

NORTHERN PACIFIC RAILWAY COMPANY

STATE OF WASHINGTON.  
VALUATION SECTION NO. 1 -  
MARSHALL TO PASCO. -

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

This is a single track main line running from near Marshall to the Columbia and Snake River bridges, west and south of Pasco.

Was built by the Northern Pacific Railroad Company in the years 1879, 1880 and 1881.

As originally constructed the track ran to a ferry slip at Pasco, this ferry carried trains across the Columbia River to Kennewick until 1883, when the bridge was completed. A temporary incline was also placed at Ainsworth (north bank of the Snake River), this was used for sending material and outfit across the Columbia River for the construction of Washington Valuation Section No. 2. Quoting from the annual report of Chief Engineer for the year ending June 30th, 1884, C.E. Old Vault File 45-5, "An incline was built on the west side of the Columbia River (near Kennewick) to transfer cars to and from the incline at Ainsworth, making the distance run by the transfer boat between the two inclines  $4\frac{1}{2}$  miles. The incline at Ainsworth was abandoned during the year ending June 30th, 1885, and another incline was built at Pasco, reducing the ferry distance from  $4\frac{1}{2}$  miles to about  $\frac{1}{2}$  mile". The transfer work for construction was handled by the Railroad Company's Steamer "Frederick Billings". The approaches to the bridge were built by George Donald under his accepted proposal of June 30th, 1887: this proposal covered grading, tracklaying and surfacing, and ballasting.

It seems from the very meager information thus far found that the original construction was done by contract, although no contracts and few final estimates have been found. Copies of two estimates dated November 6th, 1880 and January 12th, 1880 in favor of one Coulter McBean and Company for work done between miles 132 and 148 $\frac{1}{2}$  have been found and are submitted with the inventory, and also one estimate in favor of Nelson Bennett for grading on the Yakima Incline dated September 30th, 1884, are submitted with the inventory.

This valuation section runs through a dry country where the top soil is generally sandy, and is underlaid in many places with hard pan or rock. At times the rock lies entirely exposed. The country at time of original construction was generally covered with sage brush.

The line runs generally on an ascending grade east until reaching Cheney when the grade changes and descends. For long stretches the location follows the course of various dry streams or coulees; these channels are dry for the larger part of the year, but during the melting of the snow or after some of the exceptionally heavy rain storms, (to which the country at odd intervals is subjected), they become full of violent water and very substantial construction is required wherever the roadbed is exposed to washing.

There was no timber on this section, quoting from Annual Report for the year ending June 30th, 1881, A.S. Document 440. "For the first 160 miles there is no timber along the line of the road, and great trouble was experienced in getting the necessary ties and timber. Up to August, 1880, the tie contractors had made good progress in driving ties and logs down the Yakima River, and it was confidently expected that a supply would reach the division. The stream, however, fell to a very low stage, and the drive was interrupted. Later some unprecedented freshets for the season of the year occurred. Their booms at the mouth of the river broke away, and most of the logs and ties were swept into and down the Columbia River. This disaster caused utter failure to the contractors, and, upon the request of the General Superintendent, their entire plant was unconditionally turned over as the property of the Railroad Company. This made it possible, by prompt action, to recover portions of the material at various places on the Columbia between Ainsworth and Celilo, and finally to save it. Two saw mills were bought and put in operation, and the ties and timber were boated back up the Columbia to Ainsworth. This unfortunate event delayed, and increased the cost of construction of the division, but by the vigorous action of the General Superintendent a failure was prevented."

The Railway Company has suffered severely from washouts on this section and many channel changes have been made of which no record was kept. Quoting from report of Superintendent of Transportation, January 24th, 1912, Page 100 of report, "1:45 P.M. Account hard warm rain past twelve hours between Prosser and Cheney, has started snow melting between Connell and Tokio. Water running over tracks at Bridge 138, No. 1 and 5 have passed over trouble, will be necessary to detour all others via Spokane, Portland and Seattle Railway. 7 P.M. water rising rapidly at all points. Water 12 feet deep and 50 feet wide between Cunningham and Connell. Expected to reach Mesa about 9 P.M. No. 385 being

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held at Ritzville and No. 886 marooned just west of Lind. Water reported to reach Mesa about 9 P.M. struck there 8:50 P.M., and is running 18 feet deep over track at Mesa Pit. January 26th, 4:15 P.M. main line between Cheney and Pasco passable and has washed out the temporary bridge put in at last washout. January 25th, 4:15 P.M. main line between Cheney and Pasco passable except at Mesa Pit. January 26th, Shoo Fly at Mesa Pit connected up and made passable for trains at 10:40 A.M." Again on February 15th, 1913. "High chinook wind prevailing on Pascoe Division since 6 P.M. yesterday. Water running over tracks in several places between Lind and Okron". February 16th, 1913. "4:10 P.M. about 65 feet of track washed out at M.P. 80, 2½ miles west of Beatrice to the depth of 25 feet. Water rising rapidly between Connell and Lind". And again on February 18th, 1916. "Will have line open from Mesa east by 9 P.M. There are still some 15 to 20 places to be repaired between Mesa and Glade and 5 or 6 bad ones. Snow has nearly all disappeared. If weather continues to fall to-night, may possibly get line restored by Saturday evening for traffic".

There has been a great deal of work done on this line since the completion of the original construction period, widening cuts and fills, cutting down humps, raising sags, placing additional ballast, adding further bank protection, widening and improving water ways, and other similar work all of which goes to make up a well constructed main line track; much of this work was done by the Company with its own forces, of which no good record has yet been found. Over 14000 lineal feet of temporary timber bridges, have been filled and many other timber bridges and culverts have been replaced in permanent materials.

Between Pasco and the Snake River Bridge, the Northern Pacific Railway Company, for convenience of present operation, use 8054.7 lineal feet of track belonging to the Spokane, Portland and Seattle Railway Company. The track has been removed from the roadbed belonging to the Northern Pacific Railway Company, but this roadbed is not considered abandoned and the quantities contained therein are included in the regular inventory.

Copies of all the final estimate vouchers which have been found covering roadway work are submitted with the inventory, together with a list of extra work bills incurred under same on account of grading, this list does not pretend to be a complete statement of all the extra cost or in any sense a partial statement of original cost, but merely enumerates some of the items of extra cost found readily available.

The ballast is composed of gravel with some cinders; the gravel coming from pits whose location is shown on print attached to the inventory and the cinders from the points noted in the inventory.

The subsidence of the roadbed will be developed at time of Government inventory.

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