1924 SRRA

Kenya

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From	Conf.	Date
Gov. Coryndon	Conf. 215.	11th September, 1924.

Circulation :—

Mr.

Mr.

Mr.

Asst. U.S. of S.

Perm. U.S. of S.

Parl. U.S. of S.

Secretary of State

Previous Paper

[illegible]47306.

Subsequent Paper

C.A. 53309

Uganda Railway.

Turbo-[illegible] Section.

Submits preliminary survey. [illegible] for departmental construction in preference to home contract, and asks for telegraphic reply.

MINUTES

I have drafted to Crown Agents.

~~Revise~~ Recirc.

[illegible]

[illegible].10.[illegible]

Pending a reply from the Crown Agents, one or two points can be [illegible] with.

1\. Construction by main contract in Kenya.

Please see minutes on [illegible] and [illegible] Mr. [illegible]ling had returned before this despatch was sent off and no doubt reported fully the discussions which had taken place here, but he would naturally not wish to prevent the Chief Engineer and the Governor from trying their luck.

There are no new arguments. That of lower cost is vitiated by the counter claim of the "private enterprise" champions that departmental estimates are irresponsibly low, since any excess has to be made up, and that

in

Mr. Thomas

Submits preliminary survey.

21.1.24.

30/1/24

KENYA.

No. 215.

CONFIDENTIAL.

C.O. 492/40

GOVERNMENT HOUSE,
NAIROBI,
KENYA.

11th September, 1924.

Sir,

I have the honour to refer to Colonial Office telegram of the 6th August, relative to the construction of the Uganda Railway - Uganda Extension, and to transmit for your information and the consideration of the Consulting Engineers two copies of the Preliminary Survey of this Extension from Turbo in this Colony to Moulamuti in the Uganda Protectorate, together with two covering memoranda by the Chief Engineer of the Uganda Railway commenting upon various aspects arising from and concerning the Preliminary Survey Report and Estimate now enclosed.

2. While I observe with regret that in your telegram under reference it is stated that as regards the section of the Uganda Extension between Turbo and the Uganda boundary a main contract tender will be called for in England, I desire again to draw your attention to the views expressed in Kenya Confidential despatch No.144 of the 10th June and repeated in my telegram No.236 of the 31st July in which the departmental construction of the Uganda Extension was urged. This method is that advocated by my technical advisers and results from the experience gained during the construction

RIGHT HONOURABLE
J. H. THOMAS, P.C., M.P.,
SECRETARY OF STATE FOR THE COLONIES,
DOWNING STREET,
LONDON, S.W.

No.3919/27. A.

Dated 9. 9. 1924. 177

The Honorable General Manager,
Uganda Railway,
Nairobi.

PRELIMINARY REPORT
EXTENSION.

I forward herewith a report on the proposed Ugand
[illegible] prepared by Major J.S. Burns,
the [illegible]

[illegible]ould like to say at the outset that I consider
[illegible] survey exceedingly well, and
[illegible]ained in the field are, I think
[illegible] of the scope of the work. Major
[illegible] commended for their zeal and energy,
[illegible]kes and conditions. Survey work, in
[illegible]t as it is in thick bush country,
[illegible] thickly infested with mosquitoes,
[illegible] every member of the staff
[illegible] of a particularly unpleasant type,
[illegible]herefore, deserves very great credit

[illegible] desire of the Secretary of State to
[illegible] sent to him at the earliest possible date,
[illegible]what hurriedly, and the results obtained
[illegible]red only as a good indication of the
[illegible] its approximate cost. Many sections of
[illegible]re further investigation, and many
[illegible] can undoubtedly be effected, while with
[illegible] and also less cost.

[illegible], however, wish to hold up the report while
[illegible]ections are being made, as I am convinced it
[illegible] interest and will serve a useful purpose,
[illegible]liminary nature is fully recognized.

Such additional detailed investigation as are
[illegible] now being undertaken by the Survey Parties in the field,
[illegible] fixing on the finally accepted line. The detailed report,
[illegible], and estimates, which will result from these further surveys
[illegible] involved, and as carefully and completely as possible.

6. I now wish to summarize briefly the results obtained by Major Burns, and indicated where it is anticipated further savings can be effected. To do this, it will be convenient to deal with the line in its two geographical sections in Kenya and Uganda.

KENYA SECTION. Turbo-Malaba River (Uganda Boundary) 78.75 Miles.

