City of Edmonton
Office of the City Auditor

Touch the Water Project Audit
January 21, 2019
Objective
To assess why the Touch the Water project was not completed on schedule.

Scope
The scope focuses on the Touch the Water project. Touch the Water was part of five River Valley Alliance initiatives announced in 2012 and managed by the same project team; therefore, these initiatives are also considered in scope.

Statement of Professional Practice
This project was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.
Executive Summary

What did we do?
At the request of Council, we performed a detailed review of the Touch the Water project to understand the causes of the delays that prevented the project from progressing beyond the concept phase.

What did we find?
The project team, then part of the Sustainable Development department, decided to delay concept design until required environmental assessments were completed. This decision was the key factor in the delays facing the Touch the Water project to date.

The reporting of information to Council was inconsistent with the project team’s schedule, which included overly optimistic timelines.

The RVA is currently negotiating with the federal government for an extension to $3.1375 million that the City had formerly budgeted for Touch the Water but released in August 2017. This federal funding is currently considered at risk of loss.

What do we recommend?
We recognize the improvements that the City has made in enhanced communications on project status. While Building Edmonton provides up to date project status reporting on scope, budget, and schedule, it is Administration’s responsibility to highlight significant variances to Council. Council should be well informed of significant changes to project schedules in order to make appropriate budget decisions, especially if grant funding is involved.

Recommendation 1
Ensure Council is informed on project delays impacting grant funding

We recommend that the Deputy City Manager, Integrated Infrastructure Services ensure that Council is informed regarding project schedule delays that impact grant funding.
Background

Introduction

Touch the Water is a City project to build a promenade on the banks of the North Saskatchewan River in Edmonton. Touch the Water was part of five River Valley Alliance (RVA) initiatives announced in 2012. Touch the Water was delayed beyond expected project timelines, placing grant funding at risk. The project is currently still in the concept phase, with concept design work proceeding.

Project Governance

The governance structure for the Touch the Water project added complexity, as funding was provided as a grant from a partner organization – the RVA. The RVA is an organization of seven member municipalities focused on establishing and enhancing connectivity and access to river valley attractions and parks. Two City Councillors sit on the RVA Board of Directors.

The City entered into an agreement with the RVA that allowed the City to contribute funds and obtain matching amounts from each of the provincial and federal governments. The RVA entered into separate funding agreements with the provincial and federal governments.

The agreement between the City and the RVA stated that the City was to manage the completion of the initiatives and specified a completion deadline as a condition of the funding. Extensions to the agreement and changes in scope of the initiatives had to be approved by the RVA.

Although this project included a complex governance structure and multiple levels of government funding, Touch the Water was still a project owned and managed by the City of Edmonton, with Administration accountable for project completion.

RVA Initiative Funding

In 2012, the RVA announced $72.9 million in grant funding for five initiatives within Edmonton’s river valley. The RVA funding was split three ways, with the City, the Government of Alberta, and the Government of Canada each providing $24.3 million. The City later approved $3.1 million in additional funding, bringing the total budget to $76.0 million as of August 2017. These initiatives were approved by Council based on strategic-level planning only and without technical studies.
The distribution of funding for these five initiatives is shown in the following table. Touch the Water was considered part of the initiative that included the Mechanized River Valley Access (MRVA).

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Budget (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Mechanized River Valley Access and</td>
<td>A funicular, staircase, promenade, pedestrian bridge and elevator</td>
<td>$25.1</td>
</tr>
<tr>
<td>Touch the Water Promenade</td>
<td>Riverfront promenade located near the new Walterdale Bridge</td>
<td>$10.2</td>
</tr>
<tr>
<td>2) Terwillegar Park Footbridge</td>
<td>A new footbridge near Terwillegar Park</td>
<td>$25.9</td>
</tr>
<tr>
<td>3) East End Trails</td>
<td>Approximately 16 km of paved and gravel trails</td>
<td>$8.8</td>
</tr>
<tr>
<td>4) West End Trails</td>
<td>Approximately 5 km of paved and gravel trails</td>
<td>$3.7</td>
</tr>
<tr>
<td>5) Boat Docks and Launches</td>
<td>Dock improvements at seven locations</td>
<td>$2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$76.0</strong></td>
</tr>
</tbody>
</table>

**Current RVA Initiative Status**

One project team in the City’s former Sustainable Development department was assigned to manage and deliver the five RVA initiatives. The Integrated Infrastructure Services department is now responsible for managing City capital projects.

