Winnipeg
Audit Department
Service de vérification

# Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass Audit

## for the Period of April 1 to June 30, 2016

*Leaders in building public trust in civic government*

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# AUDIT AT A GLANCE

### *RECOMMENDATIONS*

*No recommendations accompany this report.*

## Background

Stage 2 of the Southwest Rapid Transitway and Pembina Highway Underpass is one of the largest capital projects that the City has embarked upon. Appropriate communication is important to allow key stakeholders to fulfill their roles in relation to the project; it also keeps the public informed on project performance. The Audit Department will be releasing quarterly audit reports that provide assurance on the reporting processes and selected key project management areas throughout the construction of the project.

## Findings

The Public Service has produced the appropriate legislated and agreed upon reports, as well as public financial status updates for the Project, from April 1 to June 30, 2016.

The Public Service has managed risk for the project in accordance with City project management guidance from April 1 to June 30, 2016.

## MANDATE OF THE CITY AUDITOR

- The City Auditor is a statutory officer appointed by City Council under *The City of Winnipeg Charter*. The City Auditor is independent of the Public Service and reports directly to Executive Policy Committee, which serves as the City's Audit Committee.
- The City Auditor conducts examinations of the operations of the City and its affiliated bodies to assist Council in its governance role of ensuring the Public Service's accountability for the quality of stewardship over public funds and for the achievement of value for money in City operations.
- Once an audit report has been communicated to Council, it becomes a public document.

## AUDIT BACKGROUND

- Stage 2 of the Southwest Rapid Transitway and Pembina Highway Underpass ("the Project") is one of the largest capital projects that Winnipeg has initiated to date. An audit of the Project was added to the City Auditor's *Audit Plan 2015 – 2018* in order to provide timely assurance on key project management areas on a proactive basis. Our audit work began after the procurement phase of the Project due to a fairness monitor being secured to provide oversight on the procurement process (a requirement of *The Public-Private Partnerships Transparency and Accountability Act*).
- The City Auditor's audit plan was adopted by Council on July 15, 2015.

## AUDIT OBJECTIVES

- The objectives of this ongoing audit are:
  - To provide assurance that appropriate reporting is occurring for the Project based on regulatory requirements, City policies and procedures, and agreements with third parties
  - To provide assurance that appropriate financial status reporting is occurring for the Project
  - To provide assurance that appropriate risk management is occurring in the Project

## PROJECT RISK ANALYSIS

- Communication is essential for successful projects. Some of the most important communication in large-scale public capital projects occurs in the form of public reporting; however, few industry organizations give guidance on what exactly should be included in project performance reports. Reporting is mainly left to be agreed upon by project stakeholders, and much is left to the professional judgment of the project management teams. Improper communication can hold up projects or cause wasted efforts. Therefore, proper communication practices are essential to ensure that projects run smoothly and efficiently.
- Individual audit area risk assessments are provided for each issue discussed. The assessments discuss and detail the residual risk for issues after considering the City's mitigating risk controls. Our risk assessment criteria are shown in **Appendix 1.**

## SCOPE

- The scope of our audit includes project communication management over the course of the project. The scope of our quarterly audit reports also includes the reporting on key management areas (such as risk, quality, schedule, and cost) as the Project progresses.
- Our audit runs concurrently with the project over the duration of the project, and reports are released on a quarterly basis. This is our second report, which covers the period of April 1 to June 30, 2016.

