Waikura Section (10 m. 40 ch. to 22 m., approx.).—Formation between 11 m. and 14 m. is well advanced, part of the work having been done by a steam-shovel. In the tunnel between 13 m. 14 ch. 88 lk. and 13 m. 21 ch. 52 lk. the bottom heading is completed. In the tunnel at 13 m. 48 ch. the bottom heading has been driven 28 ft. Permanent-way is laid to 11 m. 55 ch., but no ballasting has been done. An 8 ft. concrete culvert, 153 ft. long, has been constructed at 12 m. 22 ch., 106 piles being required in the foundation. At 13 m. 48 ch. a drive was put in for a 3 ft. culvert. Small bridges over stream-diversions were erected opposite 11 m. 5 ch. and 11 m. 35 ch., also a temporary trestle bridge to carry the line over a road and a creek at 11 m. 56 ch. Overhead bridges were erected at 12 m. 30 ch. and 12 m. 48 ch., and approaches formed. Work on this section was suspended in October, 1915, in order to concentrate the few remaining men on the completion of the Ngatapa Section.

## Gisborne-Napier (South End).

Eskdale Section (0 m. to 10 m., approx.).—The work in hand on this section comprises the construction of the Westshore Bridge and approach banks. The bridge, a very large reinforced-concrete structure, to carry both railway and road, is being erected by the Department. The banks are being constructed by the Napier Harbour Board under contract, in conjunction with the Board's harbour-improvement scheme.

The reinforcing-steel for the bridge having come to hand, it was straightened, checked, and placed in racks ready for use. The necessary plant and buildings have been erected, including a 5-ton travelling-crane on gantry for handling piles, &c., two jetties, office, cement-store and testing-room, concrete-mixer, steel-bending shed and machine, two sheds for storing bent steel reinforcement, screening plant for grading concrete aggregate, large pile-driving pontoon with derrick, steam-winch, boiler, pump for water-jet, &c., two smaller pontoons for transporting piles, and launch for towing same. From July, 1915, to January last the fabrication of the reinforcement and casting of piles has proceeded steadily, 399 pile reinforcements being fabricated and 300 piles made. This work was suspended in January owing to lack of space for stowing piles. 483 tons of steel reinforcement have been bent, labelled, and stacked. A water-supply has been laid on from the town main. The Harbour Board's tramway is being taken over for the purpose of hauling material from the works at Westshore to the end of the bank, where a complete concreting plant is being erected. Pile-driving was commenced on the 13th March, 1916, twelve piles having been driven in the abutment, as well as a number of temporary piles for staging.

The Harbour Board has almost completed the bank at the Westshore end by means of the dredge "Waikaka" and trucking material from the beach at Westshore. The total quantity put into the bank is about 73,000 cubic yards, of which 20,000 yards was trucked from the beach and the remainder dredged from the Inner Harbour. The Board also completed for the Department the construction of the bank from 2 m. 61 ch. to 2 m. 66 ch., with material from the beach. About 18 chains of stone pitching has been completed on the north side of the bank.

## STRATFORD - MAIN TRUNK RAILWAY. West End.

Whangamomona Section (31 m. 40 ch. to 37 m. 53 ch.).—Heavy slips came down on this section in July last, seriously affecting the Railway Department's traffic. A number of this Department's men were sent to assist in clearing the line.

Tahora Section (37 m. 53 ch. to 47 m. 40 ch.).—The line is practically complete and rails

laid and ballasted to Kohuratahi (42 m. 28 ch.), while the cuttings and banks are complete to 44 m. 20 ch. Numerous culverts, water-tunnels, and stream-diversions have been constructed up to 47 m. 18 ch., also sundry road-deviations, while others are still in hand. No. 1 tunnel (44 m. 30 ch. 50 lk. to 44 m. 54 ch. 50 lk.) is complete except one face wall. At No. 2 tunnel (44 m. 76 ch. 50 lk. to 45 m. 9 ch. 50 lk.) the bottom heading is completed, and a length of 6\frac{9}{4} chains has been enlarged and lined, leaving 5\frac{1}{4} chains to complete. Permanent-way is laid beyond Kohuratahi to 44 m. 16 ch., and first lift of ballast has been put down. A horse tramway is laid

has been enlarged and lined, leaving  $5\frac{1}{4}$  chains to complete. Permanent-way is laid beyond Kohuratahi to 44 m. 16 ch., and first lift of ballast has been put down. A horse tramway is laid from 44 m. 16 ch. to Tahora Station yard (47 m. 10 ch.), following the railway formation to 45 m. 42 ch., and thence following the main Ohura Road. Permanent fences are completed to Kohuratahi and for a total length of 157 chains beyond. Sites have been excavated for four platelayers' cottages at Tahora, and a contract has been let for their erection, which is making good progress.

## East End.

Matiere Section (0 m. to 11 m.).—The erection of the ferro-concrete piers for the Ongarue River Bridge at 0 m. 7 ch. is in hand. Owing to the impossibility of obtaining steel a temporary wooden superstructure will be erected to enable rails to be laid across. On the Okahu contract (1 m. 40 ch. to 4 m.) progress has been greatly handicapped by shortage of labour, but the tunnel heading has been driven right through, and the contractor has commenced breaking down and lining. During the period the amount of earthwork done in the open cuts on the contract was 18;000 cubic yards. Nothing has been done to the tunnels at 4 m. 65 ch. and 6 m. 12 ch. during the period. A contract has been let for enlarging and lining the tunnels at 7 m. 55 ch. and 8 m. 35 ch., the Department supplying bricks for lining. This work is proceeding satisfactorily. The brickworks at 7 m. are turning out a serviceable article for use in tunnel-lining, culverts, &c. Other works carried out by the Department include some earthwork, drainage, papa-burning for roadmaking purposes, and the completion of two small concrete culverts.