

## KAMO—PUHUPUHI RAILWAY

*Kamo to Hikurangi Section.*—Working surveys and plans for the extension of the railway from the end of the opened line at Kamo Coal-mine Station to the Hikurangi Coalfield, a length of about 8 miles, were completed early in December last, and in the latter part of the same month the work of forming the first 3 miles was let in short sections to parties of men on the co-operative contract principle. Arrangements were made for locating the men on the ground, and the works were started in the beginning of January. A further length of  $1\frac{1}{2}$  miles has since been let in the same way making a length of  $4\frac{1}{2}$  miles of the railway in course of construction, the total number of men employed on the work on the 31st March being 109, divided into fourteen parties. The works consist principally of heavy cuttings and embankments, masonry and timber culverts, and small bridges, all of which are progressing satisfactorily, the work performed being of a superior class, and the cost moderate.

## HELENSVILLE NORTHWARDS RAILWAY.

*Makarau Section (3 miles 6 chains).*—Formation and permanent-way. The whole of the formation outside of the tunnel is about seven-eighths done, and the works generally (excepting the tunnel) are in a forward state. The tunnel is pierced from the south end for a length of 322 yards, leaving 283 yards still to do. The first  $7\frac{1}{2}$  chains of tunnelling was through papa-rock and soft sandstone, easily worked but this was succeeded by very bad ground, which renders careful working and timbering necessary, and requires lining with brick throughout as soon as excavated. This difficult work in the tunnel has considerably retarded the progress of the other works, as until the tunnel is excavated and lined throughout the laying of the permanent-way and ballasting cannot be proceeded with to any great extent, consequently the completion of the contract will be greatly delayed owing to the heavy work in the tunnel.

*Kaukapakapa Ballast-pit Siding.*—The contractor for the Makarau Section is finishing the cutting into the ballast-pit, and having the 2 miles of line relaid and put in order so that ballast-trains can run over it. The cutting for the railway into the pit is through a deep deposit of hard clean gravel which extends over nearly the whole area of the gravel reserve, and shows that an ample supply of suitable material for ballasting the railway and metal for roads in the district is obtainable from the area of land secured for the ballast-pit.

*Mount Rix Wharf.*—The contract for the erection of this wharf was completed on 31st March, 1891, and maintained for three months thereafter by the contractor as required by the contract. Subsequently it remained in charge of the Public Works Department until vested in the Railway Commissioners by "The Railways Authorisation and Management Act, 1891."

*Surveys.*—The survey of a continuation of this line to near Wellsford, at 67 miles 30 chains, is in much the same state as reported last year namely,—

*Taheroa Section.*—From 46 miles 36 chains to 49 miles 54 chains is ready for contract.

*Komokoriki Section.*—From 49 miles 54 chains to 56 miles is located, and the plans are so far advanced that they can be got ready for contract at short notice. And a trial survey has been made from 56 miles to 67 miles 60 chains, by which it is shown that a fairly easy line for the railway is obtainable throughout nearly the whole length, except in one place where it runs along the steep and somewhat broken sides of a deep gorge for about 2 miles.

*Land-plan Surveys.*—The land-plan survey of the Makarau Section was commenced in February last, and good progress has been made with the field-work.

## KAIHU VALLEY RAILWAY

Traffic has been regularly continued on this railway throughout the year, and the line has been maintained in good order.

## WAIKATO—THAMES RAILWAY

*Paeroa—Te Aroha Section (13 miles 3 chains).*—The section of the railway from the Ohinemuri River to the end of the opened line at Te Aroha Township was surveyed and working-plans were prepared several years ago, but it was necessary to have the line pegged out afresh before arrangements could be made for letting the work of forming the railway and drainage by co-operative contracts. The work under this system was commenced in January last by a force numbering 169 men (afterwards increased to 205 men) divided into parties, to whom the works were let in sections of various lengths at prices fixed by the engineer. These contracts, which include all the formation and drainage-works on a length of 12 miles of the railway, have been carried on steadily since the start, and satisfactory progress has been made with the works, large portions of which are well advanced, and the whole should be completed in about six months hence. The total cost of the work done to the 31st March was £3,564, and the average earnings of the men amounted to 7s. 9d. per day of eight hours.

## THAMES VALLEY—ROTORUA RAILWAY

*Kaponga Section (10 miles 23 chains).*—Formation and permanent-way. This contract was completed on the 30th December last, and the maintenance was satisfactorily carried out by the contractor in terms of the contract.

*Tarukenga Section ( $4\frac{1}{2}$  miles).*—Formation and permanent-way: This is an extension of the Kaponga Section towards Rotorua. The contract was let to Messrs. J McLean and Son on the 11th January last, amount, £28,538 15s. The contractor has 126 men employed, and so far the work is making satisfactory progress.

## NORTH ISLAND MAIN TRUNK RAILWAY

*Mokau Section (11 miles 9 chains)*—This section is the connecting link between the southern terminus of the opened line at Mokau Station and the Poro-o-tarao tunnel section. The formation of about  $4\frac{1}{2}$  miles of this section was commenced on the co-operative principle early in January with