## APPROACH AND CRITERIA

- We conducted our audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient appropriate evidence to provide a reasonable basis for our observations and conclusions, based on our audit objectives. We believe the evidence we have obtained provides a reasonable basis for our observations and conclusions.
- To gather sufficient appropriate evidence for our audit, we reviewed Manitoba's legislated requirements for public-private partnership reporting, the City of Winnipeg's documented guidance for capital project reporting, and the public reporting requirements set out in funding and capital project management agreements. We also researched industry standards and guidance on capital project monitoring and reporting. We then conducted our fieldwork, which compared the public reporting for the project for the period covered by this audit report to all of the outlined guidance.
- The guiding documents we used include:
    - *The Public-Private Partnerships Transparency and Accountability Act* of Manitoba
    - *The Environment Act* of Manitoba
    - *The City of Winnipeg Charter* for Council's and its committees' legislated roles in relation to capital project decision making
    - *Administrative Standard FM-004: Asset Management* (and its precursors throughout the project)
    - Agreements with federal and provincial funding partners (P3 Canada, and the Government of Manitoba) and contracted service providers (Plenary Roads Winnipeg Transitway LP)
- Industry capital project monitoring and reporting practices we researched included:
    - Recommended practices 17R-97 and 56R-08 of The Association for the Advancement of Cost Engineering (AACE)
    - Accounting principles published by CPA Canada
    - *Effectiveness Reporting and Auditing in the Public Sector* published by the Canadian Comprehensive Auditing Foundation (CCAF)
    - Publicly available reporting information for the National Project Management System (NPMS)
    - *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) Fifth Edition*
    - Projects IN Controlled Environments (PRINCE2)
- **Appendix 2** provides a flowchart of the audit process.

## CONCLUSIONS

***The reports required by legislation, by-law, administrative standards, and contractual agreements have been issued by the Public Service.***

- The Public Service has submitted the formal reports required for this project during the period of this audit report.
- The reports reviewed for the period of this audit included:
  - "Acquisition – Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass Project"
  - "DAO 4/2015 and DAO 1/2016: Proposed Opening of University Crescent, Markham Road and Public Road Nos. 1 and 2 – Bus Rapid Transit Phase 2"
  - "Acquisition and License of a portion of the Manitoba Hydro transmission corridor for the Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass Project"
  - "Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass – Financial Status (Project No. 4230010514) Report No. 7 for the Period Ending June 30, 2016"
- The reports were compared to the guidance given for such reports and were found to meet the standards of said guidance.
- Financial costs reported to the SPC on Finance were found to be in accordance with the generally accepted accounting principles on cost reporting issued by Canada's Public Sector Accounting Board and, in our opinion, fairly presented the actual costs incurred for the Project for the period ending June 30, 2016.

***Project risks are being managed in accordance with the risk management guidance provided in the City's* Project Management Manual.**

- The City's project management team has created a risk management plan and risk registry that has been regularly updated over the period reviewed, and the risks have been discussed regularly in team meetings and Major Capital Project Steering Committee meetings.
- The private partner for the Project has also developed a risk management plan and risk registry for the Project.

## INDEPENDENCE

The team members selected for the audit did not have any conflicts of interest related to the audit's subject matter.

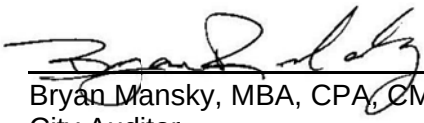
## ACKNOWLEDGEMENT

The Audit Department wants to extend its appreciation to all of the stakeholders who participated in this audit and especially to City's project team for their time and cooperation.

