

CONCERNS BOTH BRITISH INDIA
AND INDIAN STATES.

Public Works (1898) Department.

RAILWAY BRANCH.

G.O., No. 538 Ry.

DATED 6th April 1898.

per 100/2

[Despatch Abstract.]

Shoranur - Cochin Branch.

Government of India letter, sanctioning
the revised estimate of Rs 26,949, of the
cost of the final location of the proposed
_____, connected to the Agent Manager,
Madras Railway.

Indexed 14/4/98.

Government {1898} of Madras.
PUBLIC WORKS.

} 1898.

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G.O., No. 538 Ry., 6th April 1898.

APRIL.

Shoranur-Cochin Branch

Government of India letter sanctioning the revised estimate of Rs. 26,949, of the cost of the final location of the proposed —, communicated to the Agent and Manager, Madras Railway.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read again the following papers:—

G.O., No. 174 R., dated 1st February 1898.

G.O., No. 371 Ry., dated 5th March 1898.

From—The Agent and Manager, Madras Railway.
To—The Consulting Engineer for Railways, Madras.
Dated—10th February 1898, No. 116.

With reference to your letter No. 362, dated the 5th instant, I have the honour to enclose copy of a communication from the Chief Engineer No. C. 8383/175 of the 9th instant in which it is explained that in consequence of the realignment of the proposed Shoranur-Cochin line the estimate for the final location of the line has had to be revised and that the amount of the revised estimate is Rs. 32,749. The estimate, together with a copy of Mr. Dallas' letter, is enclosed, and I beg to request that you will communicate the sanction of Government to this expenditure.

I have to-day written to the Board for their approval of the proposed outlay.

ENCLOSURES.

From—The Chief Engineer, Madras Railway.
To—The Agent and Manager, Madras Railway.
Dated—9th February 1898, No. C. 8383/175.

[Your No. 9097/1124 of 2nd current.]

I beg to advise you that on the 6th February 1898 the plans and sections of the alignment of the proposed Shoranur-Cochin extension prepared by this Company was very fully considered at a meeting at which the Consulting Engineer (Mr. F. J. E. Spring) the Executive Engineer (Mr. C. E. Dallas) and myself were present, with a view to deciding the final alignment and making any modification in the plan and section for which work the allotment of Rs. 20,206 had been sanctioned.

2. I beg to submit a revised estimate for Rs. 32,749 prepared by Mr. Dallas together with an explanatory letter from that officer (No. 3 of 8th instant) and shall feel obliged if you will obtain the early sanction of Government to this expenditure to enable me to secure the services of the additional staff without delay.

From—The Executive Engineer, Madras Railway.
To—The Chief Engineer, Madras Railway.
Dated—8th February 1898, No. 3.

Having reference to Consulting Engineer's verbal instructions to alter and realign the trace of the proposed railway from Shoranur to Cochin, I beg to forward, for sanction, a revised estimate for the survey expenses amounting to Rs. 32,749, but with the credit that may be anticipated under the head of No. II "Plant" will probably not exceed an actual expenditure of Rs. 27,000.

2. The largest increase over the estimate received with your No. C. 8383/1539 of 5th instant is under main head No. II Establishment, as it will now be necessary to retain the temporary staff somewhat longer than was originally intended, for the preparation of the plans and estimates.

3. Another item in which there is also a large increase is sub-head (c) Instruments, the prices for which have been taken from Messrs. Orr & Sons' catalogue, but as these will be transferable for use in the construction of the line the charge against the survey estimate will not be more than about Rs. 300.

Shoranur-Cochin Railway Survey.

General Abstract estimate.

Main and sub-heads.	Abstract.	
	Sub head. RS.	Main head. RS.
Preliminary expenses—		
I. Survey expenses		9,439
(a) Field expenses	7,893	
(b) Office do.	1,546	
II. Plant		7,062
(a) Tents	2,754	
(b) Furniture	518	
(c) Instruments	3,620	
(d) Tools	170	
III. Establishment		16,248
	Total	32,749
Anticipated credits—	RS.	
II. Plant (a) Camp equipage	2,000	
" (b) Furniture	400	
" (c) Instruments	3,400	
		5,800
	Total	26,949

Shoranur-Cochin Railway Survey.

