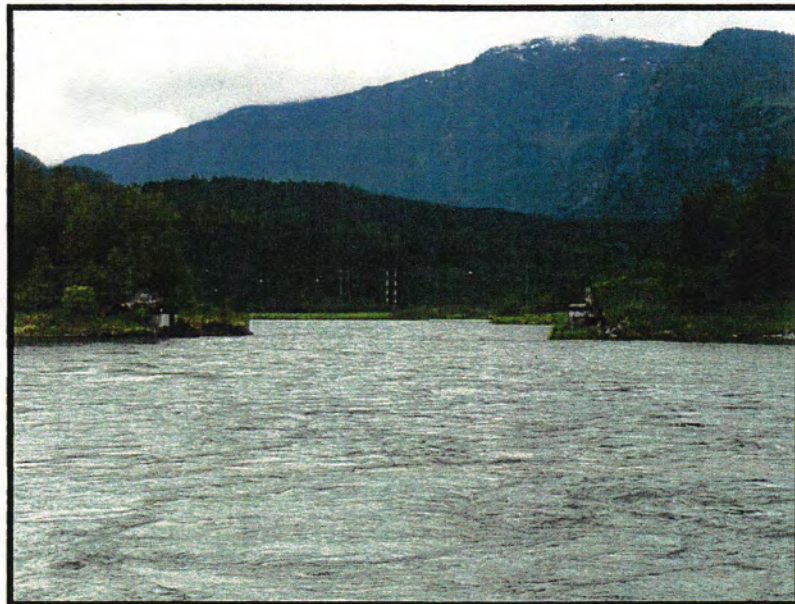


# Illecillewaet River – Greenway Bridge Crossing North End Trail Plan



✓ Wildland Consulting Inc.  
P.O. Box 2569  
Revelstoke, BC, V0E 2S0  
Ph: (250) 837-5734  
Fax: (250) 837-5764  
Email: [wildland@telus.net](mailto:wildland@telus.net)

