

WELCOME to the Quarry Road Trail Open House



PROJECT DESCRIPTION

Quarry Road Trail, located in the community of Spruce Cliff, is a popular commuter trail into the downtown core, and an area for Calgarians to walk and enjoy nature.

Connecting to Edworthy Park and the Douglas Fir Trails, there is historical significance to Quarry Road Trail; it was previously used as a haul road during the “sandstone era” of the late 1800s and early 1900s, when Calgary’s urban development was defined by sandstone buildings. Among other uses, the trail was used to transport sandstone to the Canadian Pacific Railway tracks.

It is the last major regional trail/pathway connection in Calgary with a soft gravel-like surface; The City is planning improvements to Quarry Road Trail to ensure safe, continued use of this area for citizens and a preservation of the historic aspects of the trail.

WHY WE ARE HERE

The intent of this open house is to listen to stakeholders and learn ideas and input related to the future improvements of Quarry Road Trail. The City will report what feedback was submitted and used in the project.

The City will be basing its improvement strategy for Quarry Road Trail on a number of criteria, including but not limited to: budget, safety, environmental concerns, geotechnical /engineering standards and best practices, usage data, public feedback and historical conservation.

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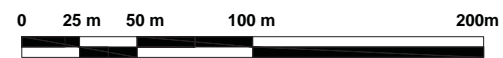


QUARRY ROAD TRAIL AERIAL PHOTO



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QUARRY ROAD TRAIL AERIAL PHOTO



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QUARRY ROAD TRAIL: HISTORICAL TIMELINE

PRE SETTLEMENT

- Pre European settlement, the site lands were inhabited by Paleo-First Nations and then by the Plains First Nations.
- Remnants of First Nations settlements may exist in the sites adjacent to the Quarry Road Trail.
- As the Plains First Nations people were nomadic, they followed herds of bison as they migrated across the Great Plains, their settlements were seasonal and required sufficient land to feed and shelter them.

SANDSTONE ERA

- The Sandstone Era occurred in Calgary between 1887 and 1917.
- This significance of this era can be seen as one walks through the City of Calgary, observing the number of historic buildings constructed from sandstone found within quarries adjacent to the Quarry Road Trail.
- These historic sites should be preserved and commemorated as their abundance and quality of stone created this era was historically significant in shaping the City.

POST SANDSTONE ERA TO CURRENT DAY

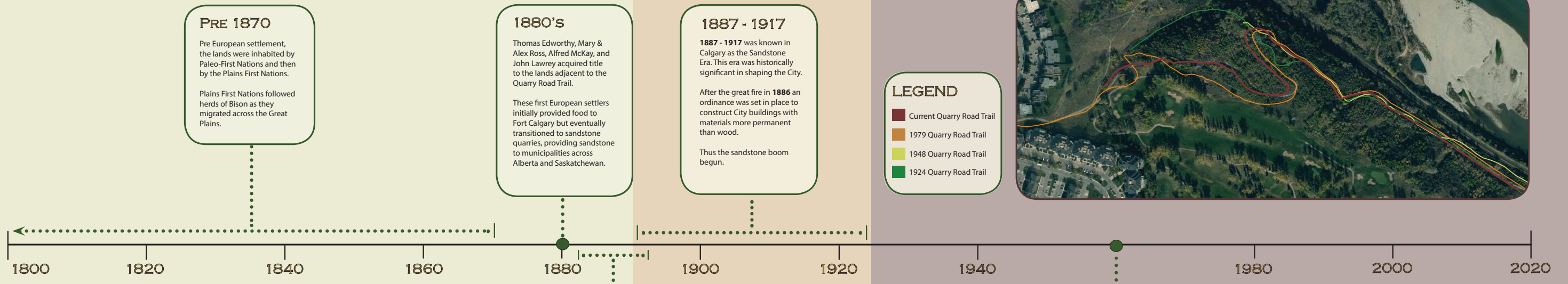
- The Quarry Road Trail currently exists as a historically significant landmark for the City of Calgary as well as transportation corridor and network for pedestrians and cyclists.
- Key character defining elements of the trail include the layout and configuration, native vegetation, views along the trail to the abandoned quarry site, and the location of the trail relative to key landmarks in the area.
- The trail spans approximately 1.6 kilometres along the northern slopes of the Bow River with many vantage points overlooking the river and the historic sandstone quarries.