**The Audit Team**

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Auditor



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City Auditor

January 2017
Date

# Project Background

## 1.1 History of the Project

- The concept of transit corridors has been included in City plans for several decades.
- The first tangible public drawings that we are aware of for a southwest transit corridor were included in “Plan Winnipeg – toward 2010” (Policy Plate C), which was adopted by Council in 1993.
- In 2004, the Mayor at the time appointed the Rapid Transit Task Force, the work of which was adopted by Council in February 2006 in an administrative report entitled *“Implementation Plan for Rapid Transit Task Force Recommendations”*. This report included Stage 1 of the Southwest Rapid Transit Corridor. Stage 1 of the Southwest Rapid Transit Corridor was completed on time in 2012, and within the approved budget of $138,000,000.
- In November 2011, Council adopted the City’s “Transportation Master Plan”, which included the provision for the expansion of the Pembina Highway Underpass and five new transit corridors, the first being the southwest corridor.
- Capitalizing on an opportunity to integrate two projects, the City of Winnipeg submitted the combined Southwest Transitway (Stage 2) and Pembina Highway Underpass project (“the Project”) to the Government of Canada for funding under the Building Canada Fund. As the Project was expected to exceed a $100 million threshold, a screening process was completed to determine whether the project could be successfully delivered under a P3 model. It was ultimately determined that the project could be successful as a P3 project, and funding was announced from P3 Canada.
- On June 25, 2014, Council approved that the project be included in the City’s Capital Budget at an estimated cost of $590 million.
- On June 24, 2016 the CAO awarded the contract for the design, build, financing, operation, and maintenance of the Project to Plenary Roads Winnipeg.

## 1.2 Project Makeup

- The design of the Project is shown below:

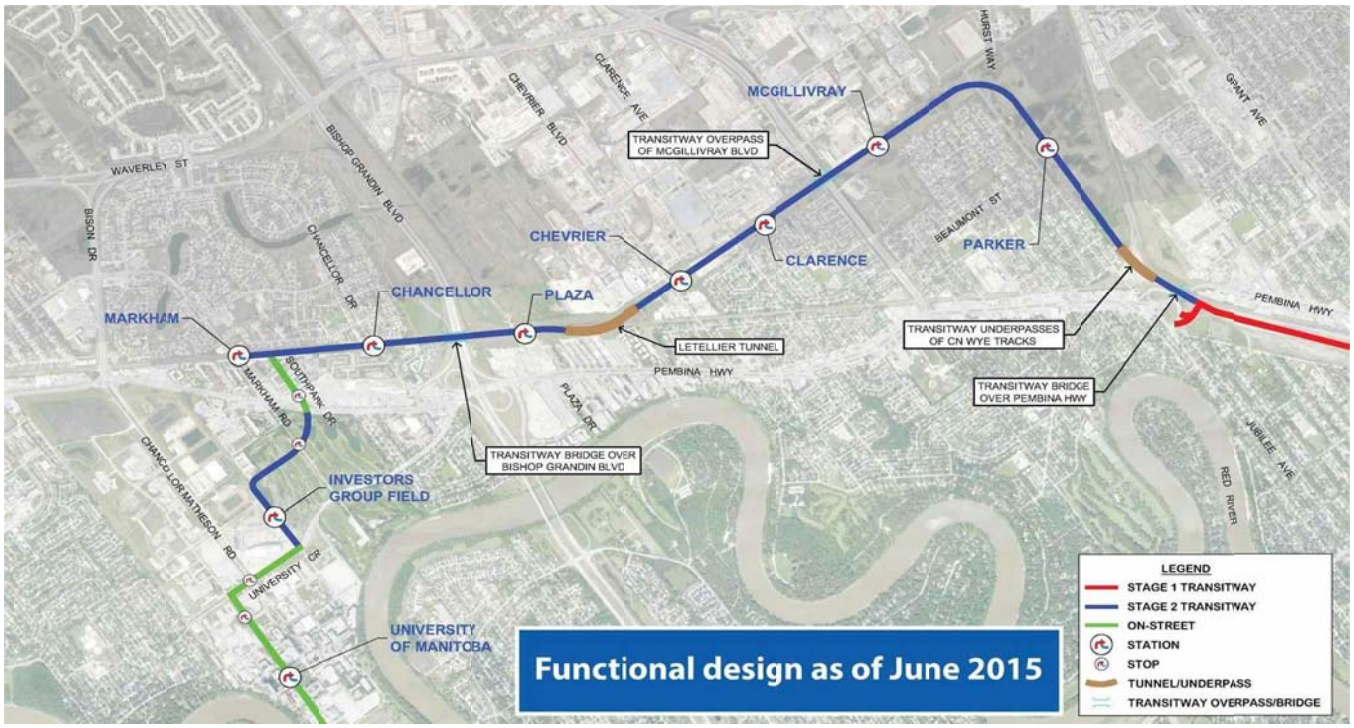



Figure 1: Southwest Rapid Transitway (Stage 2) Project Overview
~Source: Winnipeg Transit website March 31, 2016

