

# 1898.

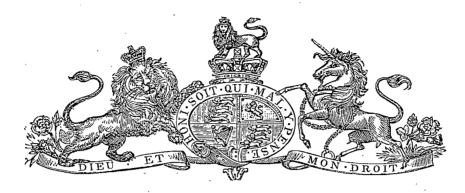
## PARLIAMENT OF TASMANIA.

# ULVERSTONE-BURNIE RAILWAY:

Report of Mr. John Macneill McCormick, C.E., Engineer of Existing Lines, Tasmanian Government Railways, together with Comments of the General Manager thereon.

Presented to both Houses of Parliament by His Excellency's Command.

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Taśmanian Government Railways, Engineer of Existing Lines Office, Hobart, 20th July, 1898.

SIR.

In accordance with your instructions, I have the honour to report on the merits of the "so-called" Back line, Ulverstone to Burnie, and the Beach line recently surveyed.

The greatest divergence of the Back line from the Beach line occurs between Ulverstone and the Penguin, and is under  $1\frac{1}{2}$  miles, which narrows at the Penguin to 8 chains. From the Penguin to Burnie the Back line is practically a coast line, at places having a sidelong slope from .25 degrees to 35 degrees, on very treacherous ground.

At 133 miles from Ulverstone a tunnel is provided, shown on the section as 28 chains in length, through hard rock. The bridge over the Leven will be a long one, with expensive approaches; the culverts numerous, and the earthworks very heavy (the excavations in cuttings being over three times as much as on the Beach line).

The Beach line as originally surveyed, with its expensive sea protection works, has been abandoned, and the line as now laid out avoids any costly works of that nature. The earthworks are light, gradients easy, culverts few, and bridges carefully located. Tunnelling has been proved to be unnecessary.

The Beach line, as now designed, will be as substantial as the Scottsdale and other Government Railways. As I have previously stated, the cost will not, I anticipate, exceed £100,000.

The Beach line can be approached by traffic almost anywhere along its route, and I have no hesitation in saying that, from whatever standpoint it may be looked at, it is an infinitely better line than the so-called Back line.

I attach locality plan, showing the position of both lines.

I have the honour to be, Sir,

Your obedient Servant,

The Honourable the Minister for Railways.

JOHN M. McCORMICK, Engineer of Existing Lines.

Forwarded through F. Back, Esq., General Manager.

Tasmanian Government Railways, Engineer's Office, Hobart, 10th August, 1898.

MEMORANDUM for the Honourable the Minister for Railways.

Ulverstone to Burnie Railway.

The estimate for the construction of the Ulverstone to Burnie Railway has now been completed, the total of which is £83,565.

I have, &c.

JOHN M. McCORMICK, Engineer of Existing Lines...

FORWARDED through F. BACK, Esq., General Manager.

Tasmanian Government Railways, General Manager's Office, Hobart, 31st August, 1898.

Sir.

In response to your request that I should forward you some further remarks with regard to the construction of the proposed line of railway between Ulverstone and Burnie, I beg to refer you to my Report of the 6th July last, copy of which I append hereto.

I would explain that in no case have I definitely set down any sum as the cost of the line. I explained that in framing my estimates of the result of working the railway I took an arbitrary figure on which to base my calculations, and that I calculated interest at 4 per cent., being the rate I was advised by the Treasury the original sum of £200,000 was borrowed at.

The Mercury this morning, in stating that I was not in accord with Mr. McCormick's estimate, must have written under a misapprehension, as up to the present time I have not expressed any opinion thereon. I am pleased, however, to be able to say that I have gone into the matter with Mr. McCormick most carefully, and feel satisfied that the estimate of £83,565 with which he has furnished you is quite a sufficient sum to construct the line in question; and, moreover, there is within that sum a sufficient margin for any minor fluctuations in the value of material or in the price of labour.

With regard to the two routes, I would remind you that when we discussed, some few years since, the question of the construction of this line, it was thought desirable that an examination of the country should be made with a view of finding out whether an inland route, say from 6 to 8 miles back from the sea-shore, could not be discovered which would have the advantage of opening up fresh country, and of furnishing traffic from both sides of the railway.

