

## **CROWCHILD TRAIL - FLANDERS AVENUE INTERCHANGE TRANSPORTATION PLANNING STUDY UPDATE**

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### **EXECUTIVE SUMMARY**

The City of Calgary currently has an approved Transportation Planning Study for upgrades to the Crowchild Trail and Flanders Avenue SW interchange along with \$20 Million in funding that has been allocated for construction of the upgrades. Since the approval of the Transportation Planning Study in 2008, Canada Lands Company (CLC) has adjusted its plans to provide increased development on the former Canadian Forces Base Calgary Lands (Currie Barracks). The increase in development requires an update to the 2008 study to identify necessary improvements to accommodate this new development.

The City and CLC have cost shared the update to the Transportation Planning Study and have agreed to cost share the construction of the improvements identified in an updated Transportation Planning Study whereby CLC will construct the improvements, The City will contribute \$20 Million, as previously approved, and CLC will fund any additional costs (currently estimated at \$15.1 Million). The improvements identified to the interchange are to better accommodate all modes of travel resulting from CLC's re-development of Currie Barracks.

This report outlines the Transportation Planning Study update completed by CLC and The City as well as identifies improvements that will be completed through detailed design along with project timelines. A summary of the public engagement program undertaken as part of the study is included.

### **ADMINISTRATION RECOMMENDATIONS**

That the SPC on Transportation & Transit recommend that Council:

1. Approve the Executive Summary for the refined Crowchild Trail and Flanders Avenue SW Interchange Transportation Planning Study Update including the updated recommended roadway plans and property requirements as summarized on Exhibits ES-4 and ES-5 (pages 20 and 21 of Attachment 1).
2. Direct Administration to work with Canada Lands Company on the detailed design and construction of the upgrades to the Crowchild Trail and Flanders Avenue Interchange based on bylaw 9B2013.

### **PREVIOUS COUNCIL DIRECTION / POLICY**

At its November 20, 2006 Combined meeting, Council addressed Calgary Planning Commission report, CPC2006-115, Non Statutory CFB West Master Plan Amendment & Land Use Redesignation (CFB – Currie) Bylaw 100Z2006 and approved recommendation 3.b.ii that Council withhold third reading pending the developer entering into a Special Development Agreement with The City and address the construction timing and cost sharing responsibilities for the front ending of upgrades to the Crowchild Trail and Flanders Avenue interchange.

The City and CLC subsequently executed the required Special Development Agreement on March 12, 2007. Concurrently, at its March 12, 2007 Combined meeting, Council addressed Planning, Development and Assessment Report E2007-03, Land Use Redesignation (Currie Barracks) Bylaw 100Z2006 and gave third reading to Bylaw 100Z2006.

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Administration presented Transportation Department report LPT2008-48, Crowchild Trail/Flanders Avenue S.W. Transportation Planning Study to Council at its September 8, 2008 Combined meeting. In approving LPT2008-48 Council endorsed the plan as presented for the front ended transportation improvements to the Crowchild Trail and Flanders Avenue interchange.

At its December 17, 2012 Regular meeting, Council approved Transportation Department Report TT2012-0660, Investing In Mobility. Within this report, the proposed funding and timing of the Crowchild Trail and Flanders Avenue interchange upgrade was presented as a required project and recommended for funding in the 2018-2022 timeframe.

Finally, at its June 24, 2013 Regular meeting, Council approved Transportation Department report PFC2013-0401, Flanders Avenue Special Development Agreement and gave 3 readings to Bylaw 9B2013 which authorized the front-ending and payback arrangement to a maximum of \$20 Million and revised the re-payment schedule to CLC for upgrades to the Crowchild Trail and Flanders Avenue Interchange to be on or before June 1, 2018.

### **BACKGROUND**

In 2008, Council approved upgrades to the Crowchild Trail and Flanders Avenue SW interchange that included a revision to the southbound off ramp connecting Crowchild Trail to Richard Road, construction of a roundabout on the east side of the existing 2 lane Flanders Avenue bridge and a restriction of traffic to transit only on Richard Road between the existing bridge and the new Southbound ramp.