- The scope of the Project has been adjusted from our previous report for the period of project initiation until March 31, 2016. The scope of the Project currently includes the extension of the current Stage 1 of the southwest transit corridor from Jubilee Boulevard to the University of Manitoba. This extension is approximately 7.6 kilometers long and requires the construction of three new bridges (one for a railway and two for the transitway), two overpasses, an underpass under existing railways, the reconstruction of Southpark Drive, two new lift stations, pedestrian and cycling facilities along Southpark Drive, a new pedestrian ramp at Investor's Group Field, and nine new transit stations.
- The Project also includes the widening of the northbound side of Pembina Highway under the Jubilee overpass from two to three lanes along with pedestrian and cycling facilities on both sides of Pembina Highway.

## 1.3 Project Resources

- At the time of this report, the Project is being managed by a team of experienced City employees. Project management is also supported by an "owner's advocate" (contracted engineering consultant), and several contracted subject matter experts for legal, engineering, procurement, and regulatory compliance advice.
- The Project was in a transition stage to be managed by the P3 consortium, Plenary Roads Winnipeg, which will be responsible for design, construction, finance, and maintenance of the asset for the next 30 years.
- The Project budget at the time of this report is $467.3 million.

- The financing for the Project is:

| Contributing Party | Contribution | Percent |
|---|---|---|
| City of Winnipeg | $ 188,050,000 | 40% |
| Province of Manitoba | 188,050,000 | 40% |
| Government of Canada | 91,200,000 | 20% |
| Total | $ 467,300,000 | |

## 1.4 Current State of the Project

- An agreement has been signed with Plenary Roads Winnipeg to design, build, finance, operate and maintain the Project. Project risks are now being shared with the private partner and the City's project management team has moved into a project oversight role.

## 1.5 Reporting

- The following reports are required for legislated and contractually agreed upon matters:
  - Actions that are outside the delegated authority of the Public Service (such as expropriation of lands, procurement in excess of delegated authority, or over-expenditure reports)
  - Quarterly reporting to the SPC on Finance
  - Report on a public sector comparator, as well as the viability, expected risks, costs and benefits of using the P3 procurement method
  - A report by the contracted Fairness Monitor on the procurement process for the Project
  - Report on the final results of the Project
  - Environmental reports as determined by the Province of Manitoba

## 1.6 Roles and Responsibilities of Governing Stakeholders

- Project communication should allow governing bodies to perform their responsibilities of their offices in general and in relation to the specific capital project.[1] To set the stage for appropriate communication, it is important to have an understanding of the different stakeholders, and the responsibilities associated with their offices. Due to the size and scope of this project, the number of stakeholders, and the form of the delivery, clear, appropriate and timely communication is essential to keep the project on track to avoid project delays and additional costs.

***Council***

- Council is the governing body for the City. Council has the legislated authority to govern the city in whatever way it considers appropriate within the broad strokes of the city charter, and has the power to delegate its authority with few exceptions. In relation to the project, Council has the responsibility to:
  - Set and approve civic priorities for the community
  - Set and approve the capital budget for the project
  - Approve contract awards in excess of $5,000,000, unless that authority has been delegated by a specific resolution of Council
  - Approve the debt financing for the project
  - Approve expropriations required for the project

[1] Canadian Comprehensive Auditing Foundation (1987). *Effectiveness Reporting and Auditing in the Public Sector* (Ottawa). 6.

- Aside from these Council duties, individual Councillors have been elected to represent and advocate for the populous and require a basic level of information to be able to hold a dialogue to advocate for citizens in their wards, and within the sphere of their committee duties.

