

(1) Number of pages 24
(2) Date of repair 6.10.87
(3) Initials of the Referencer lwg ✓

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public Works

DEPARTMENT

G.O. No.	1527	W	Press.
B.P. No.			Mis.
Dated	1. 7. 1885		196

Not to be folded or roughly handled.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From Colonel J. BEATTY, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 9th May 1885, No. 186 E.W.

I have the honor to submit, herewith, the revised plans and estimates for the smaller bridges on the Calicut-Vayitri road, and for buildings for housing the staff while the improvement of the Wynaad roads is in progress, prepared with reference to G.O., No. 3043 W., of 12th December 1884.

2. The revised estimates now submitted amount to Rs. 3,317 and Rs. 40,727, respectively, as against Rs. 5,177 and Rs. 66,329 as originally designed; and Mr. Todd has, in his very complete and concise report, explained most clearly the way in which the reduction of cost has been effected.

3. The general result of the various modifications made since the first submission of the project is as follows:—

The original estimate exclusive of establishment and tools and plant (ordered to be omitted in paragraph 10 of the note printed with the abovementioned Government order) for the road and buildings amounted to Rs. 3,47,037; the revised estimate for the same amounts to Rs. 3,17,410; so that on the whole a saving of Rs. 29,627 has been effected.

4. As stated in my letter, No. 46 C., of 24th April 1885, the annual cost of repairs, if undertaken in conjunction with the improvements, will be Rs. 13,300; and assuming that the works will extend over three years, the total cost of the improvements, repairs, and buildings will be Rs. 3,57,310.

From the same officer, dated Wellington, 17th June 1885, No. 242 E.W.

In reply to your memorandum, No. 200 E., of 5th instant, I have the honor to forward, herewith, a comparative statement showing that the difference of cost for providing a 12-feet width of roadway on the smaller bridges of the Calicut-Vayitri road, instead of $8\frac{1}{2}$ feet, would be Rs. 900.

2. In preparing estimates for a width of $8\frac{1}{2}$ feet Mr. Todd assumed that the orders for a width of 12 feet applied only to the larger bridges. The cost of the masonry work will not be affected, as the abutments are already 14 feet wide.

ORDER—dated 1st July 1885, No. 1527 W., Public Works.

With the foregoing correspondence, the Superintending Engineer, IV Circle, submits revised estimates for the smaller bridges on the Calicut-Vayitri road, and for housing the working staff.

2. The estimate for the smaller bridges has been modified in accordance with paragraph 8 of the Chief Engineer's note recorded with proceedings of Government, No. 3043 W., dated 12th December 1884, and amounts to Rs. 3,317, as against Rs. 5,177 sanctioned in the proceedings above quoted. The present estimate provides for a width of roadway over the bridges of only $8\frac{1}{2}$ feet; but it is considered essential

that the clear width between parapets should not be less than 12 feet. To admit of this extra width being given, the revised estimate will be increased by Rs. 900, which will then show a saving of Rs. 960 over the original sanction.

3. The estimate previously submitted for housing the staff involved an expenditure of Rs. 86,329; but, in accordance with the instructions issued in G.O., No. 3043 W., dated 12th December 1884, the proposals have been carefully revised by Mr. Todd, and now provide for affording satisfactory accommodation at a cost of Rs. 40,727.

4. The revised estimates are sanctioned as follows:—

Smaller bridges	Rs.
Buildings for working staff	4,217
	40,727

5. The total sanction for improvements to the Calicut-Vayitri road will now stand as shown below:—

Revised estimate for improvements sanctioned in G.O., No. 154 W., dated 19th January 1885	Rs.
Deduct saving now made in cost of smaller bridges	2,78,544
	960
	2,77,584
Add cost of repairs sanctioned in G.O., No. 3043 W., dated 12th December 1884, and which, under G.O., No. 1356 W., dated 10th June 1885, are to be charged to Provincial, and treated as part of the improvements	83,200
Buildings for working staff	40,727
Total	3,51,011

6. This sanction has been registered as Provincial, No. 74 W. of 1885-86, and classified as Communications, Original Works.