Survey expenses—

- (a) Field expenses.
(b) Office expenses.

Description of work.	Quantity.	Unit.	Rate.	Amount.
Lockspitting	73	Mile.	RS. 30	RS. 2,190
Pegs, large	900	100	8	72
" small	8,000	100	4	320
Mallets	15	Each.	1	15
Compensation for crops	73	Mile.	50	3,650
Cart-hire, five carts	120	Diem.	5	600
Coolies, jungle cutting	120	"	5	600
Rope, strings, &c.		"	25	25
Cloth for flags		"	15	15
Paint		"	15	15
Nails, screw		"	15	15
Contingencies, 5 per cent.				7,517
Total (a) Field expenses				376
				7,893
Stationary	6	Month.	75	450
Forms, books, &c.	6	"	50	300
Paper, double elephant	4	Each.	17	68
" mounted	4	"	40	160
Tracing cloth	14	"	26	364
Blank paper	4	"	20	80
Drawing pins, colors, pencils, rubber, &c.		"	50	50
Contingencies, 5 per cent.				1,472
Total (b) Office expenses				74
				1,546

Shoranur-Cochin Railway Survey.

II. Plant—

- (a) Camp equipage.
-
- (b) Furniture.

Description.	Quantity.	Unit.	Rate.	Amount.	Carriage.	Total.
Tent, large No.	1	Each.	rs.	rs.	rs.	rs.
" office "	2	"	445	445	62	507
" small "	4	"	315	630	84	714
" lascar "	5	"	150	600	84	684
" necessary "	5	"	50	250	35	285
" baggage "	5	"	33	165	23	188
			45	225	20	245
Contingencies, 5 per cent. ..	..	..	..	..	..	131
Total (a) Camp equipage ..	..	..	..	..	..	2,623
						131
						2,754

Description.	Quantity.	Unit.	Rate.	Amount.
Table, drawing No.	2	Each.	rs. A. P.	rs.
" office "	2	"	25 0 0	50
" " "	4	"	30 0 0	60
Chairs "	10	"	10 0 0	40
Stools "	4	"	3 8 0	35
Stationery chests "	2	"	3 0 0	12
Cash safe "	1	"	20 0 0	40
Plan boxes "	3	"	50 0 0	50
Camp boxes "	6	"	10 0 0	30
Despatch boxes "	2	"	6 0 0	36
Medicine chest (full) "	2	"	20 0 0	40
Lanterns "	6	"	20 0 0	40
Padlocks "	12	"	6 0 0	36
			2 0 0	24
Contingencies, 5 per cent. ..	..	..	..	493
Total (b) Furniture ..	..	..	..	25
				518

Shoranur-Cochin Railway Survey.

II. Plant—(c) Instruments.

Description.	Quantity.	Unit.	Rate.	Amount.
Theodolites, 5" No.	2	Each.	rs. A. P.	rs.
Levels, 14" "	4	"	600 0 0	1,200
Level staves "	8	"	300 0 0	1,200
Ranging rods "	40	"	38 0 0	304
Drawing boards, 41 × 28 ..	2	"	3 0 0	120
Parallel rulers, 18" × 24" ..	2	"	18 0 0	36
Chain with arrows, 100 feet ..	4	"	20 0 0	48
Umbrellas "	5	"	28 0 0	68
Compass, prismatic, 3½" ..	1	"	17 0 0	50
Instrument boxes, 2nd class ..	3	"	10 0 0	90
Drawing pens "	4	"	90 0 0	105
Stencil plates Set	1	"	2 0 0	8
Steel straight edge, 36" ..	1	"	25 0 0	25
Tapes, 100 feet, metallic ..	4	"	21 0 0	84
" 50 " " "	4	"	13 0 0	52
Ceylon ghat tracer "	1	"	8 0 0	34
Bronze crow staff heads ..	2	"	21 0 0	30
Scales "	2	"	5 0 0	15
Curves "	1	"	7 8 0	8
Set squares, 10" "	2	"	8 8 0	16
			20 0 0	5
Contingencies, 5 per cent. ..	..	..	..	3,448
Total (c) Instruments ..	..	..	..	172
				3,620

Shoranur-Cochin Railway Survey.

