



Deep Roots  
Greater Heights

## District of Maple Ridge

**TO:** His Worship Mayor Gordon Robson and Members of Council  
**FROM:** Chief Administrative Officer  
**SUBJECT:** 240 Street Bridge Feasibility Study

**DATE:** October 10, 2008  
**FILE NO:** E02-011-029  
**ATTN:** Workshop

---

### EXECUTIVE SUMMARY:

In 2008, prior to a public Open House, staff updated Council on the feasibility study and conceptual design for a bridge over the South Alouette River. The investigation undertaken by Associated Engineering Consultants was presented at an Open House and this report summarizes the comments received and the recommended next steps.

The report recommends 240 Street as the preferred alignment for the bridge and identifies a cost estimate of over \$30 million for the bridge. Additional road works to approaches and intersections will also be required. This project will require significant financial engineering to schedule and construct the bridge.

### RECOMMENDATION:

THAT staff be directed to identify in the Capital Works Program 240 Street as the alignment for a second crossing over the South Alouette River (east of 232 Street); and

THAT staff be directed to schedule the project based on the financial plans and capabilities of the District and report back on that schedule during the 2009 Annual Business Planning process.

### DISCUSSION:

#### a) Background Context:

A second bridge over the South Alouette River to the Silver Valley area has been identified in the long term Capital Plan (beyond the current five year plan). During the winter of 2007, in response to feedback from area residents, Council advanced the feasibility study for the bridge. The feasibility study considered environmental, hydraulic and geotechnical factors and identified potential cross sections, geometry and the budget estimates for the bridge.

In particular, the study examined alignments along 240 Street and along 128 Avenue for comparison and based on geotechnical considerations, property impacts and costs, recommends an alignment along the 240 Street corridor. It is proposed that the bridge span approximately 440 metres and will be supported at intervals between 30 and 40 metres.

A public information meeting was held to present the findings of the feasibility study. A total of 36 responses were received. Feedback from the Open house suggests that while the alignment on 240 Street is appropriate because of lower construction costs relative to a 128 Avenue bridge, considering the cost and impacts of the bridge, the timing of the bridge may be appropriate for the longer term rather than within the five year Capital works Program (reference summary attached).

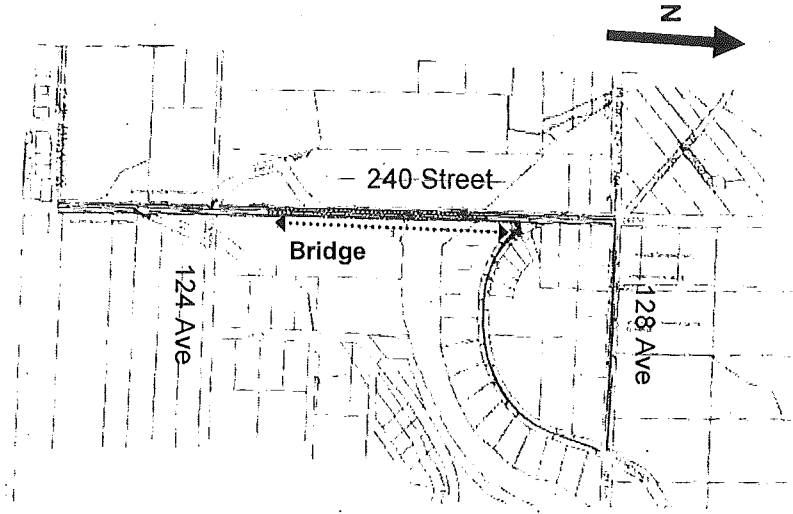


Figure 1 - Plan view of 240 Street Alignment

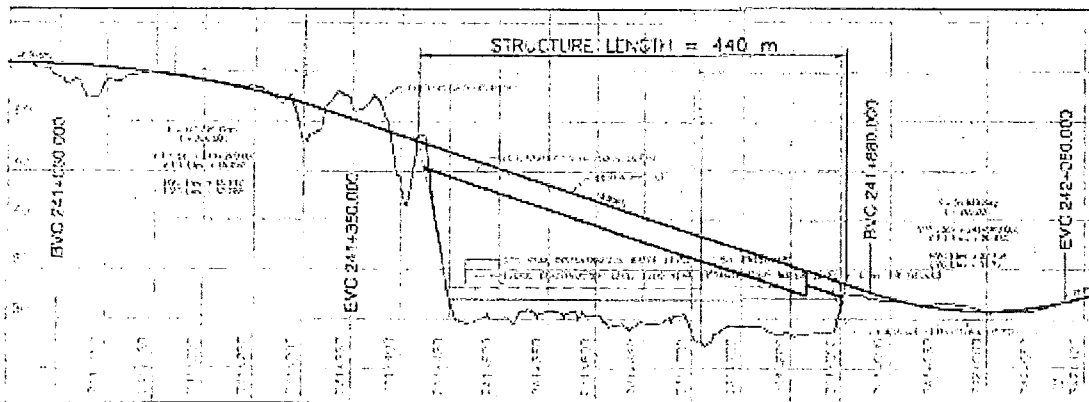


Figure 2 - Profile of proposed bridge

Prior to the development of a detailed design, a further environmental assessment will be required and well as more detailed engineering of the integration of the 240 Street bridge and approaches with adjacent intersections (e.g. Abernethy Way, 124 Avenue and Fern Crescent).