July 21, 2008

# **Illecillewaet River – Greenway Bridge Crossing North End Trail Plan**

---

## **INTRODUCTION:**

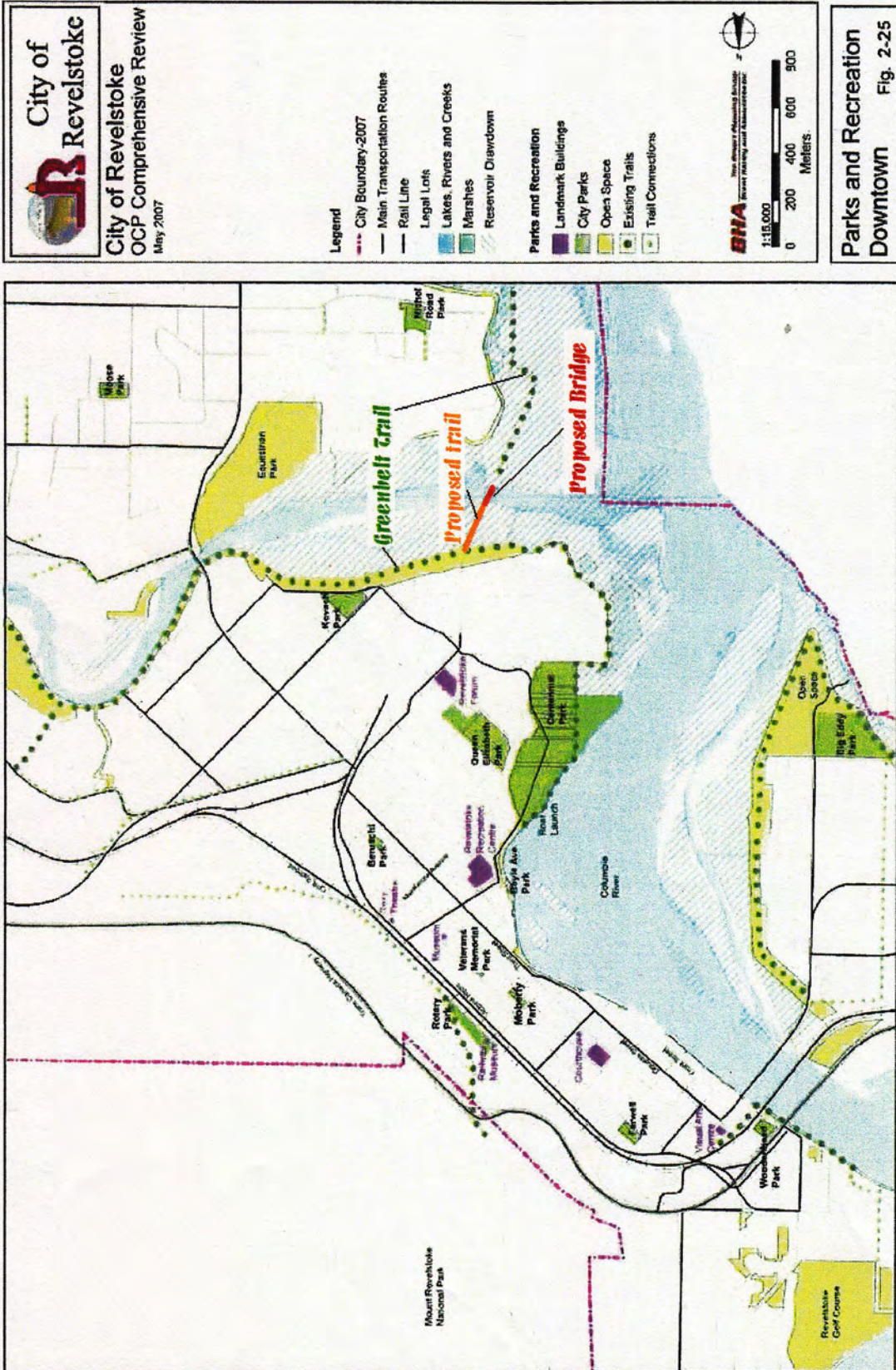
The City of Revelstoke is in the process of developing a fixed bridge crossing of the Illecillewaet River near the confluence of the Columbia and Illecillewaet Rivers. This area falls within the city boundaries. The bridge would be used solely for non-motorized activities such as walking, cycling, cross country skiing and snow shoeing. The bridge would be installed along the old CPR railway right of way and railway grade and utilize the old bridge abutments which are still in place and functioning. The railway bridge was de-commissioned and removed in the mid 1960s. A short connecting trail would be constructed to link the new bridge with a series of official and unofficial trails on the north and south side of the river including the paved Illecillewaet Green Belt Trail.

The idea and need for a fixed link to connect the official and unofficial trail systems on either side of the Illecillewaet River has been identified in a number of planning documents including the City of Revelstoke Official Community Plan. The installation of a bridge to connect these trail systems will greatly enhance the trail based recreational activities available within the city. The trail systems on either side of the river are well used by residents and visitors alike throughout all seasons of the year. Recreational use of the area is highest during the snow free periods of the year.

Thanks to the generous donation from the Mark Kingsbury Foundation, the fixed bridge crossing concept will soon be a reality.

## **LOCATION:**

As previously stated, the bridge is to be located on the existing bridge abutments of the old CPR railway grade and right of way. The north side of the Illecillewaet River has a paved trail that runs along the dike from the bridge at Fourth Street/Airport Way, past Downie Sawmill to the ball fields beneath the Community Centre. There are a number of unofficial gravel trails that run parallel to the river and link up with the paved trail. On the south side of the river, again there are a number of unofficial trails that traverse the area and link up with other unofficial trails that lead into the Arrow Heights subdivision as well as the equestrian grounds and wetlands around the airport. The proposed new connecting trail will link trail access on the north side of the river, via the new bridge, with the trails on the south side of the river. Refer to Figure One for the location of the proposed new bridge and connecting trail.



