

# Terwillegar Drive Expressway Upgrades

## Capital Profile Amendment

### Recommendation

That Executive Committee recommend to City Council:

That amended Capital Profile 19-22-9006 Terwillegar Drive Expressway Upgrades - Alternate Staging, as set out in Attachment 2 of the November 9, 2020, Integrated Infrastructure Services report CR\_8462, be approved.

### Executive Summary

This report requests approval of amendments to Capital Profile 19-22-9006 Terwillegar Drive Expressway Upgrades - Alternate Staging. Administration has been completing planning and design work in support of Terwillegar Drive expressway improvements over the past several years. In July 2020, the Government of Alberta committed funds for the completion of additional work toward the expansion of Terwillegar Drive. The additional scope captured in the amended capital profile is to be fully funded by the Province of Alberta.

### Report

In December 2019, as part of the Fall 2019 Supplemental Capital Budget Adjustment (SCBA), funding was approved for the Terwillegar Drive Alternative Staging Plan, bringing the project budget to a total of \$104 million for the following scope of work:

- planning, design and delivery for the widening of Terwillegar Drive to four lanes in each direction between Rabbit Hill Road and 40 Avenue (three lanes for motor vehicles and one lane for transit);
- planning, design and delivery of the widening and rehabilitation of the Rainbow Valley Bridges, including transit priority measures;
- planning, design and delivery of upgrades to the Whitemud Drive and Terwillegar Drive interchange; and
- planning and design of the 142 Street pedestrian/cyclist bridge.

In July 2020, the Government of Alberta announced a commitment of up to \$116.5 million towards further improvements to Terwillegar Drive. The funding commitment from the Government of Alberta will allow for the completion of additional stages of the Terwillegar Drive Expressway project, including:

- delivery of widening of Terwillegar Drive to four lanes in each direction from Rabbit Hill Road to Windermere Boulevard;

- planning, design and delivery of a segregated bus lane southbound along Whitemud Drive from 53 Avenue to Terwillegar Drive, bypassing the Whitemud Drive and Terwillegar Drive interchange;
- planning, design and delivery of improvements to the Anthony Henday Drive and Terwillegar Drive interchange;
- delivery of the 142 Street pedestrian/cyclist bridge over Whitemud Drive; and
- delivery of a new shared-use path along Terwillegar Drive.

Attachment 1 illustrates the scope of work for this project.

With the funding from the Government of Alberta, Capital Profile 19-22-9006 Terwillegar Drive Expressway Upgrades - Alternate Staging has been amended, as shown in Attachment 2, to recognize the additional scope of work and provincial government's funding commitment. A copy of the original Capital Profile is provided in Attachment 3 for comparison purposes.

Renewal of the Rainbow Valley Bridges will be completed as part of the Terwillegar Drive expansion project. Planning for the bridge renewal is currently underway to address the lifecycle requirements for these important bridges. When the design has progressed to a greater level of detail and costs refined, a further budget adjustment will be required contingent on transfer of bridge renewal funding required from the 2023-2026 capital budget to this standalone profile.

Planning and design for the Terwillegar Drive expansion is progressing. Each of the stages are at various points in the evolution of design and delivery as noted below:

- **Pedestrian / Cyclist Bridge:** Concept planning is now starting for the new pedestrian / cyclist bridge over Whitemud Drive. Public engagement planning is underway, with engagement anticipated to begin in Fall 2020. Construction is anticipated to begin in 2025 or 2026.
- **Terwillegar Drive Widening (Rabbit Hill Road to Whitemud Drive):** Utility relocations and site preparation are anticipated to begin in late 2020. Road construction will be underway for the expansion in 2021.
- **Terwillegar Drive Widening (Rabbit Hill Road to Anthony Henday Drive):** Detailed design will be underway starting in Fall 2020. Site preparations are anticipated to begin in 2021 with construction anticipated to begin in 2021 or 2022
- **Terwillegar Drive / Whitemud Drive Interchange and Rainbow Valley Bridges:** Concept planning for the interchange and expansion of Whitemud Drive is nearing completion. Design will follow immediately. Construction is anticipated to begin in late 2022 or early 2023.
- **Anthony Henday Drive / Terwillegar Drive Interchange:** Concept planning is anticipated to begin in late 2020 following approval of funding, with design to

follow completion of the planning. Construction is anticipated to begin around 2023.

At this stage, construction of the Terwillegar Drive expressway and related improvements are anticipated to be substantially complete by the end of 2026. A detailed schedule is presented in Attachment 4.

### **Budget / Financial**

Funding in the amount of \$104 million for Capital Profile 19-22-9006 Terwillegar Drive Expressway Upgrades - Alternate Staging has been approved by Council. Of this amount, \$102.7 million is financed with tax-supported debt and the remaining \$1.3 million is funded with Pay-As-You-Go. Considering the additional \$116.5 million funding provided by the Province for the completion of the stages noted in this report, the total value of the Profile will be \$220.5 million. All costs for completion of additional stages of the Terwillegar Drive Expressway project are eligible and funded through the new provincial grant. There is no additional requirement of funding from the City for the completion of these stages.

