



MCFARLAND TRAIL

Draft Master Plan

MCFARLAND TRAIL

The McFarland Trail remains a core amenity in Carmangay that can be enjoyed for its historic and natural beauty.

Patrick Bergen, CAO

September 21, 2021

Contents

Overview.....	2
Land Use and Ownership	4
North End.....	4
West Side	5
Access Road from Alta Vista.....	6
Road Sections	7
North End.....	7
South End.....	8
Trail Surface	9
Erosion.....	11
Planting of Lodgepole Pine Seedlings	12
Fortifying Riverbanks	13

Overview

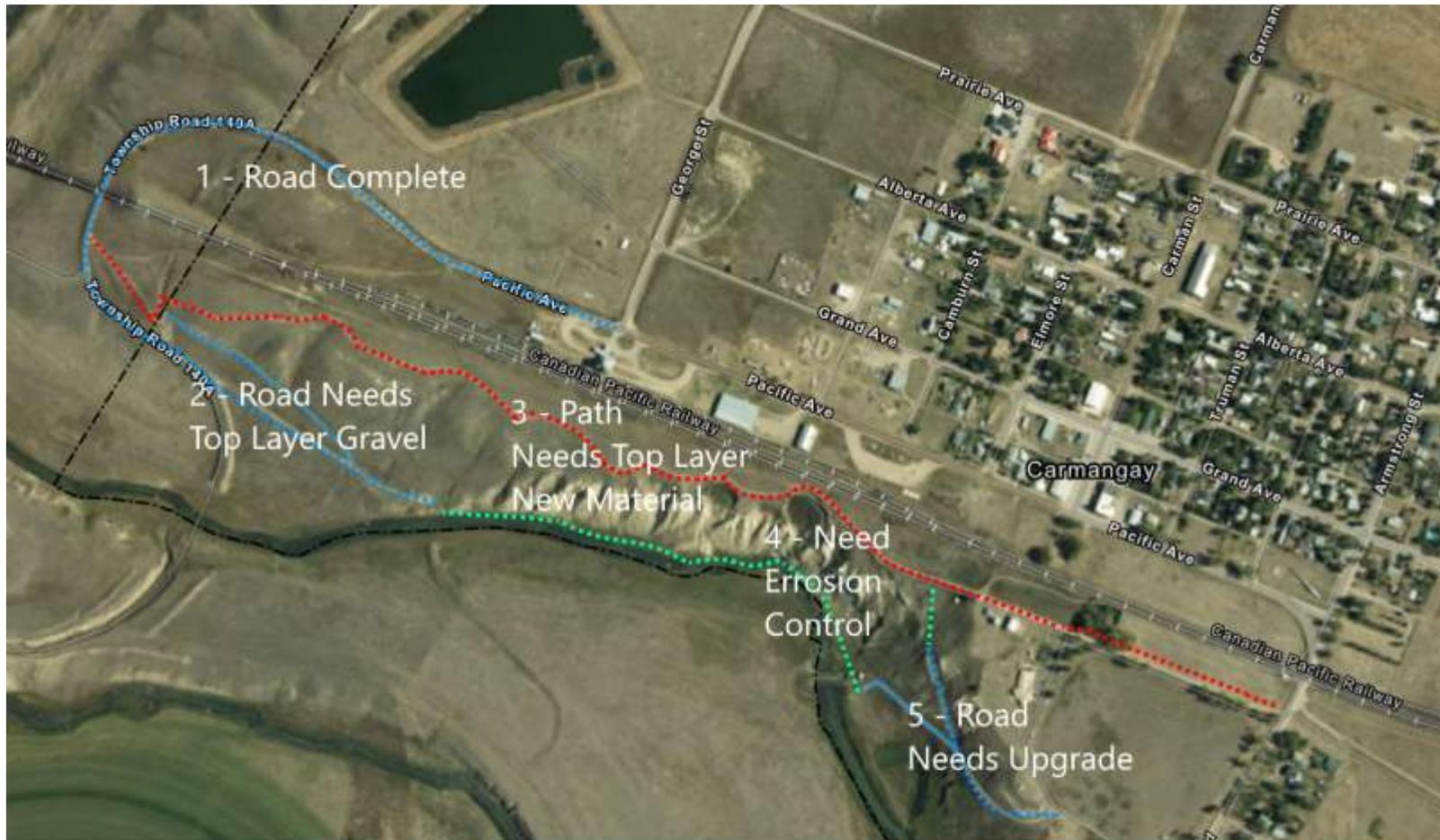
The McFarland Trail remains a core amenity in Carmangay. There are a number of opportunities to enjoy nature and historic elements as well as accessing the special beauty of the Little Bow River. The trail was initiated and maintained through the efforts of the McFarland family but requires restoration to return it to its original state. There are opportunities to expand the trail including sections along the river front. A large effort to deal with the significant erosion of the banks requires imminent attention to secure the future of the trail and lands.



