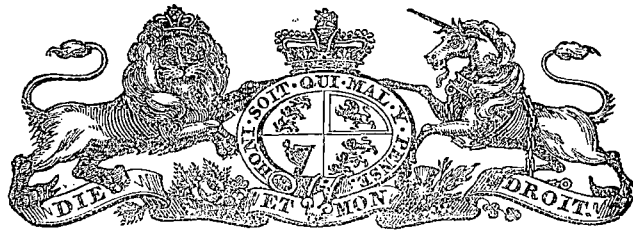


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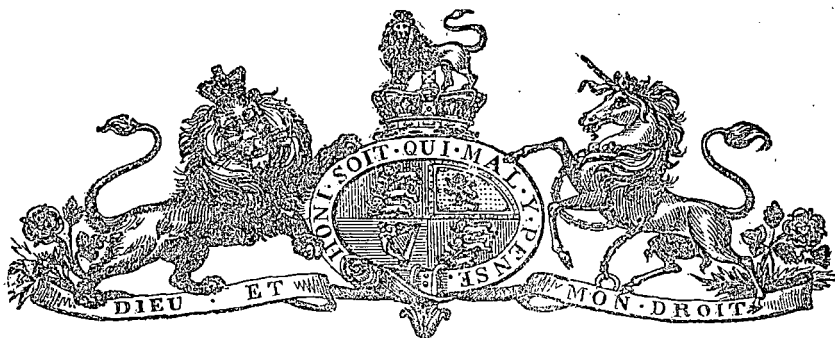
T A S M A N I A.

LEGISLATIVE COUNCIL.

ROADS IN NORTH-EASTERN TIN MINING
DISTRICTS :

MR. HUMAN'S REPORT.

Laid upon the Table by Mr. Crowther, and ordered by the Council to be printed,
October 31, 1876.



MR. Engineer HUMAN'S Report on the Tin Mining Districts of Gould's Country and Thomas's Plains as to Roads, &c.

Hobart Town, 19th September, 1876.

GEORGE'S BAY TRAMWAY.

SIR,

IN compliance with your verbal instructions of yesterday, I have the honor to state that I shall be happy to examine the country through which it is proposed to construct a Tramway from George's Bay, by a line traversing Gould's Country, Blue Tier, and penetrating to the great mining centre of Thomas's Plains, about 25 miles in length, with the object of ascertaining by inspection if such route is in the first place practicable, and, secondly, what would be the approximate cost per mile of its construction, and to report thereon.

From information I have received of the country, judging also from your opinion, an instrumental survey of the route would be quite impracticable, regarding the time in which you wish the examination to be made.

The route must be traced, and the difficulties of gradients, crossing of gullies and ravines ascertained, in order to form a judgment of practicability and cost.

I think this cannot be done in less time than a fortnight. I estimate that the sum of £40, exclusive of travelling and all necessary expenses, will be only a fair remuneration. Awaiting your approval and further instructions,

I have the honor to be,
Sir,

Your obedient Servant,

JOSIAH HUMAN.

To the Hon. C. O'REILLY, Minister of Lands and Works.

Lands and Works Office, 20th September, 1876.

SIR,

REFERRING to your letter of yesterday, I have the honor to instruct you to examine the country between George's Bay and Weldborough Town Reserve at Thomas's Plains, viâ Gould's Country and the Blue Tier, with the view of ascertaining by inspection whether it would be practicable to construct a Steam Tramway through that country as an outlet to George's Bay shipping-place.

The distance I apprehend will be about 25 miles, but the sinuosities of a line for Tramway purposes will, in all probability, still further lengthen the distance.

The Government relies upon immediate action being taken by you to furnish a report to the best of your judgment as to the probable cost per mile of the construction of the line referred to;

but should the period (viz. 14 days) stated by you as the time you believe would be sufficient prove inadequate through bad weather or other causes, you will not consider yourself limited.

Plans are forwarded herewith of that part of the country you are about to traverse, and the District Surveyor has been instructed to afford you every reasonable assistance.

I have the honor to be,

Sir,

Your obedient Servant,

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

JOSIAH HUMAN, *Esq., C.E., Davey-street,
Hobart Town.*

P.S.—An estimate of the probable cost of a Horse Tramway might also be furnished in case the severity of the grade in that country necessitates the abandonment of steam:

George's Bay, 5th October, 1876.

SIR,

I HAVE the honor to submit, according to your instructions, the following Report and Estimates on the above subject.

By a fixed aneroid at George's Bay, carefully registered at regular intervals of three hours by the Postmaster of that place, and a second one in hand whilst tracing the two routes to Thomas's Plains, I have, by correcting atmospheric disturbance during that time, obtained levels throughout the traversed routes, which are proved to be within a margin of 10 feet.

The mileage from the Bay to Trowbridge's public-house is taken from the Government chart, and beyond from the chainage of Mr. Surveyor Brown, marked by numbered stakes along both routes.

I have carefully reduced the gradients, and find that to ascend and descend the Blue Tier by the Little Plain, or by the alternative route over the Blue Tier, to Thomas's Plains, will necessitate a gradient of 1 in 16 for a continuous length of three miles on the Little Plain route on descending to Thomas's Plains, and an ascent of 1 in 16 for three miles in length before reaching the summit of the Blue Tier by the other route, with sharp curves in both cases.

Referring to your instructions "to examine the country between George's Bay and Thomas's Plains,—viz., Gould's Country and the Blue Tier,—with the view of ascertaining by inspection whether it would be practicable to construct a Steam Tramway through that country as an outlet to George's Bay shipping place," it would be practicable to construct such a road; but, considering the expense and uncertainty of working a line of Tramway of such severe gradients and curves, and looking to the results to be obtained therefrom, I am of opinion that it is inadvisable to carry out such a work, and which would be in excess of the requirements of the country at the present time, and probably for many years to come.