An examination was made, and reports to you were to the effect that such a line was, for various reasons, impracticable. A line was then surveyed, which has since been called the "inland" or "back" route, and an estimate was furnished you of the cost of construction of such a line, amounting to £200,000.

The so-called "inland" route was practically a beach route. The farthest distance of this "inland" route from the sea-shore is only 100 chains, running to 8 chains at the Penguin. No country whatever would have been served by the so-called "inland" route that cannot be equally well served by the line projected by Mr. McCormick.

In my opinion, to construct the "inland" or "back" route would be sheer waste of money. As good and useful a line will now be made for £84,000 as that for which an estimate of £200,000 was furnished. In addition to this, Mr. McCormick's line provides easier gradients and curves, and will be infinitely cheaper to maintain.

The "inland" route was laid out for some distance along the slopes of the hills in exceedingly treacherous country, which is known to be continually slipping. Mr. McCormick's route avoids this. Mention has been made of the severance of private properties. This has been very much over-estimated. For nearly its whole course along the sea-shore the line will run through Crown land, and I am of the opinion that compensation will form quite a small item.

The principal savings effected by Mr. McCormick's proposal are found in three items, viz., in earthworks, in the avoidance of a tunnel, and in the alteration of the character and location of bridges. In these three items alone are found a saving of rather more than £90,000.

To refer to the financial position, I still maintain my views as to receipts and expenditure, and I give you the same estimate of the results of working under present conditions of traffic, viz., a loss on working of £1026 per annum. To this must be added the interest on cost of construction, which is now fixed at the definite sum of £83,565. If, as I am informed, the money can be borrowed at 3 per cent. the interest will be £2507 per annum, showing a deficiency in working and interest of £3533 per annum.

I attach to this Report a plan showing the two routes under consideration.

I have, &c.

FRED. BACK, General Manager.

The Honourable the Minister of Railways.

6th July, 1898.

## MEMORANDUM for Honourable Minister for Railways.

### Ulverstone to Burnie Railway.

In directing me to report further upon the proposal to continue the Western Line from Ulverstone to Burnie, you have placed before me two propositions. One, as to whether the line will pay; the other as to whether—the line from Burnie to Zeehan being constructed—it is not desirable to bridge over the only gap in the main railway system of the colony.

As to the first proposition. Mr. McCormick, having now a re-survey of the line, estimates that the cost thereof will not exceed £100,000, or one-half of the original estimate. Here there is a large saving of interest. The impetus given to agriculture by improved prices during the past three years justifies the opinion that the output of produce will increase, but the distance it will be carried is so short that no very material addition will accrue to the railway receipts. I therefore adhere to my previous estimate of revenue, and likewise to my estimate of working expenses.

Recasting my previous figures, by allowing reduced interest in consequence of largely reduced estimate of cost of construction, we have, receipts, £5400; expenses, £6426; interest on £100,000 at 4 per cent., £4000;—leaving a deficiency of £5026.

It is possible that joint arrangements may be entered into with the Emu Bay Railway Company, mutually advantageous, by which £500 a year could be saved in working expenses. If this should be the case the deficiency would be reduced to £4526.

There is some promise of traffic from the iron mines at the Blythe. If, as the present owners contemplate, there should be an output of 1000 tons per week, a revenue of £3000 a year should be earned by the Railway. I am not, however, in a position to speak with any degree of certainty as to this traffic:

There is likewise a large deposit of iron at the Iron Cliff at the back of the Penguin, from which some 50 tons of ore a week have been sent out for some time past, and I believe a larger quantity would be sent away if railway carriage were available. The promising copper ore discoveries on the Dial Range are also deserving of some consideration.

On the whole, I think we may look hopefully to a considerable output in minerals when the railway is completed, if a market can be secured.

To come to the second proposition, it would undoubtedly be a great public convenience if the line were constructed, always assuming that the railway from Burnie to Zeehan is completed and -worked.

The question, however, if a sum of from £4000 to £5000 per annum—the estimated cost—with a possible early increase in the traffic, is not more than an adequate payment for such convenience, is one which I must leave to Ministers to decide.

#### FREDK. BACK, General Manager.

Note.—Since writing the above Report, I learn that the money required for constructing this line will have to be borrowed, and that it will be borrowed at 3 per cent. If such be the case, a further saving equal to 1 per cent. on capital cost will be made, reducing the loss proportionately.