HISTORIC LOCATION OF THE QUARRY TRAIL



LEGEND

- Current Quarry Road Trail
- 1979 Quarry Road Trail
- 1948 Quarry Road Trail
- 1924 Quarry Road Trail



PRE 1870
Pre European settlement, the lands were inhabited by Paleo-First Nations and then by the Plains First Nations.
Plains First Nations followed herds of Bison as they migrated across the Great Plains.

1880's
Thomas Edworthy, Mary & Alex Ross, Alfred McKay, and John Lawrey acquired title to the lands adjacent to the Quarry Road Trail.
These first European settlers initially provided food to Fort Calgary but eventually transitioned to sandstone quarries, providing sandstone to municipalities across Alberta and Saskatchewan.

1887 - 1917
1887 - 1917 was known in Calgary as the Sandstone Era. This era was historically significant in shaping the City.
After the great fire in **1886** an ordinance was set in place to construct City buildings with materials more permanent than wood.
Thus the sandstone boom begun.

1883 - 1888
In **1883** was the year Thomas Edworthy arrived in Calgary.
1883 was also the year the main CPR rail line reached the quarry site. The rail became the primary method for transporting sandstone and assisted the sandstone boom to occur during the sandstone era.
In **1888** Jown Lawrey purchased 4 quarry lots northwest of the site.

1960
The Lawrey family sold the remaining quarry lots to the City of Calgary in **1960**.
To honour the families that first settled and quarried these lands, the City is intending to maintain and revitalize the Quarry Road Trail and its adjacent historic sites.



Image 1: Plains First Nations Tipi



Image 2: Plains First Nations Peoples



Image 3: Shaganappi Point Cliff



Image 4: First European Settlers



Image 5: George Edworthy (Sr.) at the Coulee Road quarry that links into the Quarry Trail, circa 1929



Image 6: Stonecutters from an adjacent quarry



Image 7: Sandstone blocks still lie along on the south bank of the trail - historic remnants from its construction



Image 8: Quarry Trail exists today as an unpaved path

Historical information has been sourced from the following references:
Bryan, Liz. *Buffalo People*, 2005.
Calgary Historic Evaluation Form, 2010.
Edworthy Park Heritage Society, *Early Days in Edworthy Park*, 1991.

QUARRY ROAD TRAIL: ENVIRONMENTAL VALUES

OVERVIEW

- Quarry Road Trail is a popular commuter trail into the downtown core, and an area for Calgarians to walk and enjoy nature.
- The trail's native vegetation provides important habitat and movement corridors for a large variety of plant and animal species.
- Unique geological and physical features of the trail include:
 - Sandstone outcroppings,
 - Historical quarrying activity,
 - and Natural springs.



NATURAL SPRING



SANDSTONE OUTCROPPING



BOW RIVER CORRIDOR

CONSIDERATIONS

Vegetation and Wildlife: Up-to-date surveys are underway to determine if rare plant or wildlife species are present; will they be impacted by potential improvements, and what methods and approaches are needed to avoid or minimize impacts to the surrounding environment.

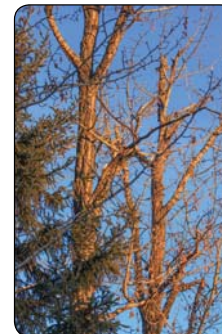
Habitat loss & Pedestrian Safety: Large, mature trees provide wildlife habitat and seed sources for forest regeneration; however they may pose a risk to pedestrians along the trail edge. Retaining mature trees while ensuring pedestrian safety and movement are key goals.

Invasive species: Many species of invasive plants grow on the pathway edges. Any construction will be designed to mitigate spread of weeds and other invasive plants.

Informal trails: Negative impacts include soil erosion, trampling of native plants and/or wildlife habitat fragmentation. The environmental value of these areas will be improved by discouraging access and rehabilitating with native vegetation.



MOSS LOG



MATURE TREES



INFORMAL TRAIL



RUBY-CROWNED KINGLET



COMMON BUCKTHORN



PEKING COTONEASTER

VEGETATION

Major vegetation along the trail is comprised primarily of:

- Aspen forest,
- Balsam Poplar,
- and Grassland.

Native plants provide seed sources for plant regeneration within the river corridor. Some native prairie grasses and wildflowers such as June Grass, Buffalo Bean and Kinnikinnick are found adjacent to Quarry Road Trail; other plants observed within the project site include Northern Blue-Eyed Grass, Western Blue Flag (or Bearded Iris), Dwarf False Asphodel, Tall Meadow Rue and Eyebright.

