

*Proceedings of the Madras Government, Public Works Department,
16th August 1875.*

No. 265. Read the following letter from Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to Lieutenant-Colonel J. MULLINS, R.E., Officiating Secretary to Government, Public Works Department, dated Madras, 5th August 1875, No. 433:—

With reference to the Order of Government, No. 1,480, dated 27th May 1875, returning, for revision, the plans and estimate for constructing a branch or siding in metre gauge from Sydapett Station to the Salt Depôt at Homes' Gardens, I have the

honor to forward a letter* received from the Agent of the South Indian Railway, enclosing a report from the Chief Engineer, in which that officer sets forth the reasons that led him in each case to fix the several curves and gradients. Under the circumstances I trust that the Government will see fit to sanction the estimates as originally sent up, amounting to Rupees 59,623.

2. The plans and estimates for the branch are again sent forward for consideration.

From W. S. BETTS, Esq., Agent of the South Indian Railway, to Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, dated Negapatam, 27th July 1875, No. 761.

Your letter No. 369 of the 9th ultimo.

I have to submit herewith, for consideration, a copy of the Chief Engineer's report, of the 24th instant, upon the estimate for the branch line from Sydapett Station to the Salt Depôt in Homes' Gardens.

Letter from the Chief Engineer, to the Agent, dated Trichinopoly, 24th July 1875, No. 1117.

REFERRING to G. O., No. 1,480, of the 27th May last, received with your No. 1117 of the 11th ultimo, I have to inform you that before sending this project forward I had several alternative lines surveyed and levelled, and finally went over the ground myself plans in hand.

2. I have again carefully looked into the alignment and levels of this branch to Homes' Gardens, and I cannot see my way to any sensible reduction in its cost either by means of sharper curves or steeper gradients.

3. The house marked A, opposite 38 chains, is a large dwelling house at present occupied by Colonel Moberly, the Superintending Engineer of the Chingleput District, and the owner of the land is very much annoyed at the prospect of this branch railway cutting into his property. To do so as little as possible, I kept the line between 30 chains and 40 chains, at a minimum distance of 4 chains from the dwelling house, and it is to get round to this and to cross the channel at 28 chains as much on the square as possible that a 12 chain curve is requisite.

4. Again, between 50 chains and 60 chains, the Mount Road, a large and important thoroughfare from and to Madras, has to be crossed on the level, and to get a somewhat square crossing I have had to do as shown on the drawing (No. 93). Were it not for this, by flattening the curve between 50 chains and 60 chains a very slight reduction in the length of the branch might be effected.

5. Looking at the section (Drawing No. 94) there are only two hollows, viz., one between 10 chains and 30 chains, and the other at 1 mile, and in neither case can any reduction be conveniently made in the embankment. Taking these embankments on my section at an average height of 8 feet, and supposing that, for the sake of cheap construction, it were expedient to reduce this height to 6 feet, the difference in quantity of earthwork would be about 6,000 cubic yards, and this at 2 Annas 9 Pies per cubic yard (the estimate rate) amounts to only about Rupees 1,000, while on the other hand every ton of material traversing the line would have to be lowered and

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16th August 1875.*

raised again 4 feet, a mechanical disadvantage, which ought not, in my opinion, to be entailed on the working expenses for the sake of saving Rupees 1,000 in construction.

6. I return the plan and estimate, and shall be glad to obtain sanction to the project as it stands, as well as to lay it out and furnish the land plans and schedules. If sanction be accorded to this, it will be necessary, I presume, that the Collector be advised to issue the usual notice in the *Gazette* before commencing operations on the ground.

No. 266.

ORDER THEREON, 16th August 1875, No. 2,355.

RAILWAY, No. 29.

UNDER the circumstances explained the estimate amounting to Rs. 59,623 is sanctioned.

(Here enter No. 2,356, dated 16th August 1875.)

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government.

PUBLIC WORKS DEPARTMENT,
OOTACAMUND, 16th August 1875.

No. 267.

No. 2,356.

FROM

MAJOR-GENERAL G. W. WALKER, R.E.,
Secretary to the Government of Madras,
Public Works Department,

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

RAILWAY, No. 30.

SIR,—Adverting to your letter, No. 1,151 R, dated 7th May 1875, I am directed to state that it has not been found

practicable to reduce the cost of constructing a branch or siding on the metre gauge from Sydapett Station to the Salt Depot at Homes' Gardens; that this Government is quite satisfied that the connection between the Salt Depot at Homes' Gardens and the South Indian Railway at Sydapett is desirable under any circumstances, irrespective of any junction with the Madras Railway Goods Station at the Salt Cotours, and that the Honorable the Governor in Council has accordingly sanctioned the work, on the original estimate, amounting to Rupees 59,623, for execution.

