

totals 128,800 cubic yards, of which 30,000 cubic yards were placed the previous year. All culvert construction was completed for the above length. Two drag-line machines have been operated on earthwork, while the No. 1 Waihou Suction Dredge was utilized to pump sand into the Waihou Bridge approaches. A third drag-line is now to be placed on side drains in the peat area.

A further forty-five married workmen's quarters, with outbuildings, were erected at Pukahu, Kerepechi, Ngatea, and Mangatarata Camps, making a total of fifty-one, plus twenty-six single workmen's huts. The old Waihou River workshop building has been refitted for the railway works, and an annexe, 31 ft. by 41 ft., has been added. One carpenters' shop, 30 ft. by 20 ft., was erected.

Pokeno Section. Earthwork construction of this line commenced in August of last year, with one mechanical shovel, and since then the number of machines has increased to nine. Double-shift working was commenced last December, and to date a total of 321,000 cubic yards of material has been handled.

The total length of formation in hand is 10 miles, of which 4 miles are nearing completion as regards earthwork.

Of the 23 miles of original survey on this section it has been found necessary to make deviations on 20 miles. Of this length, 12 miles have been investigated, the new permanent line surveyed, and the plan work completed. The remaining 8 miles have been investigated, and the permanent-line survey is in hand. In the course of relocation the route has been shortened by approximately $2\frac{1}{4}$ miles.

An additional eighty married and fifty-six single workmen's quarters, together with a recreation hall, were completed during the year.

EAST COAST MAIN TRUNK RAILWAY: EXTENSION TO OPOTIKI.

It was intended that construction on the extension of the East Coast Main Trunk Railway from Taneatua to Opotiki should commence during the year, but owing to the fact that plant and service material from other railway-works were not available, and also because the survey was hardly sufficiently advanced, construction was postponed.

During the year survey-work was continued with a small party, insufficient staff being available for carrying on survey operations on a large scale.

Permanent pegging was completed from 100 m. 8 ch. to 103 m. 71 ch. Cross-sections were set out and cut to 103 m. 45 ch.

Permanent location and grading investigations have been completed to 105 m. 60 ch. Preliminary estimates are being compiled as the survey-work proceeds.

It is anticipated that construction will be commenced in the near future.

NAPIER GISBORNE RAILWAY.

At the beginning of the period, work on this railway was considerably handicapped by the cleaning-up of the line made necessary by the disastrous floods of February and April last year.

However, with the completion of flood-damage restoration, construction work returned to normal, and, aided by a fairly dry late summer and autumn, good progress has been made on all sections.

The Napier-Putorino Section was restored by the Railways Department, assisted where possible by this Department, sufficiently to carry traffic, and the goods service to Wairoa was resumed on 5th December, 1938.

The section between Putorino and Raupunga (13 miles in length) was completed and handed over to the Railways Department on 27th February, 1939, and at the end of the period the balance of this portion of the line as far as Waikokopu was practically ready for handing over also.

Particulars of the more important items of construction carried out during the year are as follows:—

Putorino Wairoa Section (Length, 33 m. 12 ch.).—Between Putorino and Te Kumi 20,000 cubic yards to 30,000 cubic yards of filling were replaced in washouts, and from 12,000 cubic yards to 15,000 cubic yards of slips were removed. General flood damage to formation, track, and fences was also repaired. Two hundred lin. feet of 48 in. diameter concrete pipes were laid to act as a covered side drain from above the north portal of the Mohaka Tunnel to a point clear of slip country.

Between Te Kumi and Wairoa, formation work consisted of fettling, a moderate amount of ballasting, cleaning up of cuttings, and the installation of a number of small culverts.

Work on bridges was confined to the placing of guard-rails on all bridges, and the lifting of the Wairoa end span of the Wairoa River Bridge to rectify settlement which developed in the earthquake of 1931.

During the period 3,646 cubic yards of ballast were placed.

Cart-docks and concrete buffer-stops were constructed at Waihua and Ohinepaka Station Yards.

Wairoa Station Yard.—An engine-shed, rail-car shed, engine-driver's room, latrine, and refreshment-room were completed. The station building was reconditioned and altered to suit the Railways Department's requirements, after transfer in May of this Department's office to a new building in Queen Street, Wairoa. The station platform was sealed, and cart-docks and platform gates and fences completed. A new water service was laid through the yard from the Wairoa Borough's main to the engine-sheds and the group of old permanent cottages. Installation of locomotive-watering standpipes is held over pending supply of the necessary equipment by the Railways Department. This supply used 1,800 ft. of 5 in. and 1,850 ft. of 4 in. bitumen-dipped steel pipe.

Tenders were called and contracts were let for the erection of thirteen cottages on a site purchased within the Wairoa Borough. Of these, six were completed and handed over to the Railways Department