- Road Section
- Pathway Section
- Future Expansion

McFarland Trail System

September 15, 2021



McFarland Trail System

- Road Section
- Pathway Section
- Future Expansion

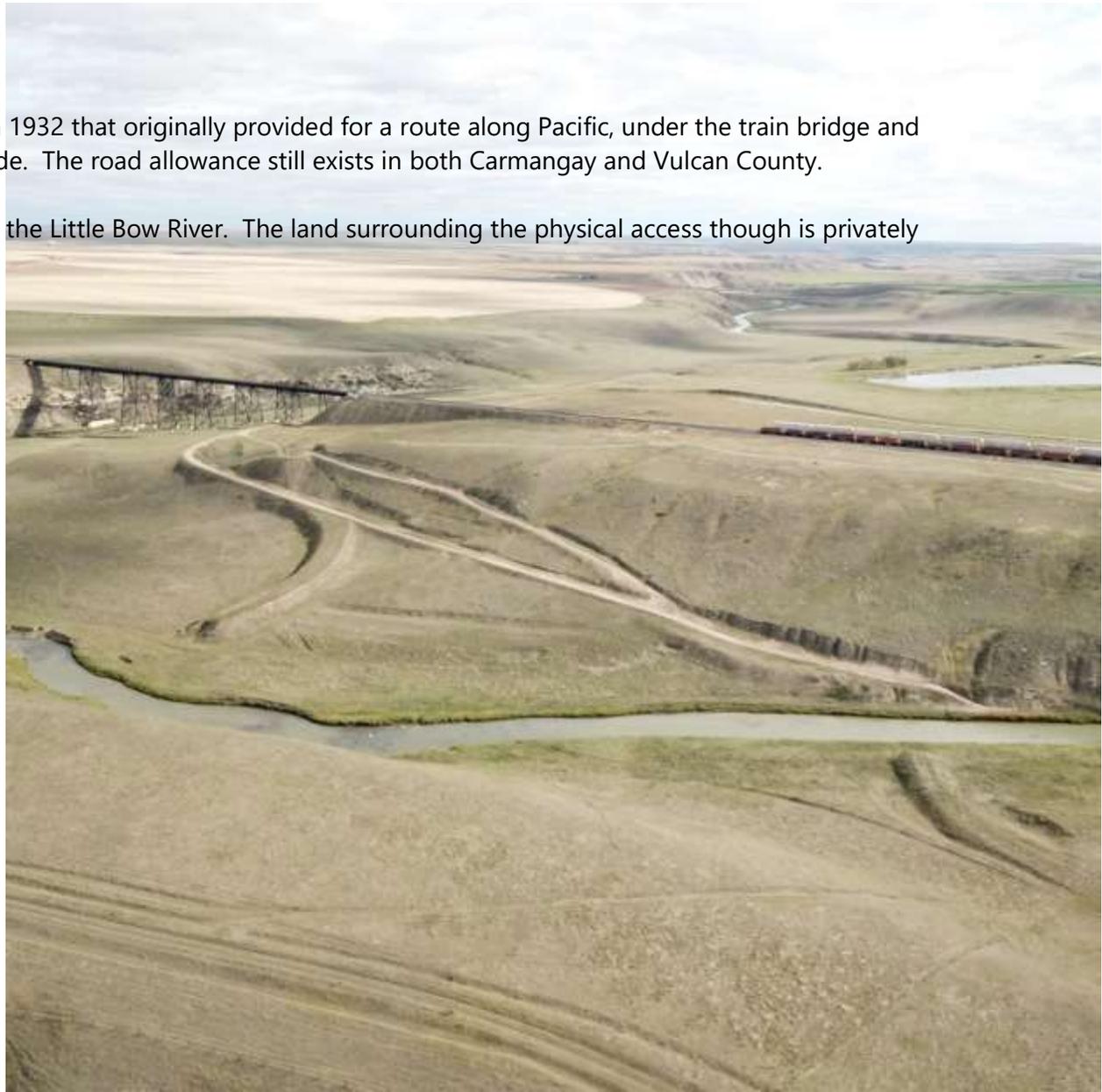
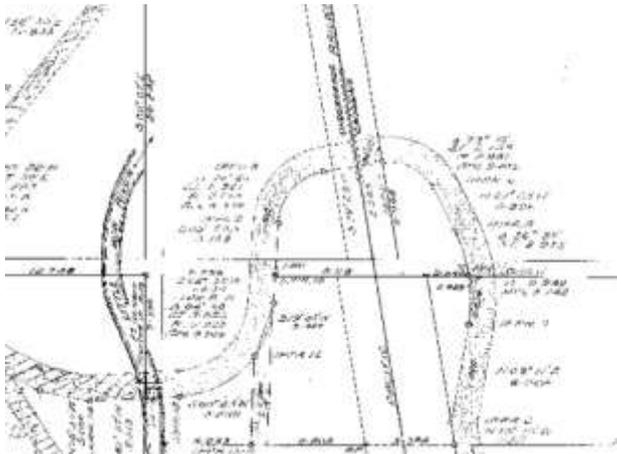
September 15, 2021