I propose that the sum of £1160 be spent upon the existing road from George's Bay to George's River, 9 miles, (one mile already slabbed but very roughly by local bodies) in forming and gripping, for which the soil is well suited, and with necessary culverts and small bridges.

A new bridge is now required over George's River at 4 feet higher level than the present one, which is very insecure, and will most likely be swept away by the first flood, stopping all traffic.

From thence to Trowbridge's public-house, $3\frac{1}{2}$ miles, a slabbed road 10 feet wide, a portion of which is already well carried out by Mr. Hall, and which I recommend to be continued from Trowbridge's to the northern side of the summit of the Blue Tier, a further length of $8\frac{1}{2}$ miles.

At this point I propose to terminate the slabbed cart road, where the greater portion of Tin is now obtained, and provide a 6 feet slabbed pack-track down the northern side of the Blue Tier to Thomas's Plains, a further length of 5 miles 25 chains, with a branch of 1 mile in length in a north-east direction on the summit of the Tier, tapping the numerous and increasing tin sections in that locality.

On the route by Little Plain another length of $2\frac{3}{4}$ miles of similar track will reach all the tin sections at present worked in that direction.

Thus a fair cart road, of greater durability than a wooden tramway, will be provided about 21 miles from George's Bay. The quantity of tin now obtained per week does not exceed 40 tons, but

assuming 50 tons, a two-horse car will bring down to the Bay $1\frac{1}{2}$ tons, and make three trips per week,—equal to $4\frac{1}{2}$ tons per week,—so that eleven two-horse cars will convey away all the tin now obtained on this line, including Thomas's Plains, and allowing a good margin for an increased quantity. It should be observed that pack-horses will be always required for each tin section to reach the main road, whether it be a tramway or not.

I feel confident that the interests and wants of the miners will be reasonably met by the proposal I have the honor now to make; and further, that other interests apart from tin mining will be benefited, and the public generally accommodated by such an expenditure of public money.

I enclose estimate of cost.

I have the honor to be,

Sir,

Your obedient Servant,

JOSIAH HUMAN.

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

The present Landing Jetty at George's Bay is a weak and inconvenient structure. It requires an addition in width of 20 feet, which will give 10 to 12 feet depth of water, such addition to be 100 feet in length, accommodating three vessels at one time.

The cost will be £350.

J. H.

ESTIMATE of Cost of Road, &c. from George's Bay through Gould's Country to Thomas's Plains.

	£	s.	d.
Road from George's Bay to George's River, less 1' mile just imperfectly made by local subscription, leaving 8 miles at £120	960	0	0
Culverts, &c.....	200	0	0
Required for new landing jetty at Bay	350	0	0
New Bridge over George's River	450	0	0
From George's River to Trowbridge's public-house, $3\frac{1}{2}$ miles at £450 per mile	1575	0	0
From Trowbridge's to the northern edge of summit Blue Tier, allowing 5 chains excess in each mile of Mr. Brown's chainage= $8\frac{1}{2}$ miles at £450—slabbed road 10 feet wide.....	3825	0	0

Horse Pack Track.

From end of slabbed road to Thomas's Plains, slabbed pack track 6 feet wide, 5 miles length plus 5 chains per mile over Mr. Brown's chainage= $5\frac{1}{2}$ miles 25 chains, at £240 per mile	1275	0	0
From junction of roads at $3\frac{1}{2}$ miles from Trowbridge's <i>en route</i> to Little Plain so far as tin is yet found, $2\frac{1}{2}$ miles of 6 feet slabbed track (portion formed) at £240 per mile	660	0	0
Branch slabbed track 6 feet wide, north-east direction from cart road along summit of Blue Tier, at £240.....	240	0	0
Contingencies	600	0	0
	<u>£10,135</u>	<u>0</u>	<u>0</u>

Deduct expended by Mr. Hall.

J. HUMAN.

George's Bay, 1 A.M., 5th October, 1876.

SIR,

SINCE posting the despatches to-night I have copied the heights of various points along the roads from George's Bay through Gould's Country to Thomas's Plains, taken by me on the present survey, in order that they may be marked on the Office Chart, if it be thought well to do so.

I have, &c.

(Signed) JOSIAH HUMAN.

The Hon. the Minister of Lands and Works.

The Heights above Sea Level, as taken by J. HUMAN, October, 1876, at various Points between George's Bay and Thomas's Plains.

	<i>Feet.</i>
Power's Rivulet (top of old bridge)	294
George's River (top of rail-post)	368
Fitzgerald's (surface of road).....	625
Trowbridge's public-house (floor of house)	752

Little Plain Route.

3½ Miles from Trowbridge's, at junction of the two routes	1536
5½ Miles ditto.....	1673
5¾ Miles ditto	1767
7¼ Miles ditto.....	2030
8 Miles Little Plain SUMMIT	2332
Crossing of Thomas's River, at 11 miles.....	1324
Manning's Store, Thomas's Plains	1283

Return from Manning's Store over Blue Tier (chainage from Trowbridge's).

Crossing of Thomas's River, 12½ miles	1196
At 10 miles	1737
At 9¼ miles	1872
At 8 miles	2486
At 7 miles, Blue Tier SUMMIT	2553
At 6½ miles	2553
At 3½ miles, near junction of routes	1536

J. HUMAN, C.E.

NOTE.—Add 15 feet to all the above levels, difference between *Telegraph Hotel* at George's Bay and sea level.