***Committees of Council***

- Other than the Executive Policy Committee, which is a statutory committee, Council has the authority to create and to delegate powers to committees as it sees fit through the enactment of by-laws. Other committees of Council that are stakeholders in this project include Executive Policy Committee ("EPC"), various Standing Policy Committees ("SPC"), and Community Committees. The committees of Council that regularly consider the Project are detailed in the following pages.

***Executive Policy Committee ("EPC")***

- EPC formulates, coordinates and endorses the work of other Council committees, and makes recommendations to Council regarding matters that affect the city as a whole, including policies, plans, budgets, by-laws and other matters. EPC is also responsible for the supervision of the City's Chief Administrative Officer. In relation to the project, the committee has the responsibility to:
    - Hold intergovernment conversations in the event that plans must be escalated to a political level
    - Endorse and present capital budgets to Council

***SPC on Finance***

- SPC on Finance coordinates and advises EPC on the City's fiscal policy development and strategies, including capital project recommendations and strategies. In relation to the project, SPC on Finance has the responsibility to:
    - Review and make recommendations on the project before project initiation
    - Receive quarterly reports on the current status of the project

***SPC on Property and Development, Heritage, and Downtown Development***

- SPC on Property and Development, Heritage, and Downtown Development provides policy advice to Council on asset management, land acquisition, land development, and planning and land use. In relation to the project, this committee has the responsibility to:
    - Recommend land acquisition strategies for the project including expropriations of property
    - Approve terms and conditions of dealing with land
    - Prepare conceptual planning in transportation systems
    - Make budgetary recommendations within the jurisdiction of the committee

***SPC on Infrastructure Renewal and Public Works***

- SPC on Infrastructure Renewal and Public Works provides policy advice to Council on engineering services, public works maintenance, transit, traffic control, and transportation control planning. In relation to the project, this committee has the responsibility to:
    - Make budgetary recommendations within the jurisdiction of the committee

***SPC on Water and Waste, Riverbank Management, and the Environment***

- SPC on Water and Waste, Riverbank Management, and the Environment provides policy advice to Council on land drainage engineering services, and environmental issues. In relation to the project, this committee has the responsibility to:
    - Make budgetary recommendations within the jurisdiction of the committee

***Community Committees***

- Community Committees maintain the closest possible communication between the City and the citizenry. In relation to the project, these committees have the responsibility to:
    - Provide residents information on the City's policies, programs and budgets, and ensure that residents are given the opportunity to represent their views on the same

# Project Reporting Analysis

## 2.1 Reporting Requirements

### Issue

- Has the Public Service communicated the proper reports required by legislation, by-laws, City of Winnipeg policies and standards, and project agreements?

### Conclusions

- The Public Service has distributed the reports required by legislation, by-laws, policies, standards and agreements over the period of review for this audit report. We have performed limited testing on the information in the reports released and outlined below, and have found the information tested to be accurate.

### Analysis

- For the period of April 1 to June 30, 2016, the following reports have been required, and have been published for the Project:
    - "Acquisition – Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass Project" (required by *The City Organization By-law*)[1]
        - The report seeks the approval required to purchase land from the University of Manitoba for the Project.
    - "DAO 4/2015 and DAO 1/2016: Proposed Opening of University Crescent, Markham Road and Public Road Nos. 1 and 2 – Bus Rapid Transit Phase 2" (required by a motion adopted by Council in its September 29, 1998 meeting)[2]
        - The report submits a proposed street opening to facilitate the construction a portion of the Project located on the former Southwood Golf Course & Country Club for the consideration of the Riel Community Committee.
    - "Acquisition and License of a portion of the Manitoba Hydro transmission corridor for the Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass Project" (required by *The City Organization By-law*)[3]
        - The report requests approval for a piece of land required to construct the Project.
    - "Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass – Financial Status (Project No. 4230010514) Report No. 7 for the Period Ending June 30, 2016" (required by *Administrative Standard FM-004: Asset Management*)[4]
        - The report presents the financial position and significant project updates for the Project up to June 30, 2016.
- Our audit work included examination of reports in relation to the legislated, regulated or agreed-upon requirements to communicate such reports. Limited testing of the accuracy of information included in reports was also completed based on our risk assessment of whether such information could be misstated.