WILDLIFE

Many wildlife species are found in the area, including:

- Mule and White-tailed deer,
- Coyote,
- Snowshoe Hare,
- Red and Grey Squirrels,
- and Cougars and Black Bears (rare).

Mature trees provide excellent perching, foraging, and breeding habitat for birds, arboreal mammals (including 65 bird species) and invertebrates. The forested habitat also provides vital stopover habitat for migratory birds. Some other species observed in the area include: Baltimore Oriole, Least Flycatcher and Osprey.

Information sources: site visits by Cynthia Lane and Julia Burger; Treasures of the Trail, edited by Jerry Olson; ACIMS, FWMS, Alberta Environmental Protection 1994, Stantec report and Paskapoo BIA



BOW RIVER CORRIDOR & QUARRY TRAIL



KINNIKINICK



ASPEN EDGED TRAIL



NORTHERN BLUE-EYED GRASS



MATURE TREES



WHITE-TAILED DEER FAWN



SONGBIRD NEST



ASPEN GROVES



OSPREY ON SNAG

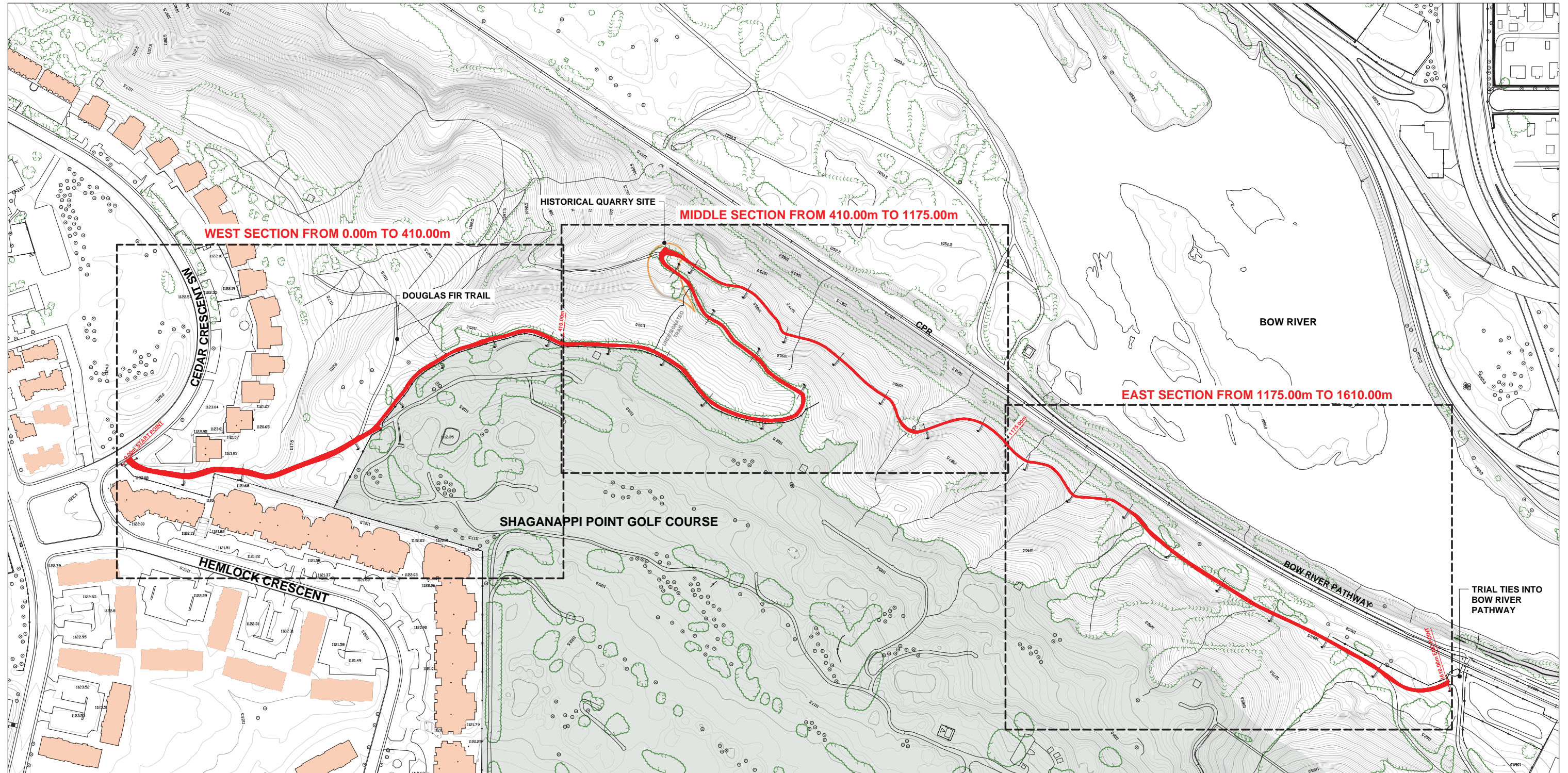


YELLOW-RUMPED WARBLER

