Minutes – Standing Policy Committee on Finance – February 15, 2018

REPORTS

Item No. 5  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 that the financial status of the Waverley Street at CN Mainline (Rivers) Grade Separation project, be received as information.
Minutes – Standing Policy Committee on Finance – February 15, 2018

DECISION MAKING HISTORY:

Moved by Councillor Mayes,
   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. 07
   For the Period Ended October 31, 2017

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>
<tbody>
<tr>
<td>B. Neirinck, P. Eng.</td>
<td>D. Domke Acting Director of Public Works</td>
<td>M. Ruta</td>
<td>D. McNeil</td>
</tr>
</tbody>
</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: 38%</td>
<td>Percent of Adopted Budget Spent: 13.3%</td>
</tr>
</tbody>
</table>

This is the seventh quarterly report to SPC Finance on this Project. Expenditures to date total $20,855,131. Currently, the total project Estimate at Completion is $121.339M (no change from last reporting period).

Contract 1 consisted of the installation of the underground utilities required in advance of the underpass construction. Total Performance was achieved on November 23, 2017.

Construction on Contract 2 is ongoing. On October 2, 2017 the Waverley Street detour roadway was opened to traffic, which is a significant project milestone. On November 8, 2017 the railway detour was completed and put into service. These accomplishments were critical to the overall project schedule, and will allow bridge construction to occur over the winter of 2017-2018. Bridge construction is approximately 4 weeks behind schedule.

The effects of construction on area traffic and active transportation modes are being managed and mitigated where possible, to maintain the safety of road users and construction workers.

To date, Contract 2 has approved over expenditures totaling $763,486.40 primarily related to poor subgrade conditions related to the temporary railway detour.

Addition of the retaining wall structure to the project scope has an estimated budget requirement of approximately $2.6 M (Class 3 estimate). No schedule impact is anticipated. Design is ongoing.

Third Party utility relocations are ongoing to accommodate the work.
In accordance with the terms of the Crossing Agreement with CN, the existing contract to supply rail materials will be expanded to include rail construction work.

CN has formally advised the City that due to the proposed reconfiguration of the existing CN infrastructure as part of both the Waverley Street Underpass Project and the Southwest Rapid Transitway (Stage 2) & Pembina Highway Project, CN will require the proposed railway design be modified to accommodate a third railway track. Discussions between the City and CN are ongoing.

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 and Contract 2.

**Contract 1**

Contract 1 consists primarily of the installation of underground utilities required in advance of the underpass construction. Borland Construction achieved Substantial Performance on May 17, 2017, and Total Performance was achieved on November 23, 2017. The final contract value was $2,861,800.30.
Contract 2

Contract 2 was awarded to 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. Maple Leaf Construction continues to make progress on construction of 2017 works, which primarily include:

- Construction of detour roadway (completed October 2, 2017) and detour rail embankment (completed and put into operation on November 8, 2017)
- Rehabilitation of Waverley Street in the vicinity of Grant Avenue, including intersection improvements (completed September 22, 2017)
- Renewal of the Midtown Feeder Main (completed October 9, 2017)

Successful accelerated completion of the detour roadway resulted in a performance bonus of $24,000 being awarded to Maple Leaf Construction. Renewal of the Midtown Feeder Main was completed 3 days beyond the contract critical stage and as a result, $30,000 in liquidated damages has been assessed.

Construction of the Bridge and Pump Station foundations has commenced.

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.

Other

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

Detailed design of a retaining wall in the vicinity of 1360 Taylor Avenue is currently underway.

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

- 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.