[1] Submitted to the Standing Policy Committee on Property and Development, Heritage and Downtown Development in its April 12, 2016 meeting.
[2] Submitted to the Riel Community Committee in its May 2, 2016 meeting.
[3] Submitted to the Standing Policy Committee on Property and Development, Heritage and Downtown Development in its June 7, 2016 meeting.
[4] Submitted as information to the Standing Policy Committee on Finance in its September 15, 2016 meeting.

- For this audit report, we audited the actual costs reported in the financial status update submitted to the Standing Policy Committee on Finance (see **Appendix 4** for an illustration). In our opinion, the actual costs reported were fairly presented, and were reported in accordance with generally accepted accounting principles issued by the Canadian Public Sector Accounting Board.

| **RECOMMENDATION** | | | |
|---|---|---|---|
| *No recommendation accompanies this analysis.* | | | |
| **RISK AREA** | Information Resources | **ASSESSMENT** | Moderate |
| **BASIS OF ASSESSMENT** | Reports that are not distributed, or that contain inaccurate information, affect stakeholders' ability to perform their roles and could also affect legal compliance or funding agreements. To mitigate this risk, the Public Service has formed an experienced project management team that works closely with all interdependent departments to address all project management knowledge areas that require reporting. | | |

# Project Risk Management Analysis

## 3.1 Risk Management Activities

### Issue

- Has the project management team followed the risk management guidance given in the City's *Project Management Manual*?

### Conclusions

- The Public Service has acted in accordance with the project risk management guidance given in the City's *Project Management Manual*.

### Analysis

- During the quarter, the Public Service signed an agreement with the private partner, Plenary Roads Winnipeg. One of the main benefits of entering into a public-private partnership agreement is for the transference of risks that would normally be retained by the public sector in a typical design-bid-build project methodology. The public sector does retain some risk that it will need to manage, and will receive assurance from the private partner through the partnership agreement and other communications that the remainder of the risks are also being effectively managed.
- We observed that the City's project management team has continued to update its project risk register for the period. We observed through meeting minutes that project risks are regularly discussed in project team meetings, as well as the Major Capital Project Steering Committee meetings. These practices are consistent with the guidance of the City's *Project Management Manual*.
- We observed that Plenary Roads Winnipeg has provided the Public Service with a project risk management plan that outlines the anticipated risks in the projects, the mitigation strategies for the risks, and the estimated residual risks remaining after the mitigation strategies. This practice is consistent with generally accepted project management practices (such as the *Project Management Book of Knowledge* issued by the Project Management Institute) and is also consistent with the City's *Project Management Manual*.

| RECOMMENDATION | | | |
|---|---|---|---|
| *No recommendation accompanies this analysis.* | | | |
| **RISK AREA** | Business Process | **ASSESSMENT** | Moderate |
| **BASIS OF ASSESSMENT** | Inadequate risk management could reduce the projected value for money savings for the Project. | | |

