· (No. 70.)



1880.

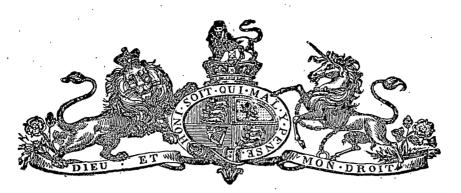
## TASMANIA.

HOUSE OF ASSEMBLY.

# REPORT OF ROBERT WATSON, ESQ., C.E. ;

TERMINUS SITES OF PROPOSED DELORAINE AND MERSEY RAILWAY AT PORT FREDERICK.

Laid upon the Table by the Minister of Lands, and ordered by the House to be printed, August 24, 1880.



SIR,

Colonial Secretary's Office, Hobart Town, 7th July, 1880.

I HAVE the honor to request that you will have the kindness, if in your power, to aid the Government of Tasmania by nominating or recommending a thoroughly competent Engineer of undoubted standing in your colony, who could undertake to examine into and report upon the most advantageous site for the terminus of the proposed Deloraine and Mersey Railway.

Our Engineer-in-Chief would meet the gentleman who may be appointed at Launceston, and accompany him over the ground, whenever the most convenient time may be decided upon.

As Parliament will shortly assemble it is desirable that the Government should ascertain the most eligible site for the terminus with as little delay as may be possible; and I shall, therefore, feel much obliged if you would give this matter your early attention.

The Hon. the Chief Secretary, Victoria.

Victoria,

I have, &c.

Chief Secretary's Office, Melbourne, 13th July, 1880.

I HAVE the honor to acknowledge the receipt of your letter of the 7th inst., No. 2098, asking that an Engineer of high standing may be nominated or recommended by this Government, who would be willing to assist the Government of Tasmania with his advice as to the most advantageous site for the terminus of the proposed Deloraine and Mersey Railway.

#### I have, &c.

W. H. ODGERS, for Chief Secretary.

The Honorable the Colonial Secretary, Tasmania.

#### TELEGRAM.

Melbourne, 20th July, 1880.

MR. Robert Watson, late Engineer-in-Chief, Victorian Railways, will proceed on Friday to Launceston to report as to the site for Railway. His address will be Post Office, Launceston.

Colonial Secretary, Treasury.

CHIEF SECRETARY, VICTORIA.

Forwarded to the Hon. the Minister of Lands for his information.

WM. MOORE. 21. 7. 80.

WM. MOORE.

#### TELEGRAM.

Hobart Town, 24th July, 1880.

MR. Robert Watson, late Engineer-in-Chief of Victorian Railways, will be at Latrobe on Monday evening, and inspect various routes of proposed Railway, and advise Government as to terminus. He will receive any information or representations those interested may desire to make with a view to assist him in reporting to the best advantage.

W. R. GIBLIN.

E. C. BRADDON, Esq., M.H.A., River Forth.

SAME telegram to J. M. Dooley, M.H.A., Latrobe. Arthur Young, Esq., Torquay.

FORWARDED to the Hon. the Minister of Lands and Works for his information and for record.

JOHN PACKER, for Colonial Treasurer. 24. 7. 80.

#### Sir,

### Lands and Works Office, 23rd July, 1880

I HAVE the honor to inform you that it is the intention of the Government to submit to Parliament proposals for the purchase of the Mersey and Deloraine Tramway, so far as constructed between Coiler's Creek and Latrobe.

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It is also the intention of the Government to submit proposals for the conversion of the Tramway into a Railway, and its construction and completion between Deloraine and the North Coast at Port Frederick.

The Government are therefore desirous of obtaining the benefit of your opinion upon the most advantageous site for the Terminus of the Mersey and Deloraine Railway at Port Frederick.

I enclose copy of Parliamentary Paper (House of Assembly, No. 73) which relates to this Line, and contains a Plan showing three routes to deep water for your information, but not necessarily for your guidance or adoption.

In arriving at any conclusion, I have to request that you will take into consideration cost of construction of the Line into the Terminus that may be selected, depth of water and facilities for shipment, and the possible extension of the line to the Westward at a future date.

Mr. Fincham, Engineer-in-Chief for Tasmania, will be the bearer of this letter, will accompany you, and afford you every assistance in his power in the examination of the localities which would admit of being selected in your judgment as sites for the Mersey and Deloraine Terminus at deep water.