II. Plant—(d) Tools.

Description.	Quantity.	Unit.	Rate.	Amount.
Mamooties.. .. . No.	24	Each.	rs.	rs.
Picks "	12	"	1	12
Shovels "	6	"	2	12
Axes "	24	"	3	72
Crow bars "	6	"	3	18
Hammers of size "	6	"	3	18
Brauds "	2	"	3	6
Contingencies, 5 per cent ..	..	..	..	162
Total (d) Tools	..	..	..	8
				170

Shoranur-Cochin Railway Survey.

III.—Establishment.

Designation.	Monthly salary of office.	Travelling allowance per month.	Total per month.	Total for six months.
1 Executive Engineer	rs. 850	rs. 150	rs. 1,000	rs. 6,000
1 Assistant do.	350	120	470	2,820
2 Surveyors	150	30	360	2,160
2 Do.	100	25	250	1,500
4 Clerks	100 & under	..	200	1,200
3 Draftsmen	100 & under	..	150	900
4 Peons	8	..	32	192
30 Lascars 4 months	9	..	270	1,080
Contingencies, 2½ per cent. ..	..	..	..	15,852
Total Establishment ..	..	..	..	396
				16,248

Telephone Message.

From—The Agent and Manager, Madras Railway.
To—The Consulting Engineer for Railways, Madras.
Dated—1st March 1898.

Will you sanction my engaging an Assistant Engineer for the Shoranur-Cochin Railway on Rs. 250 + Rs. 120 allowance as provided in Mr. Dallas' revised estimate. We want to get on work.

Telephone Reply.

From—The Consulting Engineer for Railways, Madras.
To—The Agent and Manager, Madras Railway.
Dated—3rd March 1898.

You can engage Assistant for Shoranur-Cochin Survey.

Note by the Consulting Engineer for Railways on Shoranur-Cochin Survey Estimate, dated 3rd March 1898.

In their letter No. 2033 R.C., dated the 22nd December 1897, the Government of India sanctioned the estimate, amounting to Rs. 20,206, of the cost of finally locating the Shoranur-Cochin branch of the Madras Railway which reached us with the Agent's letter No. 9097/1102, dated 27th November 1897.

Since that date I have had an opportunity of seeing the results of the recent improvements in the alignment of the Calicut-Cannanore Railway, improvements which I judge will result in a saving of some lakhs, and also I hope in shortening the line. I have moreover become familiar with the general features of the West Coast country. In the light of this experience, and in concert with the Chief Engineer of the Madras Railway and with an Engineer who was formerly on the Cochin Survey and who is now in charge of its re-alignment, I have gone very carefully through the whole of the plans and sections of the Shoranur-Cochin line.

It is perfectly clear that the same mistake was made in this case as was made in the case of the Calicut-Cannanore Survey, namely, the Engineer who made the survey thought it incumbent on him to run very long straight lines right through the most formidable obstructions which a little dodging would have enabled him to avoid. In fact the survey partakes rather of the nature of a flying survey or a trial survey, and it is in nothing like a fit state to be picked up again and staked out.

The Chief Engineer of the Madras Railway and I have made over the plans and sections to the Engineer now in charge of the re-survey of the line with very full instructions which I quite expect will result in a saving of several lakhs, and in the abolition of many unnecessary gradients.

But the effect will be that instead of picking up the old line as was contemplated when the Rs. 20,206 estimate was made, the Engineer must practically re-align fully three-fourths of it, and put in perhaps double as many curves as formerly. This will naturally cost considerably more than was at first contemplated, and the Agent has therefore had to prepare a new estimate amounting to Rs. 32,749 less expected credits Rs. 5,800, net amount of the estimate Rs. 26,949. The estimate, which I have carefully gone into, and which amounts to only Rs. 370 per mile, is not only not unreasonable, but it is the least that in my opinion the work can be done well for. The chief cause of the lack of sufficient detail of alignment of, and the consequent enhancement of the early estimate for, the Calicut-Cannanore line was due, as I have ascertained, to the Engineer in charge of the survey thinking that his time was very limited, and that he could not go back on his work. This mistake must now be avoided. An extra Assistant is wanted and of course extra instruments, surveyors, &c., and these are now provided for.