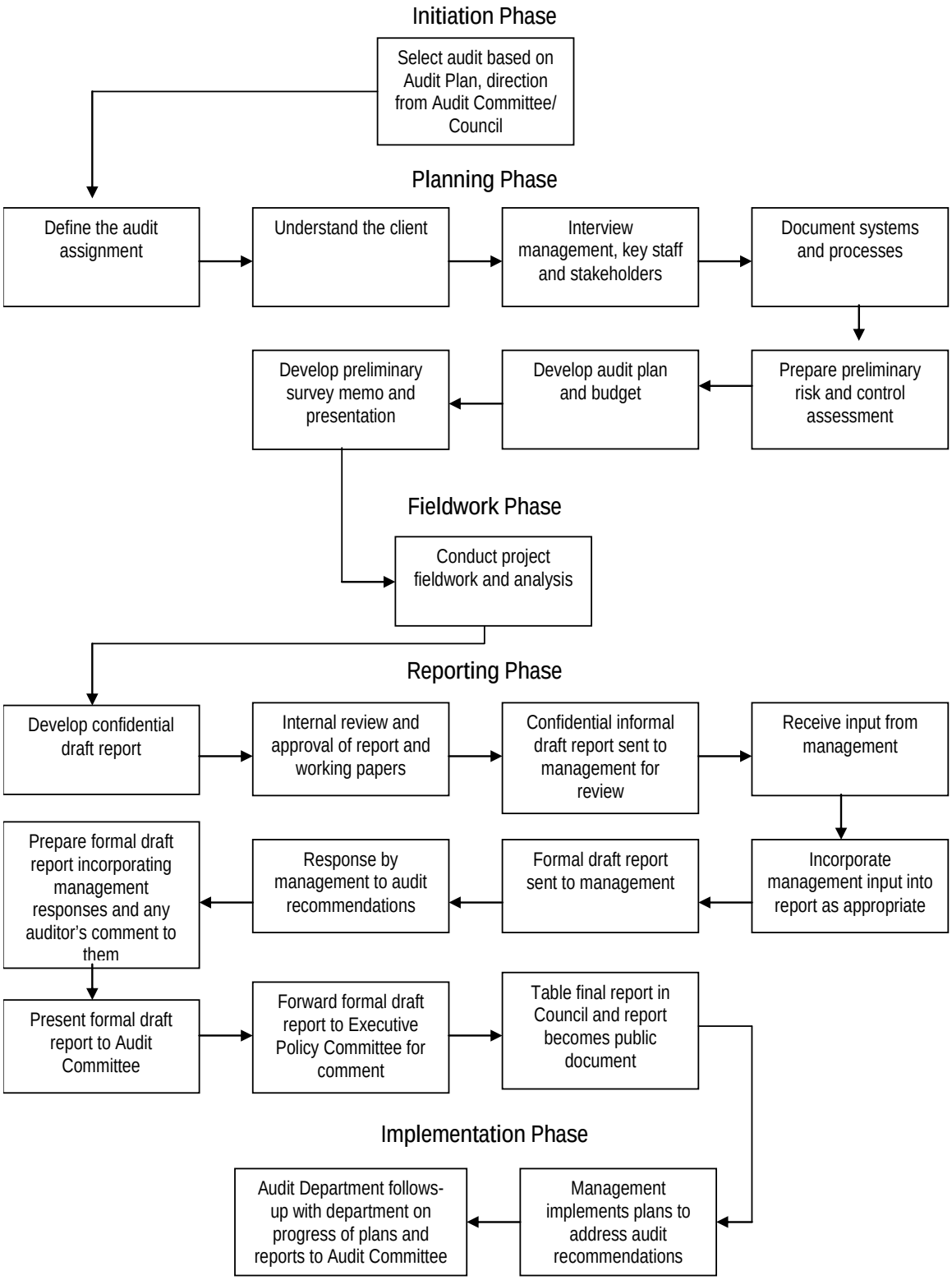
## APPENDIX 1 – Risk Assessment Worksheet

