

The Lands and Survey Department is carrying out the precise levelling from Upper Hutt to Pigeon Bush, and will also shortly be setting out the tunnel lines at each portal preparatory to running a check survey over the hill.

Test bores have been sunk on centre-line at the west end of the tunnel and useful information obtained about the alluvial material to be driven through before rock is encountered.

Formation of work-yard sites at each end and excavation of the approaches to each portal have been completed. Preparations are now in hand to concrete the west portal and commence driving the Rimutaka Tunnel. This will be followed by similar work at the east portal when skilled man-power becomes available.

At the west end camp sites for single and married men have been prepared and some married quarters have been erected and occupied.

In the Featherston military camp, at the east end, 21 married quarters, including 4 for staff, have been erected and occupied, and in Featherston 2 State houses have been erected for staff.

A specification for a contract for the Rimutaka Tunnel suitable for advertising overseas has been prepared and a specification for an alternative contract on a "labour only" basis and suitable for advertising in New Zealand is in hand.

*Hutt Valley Railway Extension.*—Owing to the continued scarcity of labour and materials, very little construction has been carried out and work has been confined chiefly to survey and investigations.

At Petone level crossing a detailed engineering survey was made, and this was followed by a thorough investigation of the bridge-site by means of bores sunk to rock over the area to be covered by the proposed overbridge.

A subway has been completed at Epuni Station and 1,100 ft. of platform front (about 70 per cent. of total) has been completed at Nae Nae.

A contract has been let for trimming of formation and berms between Waterloo and Nae Nae, and the work is about half completed.

Six test piles have been driven on the site of the Hutt River Bridge at Taita and test bores have been sunk on the site of the bridge at Silverstream just below the highway bridge. A site plan of this bridge has been completed.

For the survey of the line between Taita and Silverstream field-work is practically completed and the preparation of plans is well in hand.

*Haywards-Plimmerton Railway.*—Investigation and survey work have been carried out on this line, which will connect the Hutt Valley with the Manawatu line. It will involve a tunnel at the Haywards end about 3 miles long, and almost 20 chains of this line has been pegged. Preliminary investigations of the route between the tunnel and Pahautanui have been made preparatory to carrying out a ground survey.

*Turakina-Okoia Deviation.*—The only remaining work in connection with the above deviation which could not be carried out before the lifting of the rails in the old Fordell Station yard was the widening and completion of the top end of the access road to the new station yard. This work has now been completed.

Except for a small area, all workshop and camp sites have been cleaned up and the land handed back to the owners.

*South Island Main Trunk Railway.*—The Oaro construction camp has been closed and clearing up is in hand.

Excavation for the foundations of a 200,000-gallon reservoir at Kaikoura has been completed.

Completed-line plans are well in hand and all should be finalized within a few weeks.

*Sockburn-Styr Railway.*—The permanent-line plans for this railway have been checked and revised in collaboration with the Railways Department and some minor deviations were investigated during the year.