Consulting Services for Preliminary Engineering Study</td>
<td>$1,011,904.00</td>
<td>$50,000.00</td>
<td>30-Apr-14</td>
<td>30-Sep-15</td>
<td>100</td>
</tr>
<tr>
<td>RFP 150-2016</td>
<td>Dillon Consulting Limited</td>
<td>Consulting Services for Detailed Design, Contract Administration, and Post-Construction Services</td>
<td>11,368,000.00</td>
<td>655,430.00</td>
<td>29-Feb-16</td>
<td></td>
<td>70</td>
</tr>
<tr>
<td>Single Source</td>
<td>Fireseeds North Infrastructure</td>
<td>Independent Road Safety Audit</td>
<td>62,347.50</td>
<td>50,000.00</td>
<td>27-Sep-16</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Single Source</td>
<td>ATS Traffic Manitoba Construction Co.</td>
<td>Supply of Variable Message Sign</td>
<td>34,300.00</td>
<td>30-Mar-16</td>
<td>16-Dec-16</td>
<td>10-Mar-16</td>
<td>90</td>
</tr>
<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Relocation of Electrical Distribution - Four Electric Service Agreements</td>
<td>1,228,002.00</td>
<td>1,178,002.00</td>
<td>29-Mar-17</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Bid-Opp 473-2016</td>
<td>Maple Leaf Construction Ltd.</td>
<td>Contract 2 - Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works</td>
<td>44,701,918.80</td>
<td>763,486.40</td>
<td>20-Apr-17</td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>Single Source</td>
<td>Bell Canada</td>
<td>Communication Cable Relocation Works</td>
<td>800,000.00</td>
<td>610,000.00</td>
<td>9-May-17</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Fiber Optic Cable and Street Lighting - Two Electric Service Agreements</td>
<td>283,612.00</td>
<td>283,612.00</td>
<td>27-Jun-17</td>
<td>30-Sep-17</td>
<td>100</td>
</tr>
<tr>
<td>Single Source</td>
<td>Pembina Trails SD</td>
<td>Relocation of Various Natural Gas Pipelines</td>
<td>17,653.43</td>
<td>17,653.43</td>
<td>29-Jun-17</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td>Single Source</td>
<td>Pembina Trails SD</td>
<td>Relocation of Various Underground Services</td>
<td>27,821.30</td>
<td>27,821.30</td>
<td>29-Jun-17</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Single Source</td>
<td>BellMTS (MTS Inc.)</td>
<td>Relocation of Communication Cables</td>
<td>90,160.73</td>
<td>90,160.73</td>
<td>18-Jul-17</td>
<td>30-Sep-17</td>
<td>100</td>
</tr>
<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Natural Gas Service to Pump Station</td>
<td>49,004.00</td>
<td>49,004.00</td>
<td>8-Dec-17</td>
<td></td>
<td>-</td>
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<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Electrical Service to Pump Station</td>
<td>140,571.04</td>
<td>140,571.04</td>
<td>13-Dec-17</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Single Source</td>
<td>Pembina Trails SD</td>
<td>Relocation of Utility Pole at Grant Ave.</td>
<td>5,850.00</td>
<td>5,850.00</td>
<td>21-Feb-18</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Single Source</td>
<td>Outfront Media Canada LP</td>
<td>Supply and Install Bus Shelters</td>
<td>31,110.00</td>
<td>31,110.00</td>
<td>17-Sep-18</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Street Lighting - Waverley, and Distribution Relocation</td>
<td>755,864.09</td>
<td>755,864.09</td>
<td>18-Oct-18</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Street Lighting - Wilkes</td>
<td>10,579.04</td>
<td>10,579.04</td>
<td>24-Oct-18</td>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>

**Total** $70,058,143 $2,340,680

## Upcoming Procurements:

<table>
<thead>
<tr>
<th>Description</th>
<th>Anticipated Award Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
**Schedule** (Update from last report)

During the reporting period, CN’s rail contractor completed final main track construction, and successfully diverted rail traffic off the temporary rail detour and onto the new bridge structure. Communication cable was also relocated off the rail detour and onto the bridge. This work was completed by December 14, 2018 such that remaining components of the project remain on schedule.

