

# CAPITAL PROFILE REPORT

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PROFILE NAME: **TERWILLEGAR DRIVE EXPRESSWAY UPGRADES - ALTERNATE STAGING****FUNDED**PROFILE NUMBER: **19-22-9006**

PROFILE STAGE:

**Approved**DEPARTMENT: **Integrated Infrastructure Services**

PROFILE TYPE:

**Standalone**LEAD BRANCH: **Infrastructure Planning & Design**

LEAD MANAGER:

**Pascale Ladouceur**

PROGRAM NAME:

PARTNER MANAGER:

**Brian Simpson**PARTNER: **Parks & Roads Services**

ESTIMATED START:

**December, 2019**BUDGET CYCLE: **2019-2022**

ESTIMATED COMPLETION:

**December, 2024**Service Category: **Roads**

Major Initiative:

**GROWTH****RENEWAL****80****20**

PREVIOUSLY APPROVED:

**104,000**

BUDGET REQUEST:

**-**

TOTAL PROFILE BUDGET:

**104,000**

## PROFILE DESCRIPTION

This profile is for the planning, design and delivery of converting Terwillegar Drive to an expressway. An expressway is a high capacity, relatively high speed roadway with controlled signalized access spacing.

This profile includes: 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 for the widening and rehabilitation of the Rainbow Valley Bridges, including transit priority measures; planning, design and delivery for upgrades the Whitemud Drive and Terwillegar Drive interchange; and planning and design of the 142 Street pedestrian/cyclist bridge.

## PROFILE BACKGROUND

Terwillegar Drive is currently a major arterial with traffic signals at major intersections, including Haddow Drive, 23 Avenue, Rabbit Hill Road and 40 Avenue. Terwillegar Drive was constructed starting in the 1980's with the intention that Terwillegar Drive would ultimately be converted to a freeway. This profile was developed in response to a motion from City Council which, as a result of the cancellation of the Alberta Community Transit Fund (ACTF) by the Province of Alberta, directed Administration to update Stage 1 to reflect the elimination of the Province's dedicated transit requirements and to re-assess the overall project staging.

## PROFILE JUSTIFICATION

During peak hours, traffic along portions of Terwillegar Drive approaches the available capacity thresholds, with congestion occurring at major intersections. Additional capacity improvements are required to address these issues, as traffic volumes along Terwillegar will continue to increase with ongoing development in Southwest Edmonton.

Upgrading Terwillegar Drive to an expressway will provide additional capacity to address congestion in this part of SW Edmonton. This profile will address the most critical capacity issues on Terwillegar Drive and Whitemud Drive to alleviate traffic congestion.

## STRATEGIC ALIGNMENT

This profile aligns with the strategic objective of making transformational impacts in our community by making a discrete and measurable impact on Council's four strategic goals: healthy city, urban places, regional prosperity and climate resilience, by creating a community to connect people to what matters to them.

## ALTERNATIVES CONSIDERED

Widening is required to accommodate existing traffic and short term growth, as well as anticipated long term traffic increases. The alternatives to this profile include the previously approved staging for upgrading Terwillegar Drive to an expressway, including Stage 1 (19-22-9004), Stage 2 (19-22-9005) and Stage 3 (unfunded), maintain the infrastructure as is or proceed with the previous freeway plan. This alternative staging plan addresses the key capacity deficiencies on Terwillegar Drive and Whitemud Drive, while deferring the active transportation and upgrades south of Rabbit Hill Road to later stages.

## COST BENEFITS

Tangible benefits include decreased travel time, decreased collision rates, decreased emissions, and improved transit use. Intangible benefits include maintained or improved citizen satisfaction with roadway capacity and transit service in the area.

## KEY RISKS & MITIGATING STRATEGY

Key risks for this project include the complexity of widening the existing Rainbow Valley Bridges, which could potentially lead to the requirement to completely reconstruct the bridges. This risk can be mitigated through proper project management to refine the project scope, budget and schedule. Additional risks include significant interruptions to motorists and transit routes, in terms of congestion and travel delay during construction, particularly for the widening and renewal of the Rainbow Valley Bridges. To mitigate, communication with the public, including commuters and other stakeholders will be critical to share detour plan and construction timelines. Additional risks are typical of all construction projects, and include schedule delays and cost overruns.

## RESOURCES

Planning and design will be completed using one or more consultants retained through a competitive procurement process. Construction will be completed by one or more contractors retained through the City's tendering process.

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## CONCLUSIONS AND RECOMMENDATIONS

To address critical congestion issues along this corridor, improve the accommodation of transit, and advance planning and design of active mode upgrades, it is recommended that funding for this project be approved.

## CHANGES TO APPROVED PROFILE

2020 Spring SCBA (#20-11, CM-08): Transfer \$1.3 million of Pay-as-you-go funding from Profile 19-22-9004 (previously approved Terwillegar Drive Stage 1 profile) to the new alternate staging profile 19-22-9006 and apply against carry forward costs for planning and design from 2019 and earlier.

