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TAMRMS#: B09

North St. Albert Trail Design

Presented by: Dean Schick, Manager, Transportation Branch

RECOMMENDATION(S)

That the Community Growth & Infrastructure Standing Committee recommend to Council:

1. that the update on the North St. Albert Trail Improvement Project and proposed North St Albert Trail and LRT Alignment, contained in the report dated February 10, 2020 entitled "North St. Albert Trail Design" be received as information.
2. that Council rescind Council Motion C536-2015 which reads as follows:
 1. That the LRT alignment within the approved corridor, (St. Albert Trail), identified as the preferred option in the "St. Albert LRT Planning Study Phase 2 - Alignment Selection Report", provided as Attachment 1 to the November 2, 2015 Agenda Report entitled "LRT Functional Alignment - Final Recommendations", be approved.
 2. That this report be referred to the Capital Region Board for integration with the Capital Region Growth Plan Update.

PURPOSE OF REPORT

Administration is in process of advancing corridor improvements to the north portion of St. Albert Trail, and has developed a road alignment that will deliver on the physical improvements of travel lanes and active mode accommodation in the short-term, while continuing to protect and consider long-term (future) accommodation of Light Rail Transit (LRT). The recommended road and future LRT alignment conflicts with the past LRT Study (2014) that had previously been approved by Council (C536-2015). This report and presentation provide background on the North St. Albert Trail Improvement project, an update of the recommended alignment for both the roadway and LRT, and recommendation to address the conflicting past approved Council motions that will then enable the North St Albert Trail Improvement work to advance.

ALIGNMENT TO COUNCIL STRATEGIC PRIORITY

Strategic Priority #3: Building a Transportation Network: Integrated transportation systems.

Administration Activity 3.1 Recommend short-, medium-, and long-term options to improve the service level of Ray Gibbon Drive.

Administration Activity 3.3 Evaluate the arterials networks in St. Albert and recommend improvements.

ALIGNMENT TO SERVICE DELIVERY

N/A

ALIGNMENT TO COUNCIL (OR COMMITTEE) DIRECTION OR MANDATORY STATUTORY PROVISION

On December 1, 2014 Council passed the following motion:

(C554-2014)

That the LRT corridor following St. Albert Trail, identified as the preferred option in the "St. Albert LRT Planning Study Phase 1 - Corridor Selection Report" provided as Attachment1 to the December 1, 2014 Agenda Report entitled "LRT Functional Study Update- Phase1 - Corridor Selection Report", be approved.

On November 2, 2015 Council passed the following motions:

(C536-2015)

1. That the LRT alignment within the approved corridor, (St. Albert Trail), identified as the preferred option in the "St. Albert LRT Planning Study Phase 2 - Alignment Selection Report", provided as Attachment 1 to the November 2, 2015 Agenda Report entitled "LRT Functional Alignment - Final Recommendations", be approved.

2. That this report be referred to the Capital Region Board for integration with the Capital Region Growth Plan Update.

BACKGROUND AND DISCUSSION

Administration is in process of delivering on multiple roadway improvements that align to the recommendations of the 2018 Transportation Network Improvement Strategy. The north section of St. Albert Trail (north of Boudreau Road / Giroux Road), was second in priority from the recommendations of the Strategy.

In 2019, work began on engineering and designing improvements of north St. Albert Trail for Phase 1; from North of Boudreau Road to North of Coal Mine Road. The design approach has been informed through completed work, including the North St. Albert Trail Integration Plan (2019), LRT Study (2014), past public engagement feedback and various City planning and engineering documents such as the Complete Streets Guidelines, Active Transportation Plan, and Intelligent Transportation Systems Strategy, to deliver a wholistic design that considers multiple levels of land planning, urban design, and transportation outcomes. In developing the design, transportation and traffic demand requirements were reviewed to ensure development of short-term roadway improvements for accommodation, efficiency and safety. In addition, the project's design shall protect

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and enable the City's long-term vision of the Corridor as a vibrant, multi-modal (inclusive of LRT right of way accommodation), interactive commercial destination with high quality public realm, while also protecting and planning for future needs, so as to minimize re-work or reconstruction (resulting in lost costs or additional costs) and maximize these early investments.

Key considerations were reviewed during the preliminary engineering work, such as - conformance to transportation design standards, interpretation and analysis of traffic demands (inclusive of forecasted demands), pedestrian and active mode accommodation, corridor drainage, land use planning, and long-term corridor plans which required attention to accommodation of LRT right of way (ensuring current work would not disable or constrain potential future accommodation).