This section is generally of an easy character, presenting no engineering difficulties in obtaining a 1% line compensated, with no curves sharper than 7°.

The heaviest part of the work lies between Turbo and Broderick Falls, though this cannot be considered difficult in any way. Beyond Broderick Falls the country opens out into easy rolling plains, extending almost up to the border, on the route selected.

be. Bearing this in mind, I will not attempt to analyse Major Burns figures in detail. I think, however, with reasonable luck, we should be able to reduce the cost per mile to £8,000, and shorten the line to say,
110 miles. This gives a total of £880,000, for the Uganda section.

We may say therefore that the cost of this section should be between £800,000, and £1,000.000.

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SUMMARY. Summarising the figures for Kenya and Uganda, we [illegible] that the total cost of a line, approximately 185 miles [illegible] between £1,200.000 and £1,500.000 - or between [illegible] per mile.

PRESENT PROGRAMME. On completion of the preli[illegible] main line, the parties in the field were immed[illegible] to the preliminary survey of the Mosla Branch [illegible] survey in connection with a staking-out. [illegible]

Staking out will commence [illegible] pushed on with all speed. [illegible] tities will be sent home [illegible] [illegible] however, except [illegible] they will feel [illegible] knowledge of the [illegible] first-class maps [illegible] [illegible] them to advise [illegible] [illegible] will be even more dif[illegible] for carrying out the work.

We have, however, [illegible] obtain[illegible] Mr. A.G. Dempster, a [illegible] now engaged on receiving [illegible] selecting best alignment for staking [illegible]

It is anticipated that [illegible] for commencing construction on [illegible] proposed.

[illegible] awaited in order [illegible]

Sd. G.D. RHODES.

Chief [illegible]

True Copy.

GENERAL DESCRIPTION OF THE COUNTRY AND ALIGNMENT OF EXTENSION

KENYA - [illegible]

[illegible] the East end of Farm [illegible] the Sergoit and [illegible] point is that [illegible] ground [illegible] follows the [illegible] Kipkarren River [illegible] of the Nzoia [illegible] escarpment has [illegible] Rivers in their [illegible]

[illegible] direction of the [illegible] direction [illegible] the Nzoia River [illegible]

[illegible] Farms [illegible]

[illegible] trees [illegible] perennial [illegible] point [illegible] between the [illegible]

[illegible] Nzoya River, the [illegible] the Broderick Falls [illegible] country can only be [illegible] Broderick Falls being [illegible] Foot-hills of [illegible] 1914-15 Survey [illegible] on the Kipkarren River [illegible] where it crossed [illegible] feet in length, and [illegible] along the [illegible] bank [illegible] River, swinging South East along the bank of the Nzoya [illegible], crossing the latter just above the Broderick Falls, [illegible] then [illegible] an Easterly direction at which point the Revised Survey joins the 1914-15 Survey.

The reasons a departure was made from the 1914-15 Survey are as follows:-

In the years that followed the first reconnaissance and the previous Surveys, the Western Trans-Nzoya has become a developed Colonized Settled Area, also the lands lying towards the North of the Kipkarren River have been developed under similar conditions, the result being that the inhabitants of these areas should be considered as they will be one of the chief users of the proposed extension.

[illegible] EXTENSION.

[illegible] RAILWAY.

[illegible] River Section.

GRADIENT ABSTRACT.

[illegible]
Length [illegible]

Grades.	[illegible] Length in Miles	% of Total	[illegible] River – [illegible] Length in Miles	% of Total	[illegible] Length in [illegible]	% of Total
1%	[illegible]	57.29	24.77	65.44	[illegible]	[illegible]
·9%	2.25	3.46	.38	1.[illegible]	1.[illegible]	[illegible]
·75%	1.78	2.46	–	–	[illegible]	[illegible]
·6%	[illegible]	2.96	–	–	[illegible]	[illegible]
·5%	7.75	15.37	1.03	3.69	[illegible]	[illegible]
Under ·5%	5.2[illegible]	8.50	[illegible]	[illegible]	7.[illegible]	[illegible]
Level	1.82	2.46	1.80	[illegible]	[illegible]	[illegible]
TOTAL.	60.75	100.00	[illegible]	100.[illegible]	[illegible]	[illegible]
The longest continuous compensated grade of 1% extends over a distance of:-	[illegible] Miles.				[illegible] Miles.	
The Rise & Fall per mile	23.7[illegible] feet				[illegible] feet.	

