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Lougheed-Riverview Multi-Use Pathway Executive Summary



Submitted to The City of Coquitlam

by IBI Group

with Drdul Community Transportation Planning,
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Executive Summary

In 2001 The City of Coquitlam approved the Strategic Transportation Plan (STP) which included a comprehensive Bicycle Network Plan and a staged investment strategy to complete the identified bicycle network over the following 20 years. At that time, Lougheed Highway was identified as a Priority Bike Route. In 2008, a prioritized list of 25 cycling improvement projects was developed; of which, five of the top ten projects were sections of Lougheed Highway. Since that time, contiguous improvements to Lougheed Highway have been extended as far east as Blue Mountain Street. Early planning has also identified the feasibility of accommodating bicycle improvements within the Right-Of-Way (ROW) of Lougheed Highway north from Orchid Drive as far as Barnett Highway, making connections to the Coquitlam transit station. Currently, an update of the STP is in process and is expected to be completed in mid 2011. As part of that process, interest in an off-street pathway parallel to Lougheed Highway has been identified and improvements to Lougheed Highway to address pinch points, such as Riverview Hospital, have been identified as priorities.

The primary goals of the Lougheed-Riverview Multi-Use Pathway have been identified as:

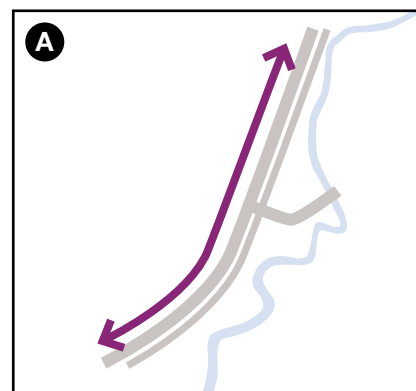
- **Improve Safety for Cyclists**

Lougheed Highway bicycle facilities serve an important role for inter-municipal bicycle commuter travel between Burnaby, New Westminster, Port Moody, Coquitlam, Port Coquitlam and Surrey. The facilities will also provide local access to major destinations such as the Coquitlam West Coast Express and Transit Station, Coquitlam Town Center, Colony Farm Regional Park and the businesses and services in Port Coquitlam.

This project is intended to provide a planning and alignment analysis of potential cycling and pedestrian facilities along the Lougheed-Riverview corridor between Colony Farm Road and Orchid Drive. A key objective of the study is to develop a route that is as direct as possible and is roughly parallel to Lougheed Highway. Due to the considerable physical constraints along this section of the Lougheed Highway, a number of alternative alignments are under consideration.

- **Increase Bicycle Trips**

Increasing bicycle trips is a goal consistent with those established in the City's Strategic Transportation Plan and priority cycling projects. The goal would largely be met through the connections in the bicycle network made possible through the results of this planning effort. A multi-use pathway along this difficult section of Lougheed Highway will provide a critical linkage in the Lougheed Highway Priority Bike Route. The pathway will facilitate connections with other existing and planned bicycle facilities connecting at Pitt River Road, including an off-street linkage to downtown Port Coquitlam and the Mary Hill area as well as the Sheep Paddock Route which Metro Vancouver intends to reopen in the future.



Preferred Alignment

Four alignment alternatives were considered:

- Riverview
- GVSDS Sewer Right of Way
- Sheep Paddock Trail in Colony Farm Park
- Canadian Pacific Railway

