

# River Road Storm Trunk Sewer and Road Improvements



## Welcome to our Open House

### Purpose of Open House

To present and get feedback on the design options for the storm trunk sewer and the associated road improvements

### Project Location

River Road from Darby Street to Carshill Street

### Project Objectives and Benefits

- To provide property owners with the opportunities to discharge storm water into a storm sewer instead of having uncontrolled runoff
- To reduce storm water ground infiltration and improve the drainage of the Fraser River Escarpment
- To improve road and driveway drainage, eliminate water ponding and winter ice forming
- To improve safety for pedestrians, cyclists and motorists

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## History of River Road – phased construction

- 1997 – Road reconstruction and drainage improvements from 207 Street to Laity Street
- 2000 – Road reconstruction and drainage improvements from Laity Street to 216 Street: designed and tendered. Tenders exceeded budget and the tender was collapsed
- 2001 – Project contemplated for 2000 was re-scoped to between Laity Street and Darby Street. Storm drainage constructed as Phase 2; road works constructed as Phase 3
- 2007 - A grant application for \$5.6M was submitted to the Province for drainage and road improvements between Darby Street and Carhill Street
- April 23, 2007 - Council proposed cost sharing with the property owners: 2/3 contribution from government and Local Area Service (LAS) for the rest. Staff commenced the design process for both drainage and road improvements
- June 18, 2007 - Council received a negative response from the residents: 75% were against contributing to the LAS, requesting the District to allocate municipal funds to implement the construction of the storm sewer, drainage and road improvements
- June 28, 2007 - Council received a formal negative response from the Province in regard to the requested grant and decided that the Local Area Service not be pursued

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## continued: History of River Road – phased construction

- July 26, 2007 - Meeting held to update residents of the results and conclusion of the LAS initiative
- 2008 - Council approved 2008 Capital Works Program:
  - ❑ Storm sewer \$2.65M (debt)
  - ❑ Road improvements \$2.97M (grants)
- February 25, 2008 - Meeting held to present Golder's Geotechnical Investigation Report
- 2008 – Staff continued with the preliminary design for both drainage and road improvements

## Storm Sewer Challenges

- Optimal location for outfall to Fraser River is on private property
- Designers tried to minimize impacts to properties
- There are a number of existing utilities in the corridor
- The project requires very deep excavation (up to 5 meters)
- Existing right-of-way is narrow and additional right-of-way is required
- The utility poles require relocation
- The 1200mm diameter pipe requires a wide trench

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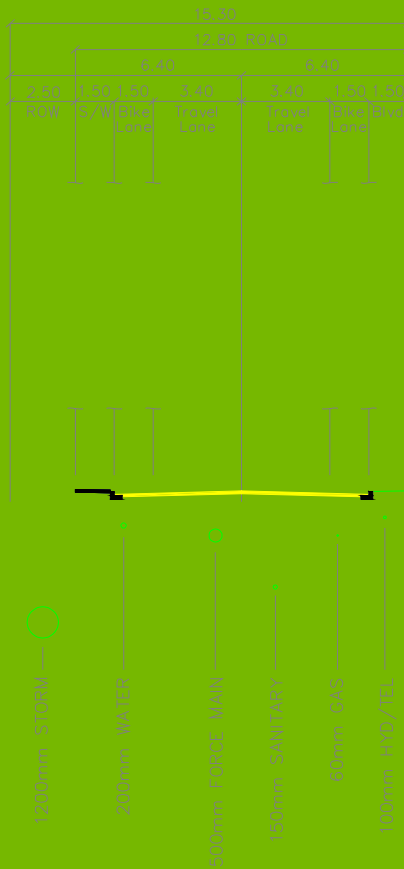


MAPLE RIDGE

British Columbia

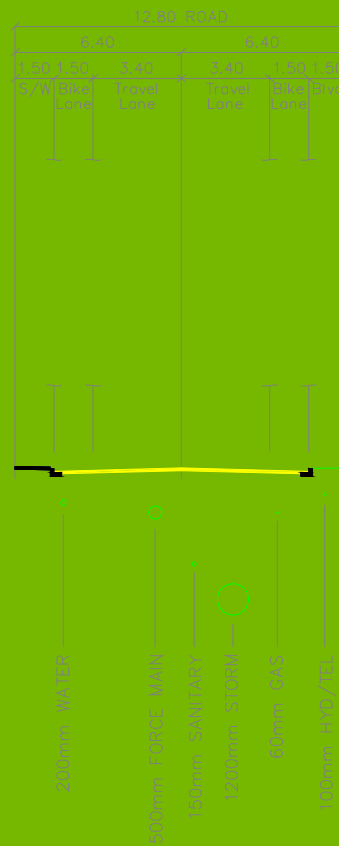
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OPTION 1



\*LOOKING WEST\*

OPTION 2



\*LOOKING WEST\*

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## Design Options

	ADVANTAGES	DISADVANTAGES
OPTION 1	<ul style="list-style-type: none"> <li>• No disturbance to existing utilities</li> <li>• Shorter construction time</li> <li>• Least disruption to traffic</li> <li>• Less expensive and within budget</li> </ul>	<ul style="list-style-type: none"> <li>• Some of the existing fences and landscapes would have to be relocated</li> <li>• Requires more property dedication from owners: 3.2m from five properties, 2.5m from fifteen properties</li> </ul>
OPTION 2	<ul style="list-style-type: none"> <li>• No need for significant fence and landscape relocation</li> <li>• Least amount of property impacted</li> <li>• Less property dedication from owners: up to 2.7m from five properties, up to 1.0m from fifteen properties</li> </ul>	<ul style="list-style-type: none"> <li>• 150mm sanitary sewer needs to be relocated</li> <li>• Significant cost increase: an extra cost of \$650K</li> <li>• Existing utilities will be disturbed</li> <li>• Significant traffic disruption</li> <li>• Significant longer construction time</li> </ul>

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## Additional Issues

- If the storm trunk sewer will be constructed, all residents will be required to connect to it
- There are significant geotechnical challenges
- Each property will be provided with a service connection at the property line and it will be the owners' responsibility to drain the roof leaders, the lawn drains and the perimeter drains into the new storm sewer at their own expense. Qualified contractors and plumbing permits will be required to do the work
- Additional funding may be required
- A right-of-way (ROW) dedication is needed for the outfall pipe alignment
- A right-of-way is needed from Canadian Pacific Railway (CPR)
- Utility companies: BC Hydro and Telus would need to relocate poles

## Next Steps

- Report to Council on property owners' willingness to dedicate property and to connect the property's drainages into the new storm sewer
- Approval from Council to proceed
- Detailed Design: winter of 2008
- Tendering: spring of 2009
- Construction: fall of 2009

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