Max.

[illegible]

[illegible] - [illegible] RAILWAY [illegible]

[illegible]

TURBO–MALABA RIVER SECTION

II LAND.

[illegible]
LENGTH OF LINE = 79.75 MILES.

Description.	Estimate Rate		Turbo-Sio River [illegible] Miles		Sio River – Malaba River 25 Miles		Turbo – Malaba River 79.75 Miles.	
			Area	Cost	Area	Cost	Area	Cost.
Cultivated (Maize)	Acre	100/-	103.12	103,12			153.[illegible]	15,31[illegible]
Marsh Land	"	10/-	459.79	4,598			463.[illegible]	4,6[illegible]
Cultivated various	"	100/-	144.85	14,485	67.78	6757	2[illegible].[illegible]	2[illegible],[illegible]
Marsh Land	"	10/-	492.07	4,921	610.91	6109	1103.98	11,040
Total COST				36,366		12996		45,24[illegible]
Rate per mile				717		461		5[illegible]

TURBO – [illegible] E.C.

UGANDA RAILWAY.

TURBO-MALABA RIVER SECTION.

VIII.A. [illegible] BUILDINGS.

BUILDINGS & FIXTURES.

Item	Unit	Rate	Turbo – [illegible] River Quantity	Cost	Sio River – [illegible] River [illegible] Quantity	Cost	[illegible] Quantity	Cost
[illegible]				[illegible]	1	4[illegible],000.00	12	120,[illegible].00
[illegible]					2	1[illegible]	4	45,[illegible].00
[illegible]		[illegible]00/-	2	[illegible]4,600.00			2	[illegible].00
[illegible]		[illegible]000/-	[illegible]	1[illegible],[illegible]00.00			1	18,000.00
[illegible]		[illegible]/-	[illegible]	[illegible],000.00	1	[illegible],200.00	2	18,000.00
[illegible]		[illegible]/-	2	1[illegible],000.00	1	[illegible]20.00	3	16,750.00
[illegible]	each	18000/-					5.5	99,000.00
[illegible]	"	8200/-	4	[illegible]	[illegible]	[illegible]	[illegible]	12,[illegible]00.00
[illegible]	"	[illegible]/-	4	[illegible]3,200.00				
[illegible]		[illegible]/-	4	2,000.00				[illegible]
4 Unit [illegible]	"		4	6,400.00		[illegible]	[illegible]	7,200.00
[illegible] Box		140/-	4	560.00	2	280.00	6	840.00
Platform Lamps (2 per Stn)	"	150/-	8	1,200.00	4	600.00	12	1800.00
Drinking Hydrants	"	250/-	8	2,000.00	4	1,000.00	12	3,000.00
Station Platform	1000 Cft.	40/-	48000 cft.	1,920.00	24,000 Cft.	960.00	72,000 Cft.	2,880.00
Approach Roads	mile	8000/-	4 Miles	32,000.00	2 miles	16,000.00	6 Miles	48,000.00
Water Service Pipes to Buildings	per ft.	1/-	4800 ft.	4,800.00	2400 ft.	2,400.00	7200 ft.	7,200.00
[illegible]								

Description of Work	Unit	Rate	Quantity	Cost
[illegible] per mile	per mile	[illegible]		
Instruments Tyers	sets each	3400/-	46 No.	[illegible]
[illegible]	each	800/-	[illegible]	[illegible]
Grand Total				
Rate per mile				

[illegible] accepts the drainage [illegible]
[illegible] Mount Elgon and the [illegible]
[illegible] mately 2250 square miles [illegible]
[illegible] in its water [illegible]

[illegible] approx [illegible]
[illegible] being [illegible]

(2) [illegible] channel [illegible] 400 feet, [illegible] mile per hour.

(3) The next channel [illegible] of 500 feet and a [illegible] hour.

[illegible] bays [illegible]

[illegible] remaining [illegible]
[illegible] statement of [illegible]
[illegible] This [illegible]
[illegible] water is [illegible] feet, [illegible]
[illegible] feet.

[illegible] difficulties [illegible]
[illegible] railway [illegible] accurate [illegible]
[illegible] only [illegible]

[illegible] construction [illegible] curve [illegible] and a [illegible]
[illegible] considered.
[illegible] has been [illegible] to [illegible] no curve [illegible]

The Railway route passes through country which calls for very careful Medical arrangements. Allowance should be made [illegible] of the staff being ineffective, and local leave to the construction staff must be considered.

