

(1) Number of pages 26
(2) Date of repair 19.1.88
(3) Initials of the Referencer lmg

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W. DEPARTMENT

G.O. No.	950 W	Press.
B.P. No:		Mis.
Dated	30.3.1887	198.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following letter from Colonel J. BEATTY, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 15th March 1887, No. 151 E.W.:—

With reference to paragraph 4 of G.O., No. 2373 W., dated 12th October 1885, I have the honor to submit, for sanction, a revised estimate, amounting to Rs. 3,75,578, for improvements to the Calicut-Vayitri road.

2. The revision has been necessitated by excesses arising from omissions* and insufficient† provision for certain items in the original estimate. These, I find, have all been fully explained in the Executive Engineer's report, except items 1 and 8, blinding and superintendence.

3. With regard to blinding, only one inch of gravel was allowed, in the original estimate, over the metal, and experience has shown that two inches are most necessary. The revised estimate therefore provides for two inches of gravel over the 12 feet breadth of metal for the whole length of the road.

4. In regard to the item superintendence, insufficient provision was made in the original estimate for work establishment, because it was then expected that the greater part of it would be charged to a special head of temporary establishments provided in the budget; and, under present circumstances, the percentage has had to be increased from 2 to 6 per cent. The latter percentage may seem high, but the special circumstances of the work, in a particularly unhealthy locality, where it is most difficult to obtain or keep superintendents, clerks, &c., must be borne in mind. The item superintendence includes the pay of an experienced mechanic, Mr. Wiggins, who has been engaged to superintend the erection of the iron work.

5. With regard to increase under the head of maintenance, before the road was handed over to this department, the insufficiency of the provision for this item was foreseen. Only Rs. 11,000 per annum were allowed in the original estimate, while I found, from inquiries made, that the Local Fund Board had spent on it annually Rs. 16,000, which had been insufficient to keep it in tolerable order. The Executive Engineer's proposal amounts to Rs. 15,650 annually, and on this head very full information is given in the report. The average income from tolls is Rs. 18,413.

6. The excess of Rs. 55,790 ‡ over the original estimate will be seen to be chiefly on the following items:—

- I. Blasting rock.
- II. Picking or breaking up the old surface.
- III. Revetments and parapets.
- IV. Mile and furlong stones.
- V. Maintenance of road while the improvements are in progress.
- VI. Superintendence.

‡ About 17 per cent. of the original sanction of Rs. 3,19,788.

For convenience of reference, I append to this letter two statements, marked A and B, by which the nature and amount of excess on each item will be readily understood.

7. The item "bridges" will have to be specially revised as soon as full information is obtained regarding the cost of iron work, including carriage to site and fitting up. As soon as one of the large bridges is completed, there will be sufficient data for this revision. The only alteration now made in this item is the provision of Rs. 807 for demolishing the old bridges.

8. When the original estimate was framed, it was anticipated that the work would be three years in hand, and, now that it has been in progress about 18 months, it seems likely it will be completed within the three years.

9. This Calicut-Vayitri road has long found a place in the Examiner's objectionable items statements, and early sanction to the revised estimate is desirable.

ORDER—dated 30th March 1887, No. 950 W., Public Works.

The revised estimate, amounting to Rs. 3,75,578, for improving the road from Calicut to Vayitri, is sanctioned.

2. The excess of Rs. 55,790 over the estimate of Rs. 3,19,788 sanctioned in G.O., No. 2373 W., dated 12th October 1885, is fully explained in the Superintending Engineer's letter above recorded or the report submitted therewith. In the circumstances stated by the Superintending Engineer, the increased charges under the heads "maintenance" and "superintendence" are approved.

3. It is understood that the amount provided for bridges will be subject to revision when reliable data is available as to the cost of the iron bridges now under construction.

4. This sanction has been registered as Provincial, No. 201 W. of 1886-87, and classified as Communications, Original Works.

(True Extract.)

Captain R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with thirty enclosures.

„ Examiner, Public Works Accounts, with general abstract estimate.

„ Local and Municipal Department.

Exd. E. Fernandez.

Spars Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1887) Madras.
PUBLIC WORKS.

Dated March, 30th.

Recd.

Encl.

G.O., 30th Mar. 1887, No. 950 W.

MARCH.

Calicut-Vayitri Road

Revised estimate of Rs. 3,75,578, for im-
proving the —, sanctioned.

Encl: No 1 of letter
No 131 of 15th March 18
EW.
from the Supg: Eng
4 of circle.