Decommissioning of the rail detour commenced immediately after trains were transitioned to the bridge structure, and bulk excavation of the underpass (including under the new bridge structure) followed immediately thereafter. Bulk excavation of the underpass is anticipated to be completed by March 1, 2019.

Looking ahead, traffic will continue to operate on the detour roadway while the bulk excavation, land drainage components, and underpass pavements are constructed through the early and mid-summer of 2019. Traffic is expected to transition off the detour road and under the new underpass in August 2019 following a third and final weekend shutdown of the site to traffic. From August 2019 to the end of the 2019 summer construction season, removal of the detour road and final pavement construction will occur primarily in the vicinity of the intersection of Waverley Street and Taylor Avenue. Substantial Performance of the project is expected to occur at the end of October 2019.

Table 2 – Milestones

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Original Targeted Completion Date</th>
<th>Revised Targeted Completion Date</th>
<th>Actual Completion Date</th>
<th>Estimated % Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Preliminary Design</td>
<td>2015 Q1</td>
<td>2015 Q1</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>2 Detailed Design</td>
<td>2017 Q1</td>
<td>2017 Q1</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>3 Contract 1 Works - Total Performance</td>
<td>2017 Q2</td>
<td>2017 Q4</td>
<td>2017 Q4</td>
<td>100%</td>
</tr>
<tr>
<td>4 Detour Roadway</td>
<td>2017 Q4</td>
<td>2017 Q4</td>
<td>2017 Q4</td>
<td>100%</td>
</tr>
<tr>
<td>5 Underpass Bridge Structure</td>
<td>2018 Q3</td>
<td>2018 Q3</td>
<td>2018 Q3</td>
<td>100%</td>
</tr>
<tr>
<td>6 Underpass Roadway</td>
<td>2019 Q3</td>
<td></td>
<td>2019 Q3</td>
<td>20%</td>
</tr>
<tr>
<td>7 Contract 2 Works - Total Performance</td>
<td>2020 Q3</td>
<td></td>
<td></td>
<td>65%</td>
</tr>
</tbody>
</table>

**Risk** (Update from last report)

A significant amount of roadwork is scheduled to be completed in the summer construction season of 2019. If extremely poor weather conditions are experienced during the construction season, there is a risk that all works are not completed on time. This risk is mitigated by the fact that Contract 2 is a calendar-day contract, meaning the contractor bears the risk associated with loss of working days due to poor weather.
Nonetheless, project personnel are working closely with the Contractor to plan construction staging, overall scheduling, and monitoring of the work to identify schedule issues early on.

Now that bridge work (including foundations) is complete and the pump station excavation has been partially backfilled (allowing operation of the groundwater depressurization system to cease), the major geotechnical risks on this project have been mitigated. However, some geotechnical and groundwater related risks remain as they relate to completing bulk excavation of the underpass, roadwork, and land drainage outlet pipe construction. These risks continue to be monitored as the work progresses.

Relocation of third party utilities (primarily fiber optic cable within the CN right-of-way) onto the new bridge structure was completed on schedule and the risk has been mitigated.