(True Extract.)

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

To the Superintending Engineer, IV Circle, with twenty-eight enclosures.
" Examiner, Public Works Accounts, with original general abstract estimate.
" Financial Department.
" Honorary Secretary, Wynaad Planters' Association, with copy of
G.O., No. 1356 W., dated 10th June 1885.

Exd. E. Fernandez,
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1885) Madras.

PUBLIC WORKS.

Dated July, 1st.

Recd.

Encl.

G.O., 1st July 1885, No. 1527 W.

JULY.

Bridges

Revised estimate for the smaller — on
the Calicut-Vayitri road, sanctioned.

C. No. 42/8

P. W. Secretariat.

Note by Budget Section.

Road from Calicut to Vayitri

Remarks and References.

3/1527

Provincial
Head Communications
Sub-Head Original Works.

Estimate	Rs.	3,17,410
in previous year	"	"
current year	"	50,000
required to complete	"	2,67,410

Total Rs. 3,17,410

of available funds.

A sum of Rs. 50,000 has been provided for the work in the
year's Provincial Budget.

1/6/85.

for Budget Clerk.

Note by Budget Section.

N^o 186
M.

Supg. Engineer's Office IV Circle
Coimbatore 9th May 1885

From

The Superintending Engineer
IV Circle

To

The Chief Engineer
P. W. Department

Sir,

Enclosures 28

1 Report
7 Plans
19 Estimates
1 General
Abstract
Estimate.

22

Forwarded by
Bangalore.

I have the honor to submit herewith the revised plans and estimates for the smaller bridges on the Calicut Vayitri River and for buildings for housing the Staff while the improvement of the Wynad Roads is in progress, prepared with reference to G. O. N^o 3043 M. of 12th December 1884.

2. The revised estimates now submitted amount to Rs. 3,317 and Rs. 40,727 respectively, as against Rs. 5,177 and Rs. 66,329 as originally designed. And Mr. Todd has in his very complete and concise Report explained most clearly the way in which the reduction of cost has been effected.

3. The general result of the various

modifications made since the first submission of the project is as follows:-

The original estimate exclusive of Establishment and Tools and Plant (ordered to be omitted in para 10 of the Note printed with the abovementioned G.O.) for the road and buildings amounted to Rs 347,037; the Revised Estimate for the same amounts to Rs 3,17,410; so that on the whole a saving of Rs 29,627 has been effected.

It is stated in my letter No 46C of 24th April/05, the annual cost of repairs, if undertaken in conjunction with the improvements will be Rs 15,300 and assuming that the works will extend over three years, the total cost of the improvements, repairs and buildings will be Rs 3,57,310.

I have the honor to be,

Sir,

Your most obedient Servant,

J. Beatty - Col. R.E.
Superintending Engineer

IV Circle

No 311 E. 27. 8. 83.
 " 395 E. 26. 9. 83.
 46-574 E. 26-27. 84. Encl.
 " 3043 E. 12. 12. 84
 " 133 E. 19. 1. 85. Encl.
 42-574 E. 12. 1. 84
 " 141 E. 12. 1. 84
 " 266 E. 12. 12. 83.
 " 524 E. 26. 2. 84
 " 412 E. 22. 4. 84
 " 3043 E. 12. 12. 84. Encl.

(1) 4218
 From
 The Sup. Engineer,
 Fourth Circle.

Col. Hunter's original letter
 on the road with his husband's
 report & proposals, with note I made
 therein, to, as well as the file.
 Please put them up.

Cy
 29. 5. 85

Public Works Department, 1885-86.

Current No. 4218
 Letter No. 4218
 Dated the 28. May/85
 From the S.E. IV Circle

NOTE OF REMARKS.

1. The accompanying are revised
 plans and estimates for the
 smaller bridges on the Bulicut
 - Nayitri Road and for building
 for housing the staff while the
 improvement of the Bagnad
 roads is in progress. - The
 revised estimates for the bridge
 amount to Rs. 3317 and for the
 buildings to Rs. 40,727 against
 Rs. 5177 and Rs. 66,327 respectively,
 as originally designed.
 2. The nine smaller bridges
 have been revised as instructed
 in para. 8 of E.W.'s note accom-
 - panying G.O. No. 3043 of the
 12th Dec/84, with the addition
 that corrugated flooring has
 been substituted for buckle
 plates. The width of roadway
 allowed for all is 8 1/2 feet.

