

## Milepost 379-380 Track Erosion Mitigation

### Purpose

The Alaska Railroad (ARRC) seeks to realign the mainline track away from the eroding banks of the Nenana River between ARRC Milepost (MP) 379 and MP 380. This remote area is just north of Ferry, away from residential communities.

This segment of track is susceptible to washout due to the track's proximity to the river, coupled with significant erosion to the river bank. Based on historical river data, the embankment is likely to washout five times within a 50-year period. The Alaska Railroad provides the only rail transit service linking southcentral and interior Alaska communities. Track washout near Ferry effectively severs this transit service until repairs can be made.

The project will protect critical state infrastructure, reducing the risk of washout and disrupted service. Maintaining the railroad in a state of good repair also enhances the safety of the traveling public, railroad customers and employees.

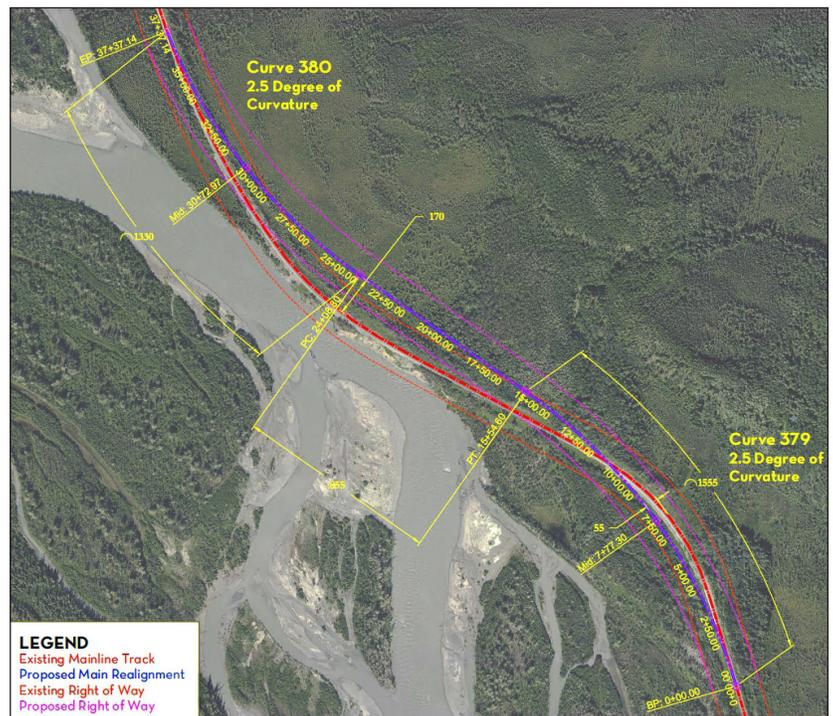
### Scope and Status

The Alaska Railroad proposes to relocate the tracks up to 170 feet away from the river, outside the current right-of-way and onto adjacent land owned by the State of Alaska. This action would eliminate the angle at which the river collides with the railroad embankment, minimizing future erosion.

Other action alternatives and their associated impacts include:

- Reestablish and armor 1,500 feet of existing river embankment. This short-term remedy has the greatest environmental impact to the river, and the greatest cost over the 50-year analysis period.
- Realign the track within the existing right-of-way. This option would still require reestablishing the existing embankment due to the narrow railroad right-of-way in this area.

### Project Area Map



*Realignment outside the existing right-of-way would allow for a straighter track.*