I have the honor to be,

Sir,

Your most obedient servant,

Major-General, R.E.,
Secretary to Government.

Exd. S. T. Austin.

Spare Copies

Unit	Quantity	Rate	to be paid	to be paid	to be paid	Total
			to be paid	to be paid	to be paid	Total

Brought forward
4. Steel crossings.

24 feet Gate	No. 1	425/100	425			
Chuck Rail	Set 1	102/100		102		
18 feet Gate	No. 1	310/100	310			
Chuck Rails	Set 1	80/100		80		
9 feet Gate	No. 2	107/100	200			
Chuck Rail	Set 2	28/100		56		
Entrance in Road approaches	Cy 400	72/100	69			
Shedding of Cars	No. 113	1/80	169			
Gate Ropes ladders	No. 2	300/100	620			
While. Struts	No. 1	5/100	5			
Grade posts	No. 6	7/100	42			
Contingencies @ 5%			98	12		
			1946	250		2,196

5. Stueing

Loss in carrying	Cy 4952	9/100		2,675		
Loss in packing	No. 4752	1/100	708			
Carriage of materials by cars.	No. 70	1/100	19			
Contingencies @ 5%			38	134		
			798	2,807		5,605

Construction of Line 22,800

for Steel Crossings

5,801

Unit	Quantity	Rate	to be		total	total
			Expenses	drawn from		
			to pay	to pay		
			Materials	to pay		
<u>III Ballast and Permanentway</u>						
<u>1 Ballasting</u>						
In Main Line	Exp.	2.680 1/8%	1.342			
" Sidings						
Contingencies @ 5%			2.234 1/8%	1.617		3,107
				148		
<u>2 Permanentway</u>						
Materials in Main Line	Exp.	2.876 1/4%		16,682		
Laying do			2.376 1/8%	1,188		
Carriage of Materials per cart	Less	1.407 1/4%	352			
Materials in Sidings	Exp.	1.342 1/4%		9,394		
Laying do			1,226 1/8%	613		
Carriage of Materials per cart	Less	791 1/4%	198			
Contingencies @ 5%			118	1,307		
			2,469	27,327	29,796	32,903

IV and Permanentway 32,903

J. J.
for Chief Engineer

Unit	Quantity	Rate	to be		total	total
			Expenses	drawn from		
			to pay	to pay		
			Materials	to pay		
<u>III Ballast and Permanentway</u>						
<u>1 Ballasting</u>						
In Main Line	Exp.	2.680 1/8%	1.342			
" Sidings						
Contingencies @ 5%			2.234 1/8%	1.617		3,107
				148		
<u>2 Permanentway</u>						
Materials in Main Line	Exp.	2.876 1/4%		16,682		
Laying do			2.376 1/8%	1,188		
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Laying do			1,226 1/8%	613		
Carriage of Materials per cart	Less	791 1/4%	198			
Contingencies @ 5%			118	1,307		
			2,469	27,327	29,796	32,903

IV and Permanentway 32,903

J. J.
for Chief Engineer

Unit
Quantity
Rate

20 lb
substant
about
quantity
20 lb
clean
from
stone

Total
Total

Stations and Buildings

4 Station Machinery

Swabstone Signal (2 single)
Oats and feeding
Three heavy switches
Single switches
Lime and Cropping
Laying bone and Cropping
Suffer stone
Carriage of Materials per cart
Contingencies @ 5%

Set 1 157/4 " " 157
" 3 114/4 " " 342
" 6 74/4 " " 444
Exp 116 1/8 174
" 4 120/4 480
" 56 0/4 14

40 " 69
848 " 1,452 " 2,300

2,300

Stations and Buildings 2,300

for Shop Expenses

Original

South Indian Railway

Vertical Extension
Abstract Estimate of Salt siding from Saidapet Station to Homes Junction

	Rs	Rs	Rs	Rs
	to be expended	to be drawn from share	total	total
<u>III Construction of Line</u>				
1 Earthwork	4,963	"	4,963	22,800
2 Brickwork	10,625	1,411	12,036	
3 Minor Brickwork and Cuts	1,946	250	2,196	
4 Soil crossings	798	2,807	3,605	
5 fencing				32,908
<u>IV Ballast and Permaculture</u>				
1 Ballasting	3,107	"	3,107	
2 Permanent road	2,469	27,327	29,796	
<u>V Stations and Buildings</u>				
1 Stations and Machinery	848	1,452	2,300	2,300
<u>VI Maintenance</u>				
	1,630		1,630	1,630
<u>Total Rupees</u>				59,628

James St. John
for Chief Engineer

William Bell

24/2/1875

Compd
J. S.