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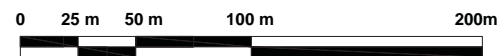


QUARRY ROAD TRAIL OVERALL PLAN



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QUARRY ROAD TRAIL OVERALL PLAN



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QUARRY ROAD TRAIL: EXISTING CONDITIONS

PHOTOS FROM WEST SECTION
OF TRAIL
0.00m to 410.00m



EXISTING GATE & GARBAGE BIN AT TRAIL ENTRANCE



EXISTING TRAIL AT WEST END



EXISTING WOODEN RAILING & SIGNAGE



EXISTING DOUGLAS FIR TRAIL INTERSECTION



ASPEN GROVES



TRAIL ADJACENT TO SHAGANAPPI POINT GOLF COURSE

PHOTOS FROM MIDDLE SECTION
OF TRAIL
410.00m to 1175.00m



HISTORICAL QUARRY SITE



EXISTING FURNITURE



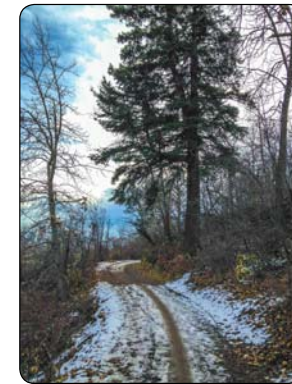
EXISTING CULVERT & WOODEN RETAINING WALL



EXISTING DOUGLAS FIR TRAIL



UNDESIGNATED TRAIL



EXISTING LARGE CONIFEROUS TREE CLOSE TO TRAIL

PHOTOS FROM EAST SECTION
OF TRAIL
1175.00m to 1600.00m



TEMPORARY SQUAT SETTLEMENTS



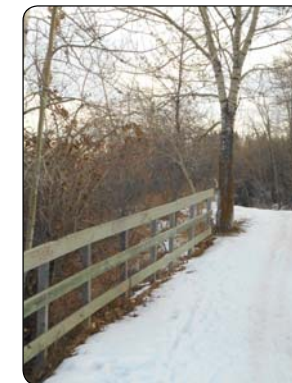
CPR & BOW RIVER PATHWAY AT EAST END OF TRAIL