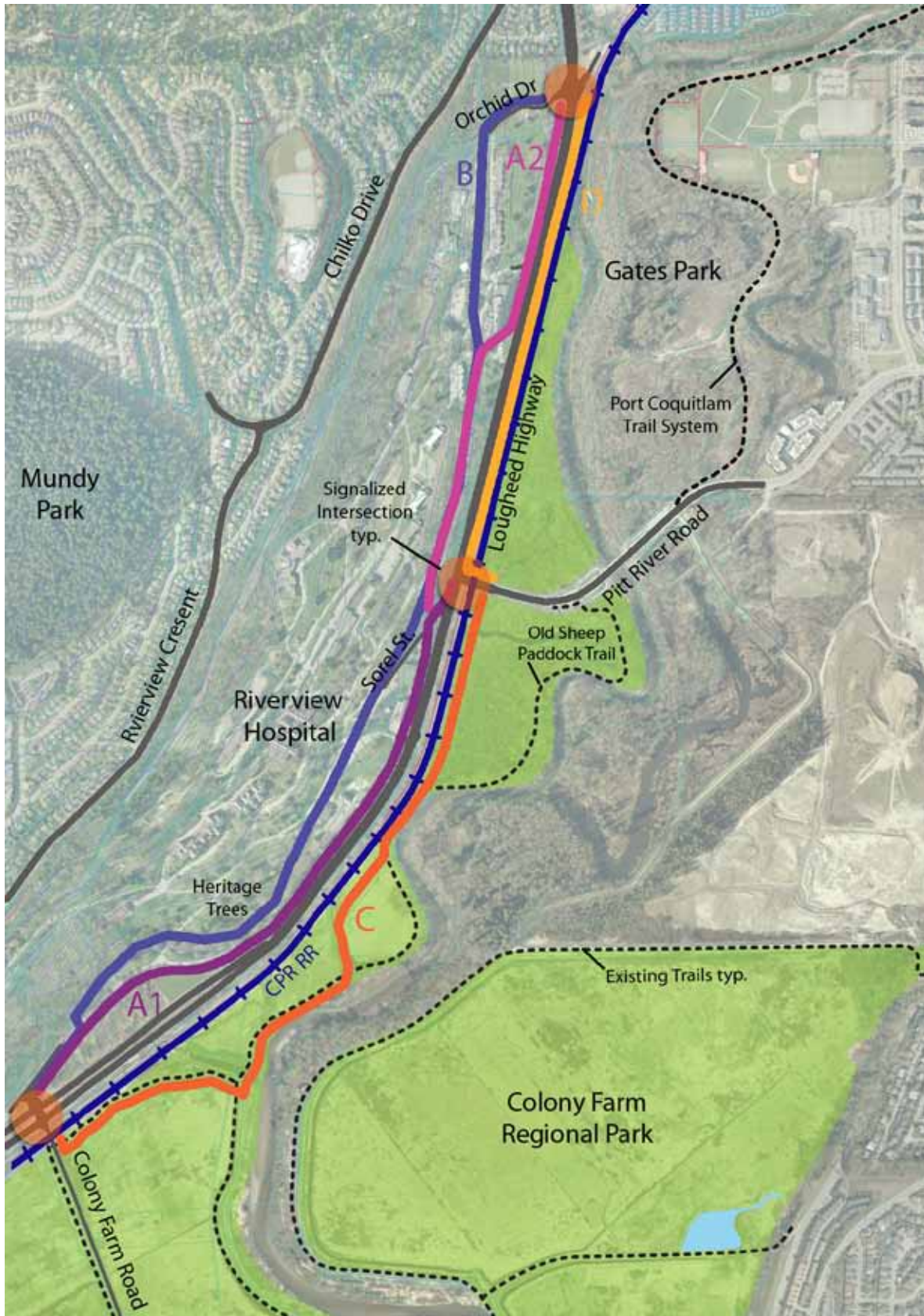
The criteria used to evaluate the alignments included:

- User Demand
- Market Capture
- Environmental Impacts
- Ease of Implementation
- Preliminary Costs

| ALIGNMENT COST TABLE | | | | |
|-----------------------------------|-----------|--------------------|---------|---------------------------------|
| CONNECTION | LAND COST | CONSTRUCTION COST* | TOTAL | |
| A: RIVERVIEW | \$1.9 M | \$2.1 M | \$4.0 M | |
| B: GVSDS, SROW | \$2.8 M | \$1.9 M | \$4.7 M | |
| C: SHEEP PADDOCK TRAIL | \$0 | \$2.7 M | \$2.7 M | Combine for evaluation purposes |
| D: CANADIAN PACIFIC RAILWAY - CPR | \$1.1 M | \$2.1 M | \$3.2 M | |

*Order of Magnitude Costs \pm 40% based on quantities and unit rates.

FIGURE 2 - STUDY AREA CONTEXT MAP – OTHER ALIGNMENTS EVALUATED



A. Preferred Alignment: Riverview



Land Ownership: Province of British Columbia

The preferred alignment runs through the Riverview property adjacent to the west side of Lougheed Highway. Starting at the south end of the project area at the intersection of Lougheed Highway and Colony Farm Road, the pathway is envisioned to travel northeast parallel and adjacent to Colony Farm Road through the Heritage Tree Preserve. As the pathway continues north along the alignment of Colony Farm Road, it traverses existing parking lots and loading areas adjacent to vacant buildings; finally reaching Sorel Street. At Sorel Street a connection is made to the signalized intersection of Pitt River Road and Lougheed Highway, utilizing the old alignment of Sorel, which no longer carries vehicular traffic. This would facilitate connections to the Pathway systems south and east of Lougheed Highway at Pitt Road.