Upon completion of the review of the above considerations, design recommendations were made that included:

- 1) The alignment of St. Albert Trail follows the existing Northbound lane alignments and proposes the Southbound travel lanes shift / relocate to the east.
 - a. This alignment was proposed in the North St. Albert Trail Integration Plan (2019); however, varies from the LRT Study report (2014) which concluded the opposite.
- 2) The current forecasted alignment of the LRT be adjusted to transition from the east side of St. Albert Trail to the West side of St. Albert Trail at the intersection of St. Albert Trail at Villeneuve Road / Erin Ridge Road.
 - a. This LRT alignment varies from the 2014 LRT Study report, to which the LRT remained on the East side of St. Albert Trail until it crossed St. Albert Trail North of Everitt Drive North.

The benefits of these recommendations of alignment of the roadway and future LRT in comparison to previously approved alignments include:

- Maintains 3 vehicle travel lanes for North and Southbound on St. Albert Trail while also supporting potential for future LRT
 - Previous alignments recognized a reduction to 2 travel lanes on St. Albert Trail in this section.
- Maintains an opportunity of an LRT station on either the East or West sides of St. Albert Trail (either North or South of the Villeneuve Road intersection).
 - This offers opportunity to support redevelopment demand on the West side of St. Albert Trail.
 - Previous alignments recognized a future station at the North side of the Boudreau Road intersection on the East side of St. Albert Trail.
- Opportunity of redevelopment of high potential area in vicinity to transit orientated development on the West side of St. Albert Trail.
 - Opportunity of public spaces for support to the redevelopment
- Relocates the potential future LRT alignment away from the residential area of the existing Erin Ridge community.
- Improves on storm water management and drainage on the East side of St. Albert Trail.
- Opportunity to utilize the existing Southbound road structure to support active mode

infrastructure.

- Opportunity is maintained for consideration of a non-grade LRT crossing (LRT underpass).
 - Minimizes impact to travel lanes of St. Albert Trail.

The two opposed St. Albert Trail corridor and LRT alignments are provided as Attachment 1 to this report.

In view of the significant advantages as described above, Administration wishes to pursue detailed engineering of the North St. Albert Trail improvements based on the updated (2019 / 2020) roadway alignment recommendations. However, these are in conflict with a previous concept that was not merely an administrative and operational choice, but was also enshrined in Council Motion C536-2015, set out in the Recommendation section at the beginning of this report. In order to move forward with not only long-term planning for the LRT, but also the more immediate priority of North St. Albert Trail improvements, Council Motion C536-2015 will need to be rescinded. There is no need to replace the rescinded motion with another Council motion, and therefore no recommendation in this report to do so. Council has already provided the necessary governance direction for the St. Albert Trail corridor to be the future route of the LRT by including this alignment in the Transportation Systems Bylaw. The precise engineering details of where the future LRT track and related infrastructure will be sited in relation to the St. Albert Trail are an operational matter that Council need not address, particularly since expansion of the LRT to St. Albert is still far in the future and the engineering of it may be subject to further revisions as circumstances unfold over the years.

The important thing for Council to accomplish now, is to ensure that planning and design for the much more immediate concern of North St. Albert Trail improvements be allowed to proceed on the basis of our best current projection of the future route of the LRT. By rescinding Motion C536-2015 Council frees Administration to do just that. It is important for all stakeholders to understand that Administration's intentions at this time do not involve seeking any funding or advancing any planning for bringing the LRT to town, beyond simply ensuring that it will be compatible with St. Albert Trail improvements that are anticipated to be complete long before the LRT ever arrives in St. Albert.

To summarize, rescinding Council Motion C536-2015 will enable advancement of North St Albert Trail improvements (road widening, sidewalk / trail construction and curb and gutter work) with minimal delay to the project.

STAKEHOLDER COMMUNICATIONS OR ENGAGEMENT

A stakeholder meeting was held on November 21, 2019, to provide preliminary and conceptual design recommendations to internal stakeholder groups for the improvements and changes to the North section of St. Albert Trail. Those in attendance included representation from the following departments: Community Services, Engineering, Public Works, Transit, Recreation and Parks, Planning and Development.

Additionally, department stakeholders (including those not in attendance for the actual workshop) were provided drawings and review time to provide comment and feedback following the stakeholder meeting. Information received has informed on preliminary design work and will be used for detailed

engineering design.