VIEW OF CALGARY FROM TRAIL



EXISTING BIKE SIGNAGE



EXISTING WOODEN RAILING AND RETAINING WALL



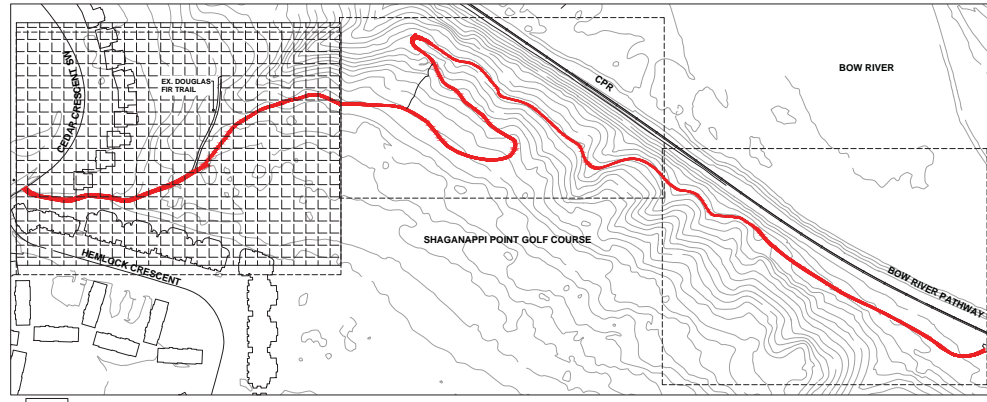
SHAGANAPPI GOLF COURSE VIEW FROM TRAIL

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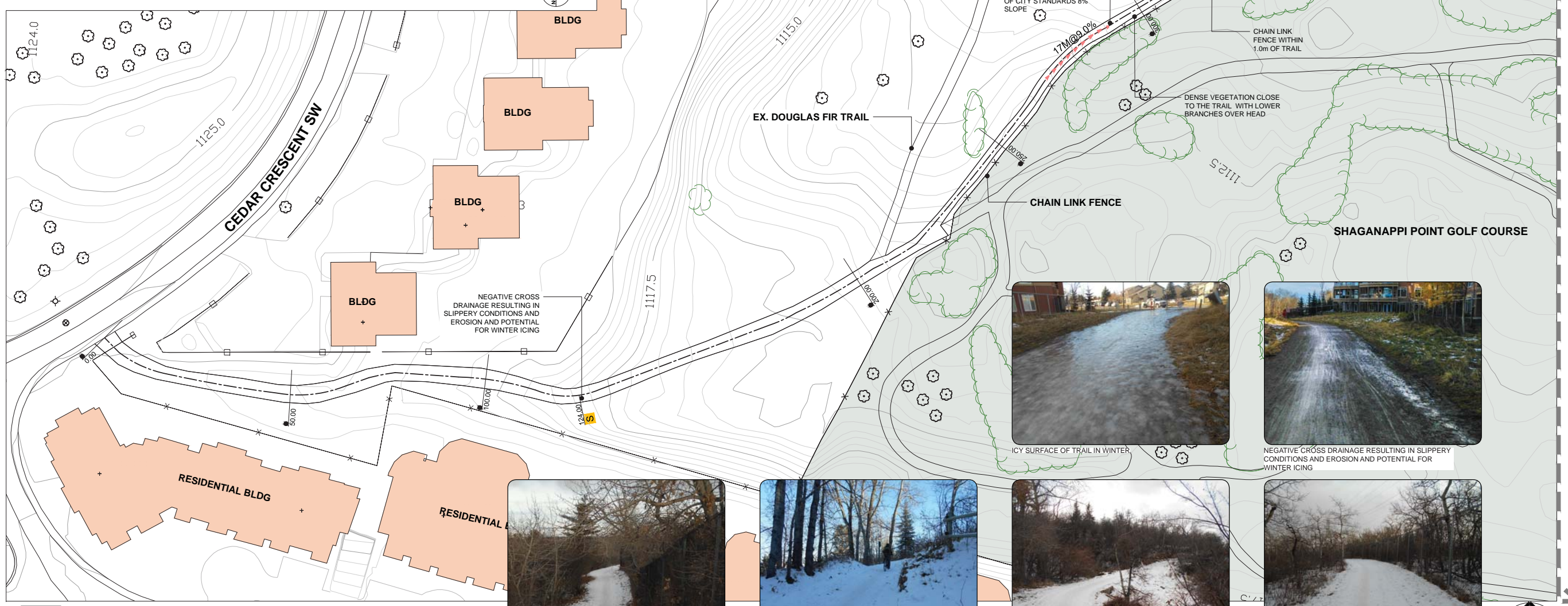
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SAFETY ANALYSIS PLAN WEST SECTION 0.00m - 410.00m



1 KEY PLAN



2 SAFETY ANALYSIS PLAN WEST SECTION 0.00m - 410.00m



LEGEND

- S BIKE SPEED SIGN
- STEEP SHOULDER WITH NO TREE COVER
- STEEP SHOULDER
- >>> STEEP SLOPE ON TRAIL (>8%)
- x CHAIN LINK FENCE
- TRIAL FEATURES
- STATION POINT
- 400
- ~ VEGETATION
- SIGNIFICANT TREES CLOSE TO TRAIL
- DECIDUOUS
- CONIFEROUS