Of note, a portion of the assets being constructed with funding from the provincial grant are provincial assets within the Transportation/Utility Corridor, specifically the Anthony Henday and Terwillegar Drive Interchange. For this portion, the City of Edmonton will act on behalf of the Province to design and construct the infrastructure, which is owned and maintained by the Province. As such, the value of the asset recognized by the City at project completion will be reduced for the amount attributable to the province.

### **Public Engagement**

Public engagement was not conducted specifically to the amendment of Capital Profile 19-22-9006 Terwillegar Drive Expressway Upgrades - Alternate Staging. However, extensive public engagement was completed for the Terwillegar Drive Expressway project.

Further public engagement is planned in support of the new 142 Street pedestrian/cyclist bridge, with engagement opportunities set to begin in Fall 2020.

Additional public engagement opportunities will be explored related to the work funded by the Province of Alberta. Engagement opportunities may exist where public input will help to influence decision making, for example, related to some aspects of the planning for the interchange improvements at Terwillegar Drive / Anthony Henday Drive. The details of future engagement opportunities will be refined as planning advances.

**Corporate Outcomes and Performance Management**

<b>Corporate Outcome: Goods and services move efficiently</b>			
<b>Outcome</b>	<b>Measure(s)</b>	<b>Result(s)</b>	<b>Target(s)</b>
Goods and services move efficiently	Business satisfaction: goods and services transportation (percent of survey respondents who are satisfied/very satisfied)	50.5% (2017)	53.0% (2018)
	Travel Time and Reliability for Goods and Services Movement (time in minutes: seconds to drive a 10-km route)	<10:09 (2017) - 50% of the time <13:35 (2017) - 85% of the time	<12:30 (2018) - 50% of the time <16:00 (2018) - 85% of the time

<b>Corporate Outcome: The City of Edmonton has a resilient financial position</b>			
<b>Outcome</b>	<b>Measure</b>	<b>Result</b>	<b>Target</b>
The City of Edmonton has a resilient financial position	City Asset Sustainability (actual expenditure on capital infrastructure divided by required expenditure)	0.94 (2017)	1.00 (2018)

<b>Corporate Outcomes: The City of Edmonton has sustainable and accessible infrastructure</b>			
<b>Outcome</b>	<b>Measure</b>	<b>Result</b>	<b>Target</b>
The City of Edmonton has sustainable and accessible infrastructure	Edmontonians' Assessment: Access to infrastructure, amenities, and services that improve quality of life (% of survey respondents who agree/strongly agree)	68% (2017)	70% (2017)

**Risk Assessment**

A risk assessment has been completed based on approving this request for a profile adjustment and not approving this request. Currently, planning and potential future mitigation measures are also provided.

<b>Risk Element</b>	<b>Risk Description</b>	<b>Likelihood</b>	<b>Impact</b>	<b>Risk Score (with current mitigations)</b>	<b>Current Mitigations</b>	<b>Potential Future Mitigations</b>

<u>Risks if Approved:</u>						
Capital Project Governance	As funding is being approved prior to Checkpoint #3, the scope, schedule and budget may be impacted.	3 - Possible	3 - Major	9 - Medium	Advance project to Checkpoint #3 as quickly as possible.	Capital budget adjustment to request additional funding.  Reduce project scope, extend project timelines.
Project Management	The project taking longer than anticipated, project going over budget, scope creep.	3 - Possible	3 - Major	9 - Medium	Utilize Project Management best practices.	Update project management approach, request project changes.
Public / Stakeholder engagement	Public perception of project and construction impacts.	3 - Possible	2 - Moderate	6 - Low	Public information sharing and engagement during planning and design where needed. Mitigate impacts through design.	Extensive information sharing during construction.
<u>Risks if Not Approved:</u>						
Public / Stakeholder engagement	The public perception that the City is not improving the accommodation of transit users, active modes and motorists.	4 - Likely	4 - Severe	16 - High	Preparation of this separate request for an amendment for the capital profile.	Additional information sharing or public engagement.
Mobility System	Lost opportunity to support economic opportunities, equity, health and safety.	4 - Likely	3 - Major	12 - Medium	Preparation of this separate request for an amendment for the capital profile.	Explore other opportunities to enhance mobility. Take on debt in the future to fund this project.
Financial	That funding from the Government of Alberta will be lost.	2- Unlikely	4 - Severe	8 - Medium	Preparation of this separate request for an amendment for the capital profile.	Seek funding from other sources. Take on additional debt to fund the project.

**Attachments**

1. Scope Map

2. Amended Capital Profile - 19-22-9006 Terwillegar Drive Expressway Upgrades - Alternate Staging
3. Original Capital Profile - 19-22-9006 Terwillegar Drive Expressway Upgrades - Alternate Staging
4. Overall Project Schedule

**Others Reviewing this Report**

- G. Cebryk, Deputy City Manager, City Operations
- M. Persson, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- S. McCabe, Deputy City Manager, Urban Form and Corporate Strategic Development
- C. Owen, Deputy City Manager, Communications and Engagement
- B. Andriachuk, City Solicitor