Table 3 – Significant Risks and Mitigations Strategies

<table>
<thead>
<tr>
<th>Significant Risks and Mitigation Strategies</th>
<th>Risk Mitigation Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New:</strong></td>
<td></td>
</tr>
<tr>
<td>Poor weather conditions in the 2019 summer construction season could lead to a delay</td>
<td>Early planning for 2019 construction staging and coordination between Contractor and City personnel, close monitoring of construction progress will occur to identify issues early and assign additional resources.</td>
</tr>
<tr>
<td><strong>Ongoing:</strong></td>
<td></td>
</tr>
<tr>
<td>Vehicle, pedestrian and cycling traffic negatively impacted by construction (e.g. delays, wayfinding difficulty)</td>
<td>Continued monitoring to ensure satisfactory performance.</td>
</tr>
<tr>
<td>Encountering poor subsurface soil and groundwater conditions may delay the project and increase cost</td>
<td>Risks related to remaining project components including bulk excavation and land drainage continue to be monitored.</td>
</tr>
<tr>
<td><strong>Mitigated:</strong></td>
<td></td>
</tr>
<tr>
<td>Failure of third party utilities to relocate services could delay the project</td>
<td>Third party utilities in CN right-of-way have been successfully relocated onto the bridge.</td>
</tr>
<tr>
<td>Encountering poor subsurface soil and groundwater conditions (Bridge component)</td>
<td>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.</td>
</tr>
<tr>
<td>Problem</td>
<td>Resolution</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Delay in completion of Bridge Construction delays Fall 2018 rail work, delays project 9 - 12 months.</td>
<td>Bridge completed on August 31, 2018. City worked with CN to compress fall 2018 rail works to maintain project schedule.</td>
</tr>
<tr>
<td>Manitoba Hydro Utility Relocations</td>
<td>MB Hydro - All major electrical distribution lines have successfully been relocated.</td>
</tr>
<tr>
<td>Changes to railway requirements (addition of third track) may result in increased design and construction costs and schedule impacts</td>
<td>Third track concept no longer being pursued. City and CN will continue to discuss future impacts.</td>
</tr>
<tr>
<td>Failure to obtain a Crossing Agreement with CN</td>
<td>Crossing Agreement executed by CN on May 19, 2017</td>
</tr>
<tr>
<td>Failure to assemble required land could delay the project</td>
<td>An expropriation by-law was approved by Council on July 13, 2016. The City took possession of expropriated lands on January 12, 2017.</td>
</tr>
<tr>
<td>Lead-time for delivery of specialized large diameter pipe material could delay Feeder Main renewal work</td>
<td>Procurement of the specialized materials was added to Contract 1 works, and has successfully been supplied for Contract 2.</td>
</tr>
<tr>
<td>Maintaining the project schedule (administrative)</td>
<td>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.</td>
</tr>
</tbody>
</table>

**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 were $9,871,560 and primarily consist of construction progress. Expenditures to date total $56,040,405.

Currently, the total project Estimate at Completion is $97.923M, resulting in a forecasted surplus of $58.359M. There is no change to the Estimate at Completion since the last report (period ending September 30, 2018). The Estimate at Completion includes $11M in contingencies.

The Estimate at Completion and associated forecasted surplus amounts are shared between the City and other levels of government in accordance with the respective contribution agreements. As the City’s contribution is funded through debt financing, the forecasted surplus will result in the City taking on less debt.
**Funding** (Update from last report)

As of the report period end date, total claims submitted to the Federal Government was $15,163,544.84, and total claims submitted to the Provincial Government was $15,233,386.23.

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

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Adopted Budget (in thousands)</th>
<th>Amended Budget (in thousands)</th>
<th>Committed (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of Estimate</td>
<td>Class 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash to Capital</td>
<td>$700</td>
<td>$700</td>
<td>$700</td>
</tr>
<tr>
<td>External Debt</td>
<td>$63,332</td>
<td>$53,832</td>
<td>$53,832</td>
</tr>
<tr>
<td>Provincial Funding for Road Improvements</td>
<td>$500</td>
<td>$500</td>
<td>$500</td>
</tr>
<tr>
<td>Provincial Building Manitoba Fund</td>
<td>$45,875</td>
<td>$45,875</td>
<td>$45,875</td>
</tr>
<tr>
<td>Federal Building Canada Fund</td>
<td>$45,875</td>
<td>$45,875</td>
<td>$45,875</td>
</tr>
<tr>
<td>CN Rail Contribution</td>
<td>$9,500</td>
<td>$9,500</td>
<td>$9,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$156,282</strong></td>
<td><strong>$156,282</strong></td>
<td><strong>$156,282</strong></td>
</tr>
</tbody>
</table>

**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 December 18, 2018, Construction Update #7 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 coming winter of 2018/19.