Land Use and Ownership

North End

There is a road allowance that was registered in 1932 that originally provided for a route along Pacific, under the train bridge and then across the river to connect on the other side. The road allowance still exists in both Carmangay and Vulcan County.

This section does provide for physical access to the Little Bow River. The land surrounding the physical access though is privately owned.



West Side

The Village owns all of the land west of the CPR lands. There are several challenges with this area which has seen significant erosion in the last 20 years. This has forced those walking on the trail to traverse the area that is on the CPR owned lands.



There are several features that could be used for public benefit including;

- The old water tower,
- The old water plant which still has electricity and access to water,
- The river pumping station is still in good condition and provides opportunity for irrigation,
- There is significant green space with dramatic views of the coulee.



Access Road from Alta Vista

There is a space owned by the Village zoned as urban reserve that is currently used as an access road to get to the water plant. The McFarland Trail is on the east side of this access road.

The trail section is grown in with grass.



Road Sections

North End



There are sections of the pathway system that allow road access for farmers, Village staff and others. These sections are at the north and south ends of the trail. The north section has recently been upgraded by removing the organic layer and putting down additional road base that had been salvaged from the recent work at the Carmangay School. There is still remaining work on the section that climbs up to the trail for removing organics and putting a base down. All sections require crushed gravel to be laid down on the surface to be finished. This section is estimated to cost another \$3 to \$4 thousand dollars for crushed gravel to finish.

South End

The south end consists of a utility access road that starts at the south end and goes down to the old pumping station at the border of the river. There is also a section that traverses up to just north of the water tower. All sections require removal of organics, some structural work as well as a new road base from crushed gravel. It would be reasonable assume that the road crush will cost in the \$8 to \$15 thousand range as well as the man hours and Village owned equipment usage to complete the work.



Trail Surface

The trail surface extends from Alta Vista in the south end to the train bridge in the north end. The surface itself requires;