Expectations for the Currie Barracks site have evolved since 2008. The City has adopted the Complete Streets Guidelines which has shifted expectations for Transportation facilities. In 2012, The City was approached by CLC with a desire to revise the development plan on the Currie Barracks site to allow for greater development as well as more mixed use development. The proposed revision to the development of Currie Barracks required further upgrades to the Crowchild Trail and Flanders Avenue interchange. CLC and The City agreed to cost share a transportation Planning Study that re-examined the 2008 Transportation Planning Study to ensure that upgrades to the interchange would accommodate additional traffic generated by the increased intensity of proposed development in the area.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

Crowchild Trail is identified as a skeletal road and is a major north-south transportation route through Calgary. Crowchild Trail connects to other major traffic routes in Calgary such as Glenmore Trail and 50 Avenue south of Flanders Avenue as well as 33 Avenue, 17 Avenue and Bow Trail north of Flanders Avenue. Construction of upgrades to the interchange at Flanders Avenue will facilitate the proposed development of the Currie Barracks lands on the west side of the interchange as well as existing traffic from approved developments in the area. Forecasted traffic volumes from the Currie Barracks site were used to test the suitability of design options.

The recommended plan as shown in Exhibit ES-4 in Attachment 1 shows a six-lane cross-section for Crowchild Trail and a modified diamond interchange at Flanders Avenue along with

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two-dual lane roundabouts for traffic control on both the east and west sides of Crowchild Trail. A new Flanders Avenue bridge structure with two additional lanes, wider sidewalks on both sides of the structure is also recommended. A third dual lane roundabout on the west side of Crowchild Trail south of the new Flanders Avenue bridge is also proposed to provide access to the Currie Barracks lands.

As shown on the property plan in Exhibit ES-5 in Attachment 1, acquisition of additional private property on the east side of Crowchild Trail is not required to accommodate the recommended plan, however, a temporary construction easement will be required from properties on the east side of Crowchild Trail to facilitate the construction of the new retaining walls and new Flanders Avenue bridge structure. Land required on the west side of Crowchild Trail will be dedicated to The City by CLC as part of the interchange project.

The total cost for this interchange upgrade project has been estimated at approximately \$35.1 Million. This cost, as per The City's agreement with CLC, will be front ended by CLC with the future repayment of \$20 Million by The City to the CLC. It is also noted that the cost estimated and schedule were established based on the proposal that the Flanders Avenue bridge be closed to traffic during much of the construction period.

As per The City and CLC's amending agreement to the Special Development Agreement, CLC is looking to pursue a design/build delivery model for the implementation of the upgrades to the Crowchild Trail and Flanders Avenue interchange. CLC is looking to initiate a 3 year construction period during 2015 and with full completion in 2017. As per the high level schedule included on page 10 of Attachment 1, the construction plan would see the closure of Flanders Avenue during the later part of year 1 with the reopening of the Flanders Avenue bridge at the end of year 2.

### **Stakeholder Engagement, Research and Communication**

This study followed a 3 phase process that closely paralleled the extensive public engagement program for the Currie Barracks land use amendment that CLC has applied for.

The 3 phases of engagement are:

Phase 1 - Issues and Constraint Identification

Phase 2 - Design Option Consultation

Phase 3 - Recommended Design Selection.

In phase 1 CLC hosted initial open houses in late fall of 2013 for the land use amendment on Currie Barracks. To introduce this study, the project team joined CLC at an open house hosted at the Currie Barracks Sales centre on December 10, 2013. This open house was extensively advertised by CLC. Individual meetings were held in January, 2014 with current land users on the Currie Barracks site to introduce the project and make them aware of this study. An internal stakeholder meeting with City staff was held on January 28, 2014. At the engagement events, simplified interchange network plans were presented and used as a basis for open discussion and feedback on public priorities and the identification of relevant issues and constraints.

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In phase 2 the feedback received through phase 1 was used to develop a preferred transportation network for the interchange that included a new access from Richard Road south of the interchange as well as extending Richard Road north of the interchange to provide an access road parallel to Crowchild Trail. The project team met with internal stakeholders on March 06, 2014 and external stakeholders (that included the private schools on the Currie Barracks lands, schools in the area of Currie Barracks, representatives from the Military Museums as well as representatives from community associations in the area) on April 10, 2014 to show the preferred transportation network. CLC hosted a public open house on April 14, 2014 as part of its engagement on the Currie Barracks application where the project team was able to show the preferred transportation network and the options for the interchange to the general public. Over 600 members of the general public attended this open house. External stakeholders and the general public were given multiple opportunities to provide feedback during this phase of the engagement plan.