Construction and installation of temporary and permanent railway infrastructure and associated railway related works is being delivered by the Canadian National Railway Company (CN). Their existing contract for supply of rail materials will be expanded to include rail construction work.
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</td>
<td>30-Apr-14</td>
<td>30-Sep-15</td>
<td>100</td>
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<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>55</td>
</tr>
<tr>
<td>Single Source</td>
<td>Fireseds North Infrastructure</td>
<td>Independent Road Safety Audit</td>
<td>62,347.50</td>
<td>-</td>
<td>27-Sep-16</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Single Source</td>
<td>Canadian National Railway Company</td>
<td>Relocation of Electrical Distribution - Four Electric Service Agreements</td>
<td>1,228,002.00</td>
<td></td>
<td>29-Mar-17</td>
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<td>98</td>
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<tr>
<td>Bid-Opp 473-2016</td>
<td>Maple Leaf Construction Ltd.</td>
<td>Contract 2 - Underpass Structure, Railworks, Roadworks, Drainage Sewer, Pumping Station and Landscaping Works</td>
<td>44,701,918.80</td>
<td>763,486.40</td>
<td>20-Apr-17</td>
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<td>18</td>
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<tr>
<td>Single Source</td>
<td>Bell Canada</td>
<td>Communication Cable Relocation Works</td>
<td>800,000.00</td>
<td></td>
<td>9-May-17</td>
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<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Fiber Optic Cable and Street Lighting – Two Electric Service Agreements</td>
<td>238,612.00</td>
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<td>27-Jun-17</td>
<td>30-Sep-17</td>
<td>100</td>
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<tr>
<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Relocation of Various Natural Gas Pipelines</td>
<td>17,653.43</td>
<td></td>
<td>29-Jun-17</td>
<td></td>
<td>10</td>
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<tr>
<td>Single Source</td>
<td>Shaw Cablesystems G.P.</td>
<td>Relocation of Various Underground Services</td>
<td>27,821.30</td>
<td></td>
<td>29-Jun-17</td>
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<td>10</td>
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<tr>
<td>Single Source</td>
<td>BellMTS (MTS Inc.)</td>
<td>Relocation of Communication Cables</td>
<td>90,160.73</td>
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<td>18-Jul-17</td>
<td>30-Sep-17</td>
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<td>Single Source</td>
<td>Manitoba Hydro</td>
<td>Natural Gas Service to Pump Station</td>
<td>49,004.00</td>
<td></td>
<td>8-Dec-17</td>
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<td></td>
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</table>

Total $68,484,418 $2,340,680

Upcoming Procurements:

<table>
<thead>
<tr>
<th>Description</th>
<th>Anticipated Award Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of Rail Infrastructure and Associated Rail Work</td>
<td>31-Jan-18</td>
</tr>
</tbody>
</table>
Schedule (Update from last report)

The project is currently forecast to be on schedule.

Construction on Contract 1 began in January of 2017 and was substantially complete as of May 17, 2017. Supply and delivery of large diameter casing pipe was added to the scope of work for Contract 1, and the total performance date was extended to allow for delivery of the materials. Total Performance was achieved on November 23, 2017.

Work on Contract 2 began on May 5, 2017. The primary milestones for the 2017 construction season have been reached which include: opening the detour roadway to traffic (occurred October 2, 2017, at 6:00 a.m.), transitioning trains onto the rail detour (completed November 8, 2017), completion of the intersection improvements and Waverley St. at Grant Ave. (September 22, 2017), and completing renewal of the Midtown Feeder Main (October 9, 2017).

Bridge construction is behind schedule by an estimated 4 weeks due to a failure by the Contractor to obtain the required approvals necessary to commence work in a timely fashion. Completion of the bridge by August 18, 2018 is critical to the overall project schedule because adequate time is required in the Fall of 2018 to complete mainline track works over the new bridge and transition train traffic off the rail detour. The Contractor has been instructed to submit a schedule recovery plan.

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>98%</td>
<td></td>
</tr>
<tr>
<td>4 Detour Roadway</td>
<td>2017 Q4</td>
<td>2017 Q4</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>5 Underpass Bridge Structure</td>
<td>2018 Q3</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>6 Underpass Roadway</td>
<td>2019 Q3</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>7 Contract 2 Works - Total Performance</td>
<td>2020 Q3</td>
<td></td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

Risk (Update from last report)

With bridge construction behind schedule by an estimated 4 weeks, the Contractor has been instructed to submit a schedule recovery plan outlining their strategy for achieving the required bridge construction completion date of August 18, 2018. Failure to complete the bridge construction on time may not allow adequate time to complete Fall 2018 rail work, and may delay completion of the project.

CN is proposing a third railway track between the Waverley Underpass and Pembina Highway Underpass which could result in design changes and cost impacts to the Project. The City is in ongoing discussions with CN to understand the impact of the proposed third railway track on both the Waverley Street Underpass and Southwest Rapid Transitway & Pembina Underpass projects.
Coordination of various third party utilities is required to complete all proposed works. Major relocation of overhead and underground electrical distribution lines by Manitoba Hydro in several areas of the project has successfully been completed.

The risk of failing to maintain the project schedule continues to be mitigated. During the reporting period, three major critical-path milestones were achieved including 1) opening the detour road to traffic, 2) completing the rail detour and putting it into operation, and 3) completion of the renewal of the Midtown Feeder Main. With these successfully completed, the project was able to move into the next major phase of work which includes bridge and pump station construction.

