VALUATION SECTIONS IDAHO 5 AND 5A, AND WASHINGTON 13.

The Pend 'Oreille Branch of the Chicago, Milwaukee and St. Paul Railway was built under the name of the Idaho and Washington Northern Railway, and was acquired by the Chicago, Milwaukee and St. Paul Company after the line was in operation.

This line leaves the Coeur d'Alene Line, Valuation Section Idaho 4, at McGuires, Idaho, and extends, about 105 miles, in a general northwesterly direction to Metaline Falls, Wash. The part between McGuires and Tweedie, a distance of about 34 miles, lies in the state of Idaho, and for Valuation purposes is designated as Valuation Section Idaho 5. That part between Tweedie and Metaline Falls is in the state of Washington and is designated as Valuation Section Washington 13. The branch from Coleman to Clagstone Junction is all in Idaho and is known as Valuation Section Idaho 5A

The line connects with the Spokane International Railway at Clagstone Junction and at Grand Junction. Prior to the acquisition by the Chicago, Milwaukee and St. Paul Company, Idaho and Washington Northern trains were operated into Spokane over the Spokane International tracks and through shipments were routed via that line.

Construction was under the direct supervision of F. A. Blackwell, General Manager and Promoter, and a Chief Engineer with the necessary assistants.

The line as constructed traverses an open rolling country with light gradients and curvature from McGuires to Rathdrum. At Rathdrum the timber country is entered and heavier grading work is encountered. From here the gradients are generally rising with a maximum of one and five-tenths percent and medium curvature to a summit at Jenida. From Jenida there is a continuous descent on a one percent gradient with a large amount of curvature for six miles to Coleman. From Coleman to four miles north of Tweedie, gradients, curvature and work are all light, and from here into Newport a descent is made on a seven-tenths percent gradient with some sharp curvature. As would be indicated from the description, the construction work on this portion is variant, being light between McGuires and Rathdrum, and between Coleman and Tweedie, and fairly heavy between Rathdrum and Coleman, and Tweedie and Newport. The average per mile was about 14,000 cubic yards, a part of which was of classified material.

North from Newport the gradient is gradually descending for four miles, thence practically level to Jared, thence a gradual rise is made to Metaline Falls with the exception of a short piece of temporary line built on three percent gradients in Mile 100. Between Newport and Metaline Falls the Pend 'Oreille River is followed quite closely and crossed once on an expensive bridge. This region is of a mountainous character and the work is correspondingly heavy and difficult, averaging about 30,000 cubic yards to the mile, largely solid rock. Three tunnels were required; one near Blueslide which is 1094 feet long, one in Mile 100 which is 666 feet long, and one in Mile 102 which is 92 feet long. Between Ione and Metaline Falls there are slides that are continually moving and require constant work to keep the line in safe condition for traffic.

The Clagstone Branch was built on light gradients and easy curvature, the work being medium with an average of about 14,000 cubic yards per mile.

Construction was carried on in three units and at different times; the Clagstone Branch and the work between Grand Junction and Newport being started in April 1907. The work between Newport and Cement was commenced in January 1909, and between Cement and Metaline Falls in May 1910.

The connection with the Chicago, Milwaukee and St. Paul Coeur d'Alene Line at McGuires was graded in 1910.

A large amount of construction work was in progress during the year of 1907 and it was impossible to find a competent contracting firm who would undertake the construction of this line. Its construction was imperative, however, as industries were being developed which required an outlet by rail. Therefore the grading between Grand Junction and Newport was done by the Railway Company forces under the direct supervision of the Chief Engineer. Sufficient grading was done by hand to permit rough track laying and the work was completed with steam shovels and train hauled material.

After the line was in operation into Newport it was decided to extend it to Cement in order to obtain the traffic that had previously been carried down the Pend 'Oreille River by boat. The contract for the construction of a roadbed ready for track laying was let to Grant Smith & Company. During the progress of the work it was decided to extend the line to Metaline Falls and the same firm was awarded the contract to complete the work to that point.

It was the policy of the Railway Company to have the Contracting Company prepare a Shoo Fly around the important cuts and hurry the lighter work in order that track could be laid and the material from the large cuts distributed by train.

Heavy clearing and grubbing was required over the entire line between Rathdrum and Metaline Falls.

The bridge work is not extensive but a few important structures were built. In Mile 41 a 60 foot Howe truss span with pile trestle approaches is used to cross over the Great Northern Railway. A pile and framed trestle about 80 feet in height and 1500 feet in length is used to cross Ashenfelter Bay about a mile north of Newport.

The Pend 'Oreille River crossing in Mile 88 is the most important bridge on the line. This consists of one 145 foot deck Pratt truss span, one 380 foot deck Pratt truss span, and one 80 foot deck girder span, resting on concrete foundations. The distance from base of rail on this bridge to low water elevation is 135 feet and the bed of the river is 70 feet below low water. The bridge was erected without falsework, the spans being made cantilever by loading the land end with sufficient weight to counterbalance the weight of the steel as it extended over the canyon. Four months' time was required to erect and rivet the steel, which was fabricated in the East.

A 71 bent trestle about 90 feet in height is used to cross Vail Gulch in Mile 99.

The other bridge work was of the usual pile or framed trestle construction. Material was obtained at the local mills.

Corrugated iron pipe was used almost entirely for culvert openings. A very few vitrified pipe and small timber box culverts are found.

Track was laid between Grand Junction and Newport and on the Clagstone Branch in 1907, between Newport and Cement in 1909, and between Cement and Metaline Falls in 1910. The connection with the Chicago, Milwaukee and St. Paul Coeur d'Alene Branch at McGuires was laid in 1910. New 75 pound 33 foot rail was used for the main track and lighter material for the siding. Ties were of native fir.

Right of way fence, telegraph lines and buildings were constructed by the Railway Company forces after track was laid. Medium sized frame depots were built at Newport, Dalkena and Ione, and smaller buildings at the less important points. A brick depot 36 feet by 100 feet, and freight house 30 feet by 120 feet, were built at Spirit Lake. Neat parks and platforms are maintained at the depot sites, which give the buildings a nice appearance.

Extensive engine terminals and shops were built at Spirit Lake, the buildings being constructed of concrete, brick and steel.

Permanent water supply stations were installed at Rathdrum, Spirit Lake, Coleman, Dalkena and Ione.

The line is operated as a part of the Idaho Division, standard main line equipment being used. Traffic is mediumly heavy.