In May, 2014 members of the project team were invited to participate in board meetings of the various Community Associations (CA) in the area including the Marda Loop CA, the Rutland Park CA, the Richmond/Knob Hill CA and the Killarney/Glengarry CA. The CA meetings provided an opportunity to review feedback from the April open house, and hear direct feedback from board members about what they had been hearing about the project from their members.

Following the second phase of engagement, final evaluation and refinement of a preferred interchange plan was completed in phase 3. The evaluation and refinement showed that roundabouts provide the best form of traffic control and access for all modes at the interchange. On June 24, 2014 a final public open house was held with the general public at the Military Museums to show the recommended interchange plan, with the roundabout controlled intersections. Feedback from the meetings and the open house showed broad support for the preferred option and the proposed upgrades to the interchange.

### **Strategic Alignment**

This study aligns with multiple policies in the CTP and the 2020 Sustainability Direction including:

- Transportation Goal #5 to promote economic development by providing smooth and efficient movement of people and goods (CTP 3.4)
- 'Improve Goods Movement' 2020 objective by maintaining free-flow operations on Crowchild Trail while providing added capacity on Flanders Avenue.
- Transportation Goal #1 by providing better connectivity for major City roadways
- TBL & 'GHG Emission Reduction' 2020 Objective by easing congestion and introducing roundabouts in place of signalized intersections.
- MDP Policy 2.2 to shape a more compact urban form by facilitating the development and intensification of the Currie Barracks lands through enhanced access, mobility and capacity.

### **Social, Environmental, Economic (External)**

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This report has been reviewed for alignment with The City of Calgary's Triple Bottom Line (TBL) Policy Framework. The following implications were identified (along with mitigation strategies for negative impacts):

Social: The proposed improvements have been developed to support future land uses. Improvements to the corridor promote active living by providing infrastructure for pedestrians and cyclists. Facilitation of active modes was a key consideration in light of the educational institutions in the area.

Environmental: Provisions for a regional pathway and on-street bicycle facilities along the corridor encourage alternate modes of transportation by providing a higher level of safety and comfort for pedestrians.

Economic (External): The proposed improvements have been developed to provide for the safe movement of goods and services. The project also adds additional capacity on Flanders Avenue and additional access points in to the re-developing area of Currie Barracks.

### **Financial Capacity**

#### **Current and Future Operating Budget:**

Once constructed, operating costs will be higher than today given the additional infrastructure added to the network. Specific incremental operating costs have not been quantified. It is anticipated that the initial additional operating costs can be accommodated within existing budgets.

#### **Current and Future Capital Budget:**

\$20M in current funding for upgrades to this interchange are identified in the Investing in Mobility Plan \$20M in the 2018 timeframe. Bylaw 9B2013 outlines The City's commitments and payback schedule to CLC for the construction of upgrades to this interchange. No additional funding beyond the approved \$20M is required.

### **Risk Assessment**

The interchange is necessary to accommodate the development in the land use amendment applied for by CLC on the Currie Barracks site. The City has worked with CLC for the planning and construction of upgrades to the interchange in order to accommodate the continued and changing development on Currie Barracks. Temporary construction easements will be required from land owners on the east side of Crowchild Trail to construct this interchange.

### **REASONS FOR RECOMMENDATIONS:**

The proposed upgrades at Crowchild Trail and Flanders Avenue allows The City and CLC to undertake an infrastructure upgrade project that supports the redevelopment of the Currie Barracks lands allowing for increased development near a major activity centre within the inner city. The recommended plan meets post development transportation demands at this location for all modes of travel.

### **ATTACHMENTS:**

**CROWCHILD TRAIL - FLANDERS AVENUE INTERCHANGE TRANSPORTATION  
PLANNING STUDY UPDATE**

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1. Crowchild Trail and Flanders Avenue SW Interchange Transportation Planning Study  
Update – Executive Summary