DENSE VEGETATION CLOSE TO THE TRAIL WITH LOWER BRANCHES OVER HEAD



TRAIL GRADE IN EXCESS OF CITY STANDARDS 8% SLOPE



SHARP TURN WITH STEEP SLOPE BEFORE AND STEEP SHOULDER WITH NO GUARDRAIL



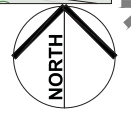
CHAIN LINK FENCE WITHIN 1.0m OF TRAIL



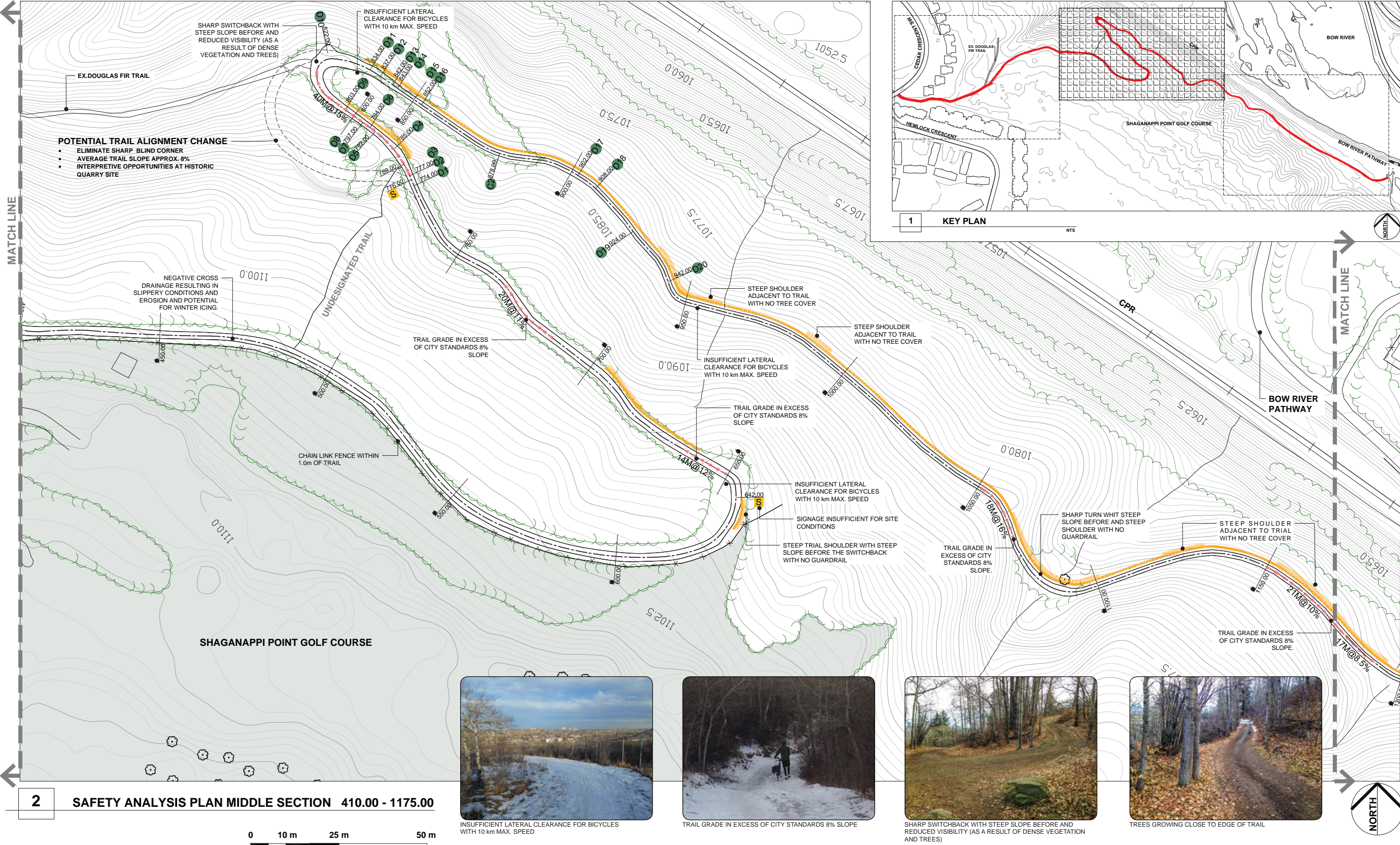
ICY SURFACE OF TRAIL IN WINTER



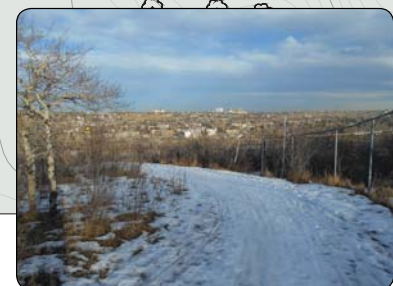
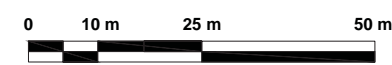
NEGATIVE CROSS DRAINAGE RESULTING IN SLIPPERY CONDITIONS AND EROSION AND POTENTIAL FOR WINTER ICING



