

An additional 6,000-gallon vat still requires to be erected at Towai, as also does a telephone-line between Hukerenui and Towai. The portion of line north of Towai Station still requires one culvert, a private-road crossing, the removal of extensive slips from 20 m. 65 ch. to 21 m. (end of section), and a few stone drains and stone walls, to be completed.

Extension to Grahamtown (2 m. 49 ch.).—Work in connection with the completion of formation, which was held over pending construction of wharf being commenced, was put in hand again in November. Formation to 4 m. 4 ch. was trimmed, and slips removed from cuttings at 3 m. 35 ch., 3 m. 65 ch., and 3 m. 78 ch. A stone-and-tile drain was put in for the whole length of the cutting from 3 m. 26 ch. to 3 m. 43 ch., and also in cutting from 3 m. 74 ch. to 3 m. 79 ch. A considerable quantity of stone was placed in several cuttings in the form of dwarf walls to prevent slips. The cutting from 4 m. 5 ch. to 4 m. 13 ch. was finished, but a heavy slip necessitated moving the line out about 14 ft. The material from this cutting is being utilized to widen station-yard. Practically all the formation in Grahamtown or Onerahi Station yard has been finished, with the exception of about 2 chains at end of wharf. The yard itself has been trimmed, and some further draining, and a stone wall at foot of hill to prevent slip, have been completed.

Rails have been laid from present Kioreroa Wharf, 2 m., to 4 m. 4 ch.; the line fully ballasted from 2 m. to 2 m. 66 ch., and about one-third ballasted to 4 m. 4 ch.

Some repairs were effected to the Kioreroa Bridge, and permanent-way was laid across it. The additions to the opening span to increase speed of working are being placed in position.

In March a commencement was made with excavation of siding into the Parakiore quarry, from which rock is to be obtained for protective purposes on this section. The laying of siding has been finished, as also has the inclined tramway. The quarry itself is being opened out, and will shortly be ready for use. The stone in this quarry is easily worked, and is of excellent quality for protective purposes.

Grahamtown Wharf: It was not until March that the contractors for this work received all their timber. This delay considerably retarded pile-driving. Since the arrival of the timber, however, the contractors have carried the work on in a most energetic manner, having driven fifty-five out of fifty-eight piers. It is anticipated that the last pile will be driven by about the middle of July. Caps, stringers, and longitudinal braces have been fixed in position as far as the fifty-fifth bay. Wales and braces have been put on several piers, and a short length of decking put in. This contract will probably be completed by the end of the year—some months before the expiry of the contract date.

The laying of rails in Grahamtown Station yard and on the wharf will be proceeded with in October, and the balance of ballasting and stone protective works put in hand. This work should not take more than three months to complete.

NORTH AUCKLAND RAILWAY.

Wellsford Section (66 m. to 69 m. 18 ch.).—A new and permanent water-supply has been put in at Waby Station.

Te Hana Section (69 m. 18 ch. to 72 m. 45 ch.).—During the year this section was completed, and handed over to the Working Railways Department on the 16th May, 1910. The traffic was worked during the first month by the Public Works Department's ballasting-locomotive. Several of the banks and cuttings are in rotten ground, so it was considered advisable to thoroughly test the track before running over it with the Railway Department's heavier engines.

The Hoteo quarry at 64 m. 46 ch., on the Waby Section, has been continuously worked during the year to provide material for protection-work along the line generally.

Kaiwaka Section (72 m. 45 ch. to 81 m. 30 ch.).—The earthworks on this section, which were during the previous year brought to an advanced stage as far as 77 m. 30 ch., have been completed, except a large bank at 77 m. 20 ch. and the cutting at 77 m. 40 ch., which are not yet quite finished. The Mainene tunnel is partly enlarged and lined. It has been completed for 4 chains 20 links from the north end. Enlarging has been commenced and carried forward for 2 chains at the south end, and has also been started in the middle. Lining will be carried on from these points.

Formation of the Topuni Station yard has been completed.

Mainene Bridge has also been completed. In the Topuni Bridge seven of the piers have the piles driven. There are still six piers in the middle of the bridge to be erected. The contract for supply of ironwork for these bridges has been completed.

Beyond 77 m. 30 ch. all concrete culverts, pipes, and stone drains are completed to the Kaiwaka Station yard at 81 m. 30 ch. Formation on the same length is all in hand and in an advanced stage.

Piercing of the tunnel at Ross's Hill has been commenced at both ends. A heading is in $2\frac{1}{4}$ chains at the south end, and about $3\frac{1}{4}$ chains at the north end, where also the tunnel front is completed. A special front had to be designed for the south end of tunnel, and this work is partly completed.

Fencing is in progress.

Service roads giving complete communication with all parts of the work on this section were completed during the year, and a landing has been prepared on the Kaiwaka Creek for launches and punts, by which material for the works is being conveyed from Te Hana and elsewhere.

Platelaying and ballasting have been proceeded with. Rails are now laid as far as 75 m. 49 ch., and bottom lift of ballast to the same point has been placed in position. The second lift has been carried as far as 72 m. 75 ch.

A contract for erection of platelayers' cottages at Kaiwaka Station yard is in progress.

A telephone-line has been erected from Te Hana to Kaiwaka Station. A movable school for the children of men employed on the works has also been erected.