Internal stakeholders from Engineering, Planning and Transit departments were also specifically engaged on the future considerations of the alignment of the LRT and discussion occurred around long-term land use planning, transit operational considerations and impacts. The proposed alignment supports the needs of these departments and does not result in anticipated impacts or hindrance to future planning or program delivery.

IMPLICATIONS OF RECOMMENDATION(S)

Financial:

None at this time.

Legal / Risk:

None at this time.

Program or Service:

Finalizing the roadway alignment and LRT alignment allows for the advancement of work for the North St. Albert Trail Corridor Improvements. Benefits of the recommended alignment are noted within this report.

Organizational:

None at this time.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

If the Committee does not wish to support the recommendation to rescind Council Motion C536-2015, the following alternative could be considered:

Alternative 1. Do not recommend to Council to rescind Council Motion C536-2015, and instead recommend that Council direct Administration to deliver corridor improvements based upon the outdated 2014 LRT Study report which will not align with future LRT development as currently envisaged.

Report Date: February 10, 2020

Author: Dean Schick

Department: Engineering Services

Deputy Chief Administrative Officer: Kerry Hilts

Chief Administrative Officer: Kevin Scoble

Figures 1 and 2: 2014 LRT Study; LRT Alignment

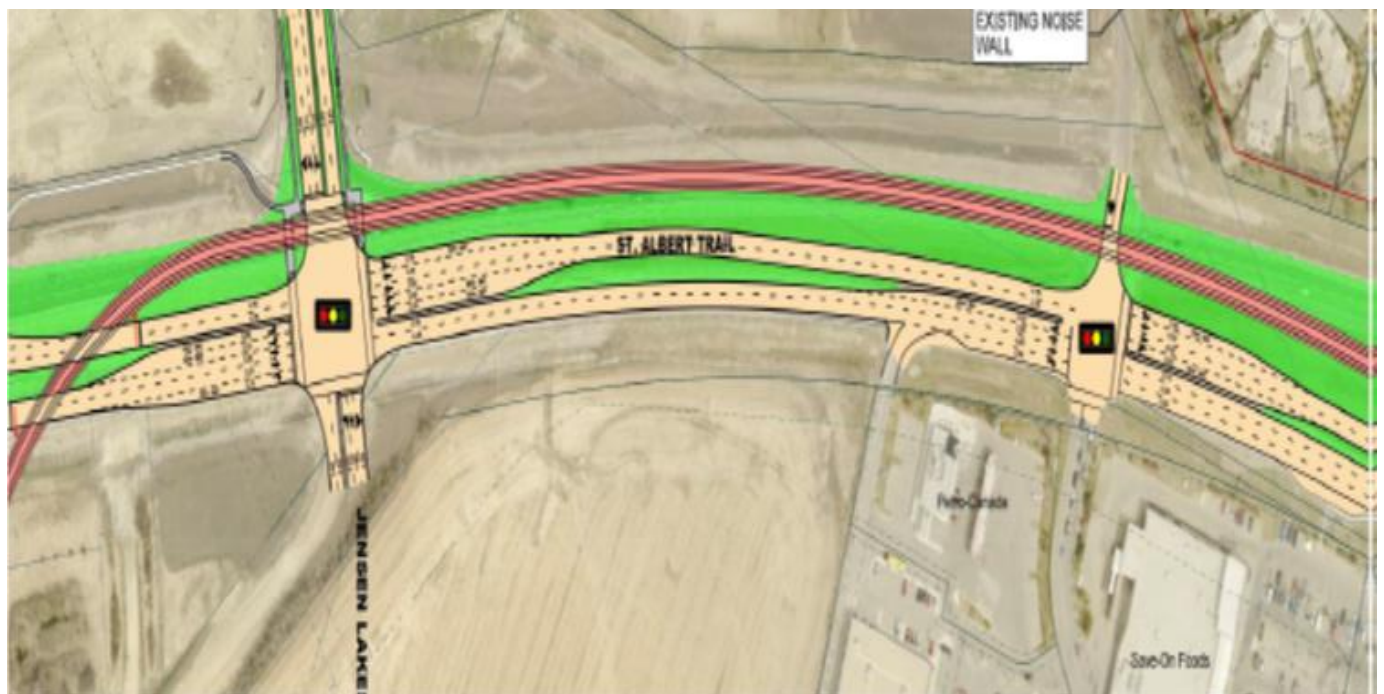
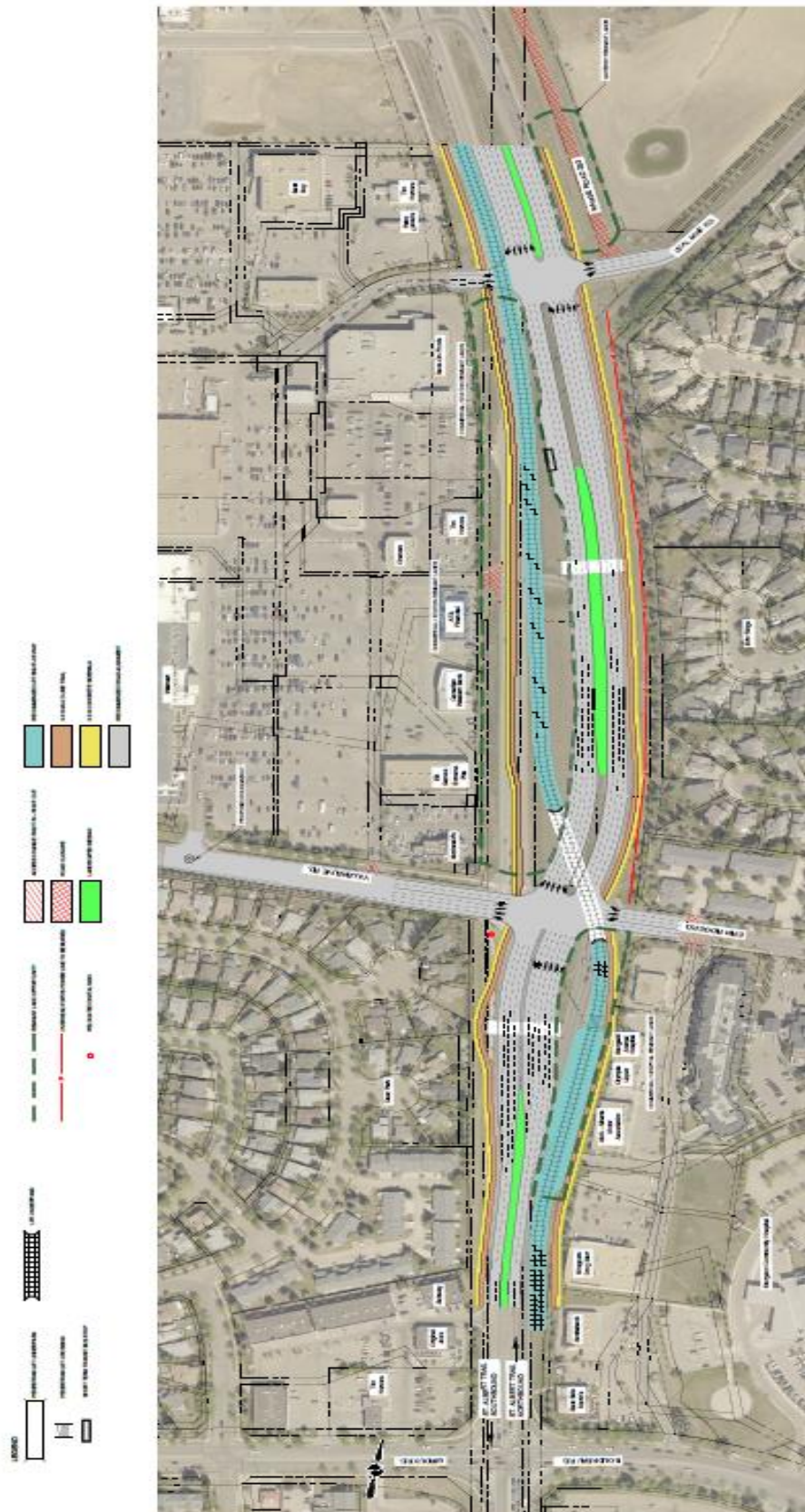


Figure 3: 2019 North St Albert Trail Improvement Recommended Alignment



North St Albert Trail Design

February 10, 2020

Presented by:

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Vice President Transportation; AE



Presentation Outline

1. Project Background
2. Conceptual Design
3. Past Council Motions
4. Recommendations
5. Next Steps
6. Questions / Discussion



North SAT Project Background

- North St Albert Trail: #2 Improvement Priority within the Network Review (2018)
 - Borrowing Bylaw approved
 - Work to be completed in 3 Phases
 - Phase 1: N of Boudreau to N of Coal Mine
- Deliver on:
 - Additional north and southbound lanes
 - Sidewalk / Trails
 - Intersection improvements
- Phase 1 construction
 - Anticipated to begin in 2020 and finish 2021



North SAT Concept



TYPICAL SECTION
ST ALBERT TRAIL (STA 1+540)

