STRATFORD MAIN TRUNK (EAST END).

Trial-line plans of alternative routes from Ohura (20 m.) to the Heao Valley (32 m. 40 ch.) were completed and comparative estimates made out. Additional surveys are still required to make the comparative estimates complete, as some alterations to grades were found necessary after the trial lines were finished. Permanent-line pegging has been done from 19 m. 74 ch. to 22 m., and plans and estimates are completed for this distance. About 2 m. of road-survey, to avoid road-crossings or enable better ones to be obtained, were made.

MIDLAND RAILWAY (NELSON END).

Trial-line surveys between 88 m. and 93 m. were made on the right bank of the Buller River, and between 88 m. and 94 m. 7 ch. on the left bank. (Note: 93 m. on right bank traverse is the same point as 94 m. 7 ch. on the left bank.) The paper location for both routes is in hand.

Westport-Inangahua Railway.

The permanent survey was carried as far as the 18 m. during the previous period. Several small deviations are, however, being finalized at present.

SOUTH ISLAND MAIN TRUNK.

During the year exhaustive surveys were carried out to determine the best route between Parnassus and Wharanui, particularly over the portion between Parnassus and Kaikoura. These surveys, which have now been completed, indicate that a route closely following the coast will prove the most satisfactory from the point of view of both grading and cost.

OTAGO CENTRAL RAILWAY-CROMWELL NORTHWARDS.

When my last report was written the trial survey of this proposed railway-extension from Cromwell via Loburn and Bendigo to Luggate had been completed for a distance of 15 m. During the year under review this trial survey has been completed to the proposed terminus at the Luggate, a total distance of approximately $27\frac{1}{2}$ m. Plans and a paper location have been completed, and these, with the estimate of cost, will shortly be available for consideration.

TE WERA QUARRY.

This quarry was originally opened to provide ballast-supplies for the Stratford Main Trunk Railway and road-metal for local bodies' and departmental use in the surrounding district. Owing to the alteration in the railway tariff, the cost of supplying local bodies was considerably increased, and consequently outside orders were not large. This necessitated a reduction in the number of men employed during the period. During the year a total of 15,186 cub. yd. was crushed, of which 10,054 cub. yd. were sent to the railway-works, the balance being used on roadworks.

CONSTRUCTION AND MAINTENANCE OF ROADS AND BRIDGES.

Huehue-Waimatenui Road (Bay of Islands County).—This road has been widened to 16 ft. over

Waikare-Kawakawa Road (Bay of Islands County).—This road-line was felled and burnt 1 ch. wide for a distance of 128 ch. and the road formed 14 ft. wide for 48 ch. In addition 110 cub. yd. of slips were cleared.

Awakino Valley (Upper) Road (Hobson County).—174 ch. of formation were completed to a width of 14 ft., 356 lin. ft. of concrete-pipe culverts placed, and one 20 ft. bridge erected.

Kirikopuni-Parakao Road (Hobson and Whangarei Counties).—A further 360 ch. of this important road were metalled 14 ft. wide, nine bridges totalling 490 lin. ft. were erected, and 660 cub. yd. of slips cleared. Bush was felled and cleared over a length of 4 ch. and 900 cub. yd. of rock excavated.

Waimamaku - Donnelly's Crossing Road (Hobson and Hokianga Counties).-Road was formed 18 ft. wide for 7 m. 35 ch., and formation is well in hand over a further 271 ch. In addition sixty culverts were placed and covered, and the road-line was double-fenced for 78 ch.

Broadwood-Runa Runa Road (Hokianga County).—The following work has been completed: re-formation 16 ft. wide, 256 ch.; formation 24 ft. wide, 81 ch.; formation 22 ft. wide, 84 ch.; formation 16 ft. wide, 23 ch.; formation 14 ft. wide, 28 ch.; cutting off corners, 4,613 cub. yd.; removing slips 1,100 cub. yd.; four 28 ft. and nine 18 ft. timber culverts; 22 ch. of drains; metalling 367 ch., and one 60 ft. bridge with approaches.

Iwitaua Road (Hokianga County).—186 ch. were widened to 16 ft., 8 ch. to 14 ft., and 29 ch. of new formation completed.

Mohuiti Road (Hokianga County).—227 ch. of formation 20 ft. wide completed, metalled, and rolled, and 225 lin. ft. of concrete culverts placed.

Kaingaroa-Fairburn Road (Mangonui County).—The following work was completed: Widening from 6 ft. to 12 ft., 237 ch., and from 12 ft. to 14 ft., 210 ch.

Mangonui – Stoney Creek Road (Mangonui County).—Re-formed 240 ch. and metalled 120 ch. Waipapakauri—Tangoake Road (Mangonui County).—This road was reconstructed over a length

of 684 ch., and widened to 16 ft. for $20\frac{1}{2}$ m. 26 ch. of drains were completed.