## CONNECTING TRAIL:

The proposed new connecting trail will link the north end of the new bridge to the myriad of existing official and unofficial trails on the north shore of the Illecillewaet River, including the Illecillewaet Greenbelt Trail. The total length of this new connecting trail is approximately 270 meters in length. The trail will use the old rail bed as the basis for the trail bed. The width of the trail will be commensurate with the width of the bridge abutment (6 meters). The height of the trail above the river at the river bank is three meters. This gradually tapers off over the length of the trail to ground level at the connection with an existing trail adjacent to the Greenbelt.

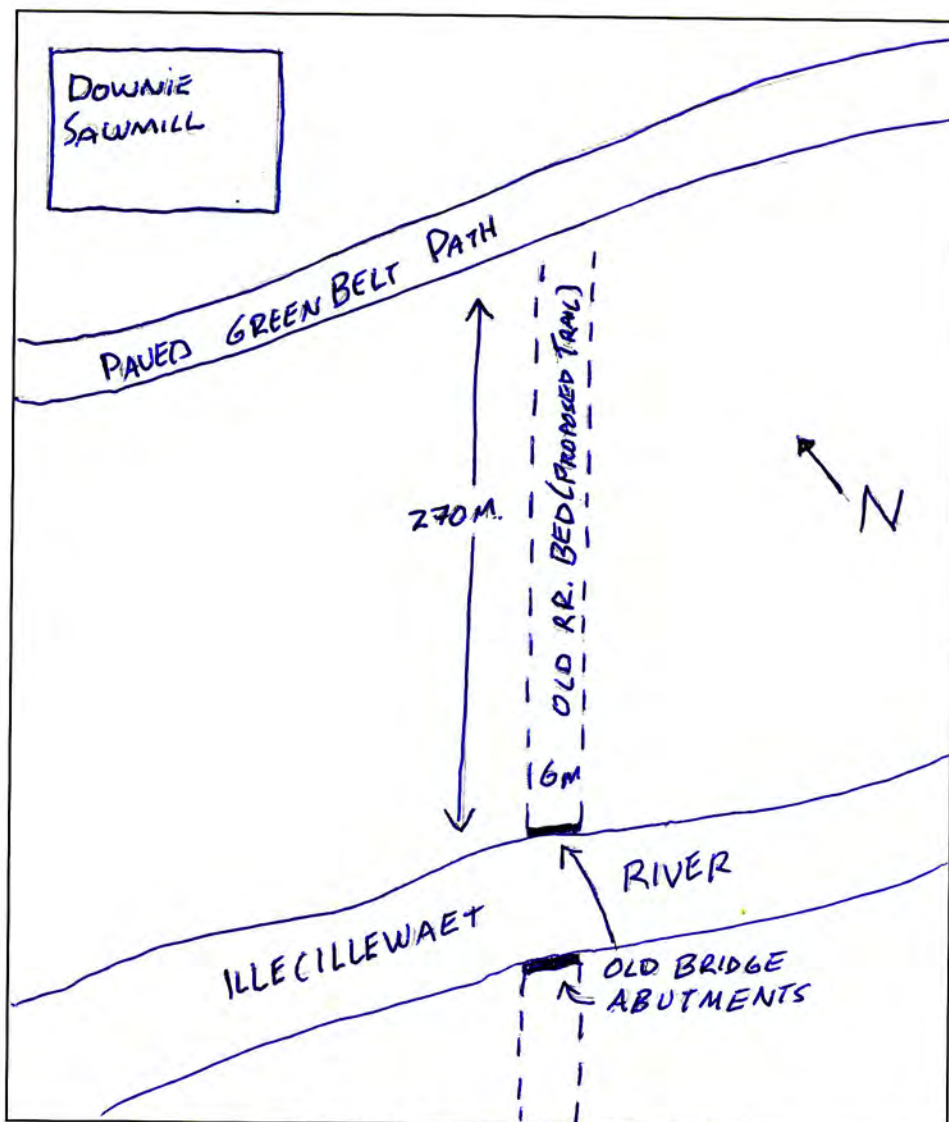


Figure Two - Trail Site Layout

Since the abandonment of the railway and removal of the bridge, the rail bed has become over grown with vegetation, namely grass, numerous small trees (primarily poplar) with approximately 90 stems with diameters less than 20 centimetres, and few large trees (primarily cedar and poplar) with approximately 20 trees with diameters greater than 20 centimetres, brush (thimble berry, dogwood, wild apple) and a variety of ground cover including grasses and sedges. Approximately 25 % of the proposed new trail bed is over grown with woody vegetation. The remaining 75% is primarily grass cover. The photos in Appendix One give an indication of the extent to which the trail bed has been encroached by vegetation.

