124 Street Stop
Valley Line West

Recommendation
That Urban Planning Committee recommend to City Council:

That the West LRT concept plan amendment to relocate the 124 Street LRT Stop, as outlined in Attachment 2 of the October 16, 2018, Integrated Infrastructure Services report CR_6155, be approved.

Previous Council/Committee Action
At the October 9, 2018, Agenda Review Committee meeting, the October 15, 2018, Integrated Infrastructure Services report CR_6155, was re-routed to the October 16, 2018, Urban Planning Committee meeting.

Executive Summary
This report summarizes the results of a design review for the Valley Line West LRT 124 Street stop location, including options for alternative configurations that were shared with local stakeholders. Benefits and varying degrees of impacts to local properties and businesses, commuters, pedestrians, and residents are shown for each option.

Administration recommends Option 2, which proposes a side-loading split platform located across 123 Street.

Report
Background
As part of the March 21, 2018 report CR_5165, Valley Line West LRT Crossing Assessments and Concept Plan Amendments, Administration presented Council with a recommended plan amendment to relocate the 124 Street stop location one block east and centered on 123 Street. Administration made this recommendation due to grading challenges immediately west of 124 Street that would require a retaining wall approximately one metre high between the platform and roadway. This height difference would limit emergency vehicle access through the area and create a visual and physical barrier in the roadway in addition to grade differences between roadway, sidewalk and business entrances.
At the March 21, 2018 non-statutory public hearing, the public raised concerns regarding the overall impact of the 124 Street LRT configuration to the surrounding properties. The concept plan for this area has center running LRT along Stony Plain Road, with a single traffic lane on each side. The design of the intersection considers trackway, LRT platform design, roadway geometry and adjacent land use and land impacts. Administration determined that additional land around the intersection of 124 Street is required to accommodate the LRT stop platforms, trackway and through lanes, with the removal of the eastbound left turn bay already included in the original concept plan to minimize overall impact.

Administration’s recommendation to relocate the LRT stop one block east to 123 Street was not approved on March 21, 2018 and Council asked Administration to look for ways to reconfigure the 124 Street stop to minimize property impacts and improve integration with developments around 124 Street.

Design Options
Administration explored opportunities to minimize property impacts through additional review and different design options. Administration engaged with immediate area property owners, businesses and tenants in early July 2018.

Three options were presented at a July 4, 2018 engagement event:

1) Option 1 is the current approved concept plan design, with an at-grade LRT stop centred around 124 Street.
2) Option 2 is a side-loading split platform LRT stop centred around 123 Street.
3) Option 3 is a side-loading split platform LRT stop located between 125 and 126 Streets.

Each option has unique advantages and disadvantages relating to considerations such as property impacts, fit within surrounding area, LRT stop spacings and ridership catchment. A detailed description of each option is provided below and the designs of Option 1, 2 and 3 are shown in Attachments 1, 2 and 3 respectively.

In all options, there are some common parcels of land that are required for the Valley Line West project; these parcels are shown in red in Attachments 1, 2 and 3. Other property impacts that are unique to each design option are shown in yellow.

Option 1 - Split platforms across 124 Street
This option is consistent with the current concept plan, with the LRT platform centred around 124 Street. The design of the LRT platform requires it to be relatively flat along the full length of the stop. Due to an existing sag point along Stony Plain Road located west of 124 Street, a retaining wall approximately one metre high is required between the platform and the westbound lane on Stony Plain Road, to accommodate a level platform west of 124 Street. In addition, the eastbound travel lane will need to be
raised, resulting in additional property acquisition requirements due to a significant grade difference between roadway and adjacent building entrances.

Option 2 - Split platforms across 123 Street
This option places the eastbound platform between 123 Street and 122 Street, and the westbound platform between 124 Street and 123 Street. Since the grade between 122 Street to 124 Street is relatively gradual, there is no need for any retaining walls between 122 Street and 124 Street.

Compared to Option 1 (the original concept), this option does not require any additional land other than the land already identified as a requirement for the project (parcels shown in red in Attachment 2).

Option 2 would move the 124 Street stop approximately 120 metres closer to the 120 Street stop, and further away from the Glenora stop.

Based on an assessment of the design options and considering the area impacts, fit and engagement feedback, Administration recommends the Option 2 design, with the relocation of the 124 Street LRT stop one block east, as shown in Attachment 2.

Option 3 - Split platforms between 125 and 126 Street
This option places the side-loading platforms between 125 Street and 126 Street. As such, lands are required on both sides of Stony Plain Road to accommodate the platforms and the shift of the eastbound and westbound traffic lanes around these platforms.

This segment of Stony Plain Road is very constrained. In order to reduce impacts to adjacent properties and minimize displacements of residents and businesses, this option only accommodates a 1.25 metre wide sidewalk on both sides of the road, between 125 Street and 126 Street. A 1.25 meter sidewalk is not desirable from a walkability and accessibility perspective and does not meet City Design & Construction standards. Option 3 impacts a greater number of properties, people and businesses compared to Options 1 and 2.

There is no retaining wall required between 125 Street and 126 Street, as the grade in this area is relatively gradual.

Compared to Option 1 (the original concept), this option would move the 124 Street stop approximately 120 meters closer to the Glenora stop and further away from the 120 Street stop.
Public Engagement

Previous public engagement on the proposal to relocate the 124 Street stop occurred at a session held in January 2018 with 255 people in attendance. The project received 69 feedback forms; more than 80 percent of those who completed comment forms either supported or had no comment on the relocation.

