E.—3.

GREYMOUTH TO HOKITIKA.

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The survey between Greymouth and Hokitika has been completed; but the plans have not been received, and an estimate cannot yet be furnished.

NORTH ISLAND.

It has not been considered necessary to continue the surveys northwards from Featherston, on the Wellington and Masterton Railway, as the construction of the mountain section across the Rimutaka Range will still take nearly two years to complete, owing to the very heavy work to be done. An engineer will, however, be detached for this survey at once. The country is well known, and, with the exception of a few miles at the dividing ridge, is favourable as far as Woodville.

From Woodville northwards towards Napier, surveys and explorations are being made. The country for about 35 miles, to the end of the work now in hand, is very much broken by deep ravines cut by the Manawatu and its tributaries, entailing heavy viaducts. Otherwise, the work

will be comparatively light.

From Woodville westwards to Bunnythorpe Junction, 3 miles through the Manawatu Gorge, will be very expensive. From the preliminary surveys which have been made, about 1 mile of tunnelling appears to be necessary. The remaining length of 10 miles is more favourable.

At Bunnythorpe, the line to Foxton meets that towards Wanganui. The Foxton line is opened

as a horse tramway, but is being converted into a railway.

Between Bunnythorpe and Wanganui there is a gap of 5 miles, for which no appropriation has been made. The plans and surveys are however complete.

Thence to Wanganui all surveys are completed where the work has not actually been let.

Between Wanganui and New Plymouth the country has been partially surveyed. It is very unfavourable; both earthwork and bridging will be heavy.

Nothing can at present be done to complete the remaining link of the North Island system—that is, the line from New Plymouth northwards to Te Awamutu; but such scraps of information as are from time to time obtained regarding the intervening country tend to strengthen the opinion that a not unfavourable line will be eventually found.

PROPOSED NEW WORKS.

SOUTH ISLAND.

STATION AT PORT CHALMERS.

The present terminus at Port Chalmers of the Dunedin and Port Chalmers Railway is quite insufficient for the business of the line, and a sum of £10,000 will be required for its improvement.

Workshops at Dunedin.

A sum of £15,000 will be required for workshops at Dunedin.

WESTPORT AND MOUNT ROCHFORT RAILWAY.

A sum of £30,500 will be required to complete the coal staiths and river protection works at the Buller. This sum was included in my original estimate of the cost of the works, but no appropriation for it was taken.

NORTH ISLAND.

WAITARA TO WANGANUI.

A further appropriation on account, of say £30,000, will be required for this line if it is to be continued at present.

WANGANUI TO MANAWATU.

As above stated, there is no appropriation for 5 miles of the length between Bunnythorpe and Wanganui. If this gap were closed there would be direct communication between Foxton, Bunnythorpe, and Wanganui. The cost of this length would be £30,500.

EXTENSION-NAPIER TO WAIPUKURAU.

A sum of £30,000 has been appropriated for the construction of a tramway from Waipukurau to Takapau. The experience gained on the Foxton Tramway shows that a wooden tram is not sufficient for a large timber traffic, and that a railway would have to be eventually laid down, as is being done at

A further sum of £27,000 would be required for this purpose.

FEATHERSTON TO MASTERTON.

When the original appropriations for the Wellington and Masterton Railway were made, a traverse had been run through the Rimutaka, showing that a line was feasible. No trustworthy estimates could be made, however, from such information as was then obtained. An approximate estimate was made, which was all that could be done in the time given, for a line with three-chain curves and of the lightest description, so that its cost might be kept within an average of £5,000 a mile. It was laid out to run round every spur and to head all the gullies, and would have proved quite insufficient to meet the traffic. It would have limited the business with the interior so much that it would have been found necessary to re-build it with more favourable curves very shortly after its

The work as now being constructed will form a substantial railway, with 52lb. rails, and curves of not less than 5 chains radius. The embankments are made wider on the mountain section than in the level country. Masonry has been used throughout for culverts, and for many of the bridge abutments. The bridges across the Pakuratahi have iron lower booms and vertical rods. A tunnel of 630 yards length has also been introduced at the summit, to reduce the height over which the traffic has

to be hauled. Altogether, the line will be equal to a very heavy traffic.