Encl
1/11/2190

950 W

A

Statement showing
the principal items of
the estimate of Impro-
ving the Calicut Vayitri
Road, and the sums pro-
vided in the original
and revised estimate

Statement showing for the principal items of the estimate of Improving the Calicut Vayithu road. the sums provided in the original and revised estimates.

No.	Particulars	Amount of Sanctions Estimate	Amount of revised Estimate	Remarks.
1	Earthwork	24,532	23,625	The saving of Rs 907 is due to the omission of picking up old surface included in this item.
2	Metalling	131,865	132,139	This excess of Rs 274 is due to miscalculations in length of road.
3	Graveling	16,886	22,496	do—Rs 5610 is due to the extra thickness of blinding required as explained in the Comparative Statement.
4	Rock blasting	84	8,459	do—Rs 8,675, due to an omission in the original estimate.
5	Rough stone parapets and revetments	"	7,850	do—Rs 7,850
6	Picking and breaking up old surface.	"	6,888	do—6,888
7	Bridges	44,553	45,276	do—723 due to the omission of any provision for demolishing the old bridges.
8	Tunnels	46,948	44,535	The saving of Rs 2,413 due to a reduction in the number of tunnels &c.
9	Buildings	8904	8973	The buildings have been completed with a small excess.
10	Maintenance of the road during construction	33,300	1,675	This excess Rs 10,000 due to the extra rate of mileage now provided for, as explained in the report.
11	Petty works	"	1,007	This includes mile and furlong stones, and guard stones.
	Contingencies	6,501	6,770	This excess Rs 269 due to the percentage calculated on the revised amount.
	Superintendence	6,215	20,310	This excess Rs 14,095 is due to the provision of 6 per cent for superintendence for the remaining 18 months the work is estimated to last; work establishment being now charged to the estimate.
	Total	319,788	375,578	
	Deduct		319,788	
	Net excess		55,790	

Supy Engr's office, 4th Circle
 Coimbatore. 14th March 87
 x vide para 2 of G.O. No
 2373 W of 12th October, 1885.

L. Beatty.
 Colonel R.E.
 Supy Engr 4th Circle

Encls. No. 2 of letter No.
131 of 15th March 1884 from the Sup.
Engineers, 1st Circle.

W. 2
P.W. 2197/18

B

Statement showing the
excesses and savings provided
for in the revised estimate of
Calicut Vayittu Road.

B.

Statement showing the excesses and savings provided for in the Revised Estimate of the Calcutta Varanasi Road.

30

Particulars	Amount sanctioned estimate.	Amount of revised estimate.	Excess.
Excesses over sub-heads of the Original estimate:			
1 Extra thickness of blinding required, and providing cast stands	16886	22496	5610
2 Maintenance of the road while improvements are in progress	33300	46950	13650
3 Rock blasting	84	8806	8722
4 Mis-calculation in lengths of the road, and in quantities of metal	77909	78183	274
5 Covering stone slabs to drains by necessary increase of length and by the substitution of probwork in chumans instead of axel work in clay.	7248	11093	3845
6 Excess on buildings	8904	8973	69
7 Contingencies	6501	6770	269
8 Superintendence	6215	20310	14095
Excesses on new sub heads introduced in the Revised estimate			
9 Picking and breaking up the road surface and reformation of road overhills.		7192	7192
10 Brought stone, pavements and parapets.	"	7850	7850
11 White and furlong stones	"	946	946
12 Demolishing old bridges before putting up the new ones	"	807	807
13 Guard stones and guard posts	"	560	560
Total excess.			63889.
Reduct savings on the following items.			
1 Earthwork from 1 st to 39 th mile (owing to the omission of picking and breaking road surface for which a separate item is provided for)	24532	28625	907
2 Mis-calculation in the quantity of conressed rubble in chumans for bridges	7443	7359	84
3 By reducing the number of tunnels from 480 to 420, and omitting the work of pointing to the tunnels on the ghant and by building wing walls outside	42167	4490	7108
Total savings	+	+	8099
Net excess.			55790

Suprg: Engineers office, IV Circle
 Bombafore. 14th March 1894

L. Beatty. Colonel R.E.
 Superintending Engineer,
 Fort St. George

No 131
E.W.

Supg: Engineer's office, 4th Circle
Coimbatore 15th March 1887.

From,

The Superintending Engineer,
Fourth Circle.

To,

The Chief Engineer,
Public Works Department

Enclosures 20.

