

**Transportation Report to
SPC on Transportation and Transit
2019 September 18**

**ISC: UNRESTRICTED
TT2019-1076**

Green Line Technical Risk Committee – Q3 2019 Update

EXECUTIVE SUMMARY

The Technical Risk Committee (“TRC”) was developed to fulfill the Project Sponsor and Executive Steering Committee (“ESC”) desire for an independent committee to support the ESC’s oversight of the Project and provide additional review, as required. It is expected that the TRC will also bring increased focus to risk management on the Project. Key to risk management on the Project will be intentionally identifying, accepting, mitigating, managing, monitoring, transferring, or avoiding risk.

The TRC is now in place and has been working with the Project Sponsor (GM of Transportation) and ESC to establish its Terms of Reference. TRC has also conducted a review of the Request for Qualification (RFQ) for Segment #1 of the Project. The TRC and the Project Sponsor have established a review schedule for the next 6 months.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Transportation & Transit recommend that Council:
Direct Administration to have the Technical and Risk Committee return with a quarterly update report no later than Q4 2019.

PREVIOUS COUNCIL DIRECTION / POLICY

At the July 29, 2019 Combined Meeting of Council report TT 2019-0811, Green Line Q2 2019 Update, the following Recommendations were adopted; and Recommendations 4, 5 and 6 are of specific relevance to this report:

That Council:

2. Direct Administration not to proceed with construction of the Green Line Light Rail Transit Project – Contract #1 (4th Street SE to Shepard SE) until the alignment review from 16th Ave North to 4th Street SE has been completed and any potential changes have been approved by Council;

4. Direct Administration to have the Green Line Technical Risk Committee carry out an independent peer review of the following

- Overall project budget and scope;
- Sufficiency of funding for the Project;
- Suitability of the proposed technical solution with respect to Contract 2;
- Deliverability of the Project;
- Risk identification, quantification and mitigation process; and
- Suitability and adequacy of the governance and resourcing of the Project;

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5. Direct Administration not to release the Request for Qualifications (RFQ) to the market for Contract #1 (4th Street SE to Shepard SE) until the RFQ has been reviewed by the Green Line Technical and Risk Committee;
6. Direct Administration to have the Green Line Technical and Risk Committee report to the SPC on Transportation & Transit Committee as part of the Green Line quarterly updates with respect to their independent peer review over the previous quarter;
7. Direct Administration to work with our funding partners to obtain agreement that any capital cost savings from the Green Line Stage 1 (16 Ave N to 126 Ave SE) project will be applied to the required land assembly, corridor preparation, and design and construction of extensions north and south (outside the Stage 1 project), with sequencing of the extensions to be determined utilizing the RouteAhead Project Prioritization Framework;
8. Direct Administration to initiate land assembly on an opportunity basis north of 16 Ave North, for Green Line future stages utilizing the Transportation Future Land Fund or the Revolving Fund for General Land Purchases, as a funding source; and
9. Direct Administration to develop a scoping study to examine opportunities for improvements to interim rapid transit services from North Pointe south along the Centre Street corridor and report back to the SPC on Transportation and Transit by Q1 2020. The scoping study will identify the next steps required to deliver functional planning, preliminary and detailed designs;
10. Continue advocacy efforts with our funding partners to secure funding to complete the full Green Line LRT; and
11. Direct Administration to undertake a review of risks associated with any potential alignment decisions that affect downtown real estate development values, and City Assessment values.

That with respect to Recommendation 1 of Report TT2019-0811, the following be adopted:

That Council:

1. Direct Administration to split the procurement of the Green Line Stage 1 Project into multiple contracts from 16 Avenue North to 126 Avenue Southeast.

That with respect to Recommendation 3 of Report TT2019-0811, the following be adopted:

That Council:

3. Direct Administration to conduct a feasibility review of potentially including the North Pointe to 16th Ave corridor along Centre Street in Stage 1 if the 16th Ave to 4th Street corridor is not resolved by January 2020, to be included only once confirmed with our funding partners;

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BACKGROUND

At the July 29, 2019 Council Meeting, council provided specific directions to engage the TRC to conduct an independent technical and commercial peer review as an additional act of due diligence on the Green Line Project (the "Project"). It is expected that the additional due diligence will bring increased focus to risk management on the Project. Key to risk management on the Project will be intentionally identifying, accepting, mitigating, managing, monitoring, transferring, or avoiding risk.

On June 25, 2019 proposals were received in response to Request for Proposals 19-1652 - Technical and Risk Committee: Expert Support. A compliance review of the proposals was conducted and an Evaluation Committee selected 4 independent specialists. Contracts with each of the 4 independent specialists were finalized and the TRC was formalized at an August 1, 2019 TRC meeting. The TRC members are industry project specialists in the areas of procurement, commercial strategies, stakeholder management, design, and tunnel construction.

The TRC members are:

- Don Fairbairn – Chair
- Albert Sweetnam
- Eric Tromposch
- Erich Neugebauer

High level biographies of the TRC members are attached as Attachment 1.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Terms of Reference

The Terms of Reference (the "ToR") for the TRC are attached as Attachment 2. The ToR sets out the structure of the TRC, the expected scope and conduct of its work and its relationship with the Project team. The TRC scope of work is comprised of two modules; Module 1 includes the reviews established in the July 29, 2019 direction from Council and Module 2 is comprised of ongoing TRC input and review of risk identification and mitigation strategies.

