

NORTHERN PACIFIC RAILWAY COMPANY  
 STATE OF WASHINGTON - VALUATION SECTION NO. 2  
 PASCO TO PALMER JUNCTION  
 PRE-INVENTORY INFORMATION  
 GENERAL HISTORY AND OUTLINE OF THE WORK.

This is a main line track extending from the Columbia River Bridge, between Pasco and Kennelick to Palmer Junction. Between Gibbon and Grandview a new line has been constructed to be used as an alternate main line in conjunction with the old Sunny-side Branch between Grandview and Granger, and the old Elliah Branch between Granger and Parker, which branch lines are now undergoing re-construction. Between Lester and Easton, with exception of the single track tunnels, double track is in operation.

This section is part of the original main line of the Northern Pacific Railway Company and was constructed in the following sections.

From the west bank of the Columbia River near Pasco to 25 miles west was built in year 1853. Quoting from the annual report of V.G. Bogus for year ending June 30th, 1854. C.E. Old Vault File 49-4. "In the early part of the year the Company had a small force employed on the lower Yakima River and another small force in the Yakima Canyon, on the Yakima River below Ellenaburg. A contract was let to Mr. Nelson Bennett for building the first 25 miles from the Columbia River westwardly in August, 1853. All Company forces were then withdrawn from the Yakima River." Copy of the contract with Bennett, dated July 24th, 1853, and Sept. 10th, 1853, which covered the general work of grading, building bridges and culverts and tracklaying and ballasting, together with a copy of the final estimate, dated December 31st, 1853, are submitted with the inventory. This 25 miles was accepted by the Government Jan. 6th, 1854.

The second 25 miles west of the Columbia River was built in years 1853 and 1854. The general work of grading, building bridges and culverts and of tracklaying and surfacing, was done by Nelson Bennett, under his contract of November 27th, 1853, copy of which together with the final estimate made under same are submitted with the inventory. Some work was done by Company Forces prior to letting of contract, see above paragraph.

On the third section miles 50 to 59 west of the Columbia River the general work of grading, building bridges and culverts, and tracklaying was done by Nelson Bennett under his contract of Sept. 1st, 1854, copy of which and of the final estimate dated March 31st, 1855, are submitted with the inventory.

The fourth section 35 miles in length from mile 85 to mile 120 and 125 west of the Columbia River, was built by Nelson Bennett, under the terms of his contract of Jan. 1st, 1855, which covered the general work of grading, building bridges and culverts, tracklaying and surfacing, copy of which and of the final estimate made under same, dated May 31st, 1856, are submitted with the inventory.

The fifth section, 40 miles long, between miles 125 and 165 west from the Columbia River was constructed by Hale, Smith, Burns & Co., under their contract of June 1st, 1856, which covered the general work of grading, building bridges and culverts, tracklaying and surfacing and ballasting. Copy of this contract and of the final estimate, dated May 31st, 1857, are submitted with the inventory.

The sixth section from mile 165 west of the Columbia River to the east approach of the Stamped Tunnel, a distance of about six miles was built by Hale, Smith Burns & Co., under their contract of June 1st, 1856, which covered the general work of grading, driving tunnels, building bridges and culverts, tracklaying and ballasting. Copy of this contract and of the final estimate voucher dated May 31st, 1857, are filed with the inventory.

The seventh section, comprising the Stamped Tunnel and approaches was constructed by Nelson Bennett under terms of his contract of Jan. 21st, 1856, and accepted proposals of July 7th, Nov. 1st, 1856 and Nov. 29th, and March 12th, 1857. Copy of the contract and of the final estimate dated May 31st, 1858 are filed with the inventory.

In order to get the benefit of having a continuous track to the coast as soon as possible, a temporary high grade line was built over the summit above the Stamped Tunnel. This over-head line was built with switch backs. The general work of grading was done by Hale, Smith Burns & Company, under their contract of June 1st, 1856. Copy of this contract and of the final estimate, dated June 30th, 1857, are submitted with the inventory. This switch back line is included in the inventory and as its construction is regarded as one of the essential steps in the construction of the Railroad, it is not considered as abandoned property. The track being laid from both the east and west ends met on the switch back at about Station 110 on June 1st, 1857.

The eighth section from the west approach to the Stamped Tunnel to a point in the Green River Valley, 70 miles from Tacoma, a distance of a little over eight miles, was built by Hale, Smith Burns & Co., under their contract of June 1st, 1857. A copy of this contract, which covers the general work of grading, driving tunnels, building bridges and culverts, tracklaying and surfacing and ballasting, is submitted with the inventory, together with copy of the final estimate dated May 31st, 1857. This section was built from the west end.

