

NORTHERN PACIFIC RAILWAY COMPANY

STATE OF MONTANA  
VALUATION SECTION NO. 19-A  
ST. REGIS TO PARADISE.

PRE-INVENTORY INFORMATION  
GENERAL OUTLINE AND HISTORY OF THE WORK.

This is a single track main line extending from St. Regis to Paradise, a distance of about 29 miles.

Was constructed by the Northern Pacific Railway Company in the years 1906 - 1907 - 1908 and 1909.

The general work of grading, laying culverts, and driving tunnels was done by Winston Brothers Company under their contract of October 16 - 1906. The tracklaying and surfacing and ballasting was done by Roberts Brothers, under their contract of February 25 - 1908. Part of the fencing was erected by B. L. Hurst, under his contract of July 6th, 1908. Additional riprap was placed by Winston Brothers under their contract of November 7th, 1908. Copies of these contracts and of the final estimates made under same are submitted with the inventory.

This line follows the Missoula River very closely for the entire distance. The general characteristics are as follows, quoting from the final report of J. C. Breedlove, Engineer in charge. "The line in general is located on the second bench above the channel proper of the Missoula River. The character of the material of this bench varies considerably, but usually consists of a thin layer of loam or decayed vegetable matter, overlaid with gravel, usually very coarse. This description applies to points well away from the mountains. Where the line comes closer to the higher hills or mountains, the material consists of various gradations of mountain debris, from shell rock mixed with loam and gravel to solid rock". Some of the individual cuts were difficult of excavation, again quoting from report of J. C. Breedlove, "Probably the most difficult cut on the line, taking into consideration the character of material encountered was that between station 206 and 225. The material consisted in general of very large boulders piled together having interstices filled with clay and gravel"; again "Cut from station 730 to 745 was solid rock lying in strata of about 3½ feet thick inclined to horizontal at about 60 degrees. On account of this dip and stratified condition of rock, which

resulted in excess material being necessarily moved, the cut, which was originally planned as a through cut, was made a daylight cut by changing line. When the toe of one of the strata was cut across, on account of clay and water between strata, the entire layer to top of hill had to be moved". A notable feature on this work was the channel change of the Missoula River, between station 884 and 947. On account of its inaccessibility the contractor brought his outfit in on barges on the Missoula River from Paradise, laying over 7 miles of continuous cable in the river.

The material encountered on this line was highly classified, being divided into the following classes: earth, hard pan, loose rock, shell rock and solid rock.

A very large amount of riprap was required along this line for bank protection work, on account of lines proximity to the Missoula River. (This river later becomes the Clarks Fork).

The country was very generally covered with timber.

Additional ballast has been placed since completion of the original construction period, some sag raising and bank widening done, more riprap placed and all the things which are necessary to do to bring a newly constructed line into a first class well maintained condition.

Copies of all the final estimate vouchers which can be found covering roadway work are submitted with the inventory together with lists of extra work bills incurred under same on account of grading, crossings and signs, and tunnels. These lists of extra work bills do not pretend to be a complete statement of all the extra cost or in any sense a partial statement of original cost, but merely enumerate some of the items of extra cost found readily available.

The ballast is of gravel with a few cinders. The cinders came from Paradise, the gravel partly from local pits and partly from Iron Mountain and Perma pits, the location of which is shown on blue print attached to the inventory.

A list of items in abandoned property is included in the inventory and itemized separately.