

11. You were dealing with Sanson?—Yes. I should say from Sanson to Marton you could not expect to make a main line of railway under £10,000 a mile, as in the Levin-Foxton section, plus a bridge. I do not know the crossing of the Rangitikei down at Bull's.

12. The original bridge has twelve spans of 150 ft.?—I understand it is over 1,500 ft. long. The Railway Bridge at Kakariki is 600 ft. long, and there have been disputes as to whether that is long enough; and I think probably a bridge at Bull's would have to be made, say, 1,000 ft. long. A bridge of that kind would probably cost £50,000.

13. You have to make embankments, have you not?—You might bank part of the river-bed and bridge part, but where you bank you have to be very careful what you do. I should say, taking it all round, the Rangitikei crossing with a bridge and banking would probably cost £50,000 to £60,000. I do not think it would cost less.

14. Then take eleven or twelve miles from Sanson to Marton: you get this at £10,000 a mile?—You get up to £170,000 for that section. Then, in regard to development, you see Marton is 450 ft. above the sea. I do not know what the level of Bull's is, but call it 150 ft. or 160 ft. You have to climb up from a fairly low level to Marton. If you are running up 1-in-100 grade, that is 53 ft. to the mile, and taking the distance from Bull's to Marton at six miles, 300 ft. is the height that you have to rise; so that in order to get a main-line grade you may have to develop and go into heavy works in order to get your line. Therefore I think you may take it that that line would probably cost for the twelve miles, including a bridge, £170,000.

15. What do you say about the works at the Marton Station?—If there is any junction made at Marton Station it means a new station to be built entirely.

16. Why?—At the present time there is a great difficulty in working the Marton Station because the junction with the Main Trunk line comes along about one-third of the way into the station, and you would require a sufficient distance from where your Main Trunk line and the Wanganui line come together—a sufficient distance from that point to the point of the next junction at the other end to provide the sidings that you require for interchange, and consequently the Marton Station would have to be carried farther south. If we could get out of that at £50,000 we would be lucky.

17. That means a considerable amount of lay-out?—Yes, and a complete alteration of the station.

18. That is, generally, your idea of the cost?—Yes, of the expenditure. I have mentioned a figure of £10,000 per mile. We at the present time are altering the railway between Auckland and Mercer—or, really, between Otahuhu and Pokeno—which is part of what we might call the old line, and making it a railway that is suitable for main-line express traffic, and we are spending in that distance about £10,000 a mile in order to get it. That is a pretty good guide of what the cost of a main line of railway is.

19. *The Chairman.*] You are straightening the line and lowering it?—Straightening it in places and raising or lowering it in other places. In some cases we are adhering to the present location, and in other places we are making a small deviation.

20. *Mr. Myers.*] In 1896 Mr. McKerrow gave a rough idea in a report he made at that time of what the cost would be. I think he said you would have to estimate £300,000 at the least?—Yes.

21. Has the cost of railway-construction increased since then?—Yes, enormously. I do not know on what class of railway he based his figures.

22. At that time you had 53 lb. rails?—Yes; we have 70 lb. now. I should say £300,000 then would mean the best part of £450,000 now. When he was making his estimate he did not take into consideration the signalling and interlocking systems which we have to take into consideration with fast traffic.

23. You have said you would not run a main line on the road?—I think it would be dangerous.

24. It has been shown that there are a number of private crossings over the tramway, which is quite near to several houses. Could the Railway Department agree to that?—Oh, no, not for a moment.

25. *Mr. Hannay.*] I understood you to say that there should be a new location?—Yes.

26. *Mr. Myers.*] Do you include in your estimate payments for land and new roadmaking you might have to undertake for the county to replace the road at present?—I think so. If we got the land at a reasonable price I think the estimates I have given would, with luck, cover the cost of land and compensation.

27. I want you now to come to the question of junctioning the tram with the railway at or near Marton. Will you tell the Commission what you have to say on that point from your point of view as Engineer of Railways?—Is it intended that the Government rolling-stock should be interchangeable with the tramway at that junction?

28. Oh, yes, the trucks, at all events, with the present tramway?—Not for a moment. It is absolutely ridiculous to think of it.

29. Why?—Because no Government Engineer would for a moment take the responsibility of allowing his rolling-stock to go from a railway to a tramway of that description.

30. But you know that certain trucks, at all events, are allowed to go from the Foxton-Himatangi Section on to this tramway?—That is so, a limited number of trucks on limited conditions and under considerable restrictions.

31. Could you permit the same kind of thing as a main-line junction?—I do not think it would be a wise thing, because the conditions of the Sanson Tram at Himatangi are altogether different from the conditions which would exist in a Foxton-Marton Tramway at Marton. You have presumably a very much larger traffic—not the limited traffic that there is at the present