South Indian Railway

Northam Extension

Estimate of salt siding from Sandgate Station to Thomas (parent)
 total length 1 mile 28 chains (commencing at 50th. 78 cts. on 50th. line)

	Unit	Quantity	Rate	to be expended about initially	to be drawn from store	Rail Total	Total
<u>III Construction of Line</u>							
1 Earthwork							
to Embankments	Cy	27,000	9 1/2	4,601			
" Channel divisions and extra earthwork where required	"	500	5 1/2	56			
Contingencies @ 5%			286				4,968
<u>2. Brickwork</u>							
1 Minor Bridges and Culverts							
Bridge of 2.25 feet Cuts at 0 mile 20 chains in 14 feet bank							
Excavation of foundations	Cy	200	1 1/4	50			
Masonry	"	367	17 1/2	3,670			
at 11' sides	Cy	102	4 1/2	408			
Wrought Iron Girders	lbs	7	192 1/2	-	-	1,348	
"	lbs	2	183 1/2	360			
Carriage of materials per cart	Mile	60	9 1/4	15			
hauling	Cy	356	1 1/2	45			
Contingencies @ 5%			227		67		
			4,775		1,411		6,186
<u>Shew Bridge of 1.10 feet arch</u>							
Excavation of foundations	Cy	176	9 1/4	44			
Masonry	"	280	8 1/2	2,240			
Contingencies @ 5%			114				2,398
<u>Culverts.</u>							
Single 4 feet Culverts	Cy	181	8 1/2	1,448			
Single 3 "	"		9 1/2	763			
Single 2 "	"		66 1/2	528			
Contingencies @ 5%			136				2,864
<u>Masonry retaining walls 100 ft</u>							
Contingencies @ 5%							
Contingencies @ 5%							

S. A. R.
Estimate of Salt Siding
from
Cadapet to Home's Garden

2522
M. 1858 / 25

Unit
Quantity
Rate

to be
expended
abstract
- monthly

to be
drawn
from
store

total

total

Maintenance

Maintaining the Line
for 124 months

in the
1-28 of 1914
per month

1,620 -

1,620 -

XX Maintenance 1,620 -

J. J. J.
for Chief Engineer

Complete
J. J. J.

South Indian Railway
Northern Extension

Received with Agents
letter N^o 417
dated 24th February 1875

G.O. 16 August/75 m.B. N^o 265

Estimate of salt
siding from Saidapet
Station to Homes
Garden Total length
1 mile 28 Chains
(commencing at 5 m. 78 ch.
on Main Line)

Rs 59,623--

See G. O. N^o 1480 of 27th May 1875
the Govt. of India orders to
revise the estimate.

M. 5107/75.

G.O. 16 Aug^t 1875 N^o 265

No. 761

South Indian
GREAT SOUTHERN OF INDIA RAILWAY.

AGENT'S OFFICE,

NEGAPATAM, 27th July 1875.

From

THE AGENT, South Indian
Great Southern of India Railway,

To

The Consulting Engineer for Railways
Madras.

SIR,

Your letter N^o 369 of the 9th Inst.
I have to submit herewith, for consideration, a
copy of the Chief Engineer's report of the 24th Inst. upon
the estimate for the branch line from Saidapet Station
to the Salt Depot in Homes Gardens.

I have the honour to be,
Sir,

Yours Most Obedt Servt.

William B. C.

Agent

South Indian Railway. Letter from the Chief Engineer to the Agent dated Trichinopoly 26th July 1875 N^o ⁶⁴²²1477.

Referring to Government Order N^o 1480 of the 27th May last received with your N^o ³⁹⁰⁴1935 of the 11th Inst. I have to inform you that before sending this project forward I had several alternative lines surveyed and levelled, and finally went over the ground myself plans in hand.

I have again carefully looked into the alignment and levels of this branch to Home Gardens, and I cannot see any way to any sensible reduction in its cost either by means of sharper curves or steeper gradients.

The house marked A opposite O. 38 is a large dwelling house at present occupied by Colonel Moberly, the Superintending Engineer of the Cumblyput District, and the owner of the land is very much anxious at the prospect of this branch railway cutting into his property. To do so as little as possible I kept the line between M. chs and O. 40 at a minimum distance of four chains from the dwelling house, and it is to get round to this and to cross the channel at O. 38 as much on the square as possible that a 12 chain curve is requisite.

Again between M. chs and O. 60 the Mount Road, a large and important thoroughfare from and to Madras, has to be crossed on the level, and to get a somewhat square crossing I have had to do as shown on the Drawing (N^o 93). Were it not for this by flattening the curve between O. 50 and O. 60 a very slight reduction in the length of the branch might be effected.