Following Council’s direction at the March 21, 2018 meeting, Administration held a follow-up stakeholder session on July 4, 2018 to outline alternatives and implications, and to receive additional feedback. This localized presentation/discussion session targeted property owners, business owners and residents along Stony Plain Road between 121 Street and 127 Street, with invitations distributed by hand and email. There were 26 attendees and only five completed comment forms. All five indicated the reasons for the recommended relocation of the stop were more clear as a result of the session. This was consistent with the verbal feedback received in face-to-face discussions. Additional comments, including several that were applied directly to the display drawings, were generally unrelated to the stop relocation and instead focused on traffic flow and the area road network.

A separate meeting was held with the 124 Street Business Association Board of Directors on June 14, 2018 to obtain opinions and feedback. The rationale for the recommended amendment to the concept plan was accepted, it was felt the local business area would remain well-served with the revised stop location. There was disappointment that no option could accommodate a left-hand turn from Stony Plain Road eastbound to 124 Street northbound.

The Valley Line West Citizen Working Group for the area told Administration through regular meetings that their greatest concern was turning restrictions and general traffic flow on Stony Plain Road at 124 Street following the introduction of LRT, irrespective of stop location.

Corporate Outcomes and Performance Management

| Corporate Outcome(s): Edmontonians use public transit and active modes of transportation |
|---------------------------------|-----------------|-----------------|-----------------|
| Outcome(s)                      | Measure(s)      | Result(s)       | Target(s)       |
| Edmontonians use public transit | Transit ridership | 91.6 rides/capita (2017) | 105 rides/capita (2018) |
| and active modes of transportation | Journey to work mode (percent of survey respondents who select auto passenger, transit, walk, cycle or other) | 26.1% (2017) | 25.9% (2018) |
Corporate Outcome(s): Edmonton is attractive and compact

<table>
<thead>
<tr>
<th>Outcome(s)</th>
<th>Measure(s)</th>
<th>Result(s)</th>
<th>Target(s)</th>
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<tbody>
<tr>
<td>Edmonton is attractive and compact</td>
<td>Edmontonians’ Assessment: Well-designed, Attractive City (percent of survey respondents who agree/strongly agree)</td>
<td>53% (2017)</td>
<td>55% (2018)</td>
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Corporate Outcome(s): The City of Edmonton has sustainable and accessible infrastructure

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<th>Result(s)</th>
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<tbody>
<tr>
<td>The City of Edmonton has sustainable and accessible infrastructure</td>
<td>Edmontonians’ Assessment: Access to Infrastructure, Amenities and Services that Improve Quality of Life (percent of survey respondents who agree/strongly agree)</td>
<td>68% (2017)</td>
<td>70% (2018)</td>
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Risk Assessment

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<tr>
<th>Risk Element</th>
<th>Risk Description</th>
<th>Likelihood</th>
<th>Impact</th>
<th>Risk Score (with current mitigations)</th>
<th>Current Mitigations</th>
<th>Potential Future Mitigations</th>
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<td>Public Perception</td>
<td>Recommended design change would result in LRT concept plan amendments. West LRT concept plan was approved in Jan 2011. Downtown LRT concept plan was approved in Feb 2012. Subsequent decisions and actions, such as land acquisitions and stakeholder engagement, were made based on approved concept plans.</td>
<td>5 - Almost Certain</td>
<td>2 - Moderate</td>
<td>10 - Medium</td>
<td>Consider public engagement results. Present recommendations to City Council and communicate recommendation to the public.</td>
<td>Develop and execute engagement plan for newly impacted stakeholders.</td>
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**Project Management**

| Recommended design change would result in LRT concept plan amendments. West LRT concept plan was approved in Jan 2011. Downtown LRT concept plan was approved in Feb 2012. Subsequent project decisions and actions, such as preliminary design and cost estimates, were made based on approved concept plans. Concept plan amendment may result in higher project cost and schedule delay. |
|---|---|---|---|---|---|
| 5 - Almost Certain | 2 - Moderate | 10 - Medium | Adopt risk-based approach in preliminary design efforts, focusing design effort in areas with less uncertainties first. Continuous monitoring of project scope, cost and schedule. | Assess impact of changes in project scope, cost and schedule. Communicate changes with impacted stakeholders and seek additional approvals where necessary. |

| If LRT concept plan recommendation is not approved or decisions are delayed, this would have a direct impact on project schedule with cost and procurement implications. |
|---|---|---|---|---|
| 3 - Possible | 4 - Severe | 12 - Medium | Development and review of design options prior to recommendation to City Council for approval. Conduct engagement with stakeholders in advance to understand opportunities and impacts. | Assess impact and quantify changes in project scope, cost and schedule. Communicate impacts with impacted stakeholders and seek additional approvals where necessary. |

**Attachments**

1. Option 1 - Split platforms across 124 Street
2. Option 2 - Split platforms across 123 Street
3. Option 3 - Split platforms between 125 and 126 Street

**Others Reviewing this Report**

- T. Burge, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- G. Ceberyk, Deputy City Manager, City Operations
- P. Ross, Acting Deputy City Manager, Urban Form and Corporate Strategic Development