Order—No. 371 Ry., dated 5th March 1898.

The Government of India will be addressed.

From—The Joint Secretary to the Govt. of Madras, P.W. Dept., Railway Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—5th March 1898, No. 372 Ry.

With reference to your letter No. 2033 R.C., dated the 22nd December 1897, communicating sanction to an estimate amounting to Rs. 20,206 for resurveying the Shoranur-Cochin Railway alignment, I am now desired to apply for sanction to an enhanced estimate of the cost of the survey amounting to Rs. 32,749 (or, after reduction by anticipated credit, Rs. 26,949).

2. A copy of the estimate is enclosed, together with a note thereon by the Consulting Engineer for Railways, Madras, which fully explains the causes of the enhancement.

Exd. A. F. Eccleston.

3. As the revised alignment, whereby large savings in the construction estimate are anticipated, could not proceed with any degree of efficiency in the absence of a suitable staff, this Government in anticipation of your sanction to the estimate has authorised the Agent, Madras Railway Company, to engage the services of an Assistant Engineer (contemplated in the new but not in the old estimate) at Rs. 250 per mensem plus Rs. 120 field travelling allowance.

Read also the following paper:—

From—The Secretary to the Government of India, Public Works Department.
To—The Joint Secretary to the Govt. of Madras, P.W. Dept., Railway Branch.
Dated—Calcutta, 19th March 1898, No. 371 R.C.

I am directed to acknowledge the receipt of your letter No. 372 Ry., dated 5th March 1898, and in reply to communicate the sanction of the Government of India to the revised estimates, received therewith, amounting to Rs. 26,949 of the cost of the final location of the proposed Shoranur-Cochin branch of the Madras Railway.

2. This sanction is in supersession of the sanction accorded in Public Works Department letter No. 2033 R.C., dated 22nd December 1897, and is chargeable to the head "41. Miscellaneous Railway Expenditure".

ORDER—No. 538 Ry., dated 6th April 1898.

Communicated to the Agent and Manager, Madras Railway.

(True Extract.)

FRANCIS J. E. SPRING,
Joint Secretary.

To the Agent and Manager, Madras Railway.
" Examiner, Guaranteed Railway Accounts.
" Consulting Engineer for Railways.

P. J. Works (1898) Department.

Railway

CURRENT No. 427

From The Government of India

Order

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28/3

No. 371 R.C

Dated 19th March 1898

Received

Registered

28. 3. 98

Enclosures

Spare copies

SUBJECT.

Shoranur - Cochin Branch.

Communicating sanction to the revised estimate amounting to Rs 26,949 of the cost of the final location of the proposed — of the Madras Ry.

FURTHER PAPERS.

No. 37/R.C.
GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY CONSTRUCTION.

To
The Joint Secretary to the Government of Madras,
Public Works Department, Railway Branch.

Calcutta, the 19th March 1898.

Sir,

Sir,

I am directed to acknowledge the receipt of your letter No.372 Ry.,dated 5th March 1898,and in reply to communicate the sanction of the Government of India to the revised estimates, received therewith, amounting to Rs.26,949 of the cost of the final location of the proposed Shoranur-Cochin Branch of the Madras Railway.

Yours faithfully,
[Signature]

of the Madras Railway.

2. This sanction is in supersession of the sanction accorded in Public Works Department letter No.2033 R.C., dated 22nd December 1897 and is chargeable to the head "41-Miscellaneous Railway expenditure".

I have the honour to be,

Sir,

Your most obedient servant,

Chyba.

Offg. Under Secretary.

Documents accompanying :-

Nil.

Form No. 1.

A.

Papers to be read in Proceedings:—

Again G.O., dated	1 st February	1898, No.	174 R.
Again G.O., dated	5 th March	1898, No.	371-2 R.
Current No.	427	of 1898, dated	28.3.98., from
" "		" 189 , "	" "
" "		" 189 , "	" "

the Book of Noie.

ORDER. No 538 R of 6/4/98.

Communicated
to the Agent and Manager
Macao Railway.

[Signature] 28/5/98

Agent Macao R.
Ex 12 R Accd.
Paying for Rev 20/5/98

28.3.98