Looking at the section (Drawing N^o 94) there are only two hollows, viz one between 10 chains and 30 chains, and the other at 1 Mile; and in neither case can any reduction be conveniently made in the embankment. Taking these embankments on my section at an average height of 8 feet, and supposing that for the sake of cheap construction it were expedient to reduce this height to 6 feet, the difference in quantity of Earthwork would be about 6000 cub yards, and this at $\frac{3}{4}$ per cub. yard (the estimate rate amounts to only about Rs 1000), while on the other hand every ton of material traversing the line would have to be lowered and raised again 4 feet, a mechanical disadvantage, which ought not in my opinion to be entered on the working expenses for the sake of saving Rs 1000 in construction.

I return the plan and estimate and shall be glad to obtain

18-10 August 75
M. 5109/1
2/195

Enclosed a copy of the Chief Engineer's report upon the estimate for the branch line from Updell station to the Falls Bridge in Namer District.

Notes of 27th July 1875
Quoted 29th July 1875
To the Chief Engineer
for Madras
From the Agent
S. D. R.

5
sanction to the project, as it stands, as well as to lay it out and furnish
the land plans and schedules. If sanction be accorded to this it will
be necessary I presume that the collector be advised to give the usual
notice in the Gazette - before commencing operations on the ground.

(True Copy)

William S. Atto

Aquit
12/6/75

Railway Department.

CONSULTING ENGINEER'S OFFICE.

No. 433

Madras 5th Aug 1875

From

LIEUT.-COLONEL J. H. M. SHAW STEWART, R.E.,

Consulting Engineer for Railways,

To

COLONEL G. W. WALKER, R.E.,

Secretary to Government,

Public Works Department,

Fort Saint George.

SIR,

With reference to the Order
of Government No. 1480, dated 27th May
1875, returning for revision the plans
and estimate for constructing a
branch or siding in metre gauge
from Sydapett station to the Salt
Depot at Homes' gardens, I have the
honour to forward a letter received
from the Agent of the South Indian
Railway, enclosing a report from
the Chief Engineer, in which that
officer sets forth the reasons that led
him in each case to fix the several
curves and gradients. Under
the circumstances I trust that
the Government will see fit to
sanction the estimates as originally
sent up, amounting to Rs 59,623.-

The

11/11/75
16-10-1875
13-11-265

2

Per,

Manitowoc L. C. & Co.

Spunk

Public Works Dept.
No. 2355

Proceedings of the Madras Government
Under date the 16th August 1875
Read the following

From
The Comr. Engrs. for
Railways } (N.C. No. 433 of 5th Augt 1875)

Under the circum-
stances explained the
Estimate amounting to
Rs 59,623 is sanctioned

(N.C. No. 2356 dated 16th Augt)

No 2356
To, The Secy. to the Govt. of India
Public Works Dept.

Sir,
Adverting to your
letter

35/8
Comr. Engrs. for Ryds -
Ext. of Ry. Accounts.
S.C. Depto - 1-9-75

808-244/1550 159-160+161
- 17 Aug - 532-533.

O. W. 1875 Dept.
RAILWAY DEPARTMENT.
No: 5107

From
The Consulting Engineer,
for Railways,
To
The Secretary to Government,
P. W. Department,
Fort Saint George.
Dated 5th August 1875
Recd. 6th

£. 5. 3^d
No. 433.
2^d Minute meeting

Forwarded
again for sanction
please and estimate
for siding on metre
gauge from Hyderabad
station to the salt
works at Omeria
Gandhinagar
1/8. 23055. 11-8-75.

12-265
12-8-75 (M.L. 16-8-75)
12-265-8-75

Letter No. 1151 R dated
7th May 1875 I am
directed to state that
it has not been found
practicable to reduce the
cost of constructing a
branch or siding on the
meter gauge from Hydapett
station to the Salt Depot
at Homes' Gardens, that
this Govt is quite satis-
fied that the connection
between the Salt Depot
at Homes' Gardens
and the South Indian
Railway at Hydapett
is desirable under any
circumstances prospective
of any junction with ^{the} ~~any~~
Madras Railway goods
station

Station at the Salt
Depot, and that the
Honble the Governor in
Council has accordingly
sanctioned the work,
on the original Estimate
amounting to Rs 59,623,
for execution.

b s c 46 of
Memoirs No. 20. p
1-9-75

May 11/8

1875
G. O. of 1875 Madras
PUBLIC WORKS.

To

Congress Pub. Wks.

Dated

Issued

Recd.

Encl.

G. O. 16 Aug 1875, No. 2335
2367

Nos. 265 - 266

267

Branch or siding on metro
range from Sydapett Station
to Salt Depot at Kones
ordens - The estimate
amounting to Rs 59,623
concerning a —
contracted