By W.
 Original G.O. No. 5241
 26-2-84 reports & plans
 submitted. S.P.
 1-6-85-

I do not see any note on
 the subject.
 What has become of it?
 C.L.
 1. 6. 85

Dated 4th May 1885.
 Secy. W.

No. 200 E. of June 5th 1885
 S.P.
 W.

Encl. 28. (7. 1885)

Bulicut Nayitri Road:-

Submits revised
 plans and estimates for
 the smaller bridges on the
 and for building for housing
 the staff while improve-
 ments of the roads are in
 progress.

Q. 2. 6. 85

and Mr. Todd explains
how, with a view to economy,
circumstances warrant the
adoption of such a width.
By this revision of the bridges
a saving of Rs. 1860 is effected.
3. In his revision of the building
for housing the staff Mr. Todd
appears to have well
and carefully studied the
wishes of Government and
in para 6 of G.O. No. 3043 of
the 12th Dec/84. Subject to
approval, plans and esti-
mates show that the staff
will be fairly housed and
the choice of building ma-
terials and marked
saving effected, Rs. 25,002, on
this item alone prove that
economy was not lost sight
of in their preparation.
A comparative state-
ment has not been
submitted.

27th May/85

BK

G. 2.6.85

To

W.

4 6/1527
S. E. IV submits revised
estimates for bridges on the
Calicut-Vayitri road, Rs. 3,317,
& for housing the staff to be
employed on the improvements of
the Wynaud roads, Rs. 40,727.-

A general estimate for the
Calicut-Vayitri road, amounting
to Rs. 280,708, was sanctioned in
G.O. No. 3043 W of 12th. Decem-
ber 1884. This included the cost
of 3 large iron bridges and of
several small ones ranging up to
about 20 ft. span.

The detailed estimates for
two of the former, which amounted
to Rs. 27,134, were revised and
sanctioned for Rs. 24,970 in G.O.
No. 155 W of 19th. January 1885.

The detailed estimates for
the smaller bridges, also includ-
ed in the general estimate of
Rs. 280,708, amounted to Rs. 5177,
and are now revised to Rs. 3317
in accordance with para 6 of
E. W's note on which G.O. No. 3043
W was based.

The bridges now designed
manifestly P.W.
are those by Messrs. MacLellan

G. 2.6.85

and recommended by Capt. Dorward,
but patent corrugated flooring
is substituted for the embossed
dimple plates of the Manufacturers.

The width adopted for roadway
is 8 ft. which Mr. Todd
considers as 12 ft. vide para 3
of his report.

In the original estimates 12
ft. width of roadway was adopted.

In my note on the original
proposals brought forward by
Mr. Nordmann I made the following
remarks on this point—
"width between parapets should
not be less than 12 ft. Mr.
Nordmann says Col. Beatty con-
siders a width of 10 ft. will
be ample (see his para 7). In
my humble opinion neither of
these recommendations is cor-
rect, as we are going to per-
petuate these communications once
for all. A development of traf-
fic should be looked for, not
stagnation on the ghant cer-
tainly the roadway over bridges
should not be less than the
width of roadway of ghant. And
in the low country 12 ft. between
parapets once for all. The
extra expense so entailed will

be but an infinitesimal frac-
tion of the whole outlay to be
incurred on the roads, and it
would in my mind be a pity under
the circumstances to skimp the
roadway over bridges".

On this you remarked that
12 ft. should be the minimum
roadway over bridges.