The ninth section, between the 50th and 70th miles from Tacoma was built by Nelson Bennett under his contract of June 1, 1856,

and accepted proposal of Sept 1st, 1866. This contract covered the general work of grading, building bridges, and culverts, tracklaying and surfacing and ballasting, and is submitted with the inventory, together with a copy of the final estimate dated April 30th, 1867. This section was constructed from the west end.

From the 50th mile to Palmer Junction, a distance of about 5 miles, was built as part of the section from South Prairie to 25 miles east. The general work of grading, building bridges, and culverts, tracklaying and surfacing and ballasting was done by Nelson Bennett, under his contract of Sept. 1st, 1864, and accepted proposal of July 30th, 1865. Copy of the final estimate dated Oct. 31st, 1865, is filed with the inventory.

The first crossing of the Columbia River between Pasco and Kennewick was by a train ferry. Was built in the year ending June 30th, 1864. Quoting from report of Chief Engineer for that year, O.K. 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 1/2 miles." The incline at Ainsworth was abandoned in the year ending June 30th, 1865, and another incline was built at Pasco, reducing the ferry distance from 4 1/2 miles to about 2 miles. The transfer work for construction was handled by the Steamer Frederick Billings. Page 25 of Abstracts from reports. In 1868 a bridge across the River was completed and the ferry was discontinued. The approaches to the bridge were built by George Donald under his accepted proposal of June 30th, 1867; this proposal covered grading, tracklaying and surfacing and ballasting.

From the west bank of the Columbia River at Pasco to the foot of the steep grade approaching the Stampede Tunnel near Easton the line follows the valley of the Yalima River. This is a very active stream and in the upper reaches has a rapid fall. For long stretches the valley narrows to a verticle gorge. From Easton the line ascends the east slope of the Cascade Mountains, and crossing the divide through the Stampede Tunnel, loops down the west slope to Lester, from where the Canyon of the Green River is followed to Palmer Junction. The Green River is a mountain stream having a rapid fall and very substantial construction has been required where-ever the roadbed came in contact with the stream.

The clearing and grubbing on the first 90 miles west of the Columbia River, consisted of sagebrush with a few willows. From mile 90 to 125 the sage-brush continued but the other clearing called "clearing willows" in the original contract became greatly increased in extent and practically equalled in amount the sage-brush. The country in this section is generally covered with sage-brush with heavier growth of timber occurring along streams or other favorable spots. From the 125th mile west the clearing increased in density and became more difficult to handle, as the main range of the Cascades drew closer. From the 165th mile to the end of the section at Palmer Junction the timber growth was continuous and heavy, large trees prevail and the undergrowth is luxuriant. The long winter and rainy seasons rendered the work expensive. Many isolated over-hanging and dangerous trees were cut outside of the clearing limits. Was necessary to clear a right of way over the top of the Stampede Tunnel for the telegraph line.

under at the difficulties. The road across a range of mountains was necessary to clear and build and supplies. The heavy snow falling on the mountains especially handicapped the work, depth of snow frequently ranged from 5 to 15 feet on the level to 50 and more in the ravines and cuts. Quoting from report of H.S. Huson for year ending June 30th, 1867. Page 146 of Abstract from Reports. "Almost from the first the tracklayers encountered severe storms of snow. The work progressed slowly, the forces frequently being compelled to shovel two feet of snow from the grade in order to place the ties and steel until January 15th. At this time only a mile and a half remained to be laid. But on the 16th of January was encountered one of the most violent storms known in the history of the Division, lasting for 21 days without cessation. When the storm ceased, the snow lay from 9 to 15 feet deep. During the time of the storm the track was completely blocked and we did not get the snow cleared until Feb. 21st. From this time on, although the country was visited by frequent and severe storms the track force was able to make daily progress by shovelling from 9 to 20 feet of snow and ice from the side of the grade - the greatest depths occurring in cuts where the snow drifted from the side of the mountain. It was considered necessary to shovel the snow for tracklaying as it could not be expected to melt off much before May, and this would have deferred the completion of the Division until the season of 1867 would be far advanced. The cost of this snow shovelling constitutes the major part of the force account, a statement of which appears below."

And quoting from same report for the Switch back on overhead line "Track from the east end reached the switch back on March 10th, and from that time bridging and tracklaying progressed with all possible vigor, often shovelling from 15 ft. of snow and ice from the grade and in the Summit out over 40 ft. were shoveled out and in many gulches a like amount to enable the Carpenters to get at the bridge foundation."