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

There is an ongoing risk that vehicular as well as pedestrian and cycling traffic will be negatively affected, which may include delay, wayfinding difficulty, and real or perceived safety concerns. To mitigate these impacts, the City is taking several steps including; installation of a real-time travel time information system for northbound Waverley Street in advance of the construction site; routine adjustment of signal timing to improve traffic flow; construction of a full four lane detour roadway and associated active transportation pathway to accommodate all users during underpass construction; coordination between major construction projects in the area to maintain adequate regional traffic flow; lane closure restrictions in place during peak hours and during important events (e.g. Canada Summer Games); and road safety audit services at various stages conducted by a third party.
### Table 3 – Significant Risks and Mitigation Strategies

<table>
<thead>
<tr>
<th>Risk Statement and Explanation</th>
<th>Risk Mitigation Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New:</strong></td>
<td></td>
</tr>
<tr>
<td>Delay in completion of Bridge Construction delays Fall 2018 rail work, delays project.</td>
<td>Contractor instructed to submit a schedule recovery plan outlining strategy to meet the required completion date.</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>Ongoing discussions with railways and nearby projects</td>
</tr>
</tbody>
</table>

| **Ongoing:**                  |                                 |
| Vehicle, pedestrian and cycling traffic negatively impacted by construction (e.g. delays, wayfinding difficulty) | Installed real-time travel time information system, ongoing signal timing adjustments, constructing full four lane detour road and path, ongoing coordination between major construction projects in the area, restricting lane closures during peak periods and important events. |
| Failure of third party utilities to relocate services could delay the project | All major Manitoba Hydro electrical distribution lines have successfully been relocated. Relocation of other third party utilities is still required. The City, it's consultants, contractors, and third party utilities are working closely to complete the work in time to avoid schedule impacts. |
| Encountering poor subsurface soil and groundwater conditions may delay the project and increase cost | Comprehensive subsurface soil and groundwater investigations carried out during design phase. |
| Maintaining the project schedule | 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. |

| **Mitigated:**                |                                 |
| 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. |
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 (August 1 to October 31, 2017) were $9,000,729.15 and primarily consist of Professional Services and Construction. Expenditures to date total $20,855,131.

Currently, the total project Estimate at Completion is $121.339M, resulting in a forecasted surplus of $34.943M. The Estimate at Completion has not changed since the last report.

Funding (Update from last report)

The project is being funded by the three levels of government with the City’s share being budgeted at 41% of total project costs factoring in ineligible cost not covered by the other levels of Government. Funding for the project was budgeted without reliance on contributions from the railway.

CN Rail is contributing $9,500,000.00 to the project. With this contribution, the City’s share of project costs is estimated to be 35%.

On July 5, 2017, the City received a copy of the fully executed contribution agreement between the Province of Manitoba and the City of Winnipeg. 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.

The contribution agreement with the Federal Government is currently being finalized. 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.

The majority of the City’s share of project cost is to be funded by debt. To-date, $17,000,000 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 millions)</th>
<th>Amended Budget (in millions)</th>
<th>Committed (in millions)</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>-</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 during the preliminary engineering study, and ongoing meetings are occurring as the land acquisition process progresses. Four 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 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 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 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 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.
**Subsequent Events after Report Period End Date**

- On November 8, the rail detour was completed and successfully put into operation.
- 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.
- 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.
Financial Impact Statement  Date:  January 9, 2018

Project Name:
Waverley Street at CN Mainline (Rivers) Grade Separation,
Project ID: 1805001413,
Quarterly Project Status Report No. 07
For the Period Ended October 31, 2017

COMMENTS:

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

"Original signed by J. Ruby, CPA, CA"