ENGINEERING AND CONSTRUCTION.

MALABA RIVER - [illegible] SECTION.

STONE.

This is plentiful throughout the route the line will take, and can be [illegible] into two classes:-
(1) Granite
(2) Ironstone.

The granite [illegible] ballast purposes, but will be [illegible] work as it does not dress [illegible]
Ironstone is [illegible] only [illegible]

SAND.

Sand [illegible] construction [illegible] section.

[illegible]

[illegible]

The [illegible] construction, [illegible] permanent buildings [illegible] quarters.
For [illegible]

LABOUR.

The labour [illegible] construction of the line [illegible] it will be necessary [illegible] from various parts [illegible] entail the establishment [illegible]

POSHO.

[illegible] foods being bananas, [illegible] native [illegible]

STORES.

The Main Stores [illegible] Mbulamuti Station, [illegible] Ginery, and [illegible] the Busoga Railway.
Sub-stores (cement and [illegible]) should be located at Kaliro and Busembatia, and stocked from Lusinga and Jinja respectively.

SERVICE ROADS.

Service Roads will only be necessary in a few instances, the chief one being from Bulange to the Mpologoma.

KAWENDWA STATION - (contd)

[illegible]

FORMATION - Earthwork [illegible]

16 feet, with [illegible]
14 feet, with [illegible]
[illegible] miles.

BRIDGING.

Through [illegible]
Section, there [illegible]
of [illegible]
per mile is [illegible]

[illegible] STATION

[illegible]

[illegible] RIVER.

[illegible] span, at [illegible] flood [illegible]

[illegible] RIVER.

[illegible]

[illegible] STATION.

[illegible]

water [illegible]
Alignment [illegible]

[illegible] RIVER.

[illegible]
roughly [illegible]
[illegible] 1-100.
[illegible]
level [illegible]
the [illegible]
[illegible]
[illegible]
span.

FENCING.

[illegible]
only [illegible] allowed [illegible]
the [illegible] of [illegible]
Road Crossings, [illegible] to [illegible]
Railway Standard have been adopted.

TELEGRAPH.

A Three Wire Air Line with Steel Posts have been allowed for in the Estimates due to the activities of the white ant which abound in the area the proposed Railway Route takes.

Complete installation of Tyers Tablet Instruments at all Stations has been allowed for in the Estimate.

PERMANENT WAY.

Overleaf.

TURBO - MBULAMUTI EXTENSI[illegible].

UGANDA RAILWAY.

MALA[illegible] - MBULAMUTI SECTION.

STATION BUILDINGS.

Name of [illegible]	Class	Station Building Sq.ft.	Passenger Platform Length	Passenger Platform Height	[illegible] Platform Length in [illegible]	[illegible]	[illegible]	[illegible] Sq.ft.	[illegible]	[illegible]	[illegible]	Native Latrines 4 - Units
[illegible]	[illegible]	[illegible]	600	1'0"	[illegible]	-	[illegible]	[illegible]	[illegible]	1	1	1
[illegible]	3rd.	800	600	R.L.	[illegible]	-	[illegible]	[illegible]	[illegible]	-	1	1
[illegible]	[illegible]	800	600	R.L.	50	-	[illegible]	[illegible]	[illegible]	-	1	1
[illegible]	[illegible]	800	[illegible]	R.L.	50	-	[illegible]	[illegible]	[illegible]	-	1	
[illegible]	[illegible]	800	[illegible]	R.L.	50	-	[illegible]	[illegible]	[illegible]	[illegible]	1	
[illegible]	[illegible]	800	[illegible]	R.L.	50	1	1	[illegible]	[illegible]	-	1	1
[illegible]	[illegible]	[illegible]	[illegible]	R.L.	50	-	1	[illegible]	2	-	1	1
[illegible]	[illegible]	[illegible]	[illegible]	R.L.	50	-	1	800	2	-	1	1

Existing. (Busoga Railway).

MAH.

Description of Work.	Year	Unit	Rate.		
(A). Survey Expenses	1	Mile			
(B). Plant	1	"			
(C). Establishment	1	"			
	1	"			
		"			129,825
	1	"		1	1,100

MAK.