To date, the City spent $66.202 million of the $76.0 million (or 87%) budgeted for RVA initiatives and reallocated $3.523 million (or 5%) to other capital projects.

All of the RVA initiatives with the exception of Touch the Water and the boat docks and launches have now been substantially completed.

**Funding for Touch the Water**

The Touch the Water project had an initial budget of $10.2 million and incurred $0.4 million in costs.

In August 2017, Council voted to release the $9.798 million in capital funding budgeted for Touch the Water, based on Administration’s recommendation that the City would be unable to complete the project before the deadline in RVA’s agreement with the City.
The capital funding released by the City came from three different sources, as shown in the following figure.

Of the funds released, $3.523 million represented the City’s funds to be reallocated to other City capital projects. The remaining $6.275 million was split between federal and provincial contributions.

RVA negotiations with the federal government are ongoing to renew its funding agreement set to expire in March 2019. As no agreement has been reached to date, OCA considers the federal contribution of $3.1375 million to be at risk for the City.

The RVA has extended its funding agreement with the provincial government until March 2025. RVA has yet to enter into a formal extension agreement with the City, although it has indicated that it intends to do so as per a memorandum sent to the City. Thus, OCA does not consider the provincial contribution of $3.1375 million to be at risk of loss.

If the City is successful in obtaining extensions from the RVA for the federal and provincial funding, it is likely that these funds will be used for other City capital projects.
**Touch the Water Timelines and Progress**

**Initial Timelines**

The initial timeline for Touch the Water showed a project initiation of August 2012 with completion in December 2015. This timeline was divided into three phases – concept, design, and build. The concept phase was forecast to take 180 working days and end in April 2013. The design and build phases were expected to take 200 and 502 working days, respectively, ending in December 2015.

**Revised Timelines and Progress**

In December 2012, the project team revised the expected project completion date to November 2016. In September 2015, the expected completion date was revised to December 2017. In March 2017, the completion date was further revised to December 2018.

In August 2017, Council voted to release the $9.798 million in capital funding budgeted for Touch the Water.

In December 2017, Council approved $1.5 million in funding for Touch the Water concept design, including environmental and geotechnical work.

The following chart illustrates at a high level the project delays and schedule revisions for Touch the Water.
Project Planning

Overview

At the request of Council, we performed a detailed review of the project planning to understand the causes of the delays that prevented Touch the Water from progressing beyond the concept phase.

In discussions with the project team, the Touch the Water project timelines were considered overly optimistic. Prior to August 2017, Administration reporting to Council communicated project delays, with some detail around challenges facing Touch the Water, but did not indicate that funding would have to be released. Ultimately, the project faced delays due to the project team’s decision to delay concept design because of environmental risks.

Environmental Assessments

The Touch the Water site is located on EPCOR land in Rossdale, part of a former industrial power plant. The site has environmental contamination issues that must be addressed.

During planning, the project team had identified two environmental risks, for which they assigned the highest possible rating for potential impact on the project. The first risk was detailed design beginning in advance of environmental approval, since this could require re-design, schedule delays or cancellation of the project if approvals are not granted. The second risk was environmental approvals not being granted prior to construction, since this could delay the start of construction work.

Environmental contamination testing covering the whole EPCOR site was initiated in October 2012.

- The Phase I Environmental Site Assessment was completed in April 2013. A Phase I Environmental Site Assessment is a historical evaluation of a property to determine the likelihood of potential contamination which involves no physical testing.

- The Phase II Environmental Site Assessment was completed in February 2015. A Phase II Environmental Site Assessment evaluates the nature and extent of any contamination on a property through
The Risk Management Plan was completed in February 2018 and submitted to the province in April 2018 for formal approval. In September 2015 a consultant was engaged to work on a Tier II Risk Assessment and Risk Management Plan (“Risk Management Plan”). This plan describes the City’s proposed approach to manage the environmental contamination on the Touch the Water site. The consultant completed the final report in February 2018. The City and the environmental consultant worked closely to meet the province’s requirements, including a full year of testing data.

In September 2015 a consultant was engaged to work on a Tier II Risk Assessment and Risk Management Plan (“Risk Management Plan”). This plan describes the City’s proposed approach to manage the environmental contamination on the Touch the Water site. The consultant completed the final report in February 2018. The City and the environmental consultant worked closely to meet the province’s requirements, including a full year of testing data.