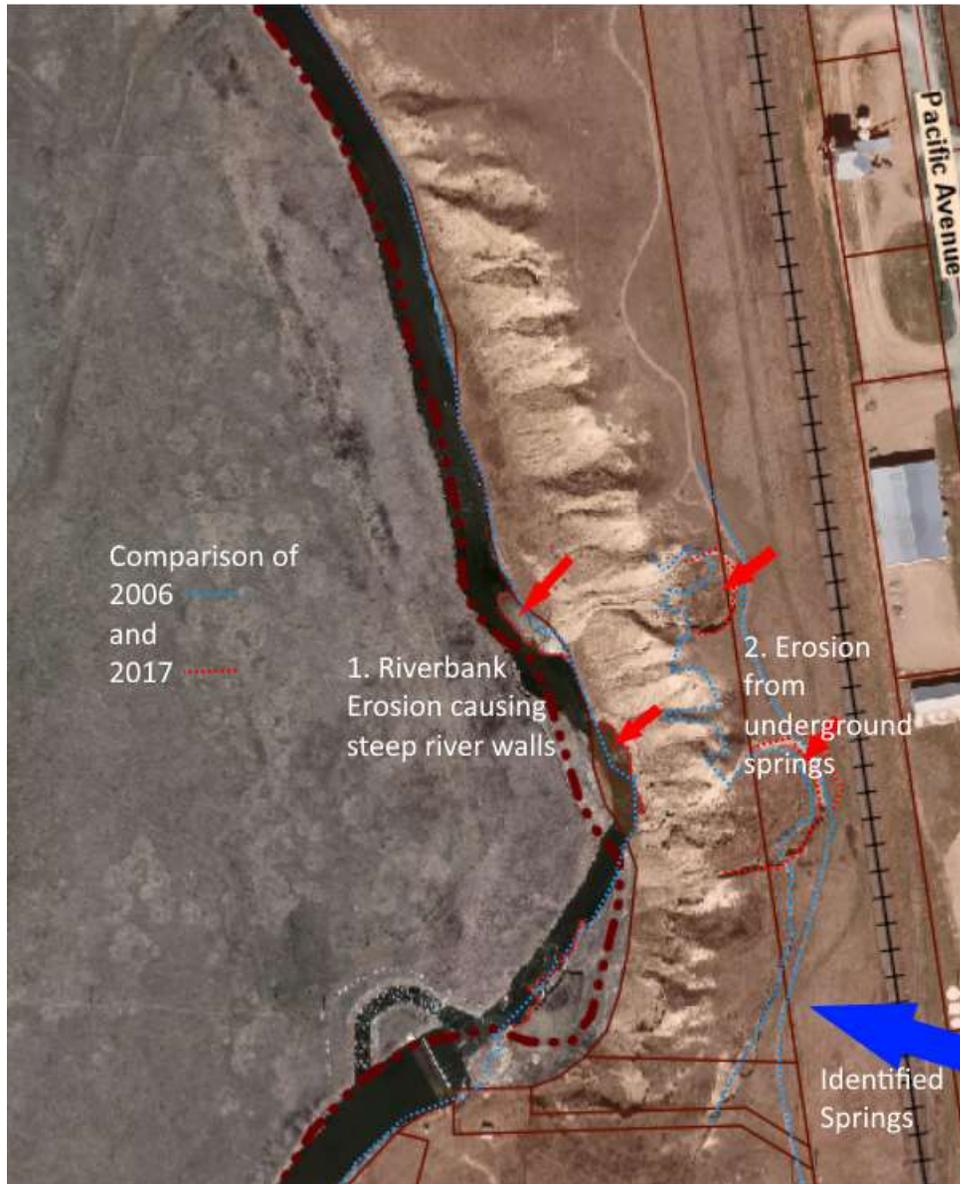
- Removing the existing organics and putting down a layer of finish rock OR
- Removing a deeper layer and putting down soil to create a mowed grass pathway.

The surface is uneven in many spots and does have a number of holes created by wildlife. The most imminent issue though is the loss of land created by erosion that is forcing the trail eastward into the CP land. These sections are not sustainable unless the erosion is addressed.





