1908.

ZEALAND. NEW

CLUTHA VALLEY TO TUAPEKA MOUTH RAILWAY

(REPORT ON THE PROPOSED).

Return to an Order of the House of Representatives dated the 17th July, 1908.

Ordered, "That there be laid before this House a return being a copy of the report by the Engineer on the proposed railway up the Clutha Valley to Tuapeka Mouth."—(Mr. J. Allen.)

REPORT UPON ALTERNATIVE RAILWAY ROUTES, BALCLUTHA TO TUAPEKA MOUTH, BALCLUTHA TO RONGAHERE, AND BALCLUTHA TO POMAHAKA VALLEY.

THREE separate routes have been examined for this work, and plans and estimates made.

As they have been compiled from examination of the country only, without any instrumental survey except a few aneroid heights, the information is necessarily approximate only, and the total length of lines examined being about seventy-three miles prevented any great amount of time being expended on the flying survey.

The following is a description of the different lines examined:—

Line No. 1, shown in red on plan, starts a few chains north of the Balclutha Bridge on the main south line, and ends near the school at Tuapeka Mouth, and follows the north bank of the Molyneux River. Length, 21 miles. Estimated cost, £99,580, or £4,718 per mile.

Between 0/0 and 1/0 about 25 chains of rocky sidings occur near the railway-bridge; for the

remainder of the distance banks and cuttings alternate, of probably no greater height or depth than 7 ft. or 8 ft. The main road will require to be diverted for some distance along this length. From 1/0 to about 3/10 the line runs straight across the Barnego Flat, where a bank will be required from 3 ft. to 4 ft. high. From 3/10 to about 5/0 rocky hillsides alternate with short stretches of river-flat. The main road will also have to be diverted for this length. About 5/0 the line will leave the river-bank and go over a low saddle about 70 ft. above river-level at 5/60, behind a rocky knob called Balmoral Hill. Another rocky ridge occurs about 7/0, and the line runs at the back of this over a low saddle; from there it will keep away from the river to get at the back of numerous rocky outcrops, and will run at a height of 60 ft. to 70 ft. above the river to about 9/0, grades and formation being very easy. At 9/0 the line runs at the back of Begg Brothers' homestead, and from thence falls gently to the Waitahuna River, which it crosses about one mile above the mouth, and then gets close to the Molyneux River about 12/0, and keeps along the river-bank to about 14/0; from thence it ascends gently and shapes a course towards the main road at Crookburn about 14/40, winding where necessary to avoid rocky outcrops, and running through very easy country. From Crookburn the line will run alongside the road to 21/0, where there is a suitable site for a railway terminus on level dry ground, between the Post-office and the school, and nearly opposite the punt over the Molyneux River.

The difficulties on this route consist of about 25 chains of rocky hillside in the first mile, and the rocky hillsides between 3/0 and 5/0. From 5/0 to 21/0 no special difficulties occur, and the line can be located with easy grades and curves, and will wind along the back of the rocky out-

crops which occur near the river.