| Potential Impacts / Likelihood | Insignificant<br>- None or minor change in services, project or processes<br>- Very limited exposure of sensitive information<br>- Very minor, non-permanent environmental damage<br>- Financial impact < $100K | Minor<br>- Minor change in achievement of service objectives<br>- Limited exposure of sensitive information<br>- Minor, non-permanent environmental damage<br>- Financial impact $100K – $500K | Moderate<br>- Moderate change in delivery of essential services<br>- Exposure of limited amount of confidential information<br>- Moderate environmental damage<br>- Financial impact $500K – $1M | Major<br>- Significant change in delivery of essential services<br>- Exposure of significant amount of confidential information<br>- Significant change in quality of life indicators<br>- Major environmental damage<br>- Financial impact $1M – $10M | Extreme<br>- Unable to perform essential services for extended period<br>Exposure of critical confidential information<br>- Very significant change in quality of life indicators<br>- Significant damage to environment<br>- Financial impact >$10M |
|---|---|---|---|---|---|
| Almost certain (Excepted to occur unless circumstances change) | M | M | H | C | C |
| Likely (Probably occur in most circumstances) | M | M | H | C | C |
| Possible (Might occur under different circumstances) | L | M | M | H | H |
| Unlikely (Could occur if circumstances change) | L | L | M | H | H |
| Rare (May occur in exceptional circumstances) | L | L | M | M | M |

**Legend**

| | |
|---|---|
| C Critical risk: | Requires urgent action, monitor and review at least weekly by Senior Management and COO, inform CAO and Committee of Council |
| H High risk: | High impact, monitor and review at least quarterly by management, inform COO |
| M Moderate risk: | Monitor and review at least quarterly by management |
| L Low risk: | Review periodically, no explicit action required. |

## APPENDIX 2 – Audit Process



## APPENDIX 3 – Actual Costs Presented in Financial Status Reports

Appendix I

SOUTHWEST RAPID TRANSITWAY (STAGE 2) & PEMBINA HIGHWAY UNDERPASS
TRANSIT DEPARTMENT
*As of June 30, 2016*

| Project Component | Capital Budget | Capital Expenditure Forecast | | | | | | | Surplus (Deficit) | Variance Last Report | Change in Variance |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Actual Costs | Forecast | | | | | Total | | | |
| | Original | To June 30, 2016 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 to End of Contract | Forecast | From Revised | | | |
| UPFRONT COSTS | | | | | | | | | | | | | |
| PROFESSIONAL SERVICES | $ 13,000,000 | $ 3,235,733 | $ 2,139,201 | $ 1,977,144 | $ 1,977,144 | $ 1,977,144 | | | $ 11,306,366 | 1,693,634 | 1,693,634 | - |
| PROPERTY AND UTILITIES | 23,000,000 | 7,798,976 | 15,201,024 | $ 3,438,000 | $ 6,562,000 | | | | $ 33,000,000 | (10,000,000) | - | (10,000,000) |
| OTHER | 5,550,000 | 671,244 | 1,274,783 | $ 1,641,674 | $ 1,689,045 | $ 945,340 | $ 1,021,548 | | $ 7,243,634 | (1,693,634) | (1,693,634) | - |
| TOTAL UPFRONT COSTS * | $ 41,550,000 | $ 11,705,953 | $ 18,615,008 | $ 7,056,818 | $ 10,228,189 | $ 2,922,484 | $ 1,021,548 | | $ 51,550,000 | (10,000,000) | - | (10,000,000) |
| CONSTRUCTION COSTS | $ 476,750,000 | $ - | | | | | | | $ 346,750,000 | 130,000,000 | - | 130,000,000 |
| CONTINGENCY | $ 69,000,000 | $ - | | | | | | | $ 69,000,000 | - | - | - |
| TOTAL PROJECT COSTS | $ 587,300,000 | | | | | | | | $ 467,300,000 | 120,000,000 | - | 120,000,000 |
| | | | | | | | | | | | | |
| ANNUAL SERVICE PAYMENTS | 719,547,000 | | | 350,000 | 350,000 | 1,780,000 | 14,460,000 | 476,160,000 | $ 493,100,000 | 226,447,000 | - | 226,447,000 |

Source: Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass – Financial Status (Project No. 4230010514) Report No. 7 for the Period Ending June 30, 2016.