I have, &c.

C. O'REILLY, Minister of Lands and Works.

ROBERT WATSON, Esg., C.E., Late Engineer-in-Chief for Victorian Railways, "Brisbane Hotel," Launceston.

#### TELEGRAM.

Lands and Works Office, 24. 7. 80.

MR. FINCHAM will be the bearer of y ur instructions, and meet you at the Evandale Junction to-morrow morning.

ROBERT WATSON, Esq., C.E., "Brisbane Hotel," Launceston.

GEORGE F. LOVETT.

" Brisbane Hotel," Launceston, 30th July, 1880.

SIR, IN accordance with the wishes of the Tasmanian Government (conveyed to me through the Hon. the Commissioner of Railways for Victoria) that I should "examine and report upon the most advantageous site for the Terminus of the proposed Deloraine and Mersey Railway," I left Melbourne on Friday, the 23rd instant, and reached Launceston the following day.

Here I was joined by Mr. Lord, Manager of the Launceston and Western Railway, and Mr. Fincham, your Engineer-in-Chief.

The latter handed me your instructions, viz., that I should "give the Government the benefit of my opinion upon the most advantageous site for the Terminus of the Mersey and Deloraine Railway at Port Frederick; and that in arriving at any conclusion I should take into consideration the cost of construction of the Line into the Terminus that may be selected, depth of water and facilities for shipment, and the probable extension of the Line to the Westward at a future date."

I have the honor to report that, accompanied by Mr. Lord and Mr. Fincham, I at once proceeded to make a personal inspection of the locality, and it was at once evident to me that there were three available places which deserved careful consideration; viz.—

1st. At the termination of the tramway from Coiler's Creek to Latrobe, at Gilbert-street, B on plan, with an extension to a point between Bell's store and the Ballast Ground, C on plan.

2nd. At Stewart's mill near Torquay, on the eastern side of the Mersey River, D on plan; and 3rd. At Formby, on the western side of the river, E on plan.

With respect to the first, B on plan, I take it for granted that if railway accommodation be afforded to this locality, Latrobe must have the first consideration, as it appears to me that, after Hobart Town and Launceston, it is one of the most important Towns in the Colony, and it is evidently growing rapidly now. It must, therefore, have a station, no matter what provision may be made for reaching "deep water."

The ground at Gilbert-street, the present terminus of the tramway, is suitable for a terminal station; and to reach what may be called "deep water," near Bell's store, C on plan, it would be necessary to construct about  $1\frac{1}{2}$  miles of railway. From the best information I could get from the residents of Latrobe and the neighbourhood, I gathered that the depth of water is about 14 feet at low tide, but between the bar and this place, at one point, there is only 4 feet of water—(the evidence about this is somewhat conflicting, varying from 3 feet to 5 feet)—and the tide rises and falls about 9 feet; so that although there is plenty of water at the proposed site for a wharf, it would not be safe for vessels drawing more than 12 feet of water to attempt to come up.

I find that Mr. Human's estimate made in 1875 for a line from Latrobe station to Stewart's mill, near Torquay, a distance of 4 miles 73 chains, is £19,535, or about £4000 per mile: this is along the edge of the river. The cost per mile of the first portion, *i.e.* between Latrobe and the Ballast Ground, would be considerably less than the average cost per mile of the whole, probably 25 per cent. less, or £3000 per mile, and the distance being about  $1\frac{1}{2}$  miles the cost would be about £4500. This does not include anything for rolling stock, and there must be added the cost of a wharf, say 200 feet by 30 feet, about £1000. This would afford accommodation for three vessels, each about 150 tons, and drawing 12 feet of water, at a total cost of £5500, and the extension would be equal to carrying the same rolling stock as the other portion of the line from Deloraine to Latrobe.

The second site at Stewart's mill, near Torquay, D on plan, would be reached by a line from Latrobe. Two routes have been surveyed by Mr. Human, C.E., and estimates made by him. One, No. 2 on plan, follows the course of the river close to the water, sometimes in it; the length is 4 miles 73 chains, and the estimated cost is £19,535. The other, No. 1 on the plan, is by way of Stott's Plain, its length is 5 miles 7 chains, and the estimated cost £12,129. It matters not to the public which of the two is made, because there is nothing to be picked up between Latrobe and Torquay by either, and consequently there is no occasion for any stopping place. This being the -case it would be better to construct No. 1.