#### **WILDLIFE HABITAT:**

The proposed trail appears to be transitory habitat for a variety of bird species. No bird nests were observed in the tree cover along the proposed trail route. Two bird boxes have been installed at locations adjacent to but off of the proposed trail location. The trail bed location is also transitory habitat for various small mammals including ground squirrels. During the berry season in late summer and early fall, the area may also be visited by black bears.

#### **TRAIL CONSTRUCTION:**

The construction of the proposed connector trail will be quite simple and straight forward due to the fact that the route will follow the old railway bed. With the exception of minor spots where some small dips and depressions occur, the rail bed is still very much intact and in good condition.

Construction of the trail will require the following steps:

##### *Step One – Removal of Woody Vegetation*

The old railway bed will be cleared of all woody vegetation to a width of 8 meters (2 meters greater than the trail bed width – provides for adequate site lines for bears, and required for movement of crane on site to install bridge). All vegetation will be flush cut to the ground. It is recommended that all woody material be chipped on site and either trucked off site (recommended) or blown off into the ditches. Only stems larger than 35 centimetres will be limbed and either trucked off site (recommended) or left on site at the edge of the trail bed.

- Use of 2 man crew to cut and clear vegetation with chainsaws and chip woody material on site.
  - Time = 10 hours
  - Cost = \$1100

### *Step Two – Grading of Trail Bed*

Once the vegetation has been removed, the top soil and root balls will have to be cleared along the length of the trail. The underlying old rail bed ballast appears to still be in good condition for the most part and provides an excellent base for a trail. The preferred machine to accomplish this clearing process is a rubber tired backhoe or loader. A grader or spreader cat will not be required. The scrapped off material and root balls will need to be loaded into a dump truck and moved off site. Once the underlying material has been exposed, high points can be graded to fill low points. Given that this will only be used for a trail bed with non-motorized use, the disturbed trail bed surfaces will not need to be compacted.

- Use of Loader or Backhoe
  - Time = 6 hours
  - Cost = \$600
  
- Use of Dump Truck to removed material
  - Time = 6 hours
  - Cost = \$540

### *Step Three –Top Dressing of Trail Bed with Crush*

Once the trail bed has been properly graded, a top dressing of crush (3/4 minus) will be applied to the entire length of the trail (270 meters at a width of 4 meters). The depth of the spread will be 10 centimetres. A rubber tired backhoe or skid steer bobcat should be used to spreads the material.

- Use of Backhoe or Skid Steer
  - Time = 6 hours
  - Cost = \$600
  
- Crush Material & Delivery
  - Cost = \$3500

In addition, an on-site project manager will be required to oversee and direct the activities of all workers and machinery on site. The entire project should not take more then 4 days from start to completion.

- Project Manager
  - Time = 20 to 30 hours
  - Cost @\$65/hr = \$1300 to \$1950

The estimated total cost for the construction of the trail is \$7640 to \$8290. If the City of Revelstoke were to use their own equipment and material (crush from City pit), this cost could be reduced to approximately \$4000 depending upon the number of days the project takes to complete.

Appendix One – Photos



View west of N & S side of bridge abutments of old RR Bridge over the Illecillewaet River.



View north to north bridge abutment from the south abutment.



View from north bridge abutment to the south bridge abutment.



Junction of old railway bed (on the right side of the sign) with the greenbelt trails near Downie Saw Mill.



First portion of old railway grade. Old railway bed is mainly covered by grass with the occasional larger tree.



Middle portion of old RR grade. Mainly covered by grass and shrubs.



Last section of old RR grade leading to old bridge abutment in distance.