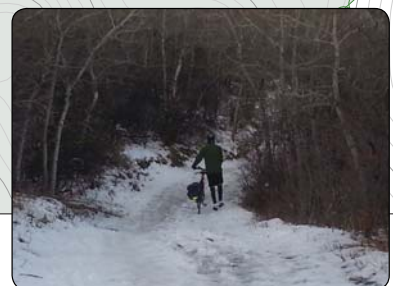
SAFETY ANALYSIS PLAN MIDDLE SECTION 410.00m - 1175.00m



2 SAFETY ANALYSIS PLAN MIDDLE SECTION 410.00 - 1175.00



INSUFFICIENT LATERAL CLEARANCE FOR BICYCLES WITH 10 km MAX. SPEED



TRAIL GRADE IN EXCESS OF CITY STANDARDS 8% SLOPE

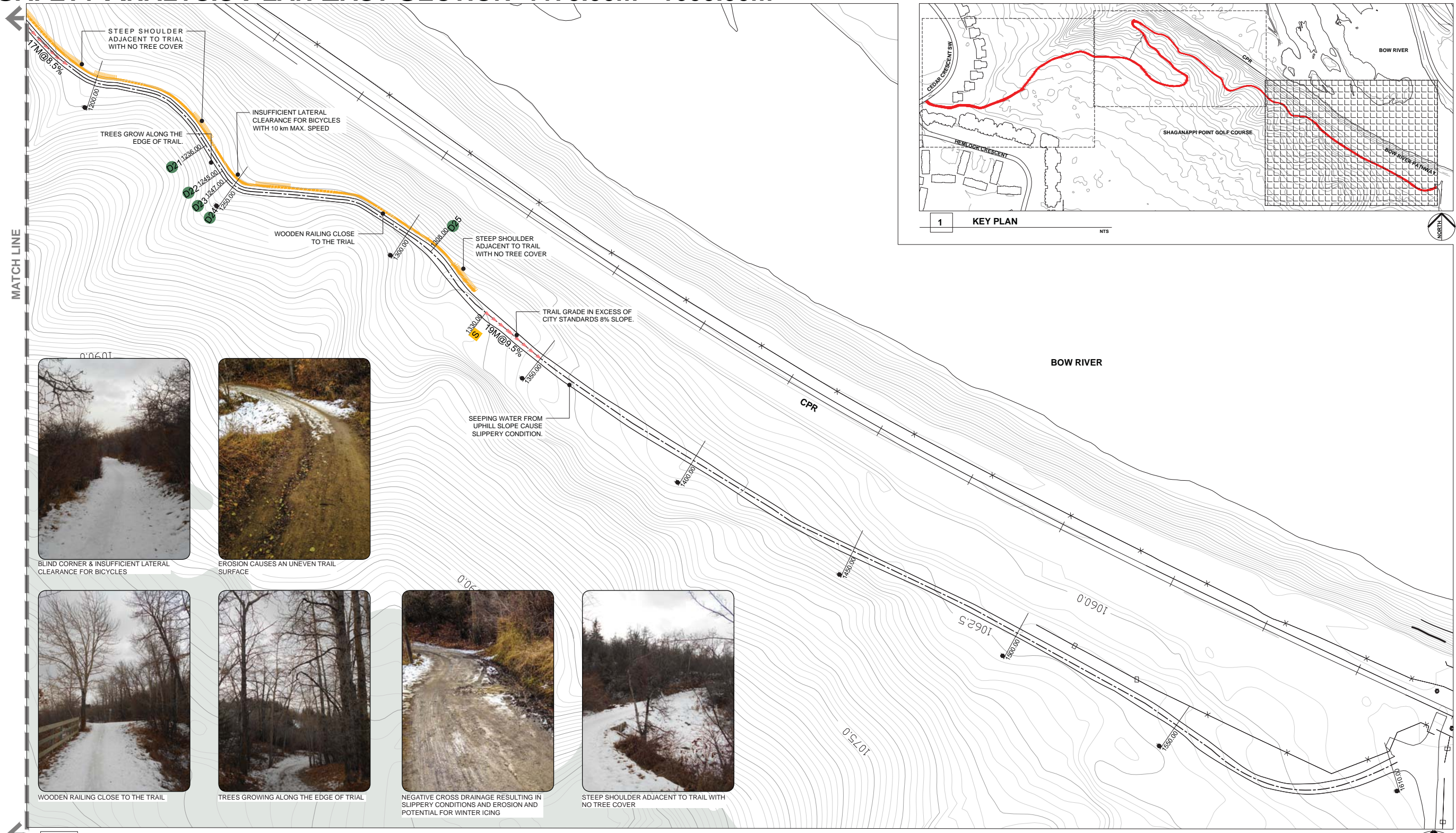


SHARP SWITCHBACK WITH STEEP SLOPE BEFORE AND REDUCED VISIBILITY (AS A RESULT OF DENSE VEGETATION AND TREES)