A wharf similar to that described before, viz. 200 feet by 30 feet, would cost a little more than the one near Bell's store, because the ground is flatter and the approaches would be a little more costly; but taking it at the same figure, £1000, then the provision for this place would cost £13,129, and there would be amply sufficient water at all times for any vessels that could come over the bar at high tide.

The third site at Formby, E on plan, would be reached by a branch from the Deloraine and Latrobe line, starting at a point near the bridge over the Mersey, A on plan, the total length being 7 miles 65 chains. Of this 6 miles 25 chains appears to have been surveyed by Mr. Human, and an estimate furnished, £14,527, or about £2300 per mile. The portion from Horsehead Creek, F on plan, to Formby, would cost more per mile than the average from A to F, say 25 per cent. more, and the distance is about  $1\frac{1}{2}$  miles.  $1\frac{1}{2}$  miles at £2875 = £4312; to this must be added cost of wharf £1000, making a total of £19,839. There would in this case, as at Torquay, be provision at all times for vessels that could come over the bar at any time. Some sidings might be required on this line, if it be true, as stated, that there are payable coal seams in close proximity.

I assume that the same station accommodation would be required in each case; then we have-

No. 1. Latrobe, with extension to wharf. Cost £5500 for vessels drawing 12 feet.

No 2. Torquay, (Stewart's mill.) Cost £13,129 for any vessel that can cross the bar.

No. 3. Formby. Cost £19,839, for any vessel that can cross the bar.

I have been assured that any ordinary vessel that can come over the bar, can come to the Ballast Ground; for although there is 6 feet of water on the bar at low tide and only 4 feet at some point between the bar and Ballast Ground, at the bar considerable allowance has to be made for surf.

Taking all things into consideration, I think No. 1, viz.—Latrobe for a Terminal Station, with an extension to a point between Bell's store and the Ballast ground—the most desirable and suitable for present requirements.

I am informed that a company is being formed for the construction of a tramway from Gilbertstreet to the Ballast ground. Whilst fully appreciating the energy of the promoters, I think it would be better, if the extension be constructed at all, that it should be constructed by the Government.

It appears to be the practice at present for the storekeepers to purchase the produce of the locality and to store it until they find a market: this involves carting from the stores to the vessels. It would be better if stores could be erected close to the line, so that goods could go from the store

into the trucks and from the trucks into the vessels. These stores should be erected by Government and rented by storekeepers.

With respect to the probable extension of the line to the westward at a future date, I do not think that for many years it will be justifiable. At present there is a large number of small jetties or wharves along the North Coast between the Mersey and Circular Head, where the settlers ship their produce for other ports in small vessels, and it is not at all likely that they would put it into the train and bring it to Formby to ship it, even although it should be taken at a lower rate in large vessels than in small ones.

Land carriage cannot as a rule compete with water carriage; and I am confident that if a railway were constructed to Formby, very little produce would be brought by it either to Launceston or Hobart Town, whilst freight by water remain as they are at present.

It is estimated that the population between the Mersey and Circular Head is 10,000 or 12,000, of these 2000 are at Mount Bischoff: there might, therefore, be some passenger traffic, but the trip from Formby to Latrobe by steamer occupies little more than half an hour.

If at any time it should be thought desirable to extend the line to the westward, I think the point of departure should be near the crossing of the Mersey, A on plan, and the country due west from this point should be carefully examined. It would be absurd to construct a line within a few miles of the coast.

In estimating the cost of the different works, I have had to be guided by the estimates of Mr. Human, without having any means of proving their accuracy; as, however, these were made by the same engineer, and all about the same time, they must be sufficiently reliable for the purposes of comparison.

I have had to scale the distances from the plans, and it may be necessary to make some corrections in them when further measurements are made.

I am indebted to Mr. Lord and to Mr. Fincham for much valuable and impartial assistance, and to the gentlemen at Latrobe, Torquay, and Formby for the fairly disinterested way in which they gave me information.

I have in this Report confined myself to the matters referred to me; other information which I incidentally gathered is irrelevant to this enquiry, referring rather to traffic.

I have, &c.

The Hon. C. O. REILLY, M.H.A., Minister of Lands and Works.

ROBT. WATSON, C.E., M. Inst. C.E.

JAMES BARNARD, GOVERNMENT PRINTER, TASMANIA. BASS' STRAIT

