

4. The letters of Mr. P. Smith, of 26th October, Mr. Bold, of 13th November, and Mr. Heale, of 21st March and 17th June, show the difficulty of selecting a line of road and estimating its cost from flying inspections; and Mr. Heale, though he describes routes and gives rough estimates, just as I did, still insists, in his letter of 21st March, on the necessity of ascertaining thoroughly the details of the formation of ground before laying out a road over it, and estimates the cost of such an examination as is required for this purpose at £3 to £4 per mile over and above the actual cost of laying off the line afterwards. Your own letter of 5th October to Mr. Smith also alludes to the time required to explore a line.

5. As regards the cost of the Mangawhero-Taupo Road, as compared with others referred to in the correspondence,—

Mr. Ross, on 5th November, estimates the cost of a road 14 feet wide, through fern and scrub, similar to the bulk of the land traversed by our finished line, at £3 per chain, or £240 per mile. Our line, at the same rate, should cost £137 10s. per mile.

Mr. Ormond, on 4th July, speaks of forty miles of road as having been completed by Poihipi for £450. Mr. Bold's letter of 21st June shows that the Natives only did twenty-eight miles of the distance for the above money, which is at the rate of over £14 per mile. No description of the road, or country traversed, is given, but passages in other letters seem to show much of the latter to be level, grassy, pumice land; and Mr. Bold's telegram of 13th November describes "the principal part of the work" as consisting of some "side and scrub cutting between Opepe and the lake." This, too, is in a locality where Native labour only costs 2s. 6d. per day, instead of the 5s. we have to pay.

Colonel St. John, on 12th December, gives estimates for a road 7 feet wide, and the work appears, by a letter of 7th March, to have slightly exceeded the estimate. The total cost of 267 chains was £350, or about £105 per mile. The road referred to, however, has on it about 1,550 cubic yards of cutting per mile, while ours has only about 650 cubic yards. Reducing the price of Colonel St. John's figures in this proportion to make it agree with ours, we get £44 per mile as the cost of his 7-foot road as against our 8-foot one, and this with Maori labour at only half what it costs in Wanganui.

Mr. Heale, in his letter of 27th June, expresses views on the subject of present and permanent roads precisely similar to mine in my report of 13th November, and he estimates the cost of a 14 feet road through a level pumice country, about half bush and half open, at £250 per mile, (to which he afterwards adds, on the whole, £1,250 for bridge, &c.) a rate which would bring the fair cost of our line to £143 per mile, or more, considering the difference of soil.

Mr. Clarke, we find, from his letter of 24th June, agreed to give Maoris £150 per mile for a road, 16 feet wide, through bush on pumice land; and he employed two engineers, in addition to this, to lay off and superintend the line, and allowed their assistants 10s. per day, while mine only got 7s.

Mr. Stewart's telegram of 6th April shows two miles and three-quarters of "light work, through open country," to have been only "partly done" for £100.

In strong contrast to all the above, our line has only cost about £12 per mile for the actual labour, or £22 per mile inclusive of officers' salaries for the time occupied by the work.

In reference to all the above works, there is a certain amount of vagueness in the letters, &c., which might possibly lead to some trifling error in the calculations, notwithstanding the pains I have taken to make them accurately; but the case of the contract from Waingongoro to Rawa, as referred to in Mr. P. Smith's estimates of October 28th and Mr. Parris' letter of June 24th, affords conclusive data. The road is through vegetation precisely similar to that traversed by our finished line, but the ground is more level and there are no large rivers to ford, and no necessity, therefore, for expense in approaches to fords. The road is twelve miles long, 20 feet wide, and has about 5,000 yards of cutting on it; and the contract was let at Mr. Smith's estimated price of £391 10s., which I concur with Mr. Heaphy in regarding as a fair one. We find from Mr. Parris' letter that thirty-six able-bodied men were over ninety days doing this work; while my mixed gang of nine able and sickly men and boys completed eighteen miles of road, 8 feet wide, and with nearly 12,000 yards of cutting, besides a strong bridge of 15 feet span, drains, fascine work, and some bits of metalling on it, in seventy-seven working days. An examination of the prices gives a similar result. The average value of the work done under the contract by each Native on the Waingongoro-Rawa Road was 2s. 5d. per day; and, from what Mr. Parris says of their dissatisfaction at the smallness of their earnings, there will probably be a difficulty in getting them to take any more work at Mr. Smith's valuation. Taking the worth of my people's work at the £150 for which I consider it could have been done by Europeans, we find the average value of each hand's daily labour to have been 4s. 4d., which, I think, affords a pretty fair indication whether I and those under me kept the hands up to their work, and how far my views as to the expediency of employing Maoris by day or contract, when time is an object, are borne out. It is true that the Natives at Waingongoro were only receiving 2s. 5d. for 2s. 5d. worth of work, while mine were receiving about 4s. 10d. for 4s. 4d. worth; but the evident doubling of the time occupied on contract work, and with it the doubling of the officers' salaries, would have covered this difference several times over, and if Mr. Parris' suggestion of giving the Waingongoro people a gratuity of £58 10s. is acceded to, they will have received as much, in proportion to the value of their work, as my Natives.

I have gone into the above calculations, not merely because I have a personal interest in the matter, but because I think that a Government which adopts so largely a public works policy should be able readily to contrast results from different localities and under different systems.

The Hon. D. McLean, Defence Minister.

I have, &c.,
H. C. FIELD.