City environmental science staff have indicated that there are no defined criteria around expected timelines for environmental work of this kind. Based on their experience, the Touch the Water environmental work was consistent with timelines for a complex site.

Another concern the City’s environmental staff have is the stability of the riverbank. The site’s geotechnical issues and environmental contamination may pose challenges during design and construction.

Due to environmental concerns, the project team decided to wait for the results of the Risk Management Plan to address the site contamination before proceeding with concept design.

The City submitted the Risk Management Plan to the province for formal approval in April 2018. City environmental staff have advised that provincial review for similar projects can take 2.5 years or more.

As of June 2018, the City has initiated concept design work for Touch the Water, even though the Risk Management Plan has not yet been approved by the province. Their decision to proceed is based on the assumption that environmental risks can be managed during construction, which is supported by the plan. As previously mentioned, Council approved $1.5 million in funding for Touch the Water concept design work in December 2017.

The Touch the Water and MRVA projects were related and considered a part of the same RVA initiative, with Touch the Water intended to be the landing point of the MRVA.

The projects were linked for planning and design
considerations, with the MRVA considered the primary project and Touch the Water as the secondary project. As a linked project with one combined budget, funding for Touch the Water was dependent on funding used by the MRVA.

The following image from initial planning documents shows the MRVA going down 104 Street and terminating in Rossdale at Touch the Water. For reference, OCA has marked the final alignment of the MRVA in blue.

Executive Committee voted in April 2013 to discontinue work on the MRVA and its planned 104 Street alignment. In July 2014, Administration presented to Executive Committee multiple replacement options for the MRVA project, including expanding Touch the Water. Council approved a 100 Street alignment for the MRVA in June 2015 – more than two years after the 104 Street alignment was cancelled.

The change in alignment of the MRVA created uncertainty for the project team in proceeding with planning work for Touch the Water.
**EPCOR Subdivision and Land Transfer**

Based on a Master Agreement with the City, EPCOR controls the land that includes the Touch the Water site. Negotiations between EPCOR and the City about the subdivision and transfer of land to the City for Touch the Water are ongoing and documented as far back as 2012. No agreement has been reached yet.

EPCOR has stated the desire to complete the land transfer in a timely manner and also indicated that the subdivision of the land must be completed prior to the transfer to the City.

The subdivision and land transfer from EPCOR to the City were delayed due to the required completion and provincial approval of environmental assessments and a Risk Management Plan. The City's Environmental Site Assessment guide indicates that for a subdivision, the appropriate environmental assessments must be approved by the province and the City. This approval is necessary to complete a subdivision of the EPCOR land and is currently outstanding.

The extended negotiations between EPCOR and the City did not have any direct impact on the delays facing the Touch the Water project.

**Project Management Practices**

The Touch the Water project charter was created in 2012. In 2013 the City released Directive and Procedure A1406A – Project Management for Construction Projects, as well as the Corporate Project Management Reference Guide.

The City has since undertaken multiple project management initiatives, including a new Project Development and Delivery Model, a Capital Project Governance Policy and a project management information technology system.

The project management practices above were not formalized at the inception of Touch the Water and the project team followed Sustainable Development departmental standards at the time. Our review indicates that following the new project management practices would not likely have had any significant impact on the delays facing Touch the Water.

The project team had performed risk identification and risk assessment work as required under the City's Corporate Project Management Reference Guide. In the project team’s risk assessments for Touch the Water, they identified an
The project team identified major risks to Touch the Water, including an unrealistic project schedule and environmental approvals.

unrealistic project schedule and environmental approvals as major risks which could impact the project.

The risk of an unrealistic schedule was first identified in 2014, along with the possibility of needing to ask for an extension from funding partners. This risk was accepted as the team attempted to move the project forward. Ultimately, the City was able to complete the majority of the RVA initiatives and use all grant funding with the exception of Touch the Water.

To address the environmental risks, the project team engaged external consultants to perform the required environmental assessments beginning in 2012, as previously discussed.

The reporting of information to Council was inconsistent with the project team’s schedule, which included overly optimistic timelines. The resulting extended timelines for the project led to project funding being extended and ultimately released.

In December 2015 and again in August 2016, Council received a status update showing that the project would be completed by the end of 2017.

Our analysis shows that this was not possible given that the project team’s schedule from January 2016 showed a tender closing date in November 2016. The project team estimated 502 working days of construction, which would take project completion well into 2018 or 2019.