J. Ruby, CPA, CA
Manager of Finance & 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: December 18, 2017

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>Project Name</th>
<th>Waverley Street at CN Mainline (Rivers) Grade Separation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Owner (Department)</td>
<td>Public Works Department</td>
</tr>
<tr>
<td>Project ID</td>
<td>1805001413</td>
</tr>
<tr>
<td>Project Sponsor</td>
<td>Brad Neirinck, P.Eng., Manager of Engineering</td>
</tr>
<tr>
<td>Department Responsible for Project Delivery</td>
<td>Public Works Department</td>
</tr>
<tr>
<td>Consultant Engineer (Company Name)</td>
<td>Dillon Consulting Limited</td>
</tr>
<tr>
<td>Adopted Budget</td>
<td>$156,282,000</td>
</tr>
<tr>
<td>Class of Estimate (Adopted)</td>
<td>Class 3 (-20% to +30%)</td>
</tr>
<tr>
<td>Range of Estimate (Adopted)</td>
<td>$125,000,000 to 203,167,000</td>
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<tr>
<td>Amended Budget</td>
<td>N/A</td>
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<tr>
<td>Class of Estimate (Amended)</td>
<td>N/A</td>
</tr>
<tr>
<td>Range of Estimate (Amended)</td>
<td>N/A</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, Acting Director of Public Works (Chair)
- Brad Neirinck, Manager of Engineering, Public Works (Project Sponsor) with similar projects.
- Tim Shanks, Manager Water Services, Water and Waste
- Jason Ruby, Manager of Finance, Public Works
- Georges Chartier, Chief Asset and PM Officer, Chief Administrative Office
## Appendix B – Financial Forecast

### Project Component Deliverables

<table>
<thead>
<tr>
<th>Project Component Deliverables</th>
<th>Budget (in 000’s)</th>
<th>Actual Costs To October 31, 2017</th>
<th>Projected Costs</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>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Engineering and Design</td>
<td>$ 11,422</td>
<td>-</td>
<td>$ 11,422</td>
<td>$ 7,329</td>
<td>$ 660 $ 3,320 $ 2,537 $ 70 $ 13,916</td>
<td>$ (2,494)</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>$ 88,280</td>
<td>-</td>
<td>$ 88,280</td>
<td>$ 10,976</td>
<td>$ 6,257 $ 42,000 $ 22,000 $ 900 $ 82,133</td>
<td>$ 6,147</td>
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<tr>
<td>Land Acquisition</td>
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<td>$ 4,200</td>
<td>$ 661</td>
<td>$ - $ 1,700 $ 1,839 $ - $ 4,200</td>
<td>$ -</td>
<td>$ -</td>
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<tr>
<td>Internal Financing, Overhead, and Other</td>
<td>$ 10,090</td>
<td>-</td>
<td>$ 10,090</td>
<td>$ 1,889</td>
<td>$ 761 $ 2,840 $ 3,770 $ 830 $ 10,090</td>
<td>$ -</td>
<td>$ -</td>
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<tr>
<td>Contingency</td>
<td>$ 42,290</td>
<td>-</td>
<td>$ 42,290</td>
<td>$ -</td>
<td>$ - $ - $ - $ - $ 11,000 $ 11,000 $ 31,290</td>
<td>$ 31,290</td>
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<tr>
<td><strong>Total Project Budget</strong></td>
<td><strong>$ 156,282</strong></td>
<td>-</td>
<td><strong>$ 156,282</strong></td>
<td><strong>$ 20,855</strong></td>
<td><strong>$ 7,678 $ 49,860 $ 30,146 $ 12,800 $ 121,339</strong></td>
<td><strong>$ 34,943</strong></td>
<td><strong>$ 34,943</strong></td>
</tr>
</tbody>
</table>

### % of Project Budget Spent

| (Actual Costs to Date / Adopted & Amended Budget) | 13% | 13% |

*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.
- 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 14, 2016, Council approved a cost-sharing arrangement for CN Rail to contribute $9,500,000 as their cost apportionment for the project, to be used as a part of the City’s portion of project funding.
• On January 9, 2017, Contract 2 was posted to the City of Winnipeg Bid-Opportunities website.
• On January 12, 2017, the City of Winnipeg obtained possession of permanently expropriated lands and the right to enter and construct on lands subject to expropriated easements.
• On February 1, 2017, the first of several electronic newsletters (Construction Update #1) was issued, providing the public with an update on construction of the project.
• On February 10, 2017, the City was advised that CN property required for the project was sold to a private company. The land was identified as CN land at the start of the expropriation process, and was therefore not subject to expropriation because CN land cannot be expropriated. At that time, an interest in the required lands was expected to be obtained via the forthcoming crossing agreement between the City and CN.
• On February 13, 2017, the City of Winnipeg awarded a Single Source Purchase Order (Materials Management reference number 98-2017) to CN for the supply of rail materials.
• On March 14, 2017, SPC Property and Development, Heritage and Downtown Development approved the purchase of privately owned lands required for the project which were not subject to the expropriation bylaw.
• On March 20, 2017, the City of Winnipeg issued a notice in accordance with Section 8(1) of the Railway Safety Act for work related to construction of the new at-grade crossing of the Waverley Street Detour Road at the CN Rivers Subdivision Mile 3.94. Notices were issued to representatives of Grant Memorial, 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 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.

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.