# CAPITAL PROFILE REPORT

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PROFILE NAME: Terwillegar Drive Expressway Upgrades - Alternate Staging

**FUNDED**

PROFILE NUMBER: 19-22-9006

PROFILE TYPE: Standalone

BRANCH: Infrastructure Planning & Design

## CAPITAL BUDGET AND FUNDING SOURCES (000's)

|                 |                                  | Prior Years | 2020   | 2021   | 2022   | 2023   | 2024  | 2025 | 2026 | 2027 | 2028 | Beyond 2028 | Total   |
|-----------------|----------------------------------|-------------|--------|--------|--------|--------|-------|------|------|------|------|-------------|---------|
| APPROVED BUDGET | Approved Budget                  |             |        |        |        |        |       |      |      |      |      |             |         |
|                 | Original Budget Approved         | -           | -      | -      | -      | -      | -     | -    | -    | -    | -    | -           | -       |
|                 | 2019 Cap Council                 | -           | 10,000 | 25,900 | 35,300 | 23,500 | 8,000 | -    | -    | -    | -    | -           | 102,700 |
|                 | 2019 Cap Carry Forward           | 2,010       | -2,010 | -      | -      | -      | -     | -    | -    | -    | -    | -           | -       |
|                 | 2020 Cap Administrative          | -           | 1,300  | -      | -      | -      | -     | -    | -    | -    | -    | -           | 1,300   |
|                 | Current Approved Budget          | 2,010       | 9,290  | 25,900 | 35,300 | 23,500 | 8,000 | -    | -    | -    | -    | -           | 104,000 |
|                 | Approved Funding Sources         |             |        |        |        |        |       |      |      |      |      |             |         |
|                 | Pay-As-You-Go                    | 2,010       | -710   | -      | -      | -      | -     | -    | -    | -    | -    | -           | 1,300   |
|                 | Tax-Supported Debt               | -           | 10,000 | 25,900 | 35,300 | 23,500 | 8,000 | -    | -    | -    | -    | -           | 102,700 |
|                 | Current Approved Funding Sources | 2,010       | 9,290  | 25,900 | 35,300 | 23,500 | 8,000 | -    | -    | -    | -    | -           | 104,000 |

|                |                |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|
| BUDGET REQUEST | Budget Request | - | - | - | - | - | - | - | - | - | - | - | - |
|----------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|

|                              |                              |       |        |        |        |        |       |   |   |   |   |   |         |
|------------------------------|------------------------------|-------|--------|--------|--------|--------|-------|---|---|---|---|---|---------|
| REVISED BUDGET (IF APPROVED) | Revised Budget (if Approved) | 2,010 | 9,290  | 25,900 | 35,300 | 23,500 | 8,000 | - | - | - | - | - | 104,000 |
|                              | Requested Funding Source     |       |        |        |        |        |       |   |   |   |   |   |         |
|                              | Pay-As-You-Go                | 2,010 | -710   | -      | -      | -      | -     | - | - | - | - | - | 1,300   |
|                              | Tax-Supported Debt           | -     | 10,000 | 25,900 | 35,300 | 23,500 | 8,000 | - | - | - | - | - | 102,700 |
|                              | Requested Funding Source     | 2,010 | 9,290  | 25,900 | 35,300 | 23,500 | 8,000 | - | - | - | - | - | 104,000 |

## CAPITAL BUDGET BY ACTIVITY TYPE (000's)

|                              | Activity Type | Prior Years | 2020  | 2021   | 2022   | 2023   | 2024  | 2025 | 2026 | 2027 | 2028 | Beyond 2028 | Total   |
|------------------------------|---------------|-------------|-------|--------|--------|--------|-------|------|------|------|------|-------------|---------|
| REVISED BUDGET (IF APPROVED) | Construction  | 2,010       | 4,290 | 24,300 | 35,000 | 23,500 | 8,000 | -    | -    | -    | -    | -           | 97,100  |
|                              | Design        | -           | 5,000 | 1,600  | 300    | -      | -     | -    | -    | -    | -    | -           | 6,900   |
|                              | Total         | 2,010       | 9,290 | 25,900 | 35,300 | 23,500 | 8,000 | -    | -    | -    | -    | -           | 104,000 |

## OPERATING IMPACT OF CAPITAL

Type of Impact:

| Branch:                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                        | Rev | Exp | Net | FTE | Rev | Exp | Net | FTE | Rev | Exp | Net | FTE | Rev | Exp | Net | FTE |
| Total Operating Impact | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |

# CAPITAL PROFILE REPORT

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**PROFILE NAME: Terwillegar Drive Expressway Upgrades - Alternate Staging**

**PROFILE NUMBER: 19-22-9006**

**BUDGET CYCLE: 2019-2022**

| Project Number | Project Name                            | Start Date | End Date | Description                             |
|----------------|---|------------|----------|---|
| 000001         | Terwillegar Drive Alternate Staging     |            |          |   |
| 007791         | TERWILLEGAR DRIVE (TUC-WMD)             |            |          | TERWILLEGAR DRIVE (TUC-WMD)             |
| 009127         | TerwillegarDrStg2&RbowValleyBrid/CP8480 |            |          | TerwillegarDrStg2&RbowValleyBrid/CP8480 |
| 009337         | 142 ST PEDESTRIAN/CYCLIST BRIDGE        |            |          | 142 ST PEDESTRIAN/CYCLIST BRIDGE        |
| 009409         | Terwillegar Drive Expressway Upgrade    |            |          | Terwillegar Drive Expressway Upgrade    |