Quarterly Capital Financial Updates reported delays in the Touch the Water project. The Q4 2016 Capital Financial Update presented to Council in March 2017 noted that the funding agreement would require an extension.

Although Administration reported on delays and challenges faced by Touch the Water in quarterly updates, they did not report that funding would have to be released until August 2017.
New Reporting Processes

Beginning in 2017 the City began reporting on infrastructure projects with a web-based guide called Building Edmonton. Each project is shown on a map and coded green, yellow or red based on the status of its budget and schedule. The details for Touch the Water from Building Edmonton are shown below.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Touch the Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope:</td>
<td>The Touch the Water Promenade will create a waterfront public space that connects the existing river valley trail, Rosedale Generating Station/pump houses, and the new Walterdale Bridge. The promenade is planned to create a series of spaces that can be used for public gathering and individual enjoyment of the river and River Valley.</td>
</tr>
<tr>
<td>Asset Type:</td>
<td>Open Space</td>
</tr>
<tr>
<td>Project Update</td>
<td>The project is in the early stages of the concept phase. A prime consultant for concept design, preliminary design and associated work will be retained by the end of November 2018. The first round of public engagement will take place in the first quarter of 2019.</td>
</tr>
<tr>
<td>Current Phase</td>
<td>Concept and Development Design</td>
</tr>
<tr>
<td>Approved Budget ($M):</td>
<td>[Green] - $1.50M</td>
</tr>
<tr>
<td>Project End Date</td>
<td>[Green] - Q4 2019</td>
</tr>
<tr>
<td>Ward:</td>
<td>Ward &amp;</td>
</tr>
<tr>
<td>Contact:</td>
<td>Jeannette Gasser</td>
</tr>
<tr>
<td>Phone:</td>
<td></td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:jeannette.gasser@edmonton.ca">jeannette.gasser@edmonton.ca</a></td>
</tr>
</tbody>
</table>

Touch the Water is shown as being in a concept and development design phase with a budget of $1.5 million. This planning work is expected to be completed in Q4 2019. The status is shown as green because the original timelines have been revised given a new capital profile for the project was created.

We recognize the improvements that the City has made in enhanced communications on project status. While Building Edmonton provides up to date project status reporting on scope, budget, and schedule, it is Administration’s responsibility to highlight significant variances to Council. Council should be well informed of significant changes to project schedules in order to make appropriate budget decisions, especially if grant funding is involved.

We have made one recommendation to review current communication and reporting practices around project delays that impact grant funding.
Conclusion and Recommendation

The project team’s decision to delay concept design until required environmental assessments were completed was the key factor in the delays facing the Touch the Water project to date. The reporting of information to Council was inconsistent with the project team’s schedule, which included overly optimistic timelines.

The RVA is currently negotiating with the federal government for an extension to $3.1375 million that the City had formerly budgeted for Touch the Water but released in August 2017. This federal funding is currently considered at risk of loss.

We recommend that the Deputy City Manager, Integrated Infrastructure Services ensure that Council is informed regarding project schedule delays that impact grant funding.

**Recommendation 1**
Ensure Council is informed on project delays impacting grant funding

_accepted_ by Management

Administration provides Council quarterly project updates through the online public Building Edmonton map and also through the Capital Financial Updates. In both of these reporting mechanisms Administration provides updates on the status of projects including potential schedule impacts. Administration also utilizes stand-alone Council reports to highlight scope, schedule or budget concerns for specific projects. Future updates and/or reports will include specific reference to grant funding, if applicable.

**Implementation:** June 30, 2019

**Responsible party:** Deputy City Manager of Integrated Infrastructure Services

We thank the staff involved with the Touch the Water project for their cooperation and openness during the audit.
Appendix 1: Risk Assessment and Methodology

**Risk Assessment**

During our risk assessment, we identified the following potential risk areas related to the Touch the Water project:

- EPCOR Subdivision Negotiations
- Environmental Contamination
- Reporting to Council
- Project Pre-Planning
- Mechanized River Valley Access Alignment
- Project Management Practices
- Project Funding
- Project Team Resourcing

These risks formed the basis of our audit objectives and audit program.

**Methodology**

We used the following methods to conduct this audit:

- Discussed with management and staff involved with the project
- Performed a site visit
- Reviewed project documents and reports
- Reviewed communications with Council and EPCOR
- Reviewed the City’s project management practices