



INFORMATION ONLY COUNCIL REPORT
Engineering / Public Works
For the December 16, 2019 Council Meeting

DATE: December 9, 2019
TO: Paul Gipps, CAO
FROM: Steven Gubbels, Design and Inspection Technologist
RE: Glenrosa Road Improvements – Design Update

BACKGROUND:

Allnorth Consultants Limited was awarded the contract for design of the Glenrosa Road improvements between Glen Abbey Place and McGinnis Road at the April 23, 2019 Council meeting. Using the City's Urban Arterial cross section as a starting point, Allnorth developed a design that provides an improved road section complete with pedestrian facilities, cycling facilities, and road safety improvements that includes the realignment of the Glenrosa McIver intersection. The landscape plans are provided in ***Attachment 1 – Conceptual Landscape Drawings***.

Topography constraints in the corridor require retaining walls in several sections due to widening the corridor and grade changes. In an effort to reduce retaining, tie in existing steep accesses, and reduce project costs, a variable cross section is proposed. In addition, street lighting will be located on one side of the road to reduce boulevards throughout the corridor. Providing a design that best utilizes the corridor topography allows the roadway to include all key facilities of the arterial section while providing the required safety improvements of the road design.

An ICBC Road Safety Audit was completed in October, and their recommendations were considered for the design. Allnorth is currently completing the tender drawing set submission for the City with the intent of having tender ready drawings in January.

Allnorth has worked with BC Hydro on a preliminary design for the project. Based on our experience from previous projects and initial feedback from BC Hydro, the cost of relocating the overhead Hydro lines underground is cost prohibitive. Allnorth is working with Hydro on a design that maintains overhead lines and relocates any poles that may conflict with the new alignment. The preliminary design indicates that this will be limited to a few poles and anchor relocations. Once the BC Hydro design is completed it will be forwarded to the other shallow utility providers for the completion of their design.

There is an opportunity with this project to make a sidewalk connection between the project extents and the Webber Road roundabout. This sidewalk construction would be outside of the project scope of the Glenrosa Road Improvements project, but would connect sidewalk along Glenrosa for a total of 1.6 km between McGinnis Road and the Webber Road roundabout. The additional design and construction budget required for this sidewalk connection is approximately \$600,000. This will be included as a 2020 budget item if Council decides to include this connection with the Glenrosa Road project.

Decision point #1 – Does Council want to proceed with the design and construction of additional project outside of the project scope to provide a continuous sidewalk along Glenrosa Road to the Webber Road roundabout?

There are two options for the sidewalk extension. Option 1 is to install the sidewalk on the southwest side of Glenrosa Road for approximately 375m to connect with the sidewalk built as part of the Trails development (see **Attachment 2**). Option 2 is to extend the sidewalk for approximately 425m on the northeast side of Glenrosa road from where it currently ends near Walnut Glen Drive to the Webber Road roundabout (see **Attachment 3**).

Decision point #2 – If proceeding with the design and construction of the sidewalk, which option does Council want to use - Option 1 (southwest side of the road) or Option 2 (northeast side of the road)?

A detailed review of the two options will be presented for discussion during the Council meeting.

Property Acquisition

Allnorth retained Watt Consulting Group to provide transportation engineering services, and to provide review and analysis of the traffic challenges for the project. Refer to **Attachment 4 - Glenrosa Road Improvements Transportation Review** for Watt's analysis. The Watt report reviewed several options for the improvement of the Glenrosa/Mclver Road intersection. The recommended option was the realignment of the Glenrosa/Mclver intersection to improve sightlines and resolve turning conflicts at the intersection (refer to **Attachment 1 –Conceptual Landscape Drawings**). This realignment also eliminates the offset intersection with the west leg of Mclver Road. To proceed with this option, the City purchased the property at 3012 Glenrosa Road. Although the cost of the property acquisition is significant, the construction costs to realign the intersection is less than the other options.

Table 1: Mclver Intersection Comparative Costs

	<i>Option 1 Realignment</i>	<i>Option 2 Roundabout</i>	<i>Option 3 No Left Turn</i>
Construction	\$460,000	\$980,000	\$600,000
Contingency	\$140,000	\$294,000	\$180,000
Land Acquisition	\$682,000	\$682,000	\$30,000
Comparative Totals	\$1,282,000	\$1,956,000	\$810,000

The purchase of the property at 3012 Glenrosa Road also allows the City to secure the additional space needed for a roundabout at the intersection, should future traffic needs dictate that one is required.

Next Steps

City staff will continue to work with Allnorth to prepare a tender-ready design. The Glenrosa Road Improvements project is a budget early approval item in January 2020. If Council approves this item, staff will work with Communications to schedule an open house to meet with Glenrosa residents and to get public input on the design. If any changes are required after public consultation the tender design will be updated and the intent would be to tender the project to keep it on schedule to have the works started in the spring. The target would be to complete the works in 2020, subject to the approval of Council.

COUNCIL REPORT/RESOLUTION HISTORY:

Date	Report Topic/Resolution	Resolution No.
April 23, 2019	THAT Council authorize the Mayor and Corporate Officer to execute an agreement with Allnorth Consultants Limited for consulting services for the design of Glenrosa Road and McIver pedestrian Improvements in the amount of Two Hundred and Seventy Three Thousand, Six Hundred and Ninety Nine Dollars (\$273,699).	C176/19

FINANCIAL IMPLICATIONS:

There is a 2020 budget request of \$6,500,000 being considered by Council for project construction. This budget request included \$850,000 for land acquisition.

Table 2: Project Budget Summary

Total 2020 Budget Request	\$6,500,000
Capital Costs (Including Land)	\$2,299,404
Development Cost Charges	\$4,200,596

As part of the tender preparation there will be a pre-tender estimate prepared by Allnorth to get a better indication of actual project costs based on the stage of the design.

REVIEWED AND APPROVED BY:

Allen Fillion, Director of Engineering & PW
Warren Everton, Director of Finance, CFO
Tracey Batten, Deputy CAO/Corporate Officer
Paul Gipps, CAO

Powerpoint: Yes ☒ No ☐

Attachments:

1. Conceptual Landscape Drawings
2. Option 1 – Sidewalk on Southwest side
3. Option 2 – Sidewalk on Northeast side
4. Glenrosa Road Improvements Transportation Review