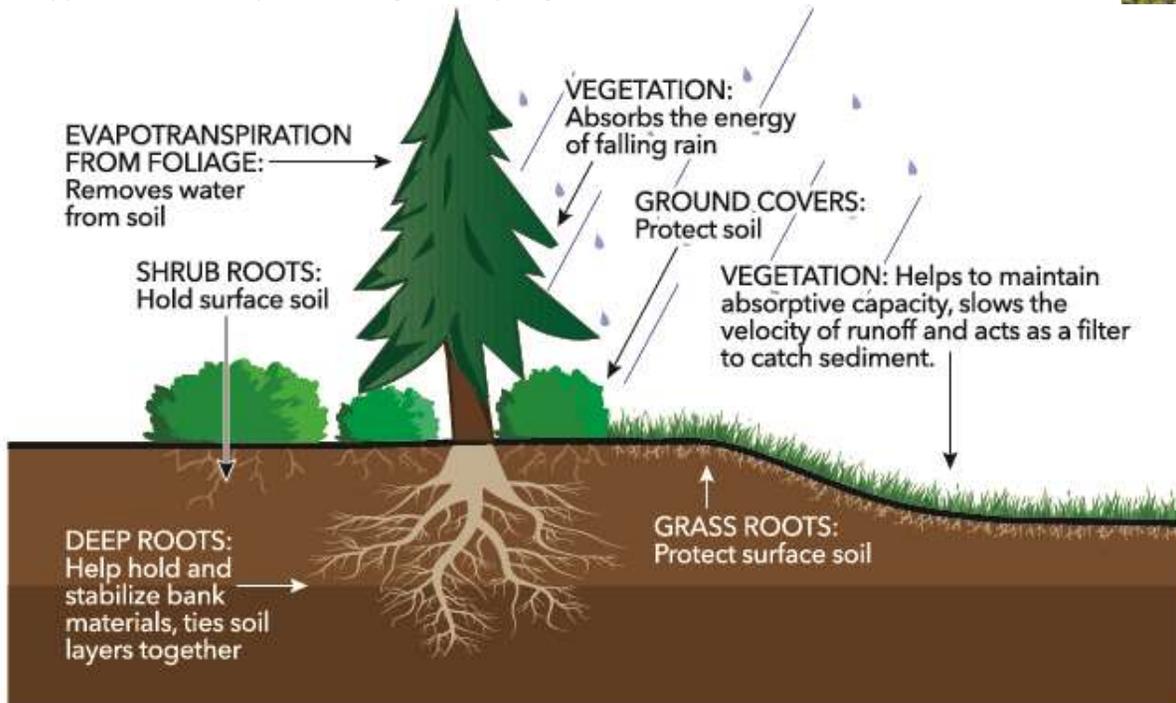
Erosion



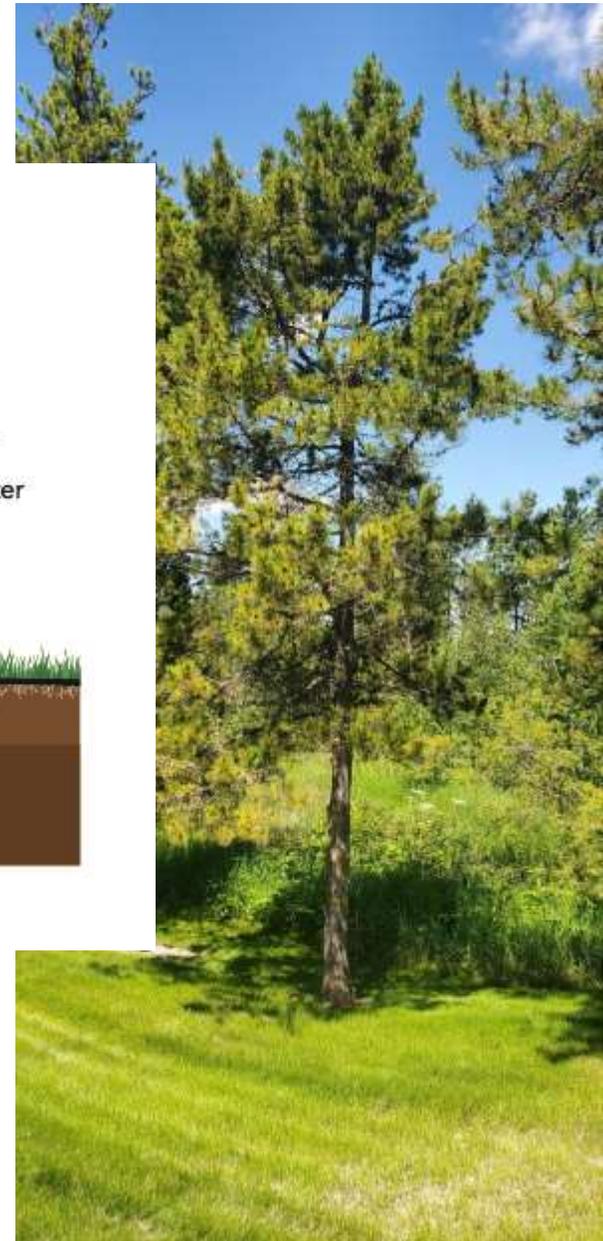
Erosion represents the most extensive and costliest efforts that will be required. Erosion has occurred by the river sweeping away a section of the bank and depositing it downstream shown as item 1 on the below diagram. Additionally, there is an extensive underground stream that was identified on the Alberta Water Licensing Map and is evident in the below diagram as item 2.

Planting of Lodgepole Pine Seedlings

Lodgepole pines survive in dry sandy conditions and will grow 1 to 3 feet per year. It is suggested to plant a number of seedlings especially in the areas that are green and lush that appear to be fed by the underground springs.



EFFECTS OF VEGETATION IN MINIMIZING EROSION



Fortifying Riverbanks

The banks are eroding from both the river movement and underground springs. Fortifying the riverbank with rocks or walls would require the permission of both the provincial and federal governments. While this is a long term solution that is time consuming and costly, it would be advisable to start the process early to understand what would be required and when it could be executed.