The TRC, in collaboration with the Project Sponsor will prioritize the timing of the Module 1 reviews in accordance with Council's direction and develop specific tasks for conducting each of the reviews. The TRC and the Project Sponsor will agree in advance the methodology of each review and may, during the conduct of a review, agree to modify the review methodology. Typically, the TRC will complete sufficient review and due diligence to assess if the Project team's work has been performed to an appropriate standard of detail, and identify potential issues, inconsistencies, errors and discrepancies and offer constructive observations and recommendations intended to assist the Project team. Report TT 2019-

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0811 provides specific directions to engage the TRC to conduct an independent technical and commercial peer review.

TRC reviews will be conducted by independent specialists; whether they be TRC members or other independent specialists engaged by the TRC. The standard of each review may vary; specifically, the reviews will not be fully comprehensive and will not entail in-depth analysis of all assumptions, calculations, extrapolations, and alternative interpretations; rather, reviews may verify or test compliance with common practice and methodologies and confirm the appropriateness of the methodologies and application of the methodologies by the Project team and may include limited in-depth analysis only when necessary to assess the reasonableness of the various conclusions of the Project team.

It is the intention of the TRC to provide observations and recommendations that, in its view, will result in the best outcomes for the Project and the City. Nevertheless, TRC observations and recommendations are not binding and discretion can be exercised by the Project team in adopting TRC recommendations.

The Module 1 reviews, listed below, may be modified from time to time by the Project Sponsor, in consultation with the ESC.

- Suitability and adequacy of the governance structure;
- Deliverability of the Project:
 - Review of key project management documentation;
 - Review of procurement documentation, evaluation and ad-hoc procurement issues;
 - Suitability and adequacy of resourcing and project controls;
 - Stakeholder engagement and communications ;
- Suitability of the proposed technical solution with respect to Segment 1:
 - Alignment and structures
- Suitability of the proposed technical solution with respect to Segment 2:
 - Tunnel constructability;
 - Bridge constructability;
 - Traffic Management and community impacts;
- Risk identification, quantification and mitigation process:
 - Review of the key commercial terms and the proposed risk transfer within the key agreements;
 - Overall risk allocation, marketability and bankability of the Project;
- Overall project budget and scope:
 - Segment One review;
 - Segment Two review;

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- Sufficiency of funding for the Project.

Module 2 of the TRC work will focus on preventative risk management. With a focus on risk management, the TRC will be available to assist the Project team with the early identification of issues and project risks and work with the Project team to develop risk mitigation strategies.

For work on both Modules 1 and 2, the members of the TRC must conduct themselves thoughtfully and respect the accountability and authority of the Project team to undertake the work required to deliver the Project. It is critical that the TRC maintain its independence, and in so doing the TRC must also sustain a high level of mutual respect with the Project team and work constructively with the objective of supporting the successful implementation of the Project. The Project team, in return, must remain open to the TRC reviews and input into the risk management process. The TRC, through its independent reviews and recommendations, is supporting the efforts of the Project Sponsor and the ESC to effectively lead and oversee the work of the Project team to deliver the best outcomes for the Project and the City.

RFQ Review

The TRC reviewed the Request for Qualifications-RFQ No. 19-0111 – Design, build and Finance Green Line Segment 1 Light Rail Transit Project. The TRC was asked to focus the review on the submission requirements and the evaluation criteria. The TRC provided comments to the Project team and the Project team incorporated TRC comments into the RFQ. The TRC provided overall conclusions; specifically, the submission requirements and the evaluation criteria:

- are sufficient and there are no overlaps or gaps amongst the criteria;
- the criteria are reasonable and can be applied in a clear and consistent manner;
- the point allocation is appropriate; and
- if properly conducted, the evaluation process is likely to determine the best RFQ submissions.

Schedule of Reviews

The TRC has worked with the Project Sponsor to develop an initial schedule of reviews, as per attachment 3. This initial schedule of reviews will be modified as the TRC develops additional project understanding and the need for additional scopes of work are identified.

Stakeholder Engagement, Research and Communication

The TRC will report verbally and in writing on an as required basis to the Project Sponsor. The TRC will also report to the SPC on Transportation and Transit coincident with the timing of the Green Line quarterly report updates.

Strategic Alignment

The terms of reference of the TRC are aligned with council direction from Report TT 2019-0811.

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Social, Environmental, Economic (External)

Not Applicable

Financial Capacity

Current and Future Operating Budget:

If requested by the TRC, the Project Sponsor may agree to engage additional independent specialists to support the work of the TRC. Each request will be accompanied with a description of the required work, a supporting rationale and expected time and cost associated with the engagement of independent specialists.

Current and Future Capital Budget:

This report has no impact on the current or future capital budget.

Risk Assessment

The establishment of the TRC will assist in the assessing and mitigation risk for The City.

REASON(S) FOR RECOMMENDATION(S):

The Technical Risk Committee is pleased to submit this initial report to the Transportation & Transit Committee.

ATTACHMENT(S)

1. Attachment 1 – Green Line Technical and Risk Committee Member Resumes
2. Attachment 2 – Green Line LRT Project Stage 1 – Terms of Reference – Technical and Risk Committee
3. Attachment 3 – Preliminary Schedule of Reviews