A copy of the report will be made available in Council's library and at the Engineering Department customer service counter.

**b) Strategic Alignment:**

Smart Managed Growth

The Corporate Strategic Plan directs that municipal infrastructure be protected and managed through the preparation of appropriate plans to ensure maintenance of the system. A feasibility study and the selection of a route is the first step in developing smart infrastructure plans.

Financial Management

Council has directed that the Municipality provide high quality municipal services to our citizens and customers in a cost effective and efficient manner. Based on the estimates of the bridge and considering the need for reconstructing approach roads and intersections, the final costs of the project and approaches including could be as high as around \$40 million. As such, the planning of the project will need to consider the District's financial envelope. Typically, projects of this magnitude require significant planning and capital assembly. Scheduling the project is the first step in the process.

**c) Citizen/Customer Implications:**

Maple Ridge customers expect that investments in the network be made to provide safe, reliable and high quality transportation. The feasibility study is the first step towards a second access.

As the District considers the timing of the bridge in the current Business Planning session, should the project be scheduled beyond the next few years, operation and maintenance aspects may need to be examined to increase the reliability of the road network.

**d) Interdepartmental Implications:**

The Capital Works program is an interdepartmental program approved by CMT and Council. The project will be prioritized annually against other Council priorities in accordance with the long term Financial Plan and Corporate Strategic Plan.

**e) Policy Implications:**

It is the District's policy to undertake long term planning of significant infrastructure. The feasibility study identifies a work plan that should be followed when the project is scheduled for construction.


**CONCLUSIONS:**

A feasibility study of a crossing over the South Alouette River has been completed and is presented. The report identifies the feasibility of the project, as well as cost estimates. It is recommended that the 240 Street alignment be selected as the preferred option for the Capital Works Program and that the project be scheduled appropriately.




---

Prepared by **Andrew Wood, PhD., PEng.**  
**Municipal Engineer**



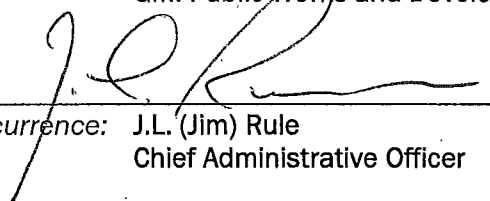
---

Reviewed by: **Paul Gill, BBA, CGA, FCRM**  
**GM: Corporate and Financial Services**



---

Approved by: **Frank Quinn, MBA, PEng.**  
**GM: Public Works and Development Services**



---

Concurrence: **J.L. (Jim) Rule**  
**Chief Administrative Officer**

AW/mi

## APPENDIX A

## Summary of feedback from Open House and website

Supportive	Unsupportive
<ul style="list-style-type: none"> <li>▪ The bridge will provide a second access for emergencies</li> </ul>	<ul style="list-style-type: none"> <li>▪ A second access to Silver Valley should be provided over the Rock Ridge area starting north from 132 Avenue and 232 Street</li> </ul>
<ul style="list-style-type: none"> <li>▪ The construction of the bridge will reduce traffic on Fern Crescent east of 232 Street</li> </ul>	<ul style="list-style-type: none"> <li>▪ Wildlife would be negatively impacted – raptors, eagles, bears, etc.</li> </ul>
<ul style="list-style-type: none"> <li>▪ The new bridge provides a direct route for south-east development</li> </ul>	<ul style="list-style-type: none"> <li>▪ Municipality should consider spending money to improve other infrastructure first</li> </ul>
<ul style="list-style-type: none"> <li>▪ The project will result in reduced travel distance and will increase walking potential for Silver Valley children who attend Meadow Ridge School.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There are traffic safety concerns around Meadow Ridge School. Building the bridge would make it worse and less safe for children walking to and from school</li> </ul>
	<ul style="list-style-type: none"> <li>▪ The bridge would directly impact some of the homes adjacent to the project</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Costs and impacts do not justify the creation of a second access. \$30 million is a waste of taxpayers money</li> </ul>
	<ul style="list-style-type: none"> <li>▪ The 128 Avenue alignment would be preferable</li> </ul>
	<ul style="list-style-type: none"> <li>▪ A second access is not warranted. A one in fifty year occurrence for blockage does not justify the bridge</li> </ul>