The main alignment of the pathway continues to the north and uphill within an existing cleared alignment through the trees. At the top of this hill, the pathway is directly above the intersection of Pitt River Road and Lougheed Highway with good views out to the regional park. The pathway then parallels a portion of Alignment B, following the Greater Vancouver Sewer and Drainage District Statutory Right of Way (SROW) until it exits the woods at a large expanse of lawn. The pathway is envisioned to follow a desirable alignment to navigate the grade change downhill across the lawn reaching the east edge of Lougheed Highway. The pathway would continue above and parallel with the east side of Lougheed Highway finally reaching the signalized intersection at Orchid Drive making connections to other facilities.

B. GVSDD, SROW



Land Ownership: Province of British Columbia

The alignment over the Vancouver Sewer and Drainage District, Statutory Right of Way (GVSDD, SROW) is a compelling concept; combining the need to maintain clear access above the sewer infrastructure with the need for a multi-use pathway alignment through the area. The corridor itself is offset from Lougheed Highway and bisects the Riverview site from southwest to northeast. Upon inspection, a number of significant challenges emerge. The alignment is currently intersected at odd angles and in awkward locations by many roads and driveways. Each crossing would require special treatments including possible revisions to the street system to address pathway crossing safety. Due to the width of the SROW a sub-standard 3 meter wide asphalt pathway would result. An additional hurdle has to do with the allowed uses of the GVSDD SROW which currently

will allow access for maintenance, but does not permit public rights-of-passage. The alignment would also bring pathway users adjacent to a number of existing buildings which may be undesirable for current facility operations.

During the site visit, the consultant team, City staff, and Metro Vancouver staff were in agreement that the GVSDD SROW alignment was an inferior alternative in terms of the overall experience as well as for the reasons stated above.

C. Sheep Paddock Trail

(Colony Farm Park to Pitt River Road)

Land Ownership: Metro Vancouver

The proposed Sheep Paddock Trail provides a pathway through Colony Farm Regional Park roughly parallel to Lougheed Highway. Sheep Paddock Trail would form the southern half of a pathway alternative east of Lougheed Highway, connecting between Colony Farm Road and Pitt River Road. See Alternate D for northern half of the alignment.

The alignment passes through a number of environmentally sensitive areas and would require environmental mitigation and potential construction of boardwalks or bridges to address seasonally wet conditions. The pathway alignment would contribute considerable scenic value and create a desirable loop through the Riverview property via signalized crossings of Lougheed Highway at Colony Farm Road and at Pitt River Road.

A trail alignment to restore the old Sheep Paddock Trail connection is currently under internal study by Metro Vancouver Parks for feasibility. Notably, the Sheep Paddock Trail alignment has good potential for a willing partner in Metro Vancouver Parks. Metro Vancouver has indicated that the standards for the design and construction of the trail through the regional park will be subject to environmental requirements. The current trail development policy provides no or limited lighting and the typical surface is gravel.



D. Canadian Pacific Railway - CPR

(Pitt River Road to Orchid Drive)

Land Ownership: Canadian Pacific Railway

A pathway alignment parallel to the CPR between Pitt River Road and Orchid Drive was investigated to complete the northern half of a pathway alternative east of Lougheed Highway. See Alternate C for southern half of the alignment.