Subsequent Events after Report Period End Date

- On January 18, 2019, the Chief Administrative Officer approved a second over-expenditure for Contract 2 (Bid-Opportunity 473-2016) in the amount of 3.09% or $1,382,383.17 (for a total over-expenditure of 4.80% or $2,145,869.57).
- On February 4, 2019, the Director of Public Works approved an over-expenditure to ATS Traffic Manitoba in the amount of 10.73% or $3,680.00 for continued technical services for the variable message sign.
- On February 26, 2019 the Contract 2 critical stage for completion of the underpass bulk excavation was achieved.
Financial Impact Statement

Project Name:
**Waverley Street at CN Mainline (Rivers) Grade Separation**

Project ID: 1805001413

Quarterly Project Status Report No. 11

For the Period Ended December 31, 2018

**COMMENTS:**

There is no financial impact associated with the recommendation of this report. See Appendix B as to the financial status of this project.

"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: April 3, 2019

Appendices
Appendix A – Key Project Facts
Appendix B – Financial Forecast
Appendix C – Key Project Events (History)
### Appendix A – Key Project Facts

<table>
<thead>
<tr>
<th>Appendix A – Key Project Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Name</strong></td>
</tr>
<tr>
<td><strong>Business Owner (Department)</strong></td>
</tr>
<tr>
<td><strong>Project ID</strong></td>
</tr>
<tr>
<td><strong>Project Sponsor</strong></td>
</tr>
<tr>
<td><strong>Department Responsible for Project Delivery</strong></td>
</tr>
<tr>
<td><strong>Consultant Engineer (Company Name)</strong></td>
</tr>
<tr>
<td><strong>Adopted Budget</strong></td>
</tr>
<tr>
<td><strong>Class of Estimate (Adopted)</strong></td>
</tr>
<tr>
<td><strong>Range of Estimate (Adopted)</strong></td>
</tr>
<tr>
<td><strong>Amended Budget</strong></td>
</tr>
<tr>
<td><strong>Class of Estimate (Amended)</strong></td>
</tr>
<tr>
<td><strong>Range of Estimate (Amended)</strong></td>
</tr>
</tbody>
</table>

#### Project Scope

- 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:

- 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 Real Estate and Land Development, 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

As at December 31, 2018

<table>
<thead>
<tr>
<th>Project Component Deliverables</th>
<th>Budget (in 000’s)</th>
<th>Actual Costs To December 31, 2018</th>
<th>Projected Costs 2019</th>
<th>Projected Costs 2020</th>
<th>Total Forecasted Costs</th>
<th>Surplus (Deficit) From Amended Budget</th>
<th>Variance Last Report</th>
<th>Change in Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adopted Budget</td>
<td>Council Approved Change</td>
<td>Amended Budget</td>
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<td><strong>Total Project Budget</strong></td>
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<td><strong>$27,253</strong></td>
<td><strong>$14,630</strong></td>
<td><strong>$97,923</strong></td>
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### % of Project Budget Spent

- (Actual Costs to Date / Adopted & Amended Budget)
  - 36%

* Amended budget and actual costs to date have been agreed to the City's general ledger and Monthly Capital Expenditures Report. Actual Costs to December 31, 2018 per the Capital Expenditures Monthly Report are stated at $55,530,937. Actual Costs to December 31, 2018 per this report and the City's general ledger are stated at $56,040,405. The difference of $509,468 is due to 2018 consulting expenses being correctly recorded subsequent to the Run Date of the December Capital Expenditures Monthly 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.
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 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 16, 2016 the Manager of Materials approved the single source purchase of a variable message sign from ATS Traffic Manitoba in the amount of $34,300.00 (Materials Management reference #1141-2016), to be used as part of the travel time information system for the project.

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.

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 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 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.

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.

2017 continued

• 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.
• 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 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
On March 15, 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.

2018 continued

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.

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.

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 17, 2018 rail work commenced for construction of permanent rail track over the new bridge structure.
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, in the amount of $755,864.09.

2018 continued

On October 23, 2018 The Winnipeg Arts Council received submissions in response to a national call to artists for expressions of interest and qualifications.

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, in the amount of $10,579.04.

On December 14, 2018 all train traffic was diverted off the temporary rail detour and onto the new rail carrying bridge structure, marking substantial completion of the rail work.

On December 18, 2018, Construction Update #7 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 coming winter of 2018/19.

On December 21, 2018, backfilling around the pump station substructure was completed and operation of the groundwater depressurization system ceased.