TREES GROWING CLOSE TO EDGE OF TRAIL

SAFETY ANALYSIS PLAN EAST SECTION 1175.00m - 1600.00m



BLIND CORNER & INSUFFICIENT LATERAL CLEARANCE FOR BICYCLES



EROSION CAUSES AN UNEVEN TRAIL SURFACE



WOODEN RAILING CLOSE TO THE TRAIL



TREES GROWING ALONG THE EDGE OF TRAIL



NEGATIVE CROSS DRAINAGE RESULTING IN SLIPPERY CONDITIONS AND EROSION AND POTENTIAL FOR WINTER ICING

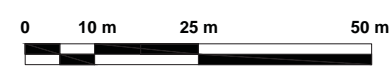


STEEP SHOULDER ADJACENT TO TRAIL WITH NO TREE COVER

LEGEND

- BIKE SPEED SIGN
- STEEP SHOULDER WITH NO TREE COVER
- STEEP SHOULDER
- STEEP SLOPE ON TRAIL (>8%)
- CHAIN LINK FENCE
- TRIAL FEATURES
- STATION POINT
- VEGETATION
- SIGNIFICANT TREES CLOSE TO TRAIL DECIDUOUS
- SIGNIFICANT TREES CLOSE TO TRAIL CONIFEROUS

2 SAFETY ANALYSIS PLAN EAST SECTION 1175.00 - 1600.00



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POTENTIAL MATERIAL OPTIONS FOR TRAIL IMPROVEMENTS

Here are some possible materials and improvements that The City of Calgary may consider for Quarry Road Trail. Please note that no decisions have been made and these are only examples.

PAVING OPTIONS

GEOCELL WITH GRAVEL INFILL

Improves performance of gravel trail mix for erosion control



RETAINING WALLS

SOIL-FILLED BAGS

Environmentally friendly soil-filled geotextile bags, forming a wall that is then planted with native vegetation, to lock soil in place with an ecologically sound vegetated erosion control system.



GABION WALL

Free-draining walls constructed of large galvanized steel baskets filled with rock.



SLOPE STABILIZATION

ANCHOR REINFORCED VEGETATION SYSTEM
Flexible armoring provides surficial slope stabilization.

COIR EROSION CONTROL MATS

Made of biodegradable coconut fibre, these mats increase soil support, helping vegetation root and increase slope stability.



ASPHALT

A mixture of aggregates, binder and filler.



COLOURED ASPHALT

Asphalt with colour added for visual impact.



PERMEABLE INTERLOCKING CONCRETE PAVEMENT

Manufactured concrete units that lock into a grid pattern.



QUARRY ROAD TRAIL: How Do We Make Decisions On The Improvements?

■ ■ The City of Calgary bases final project decisions on a number of factors:

- Stakeholder Input: We value your input and always take Calgarians' ideas and opinions into consideration.
- Safety: Ensuring a safe, accessible area for all citizens is paramount.
- Legal: What legislation and legal requirements must we adhere to?
- Environmental: How can we improve the area for use, while ensuring preservation of our natural space?
- Geotechnical / Engineering Standards: What is feasible to construct and maintain. Testing is underway.
- Budget: How can we create the best possible project while maintaining fiscal responsibility to Council and citizens?
- Usage Data: Who are the key users of this area and how do they use the trail?
- Heritage Site Impact: How do we balance future use while minimizing impacts to heritage sites?
- Archaeology / Paleontology: How are we preserving the trail's past history with the trail's future use?

■ ■ Next Steps - Project Process:



THANK YOU for attending this Open House.

■ ■ Please Provide Your Feedback!

We want your comments and ideas about Quarry Road Trail. Are there opportunities, issues or ideas we haven't covered - or should know about when considering improvements to Quarry Road Trail?

Please write your ideas on the Post-it notes provided and stick them on this board. There is also an Open House feedback form with specific information regarding use of Quarry Road Trail and your input would be highly valued. Thank you for attending this open house and providing feedback!