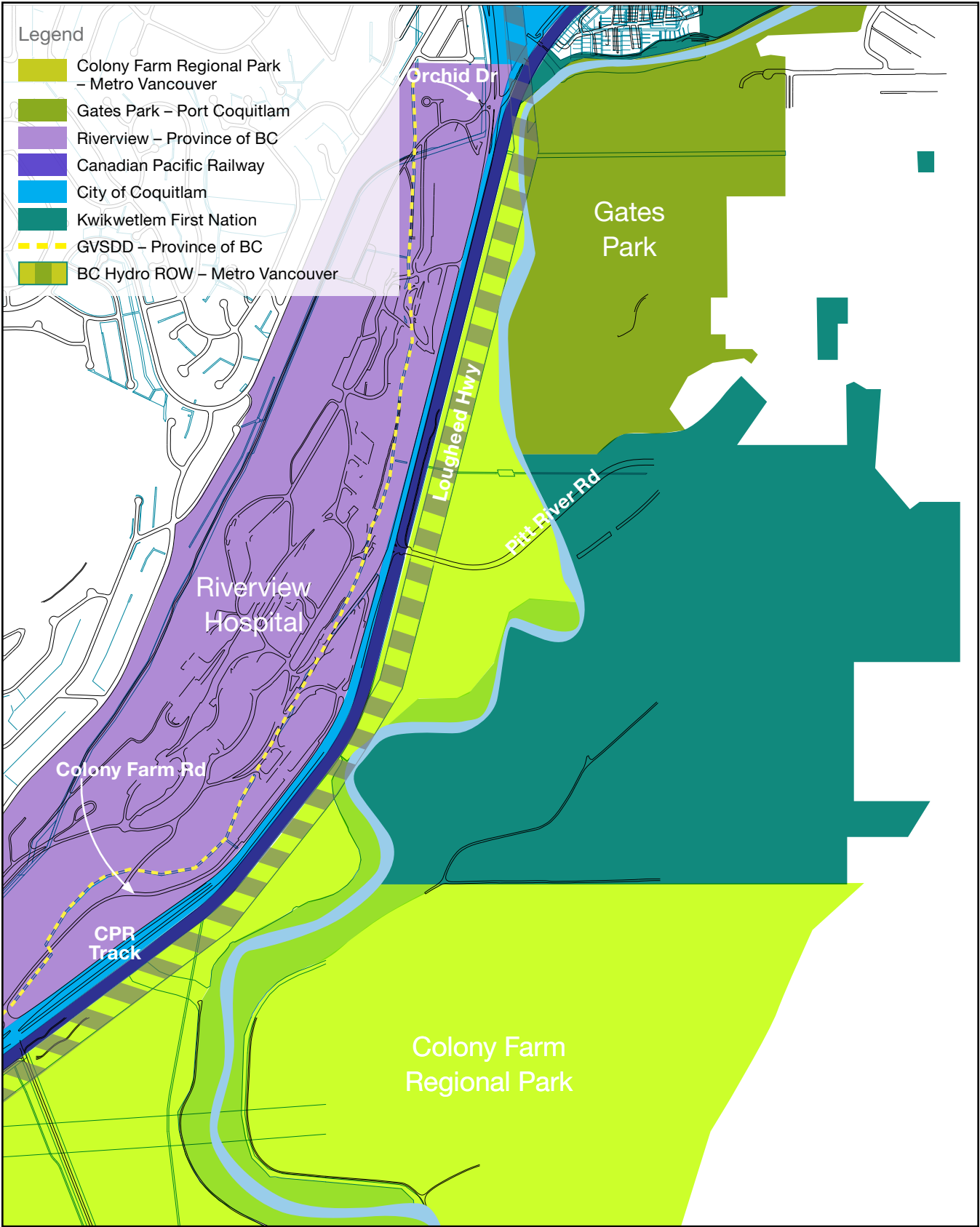
This alignment, situated between Lougheed Highway and the CPR tracks, would provide a relatively flat running alignment despite considerable cross-slope. Because the alignment would be below Lougheed Highway, the trail would be protected from the noise of the road way and could be a pleasant location for a trail. Safe roadway crossings across Lougheed are facilitated at Pitt River Road and Orchid Drive. The trail could also accommodate future connections north with proposed routes to Coquitlam and Port Coquitlam. The alignment has the potential to impact drainage areas adjacent to Lougheed Highway and would require extensive use of retaining walls to accommodate construction of the trail on the embankment between Lougheed Highway and the CPR.

While the alignment appears a reasonable option, there may be significant hurdles imposed by CPR. Based on a preliminary conversation, CPR is not supportive of the idea of locating a pathway within the CPR ROW; however, they do have an application process for such requests, which evaluates the request against a myriad of safety and potential operational impacts.

An alignment west of the CPR tracks was initially considered, but was subsequently discarded from consideration based the two following factors. The Department of Fisheries and Oceans biologist and the consultant team's biologist both noted that significant study of the area would be required based on potential habitat impacts and seasonal flooding implications. Secondly, Metro Vancouver suggested that the area could contain contaminated sites related to historic Riverview waste dumps. Recent policy changes within CPR no longer accept recreational uses within the rail right-of-way.




























