What do you estimate would be the cost of those?—I provide nearly £60,000 for overbridges. Does that include the necessary overbridging you would have to do at the station itself?—Yes. Including the big one at Rangitikei Street?—Yes.

That does not include the additional line you would require to get to the Whakaronga Station?

-No; in the £50,000 for the Whakaronga Station I have included £12,000 for bridging.

Those are all at the present rate of expenditure?—Yes, all the schemes are on the same basis. Why is it you have put in these overbridges—because really the new deviation is in outlying districts—they are not through any portion of Palmerston North, or any populated area ?—That is so. But you have provided bridges nevertheless?—Yes.

There must be innumerable instances of level crossings, particularly from Lyttelton to Timaru, in the immediate neighbourhood of good-sized towns where there are no bridges or crossings ?—That

If you leave them out you can knock £50,000 off the estimated cost.

There are an enormous number of level crossings in the South Island where the trains pass through towns as large as Palmerston North and there is no protection?—There are quite a number of level crossings in New Zealand which are not bridged, and as I stated in my main evidence, those bridges can be omitted if it is desired; but in my recommendations to the General Manager I am making my own personal recommendations. I think it would be better to spend the money on bridging those, because it would give us not only safety for the general public who have to cross the railway-lines, but it would also enable shunting to be carried on qu te freely without any fear of killing anybody.

But under the new proposal I take it there was only one road through which it would be necessary to carry on any shunting operations by reason of the adequate area you have for the station and yards?—Not at all. There would always be shun'ing between the passenger-station, the goods-yard, and the sorting-yard, and also between the passenger and goods yard and engine-depot,

and those are on the other side of the roads.

Only one road ?-No, two roads.

I thought there was only one road that crossed the proposed station-site?—No. [Plan referred to.]

Part of your sorting and marshalling yards will be down near Rangitikei Street !—Yes.

I take it the sorting-yards comprise the area north-east of Rangitikei Street, and include the area that was shown as being under flood in the photograph that was produced at Palmerston North?-That is so. We have taken the levels of that country, and the greatest depth in a very much higher flood than you are referring to was not more than 18 in. Those were the levels taken by quite an independent engineer, and the flood-levels he showed were higher than the floods you referred to when the photograph was taken.

What would be the highest flood that you have known there?—The flood-level of October, 1920.

The formation-level will be 18 in. above the highest flood-level.

You do not know of your own knowledge how many level crossings there are between Christchurch

and Timaru ?—I will find out for you.

There has been no occasion of any steps taken to protect them? The whole outcry so far as Palmerston North is concerned, according to the evidence, was based upon the difficulty of the level crossings. The question of the level crossing is no more a great difficulty in Palmerston North, with the exception of the question of the shunting into the Square, than in all the other towns in New Zealand ?—The whole suggestion is quite silly.

## RICHARD WILLIAM McVILLY further examined.

Mr. Luckie.] You have expressed your approval of the reports of Mr. MacLean in connection with this matter ?-I have expressed my approval of the scheme, yes.

I gather from the report that the deviation appeared to be Mr. MacLean's proposal originally, was it not?—I do not think we need discuss that: I have expressed my approval of it.

I take it the new proposal had its origin about the time of Mr. MacLean's report ?—If you ask

when the proposal had its origin, it was in 1919.

Prior to that time most of your attention had been directed towards an improvement of the conditions at the Palmerston North station-site ?—Oh dear, no! we had been considering improvements at Palmerston North, as to what was necessary to provide for the requirements of the traffic, looking ahead, and we were not committed to any permanent scheme of alteration. Temporary expedients had been considered.

But nothing in the nature of a permanent improvement?—No. Then all these schemes from 1889 were only temporary expedients?—Temporary expedients put forward to deal with business at that time.

But not for the future ?—As far as it could be foreseen; but the traffic varies very rapidly, and the fact of this increase of 500 per cent. in the last twenty years is a pretty fair indication how much it has increased.

Mr. Myers.] And how much in the last ten years?—About 100 per cent.
Mr. Luckie.] It is common ground that something had to be done, the only question being whether you had previously considered any other proposal involving the deviation prior to 1919 ?-The question of what improvements had to be affected at Palmerston North, and the best way of dealing with the problem, had engaged the attention of the Railway Engineers for a good many years prior to that.

You have examined with Mr. MacLean the reports that he put in of the proposals that were indicated, and you are satisfied that his method was the only one that could by any means be carried into effect ?-I am perfectly satisfied that the scheme outlined by the Department and approved by the Department is the only one that will meet the position that has arisen and also provide for the future.