North SAT Concept- Short-Term

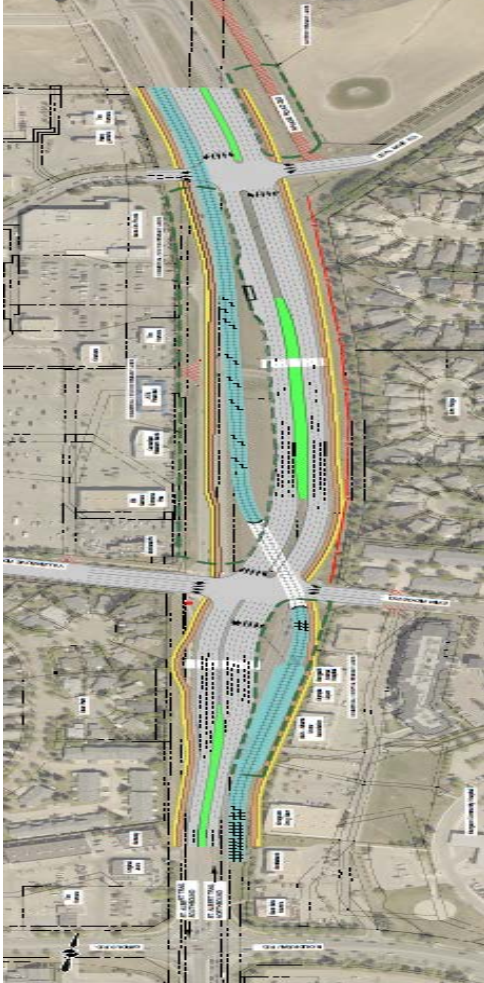


North St Albert Tr Concept – Long-Term



North SAT Concept Design

2019 Proposed LRT Alignment



2014 Proposed LRT Alignment



North SAT Concept Design – West LRT

Benefits of Shifting the LRT Alignment to the West

Maintains 3 vehicle travel lanes versus reducing to 2 travel lanes n + s bound with LRT accommodation

Maintains opportunity of an LRT station on either the east or west sides of St Albert Trail

Opportunity of redevelopment of the high potential area in vicinity to the TOD on the west side of St Albert Trail

Relocates LRT from directly adjacent to residential (Erin Ridge)

Creates opportunity for urban design and public spaces with future west side development

Least impact to Erin Ridge and Coal Mine Road intersections

Improved storm water management on the east side of St Albert Trail

Opportunity to utilize the existing southbound lane structures for shared path infrastructure.

Opportunity of future consideration of a non-grade LRT crossing (LRT underpass)

Past Council Motions

- Dec. 1, 2014 (C554-2014)

That the LRT corridor following St. Albert Trail, identified as the preferred option in the "St. Albert LRT Planning Study Phase 1 - Corridor Selection Report" provided as Attachment1 to the December 1,2014 Agenda Report entitled "LRT Functional Study Update- Phase1 - Corridor Selection Report", be approved.

- Nov. 2, 2015 (C536-2015)

1. That the LRT alignment within the approved corridor, (St. Albert Trail), identified as the preferred option in the "St. Albert LRT Planning Study Phase 2 - Alignment Selection Report", provided as Attachment 1 to the November 2, 2015 Agenda Report entitled "LRT Functional Alignment - Final Recommendations", be approved.

2. That this report be referred to the Capital Region Board for integration with the Capital Region Growth Plan Update.

Recommendation

A) The Committee Recommend to Council:

Rescind Council Motion C536-2015

1. That the LRT alignment within the approved corridor, (St. Albert Trail), identified as the preferred option in the "St. Albert LRT Planning Study Phase 2 - Alignment Selection Report", provided as Attachment 1 to the November 2, 2015 Agenda Report entitled "LRT Functional Alignment - Final Recommendations", be approved.
2. That this report be referred to the Capital Region Board for integration with the Capital Region Growth Plan Update.

B) That the Committee direct:

That the CAO create a directive to incorporate and utilize the St Albert Trail corridor as the approved LRT corridor and incorporate past, or updated, LRT and Roadway studies to protect, accommodate and deliver on LRT planning and integration within the transportation network.

Next Steps

- Finalize Phase 1 Detailed Design
- Tender and award Phase 1 Construction
- Phase 1 Construction
 - 2020 and 2021
- RFP for Phase 2 & 3 Engineering: 2020
- Phase 2 construction: 2022
- Phase 3 construction: 2023 / 2024

Questions