FIGURE 1 - PROPERTY OWNERSHIP MAP



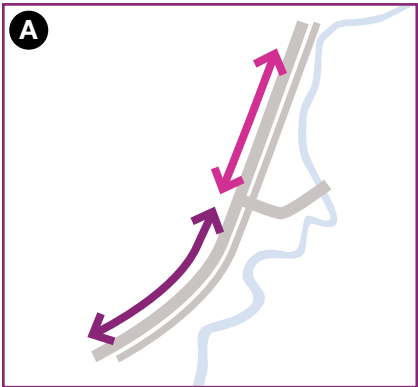
Evaluation Criteria

The following criteria were used to evaluate potential alignments for the Lougheed-Riverview Multi-Use Pathway, and to identify a preferred alignment. The five criteria were based on the those previously used to evaluate alignments for the Coquitlam Fraser Greenway.

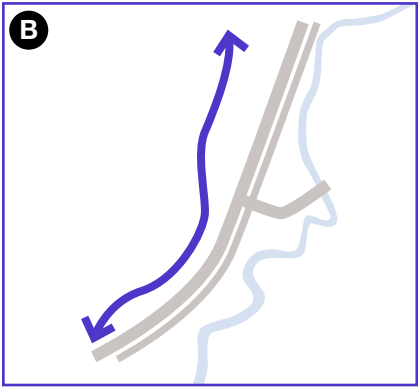
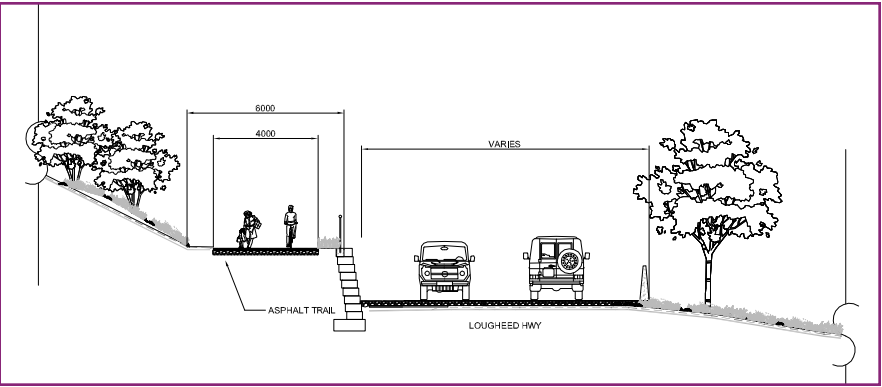
FIGURE 3 - MULTIPLE ACCOUNT EVALUATION

|  Positive  Neutral  Negative | OPT A RIVERVIEW | OPT B GVSD | OPT C SHEEP PAD | OPT D CPR ONLY |
|---|--|---|---|---|
| User Demand |  |  |  |  |
| Connections to other bicycles / pedestrian routes |  |  |  |  |
| Connections to community destinations |  |  |  |  |
| Directness of route |  |  |  |  |
| Delays or obstacles |  |  |  |  |
| Quality and appearance of route and environment |  |  |  |  |
| Market Capture | | | | |
| Perceived as safe from collision/injury |  |  |  |  |
| Perceived as safe from conflicts with motor vehicles |  |  |  |  |
| Perceived as safe from conflicts with other pathway users |  |  |  |  |
| Perceived level of personal safety and CPTED features |  |  |  |  |
| Accessibility for persons with disabilities/Topography |  |  |  |  |
| Environment | | | | |
| Impacts to existing habitats and trees |  |  |  |  |
| Potential to improve environmental conditions |  |  |  |  |
| Implementation | | | | |
| Jurisdictional and regulational issues |  |  |  |  |
| Engineering constructability |  |  |  |  |
| Property implications |  |  |  |  |
| Contingency on future development |  |  |  |  |
| Ease of maintenance |  |  |  |  |
| Cost-Effectiveness | | | | |
| Land costs and negotiation cost |  |  |  |  |
| Trail construction costs |  |  |  |  |
| Operational and maintenance costs |  |  |  |  |
| Cost-sharing opportunities and grant eligibility |  |  |  |  |
| | 14 | 10.5 | 8.5 | 4.25 |