It was necessary to spend a large amount of money for Laborers Protection.\* Quoting again from the Annual Report of H.S. Huson for year ending June 30th, 1867.

\*Numerous saloon men established themselves upon the works from the very start, and became active agents in demoralizing and debauching the laborers and in organizing associations to prevent the contractors from employing Chinese labor. It became necessary for the Company to take some steps to protect the contractors in securing Chinamen and helping them to control labor. Accordingly an arrangement was made with Thiel's Detective Association to send guards to accompany Chinamen and protect them from any outrages which the labor organizations might undertake. Detectives and detectives were employed to secure evidence against these saloons and work in connection with the Legal Department. Saloon keepers were thus enjoined from selling liquors, and arrested and taken out for trial under various charges. By this means some eleven hundred Chinamen were employed and introduced upon the works without serious outbreak. The cost of maintaining these guards and detectives was borne by the Company, and charged to account of Laborers Protection. While this item will seem large as it appears in the various sections, this course was, in my mind, the most practical expedient that could have been taken in order to complete the work on this and other sections by the time specified."

In going through the various reports it is noted that mention is made of spending over \$70,000.00 for this class of work alone in year ending June 30th, 1887. Entire cost will be shown at time original cost is developed.

The machinery used in construction of the Stampede Tunnel was hauled by team from Ellensburg. Citing from H.F. Huseon Report, June 30th, 1887, C.F. Old Vault File 85-8. "All the machinery for the tunnel had to be hauled from Ellensburg and the roads were very muddy until late in the season. In order to get the machinery to the West end, a road had to be built over the Mountain along the line of the Switch Road. All things considered I think the task of getting the machinery in place at either end of the tunnel was accomplished as rapidly as could be expected".

During the year ending June 30th, 1888 over 17612 lin. ft. of snow sheds were constructed at various points on the Mountain.

Since the completion of the original construction period, the Railway Co. has done a large amount of improvement both with its own forces and by contract. The largest piece of such work was the revision and double tracking of the Mountain line between Easton and Lester, which was done in year 1912-1913 and 1914, under A.F.E.'s 853 (13) 855 (13) 856 (13) 823(14) and 824 (14); the general work of grading, and bridge foundation work being done by Guthrie McDougall & Co., under their contract of Dec. 9th, 1912, copy of which and of the final estimate are submitted with the inventory. The tracklaying and surfacing and ballasting was done by the Company with its own forces.

The Ventilating Plant at the Stampede Tunnel was constructed in the winter of 1914-1915; the foundations, buildings, feed well and nozzles were provided by the Railway Co., the work being done partly by force account by Guthrie McDougall & Co. and partly by Company forces; the balance of the outfit were provided by the B.F. Sturtevant Co. under terms of their contract of Dec. 8th, 1913, copy of which is submitted with the inventory.

At Gibbon in 1913, some trouble developed with a slide and it was necessary to drive drainage tunnels in an endeavor to stop the movement of the ground. Two hundred and five feet of tunnel were driven first by Company forces, then contract was let to one Elijah Brooks, dated March 17th, 1914; under this contract some 1151 lin. ft. of additional tunnels were driven. Considerable other work has also been done digging test wells, etc. Copy of the contract with Brooks is submitted with the inventory, together with copy of final estimate dated Dec. 29th, 1914. The cost of the work done by Company forces will be developed at time of original cost is worked out.

At the Mather River Crossing, Section 95, there has been considerable work done in the past rectifying the channel and controlling the atreams, the quantities handled in so doing do not now all appear as their purpose has been served. The work on this river crossing thus far found is represented in the copies of the voucher which are submitted with the inventory as follows:

Dated Aug. 71st, 1891 in favor of J.F. Peters, as per contract Jan. 27th, 1891.  
Dated May 4th, 1891, in favor of J.R. Peters; crib logs furnished.  
Dated Nov. 26th, 1891, in favor of County of Yakima for work constructing a crib.

There have been many grade revisions, changes of line, and other improvement work done since the completion of the original construction period by the Railway Company with both its own forces and by contract, which will not be enumerated.

Copies of all the final estimate vouchers which can be found covering roadway work are submitted with the inventory, together with lists of extra bills incurred under same on account of grading, ~~and included in the inventory.~~ These lists of extra work bills do not pretend to be a complete statement of all the extra costs 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 some cinders, the gravel coming from pits whose location is shown on print attached to the inventory and the cinders from the points noted.

The subevidence 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.