2 Statements A. Sir,

7 B.

15 Estimates with 3

accompani-

ments and by

the honor to submit, for sanction, a re-

vised estimate, amounting to Rs 37,557.8

for Improvements to the Calicut-Tripun

Road.

* Vide items

9 to 13 Statement

B. accompanying

in this letter.

and insufficient provision for certain

⊗ Vide items

1 to 8 Statement

B. do —

I find, have all been fully explained

in the Executive Engineer's Report

except Items 1 and 2, Blinding and

Superintendence.

3. With regard to blinding only

With reference to para 14 of G.O.
No 2373 W, dated 12th October 1885, I have
the honor to submit, for sanction, a re-
vised estimate, amounting to Rs 37,557.8
for Improvements to the Calicut-Tripun
Road.

The provision has been necessitated
by excesses arising from omissions
and insufficient provision for certain
items in the original estimate. These
I find, have all been fully explained
in the Executive Engineer's Report
except Items 1 and 2, Blinding and
Superintendence.
3. With regard to blinding only

one inch of gravel was allowed in the original estimate over the metal and experience has shown that two inches are most necessary. The revised estimate therefore provides for two inches of gravel over the 12 feet breadth of metal for the whole length of the road.

4. In regard to the item Superintendence, insufficient provision was made in the original estimate for work establishment, because it was then expected that the greater part of it would be charged to a special head of temporary establishments provided in the Budget; and under present circumstances, the per centage has had to be increased from 2 to 6 per cent. The latter per centage may seem high, but the special circumstances of the work in a particularly unhealthy locality where it is most difficult to obtain or keep Superintendents, clerks, must be borne in mind.

* About 17 per cent of the original estimate of Rs 3,19,788

it it seems
The item Superintendence includes the pay of an experienced mechanic, Mr. Wiggins, who has been engaged to superintend the erection of the iron works.

5. With regard to increases under the head of maintenance; before the road was handed over this Department the insufficiency of the provision for this item was foreseen. Only Rs 11,000 per annum were allowed in the original estimate, while I found from inquiries made, that the Local Fund Board had spent on it annually Rs 16,000 which had been insufficient to keep it in tolerable order. The Executive Engineer's proposal amounts to Rs 15,650 annually and on this head very full information is given in the Report. The average income from tolls is Rs 18,413.

6. The excess of Rs 55,790 over the original estimate will be seen to be chiefly on the following items.

- I. Blasting rocks.
- II. Picking or breaking up the old surface.

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- III. Revetments and parapets.
 - IV. Mule and furling stores.
 - V. Maintenance of Road while the improvements are in progress.
 - VI. Superintendence.

For convenience of reference, I append to this letter two statements marked A & B. by which the nature and amount of excess on each item will be readily understood.

The item "Bridges" will have to be specially revised as soon as full information is obtained regarding the cost of iron work, including carriage to site and fitting up. As soon as one of the large bridges is completed there will be sufficient data for this revision. The only alteration now made in this item is the provision of Rs 807 for demolishing the old bridges.

8. When the original estimate was framed, it was anticipated that the work would be three years in hand, and now that it has been in

in progress about 18 months it seems likely it will be completed within the three years.

9. This Calicut Vayitri Road has long found a place in the Examiner's objectionable Item Statements, and early sanction to the revised estimate is desirable.

I have the honor to be
Sir,
Your most obedient servant.

L. Beatty - Colonel R.E.
Superintending Engineer,
Fourth Circle

24

40.1527. W a/1-7-85
 1356 W a/10-6-85
 3043. W a/12-12-84
 2873 W a/12-10-85
 3043. H a/12-12-84

P.W.D. No 2190

(29)

From
 Colonel of Beatty, R.E.
 Supg. Engineer
 H. A. Circle.



Dated 15th March 1887
 Received 17th

No 131
 E.W.

Enclosures 20.33

Calicut Vayitri Road.
 Submitting the revised
 estimate of the amount
 ing to Rs: 37,5578.

Can 28/3/87. Rd. 30/3/87

IV

The expenditure on the
 Calicut Vayitri Road,
 appears repeatedly in the
 objectional item statements,
 and for this reason the S.E.
 makes the revised Est. of
 Rs 3,75,578 to be sanctioned
 as once. But as the Bridges
 have still to be estimated for,
 would it not be advisable
 to wait until these Ests. have
 been received, and sanction
 the whole complete Est.?
 It should the Est. as submitted,
 be sanctioned, with the following
 note.
 It is understood that ~~the~~
 the Est. ~~submitted~~ will
 be subject to revision, as soon
 as reliable data is available
 regarding the cost of the iron
 bridges, now under construction.
 Under the circumstances explained
 by the S.E. the increased charges
 under the heads of "Maintenance"
 and "Superintendence" are
 approved.