# PROJECT FACTS

## Project Area Map

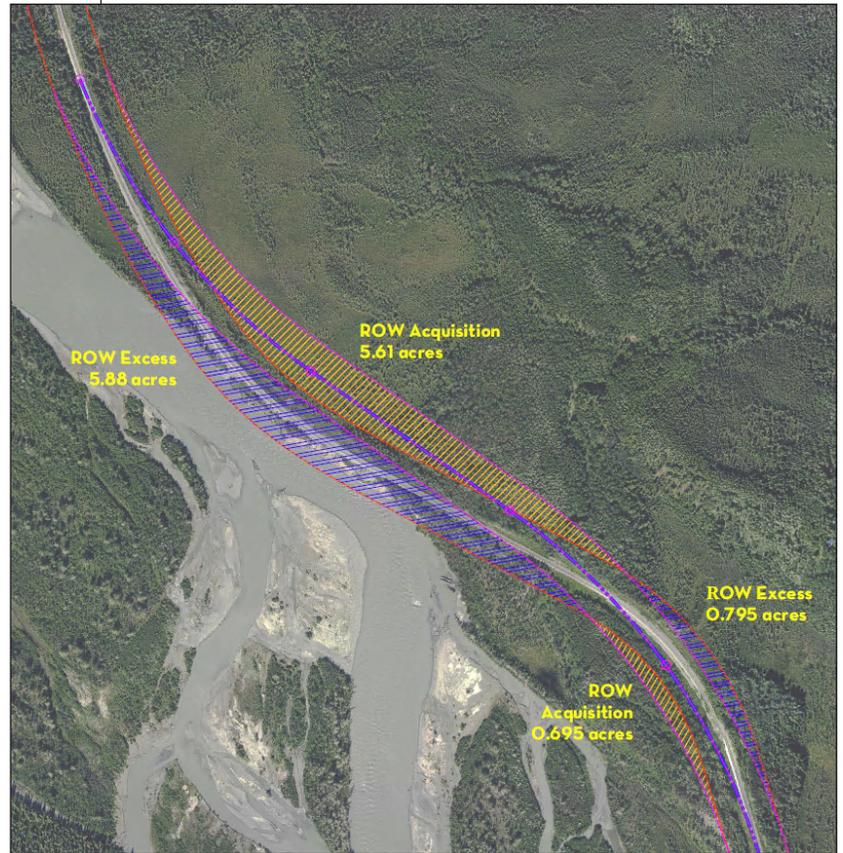
Preliminary analysis points to realignment outside the existing ROW as a preferred alternative. This option has the least impact to the environment, allowing the Nenana River to meander in its natural pattern. Relocation would also be the least expensive over the long term, eliminating the need for continual, costly armament of the steep and eroding embankment.

The ARRC has initiated geotechnical and civil engineering, along with environmental and historic data studies. Results will help determine the feasibility and effectiveness of realignment and other erosion mitigation actions.

Based on engineering and study findings, the project would potentially move into design and construction.

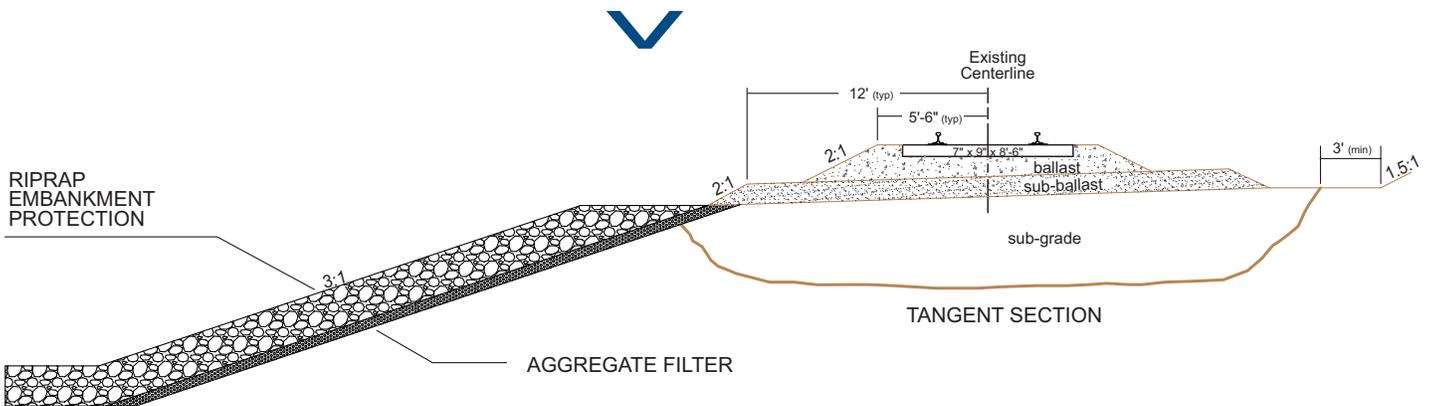
## Cost and Funding

The estimated cost of engineering and environmental work is \$375,520, funded by the Federal Transit Administration (FTA) with a 20% cash match from the Alaska Railroad. Preliminary engineering will help estimate the cost of final design and construction; and ARRC may seek federal funding to help underwrite these later activities.



Relocating the track outside the right-of-way would likely require a legal transfer of adjacent land from the Alaska Department of Natural Resources to the ARRC.

## Reestablish and Armor Existing Embankment



Reestablishing the existing embankment would require substantial fill, filter rock and riprap.