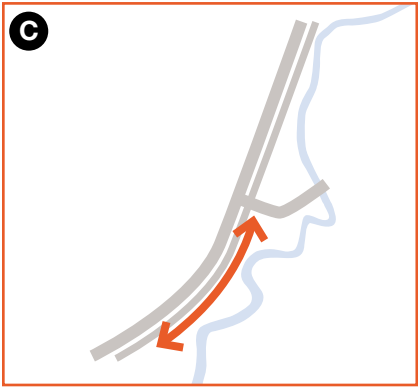
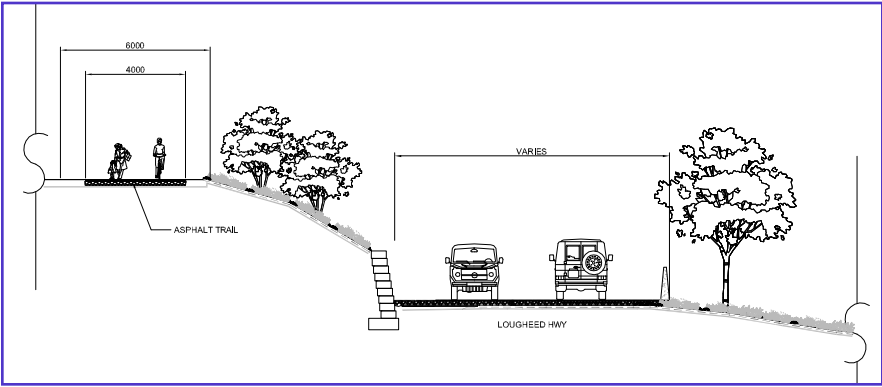
CROSS-SECTIONS CONCEPTUAL IN NATURE



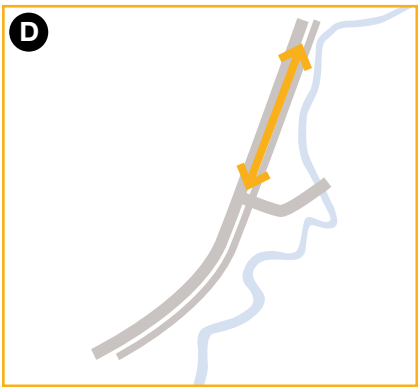
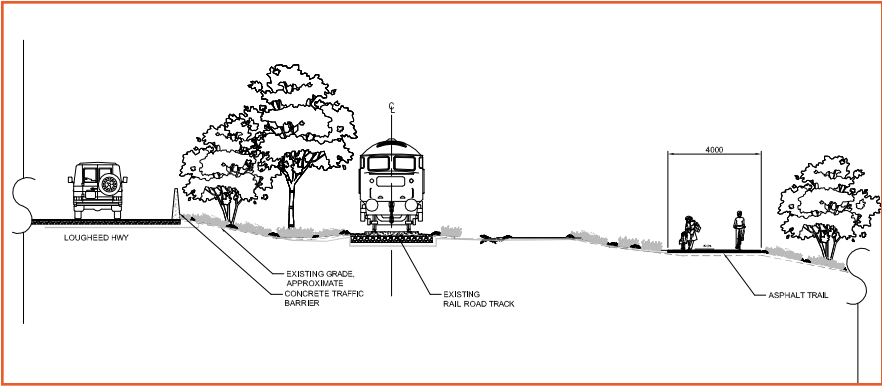
A. Riverview



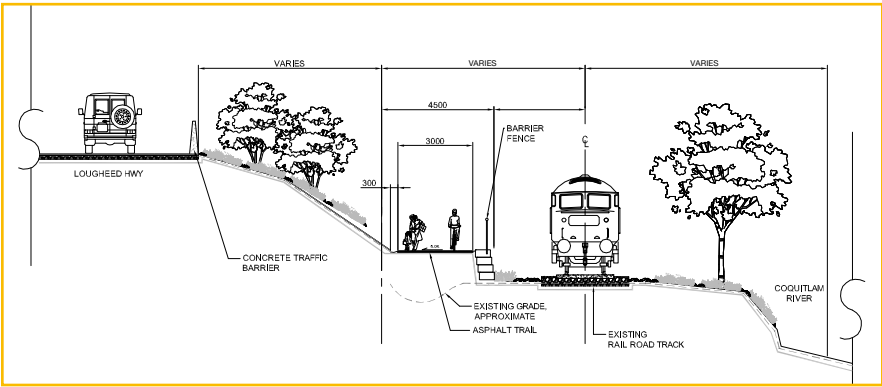
B. GVSDD, SROW



C. Sheep Paddock Trail



D. Canadian Pacific Railway (CPR)



Note: Recent changes with CPR no longer accepts recreational uses with rail right-of-way

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