W.M.
 25.3.87

2 for 4th & 5th
 last amount

Current No. 2190
 Letter No. 131
 Dated the 15th March 1887
 From the S.E. H. A. Circle

NOTE OF REMARKS.

1. The accompanying is a revised estimate for improving the road from Calicut to Vayitri, and is submitted in obedience to G.O. No. 2373 W. of the 12th October 1885. This revised estimate amounts to Rs. 3,75,578 - being Rs. 55,790 in excess of that last sanctioned, Rs. 3,19,788, in G.O. No. 2373 W. of the 12th October 1885.
2. The necessity for the present revision is satisfactorily explained, and the various causes of the excess, Rs. 55,790, are well and clearly stated in the accompanying report and in S.E.D.'s enclosing letter, No. 131 of the 15th March 1887.
3. It is shown in statement A appended to S.E.D.'s letter that the excess under the sub-heads 'Laying' is Rs. 274; under 'Gravel' Rs. 5,610; under 'Rock blasting' Rs. 8,675; under 'rough stone'

parapets and settlements -
Rs. 7,850; under 'fucking and breaking
up old surface of road' - Rs. 6,884;
under 'bridges' - Rs. 723; under
'buildings' - Rs. 69; under 'maintenance
of the road during its construction' -
Rs. 13,650; under 'fetty works' (including
mile stones &c) - Rs. 1,007; under
'contingencies' - Rs. 269; and under
'superintendence' - Rs. 14,095 -
The excess amounting in all
to Rs. 59,110 from which must be
deducted the saving effected
under 'earthwork' - Rs. 907; and
under 'tunnels' - Rs. 2,413 (amounting
to Rs. 3,320) to obtain the net
excess of Rs. 55,790.

In the former estimate a gravel
surface 1 inch thick is provided
but in the present revised
estimate gravelling is allowed
a thickness of 2 inches, and S.E.IV
writes that "experience has
shown that two inches are most
necessary."

In paragraph 4 of his enclosing
letter, S.E.IV. fully explains the
necessity there now exists for

25/11
increasing the percentage to
be allowed for superintendence
from 2 to 5 per cent, and
subject to approval, there
certainly appears to exist
good grounds for assenting
to the proposed change.

6. Subject to approval, after a
due consideration of what is
said on the subject both in the
Report and in S.E.IV.'s letter
it would indeed seem to be
a mistake not to grant the
increased allowance now
asked for under the subhead
'Maintenance of the road
during construction.'

7. The rates appear to be fair.
The revised estimate now
submitted has evidently been
prepared with care there
is however a slight mistake
in statement B. - but this
perhaps need not be noticed.

8/14
24/3/87

950. W

PROCEEDINGS OF THE MADRAS GOVERNMENT.

30 March 87.
Read the following

Letter from the Suptg.
Engr. IV. Circle

N.B. N. 131 of 15 March 87
E.H.

mm
29 March

The revised estimate amounting to Rs. 3,75,578 for improving the road from Calicut to Vayittur, is sanctioned.

2. The excess of Rs. 55,790 over the estimate of Rs. 3,19,788 sanctioned in G.O. N. 2373 W of 12 October 1885, is fully explained in the Suptg. Engr's letter above recorded and the report submitted therewith. In the circumstances stated by the Suptg. Engr. the increased charges under the heads "maintenance" and

"Superintendence" are ap-
proved.

3. It is understood
that the amount pro-
- vided for bridges will
be subject to revision
when reliable data
is available as to the
cost of the iron bridge
now under construction.

4. This sanction has
been registered as Pro-
- ce. 201 W of 1886-87, and
classified as Communi-
- cations, original work.

W. 3-87

See
28/3/87

W. 3-87
B. 1887

S. C. II Circle
with 30 enclos.

Ex. P. H. aceto.
with pen. abt. 1887.

Local & Municipal. Sept.

87
6/4

Ac

28/3/87 W. 30/3/87

11-12-18

2190

Govt. of Madras.
PUBLIC WORKS.

1/4/06
13-9-165

Dated *21/3/87*
Recd. *21/3/87*

G.O. 30th March 1887, No. 950 W

Calicut - Tugitri
road
=

Revised Estimate
of Rs 3,75,578
for improving
the ————— Sanctioned

60
5

one
30/3

21/3