

in wet weather. The Waikokopu Wharf is completed except for the replacement of wooden fenders by iron fenders on iron bark spring piles. Goods traffic has been run during the year, the total revenue for the year derived therefrom totalling £7,300, which more than paid working-expenses.

STRATFORD MAIN TRUNK RAILWAY (EAST END).

Matiere Section (0 m. to 10 m. 23 ch.; length, 10 m. 23 ch.).—The only new work on this section is the building of the road-overbridge at 10 m. 21 ch., and the building of a water-supply reservoir for Matiere Station. Adequate maintenance has been carried out.

Ohura Section (10 m. 23 ch. to 19 m. 10 ch.; length, 8 m. 67 ch.).—Railway-formation on the section is now complete 33,000 cub. yd. of earthwork being excavated and placed during the year. Road-deviation work, which has been very heavy, is mainly in connection with access roads to Ohura Station, and alteration to the roading-system in Ohura Township where interfered with by the railway-works. The earthwork done in this connection during the period under review was 30,000 cub. yd. One 10 ft. by 6 ft. flat-topped culvert at 19 m. 6 ch. and an 18 in. circular concrete culvert at 16 m. 72 ch. have been built, and a culvert at 18 m. 67 ch. is in hand. The railway-bridges on the section are now complete, five being completed during the year, total length 495 ft., comprising sixteen steel-plate girder spans, on concrete and timber pile piers. Three road-overbridges are in hand. 460 lin. ft. of concrete-pipe culverts varying from 9 in. to 3 ft. in diameter have been placed in road and level crossing construction. Considerable work was done on provision of private crossings, and 6¼ m. of fencing have been erected. The formation of the Nihoniho and Kopuka station-yards, which had been proceeding the previous year, was duly completed, and formation of Ohura station-yard is finished, with the exception of the formation for the dead-end sidings. On the main line, 3¼ m. of rails have been laid, making rail-head at 19 m. 10 ch. and sidings at Nihoniho and also those at Ohura, with the exception of the dead-end sidings are laid. Ballasting has closely followed platelaying operations, the main line being fully ballasted to 19 m. 10 ch. The main line, sidings, and road-deviations absorbed 20,000 cub. yd. ballast during the period. This ballast is obtained from the shingle-beds of the Taringamotu Stream, the average haul over opened and unopened line being 23 m.

Traffic.—A goods and passenger service has been maintained from Okahukura to the terminus, which was moved from Toitoti (16 m.) to Ohura in December, 1926. The passenger and freight receipts totalled £6,589.

Section beyond Ohura.—In October of last year preliminary work was started on this section and so far a total quantity of 16,000 cub. yd. of earthwork has been shifted, two steam-shovels being now in operation. The driving of the bottom heading of the Mangatawa Tunnel at 19 m. 52 ch. has been commenced.

STRATFORD MAIN TRUNK RAILWAY (WEST END).

Work on this railway has been mainly concentrated on the Heao Section, so that the tunnels which are the governing feature in the through connection could be manned as early as possible.

Raekohua Section (47 m. 40 ch. to 50 m. 60 ch.; length, 3 m. 20 ch.).—Very little regular formation work has been carried out on this section, the most important work being the service tram and its maintenance. This tram, which was constructed to a 3 ft. 6 in. gauge is generally paralleling the railway-line, but is on steep grades and sharp curves to reduce formation costs. It connects the station-yard at the Raekohua Flat with the opened section at Tahora, and enables all construction materials to be transported in the railway-trucks direct to the main camp and depot at the Flat, thus saving considerable cartage and handling costs.

On the main line the overhead bridges at 47 m. 75 ch. and at 48 m. 38 ch. were completed, the latter consisting of two 60 ft. trusses with one landing-span, all on concrete piers. The bridges at 48 m. 15 ch. and 49 m. 16 ch. are in hand. Two large 8 ft. arched culverts at 48 m. 30 ch. and at 50 m. 25-50 ch. and a 4 ft. one at 48 m. 32 ch. were completed. Where necessary to form the bridge approaches, formation has been put in hand, but otherwise, as already mentioned, the policy has been to leave it in favour of more urgent work.

The construction of a road partly for settlement use and partly to serve the railway-work has been proceeded with between 47 m. 40 ch. and 50 m. 40 ch.; this work, which involves considerable formation in addition to two bridges, is well in hand. The large permanent camp at the Raekohua Flat, which I mentioned in my last report as being under construction, was completed; it involves a total of eighty-seven married quarters, seventy single quarters, post-office, social hall, nurses home, school, staff quarters, &c. A number of private business premises have been erected on land leased by the Department, and an electric-lighting supply and drainage-system installed throughout the camp generally. A regular passenger service has been run from the main camp to connect with the railway services on the opened line at Tahora.

Heao Section (50 m. 60 ch. to 57 m. 0 ch.; length, 6 m. 20 ch.).—The principal work on this section has been the opening-up and working of the tunnels, of which there are four on the section. The country is exceedingly rough, and, as mentioned in my last report, a great deal of preliminary work in connection with the transport and erection of plant has been necessary before work on the actual piercing of tunnels could be commenced. A particular feature on this section is the electrification of practically all the construction plant. A large power-house equipped with two Babcock boilers and the necessary generating equipment has been established, and transmission-lines run throughout.

Tunnels Nos. 1, 2, and 3 are now in hand. At No. 1 tunnel (51 m. 15 ch.) good progress was made at the west end, a total of 14 ch. being excavated and lined complete. Electric locomotives are utilized for hauling spoil from the face, and the drills are driven by compressed-air delivered from the electrically driven compressors at the power-house.