I cannot help thinking that
8 ft. though just sufficient to
pass a single file of bandies,
will be found extremely awkward
on a road with steep gradients
and sharp curves. It is pushing
economy too far to build per-
manent bridges of such a width
of roadway.—

In para 6 of G.O. already
quoted, sanctioning estimates for
Improvements & for repairs, Govt.
objected to the estimate of Rs.
66329 for buildings for the
staff, & directed S.E. to submit
revised proposals.—

The estimate now submitted
in accordance therewith amounts
to Rs. 40727, & will I think meet
all requirements. I presume it
must be sent up to Govt. of India.—

The total savings effected
by the revisions of estimates
for the 2 Iron bridges (6

*Under 70 ft. bridge
now ruled that
divisions, however
small, are of no use
do not require the
division*

*Under 50 ft. bridge
under the dwelling houses for land
of 100 ft. shall not be considered
as a separate one. General 10 ft. rule
shall apply. The cost of foundation for
the bridge shall be 100 ft. Should be
considered as a separate one. 50 ft. by*

No. 135 W of 19th. Jan 1885
and of those now sent up will
amount to Rs. 23,037.

CO.

By. W.

1.6.85

N^o 242
W.
From

Supg. Engineer's Office IV Circle
Camp Wellington 17th June 1885.

The Superintending Engineer
IV Circle

To

The Chief Engineer
P. W. Department.

Sir,

Enclosure 1
1 Camp: abatt. In reply to your Memo: N^o 200 P. of
5th Instant. I have the honor to forward
herewith a Comparative Statement showing
that the difference of cost for providing a lesser
width of roadway on the smaller bridges
of the Calicut Vajithi Road, instead of
8 $\frac{1}{2}$ feet, would be Rs. 900.

2. In preparing estimates for a width
of 8 $\frac{1}{2}$ feet Mr. Todd assumed that the orders
for a width of 12 feet applied only to the
larger bridges. The cost of the masonry work
will not be affected, as the abutments are already
14 feet wide.

I have the honor to be,
Sir,
Your most obed^t serv^t,

L. Beatty. Col. R.E.
Supg. Engineer IV Circle

21
527

Dec 5-25

From

The Supt. Engineer,
Fourth Circle

Dated 27th } June 1885
Recd 15th }

N^o 342
E. W.
Enc 1

Calicut-Vayalar Road.

Towards a comparative statement showing difference of cost for providing a 12 feet width of road way on the smaller bridges of the — in place of 8 1/2 feet.

Recd 27/6

19th June 1885

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following

Letter from the Suptg. Engr. IV. Circle N^o 186 of 9th May 1885.
Do " " N^o 342 of 17th June 1885.

With the foregoing correspondence, the Suptg. Engr. IV. Circle submits revised estimates for the smaller bridges on the Calicut-Vayalar road, and for housing the working staff.

2. The estimate for the smaller bridges has been modified in accordance with para 8 of the Chief Engineer's note recorded with P. G. N^o 3043. W of 12th December 1884.

against the 5777 sanctioned in the Proceedings above quoted. The present estimate provides for a width of roadway over the bridges of only 8 1/2 feet; but it is considered essential that the clear width between parapets should not be less than 12 feet. To admit of this extra width being given, the revised estimate will be increased by Rs 900, which will then show a saving of Rs 760 over the original sanction.

The estimate previously submitted for having the Staff involved an expenditure of Rs 66,327, but, in accordance with the instructions issued in G.O. No 3043 W of 12 December 1884, the proposals have been

carefully revised by Mr. Todd, and now provide for affording satisfactory accommodation at a cost of Rs 40,727.

4. The revised estimates are sanctioned as follows:—

Smaller bridges — Rs 4,217
Buildings for working Staff — 40,727.

5. The total sanction for improvements to the Calicut-Vayitri road will now stand as shown below:—

Revised estimate for improvements, sanctioned in G.O. No 155 W dated 19 January 1885	}	Rs 2,00,544
deduct saving now made in cost of smaller bridges		
		960
		2,77,584
Add cost of repairs sanctioned in G.O. No 3043 W of 12 December 1884, and which under G.O. No 356 W dated 10 June 1885, are to be charged to Provincial, and treated as part of the improvements	}	33,300
Buildings for working Staff		40,727
		Total Rupees 3,51,611

6. This sanction has

classified as Communications

original works

11

25-6-85

524 524 20-2-84
2443 24 12-12-84
155 24 19-1-85
1856 24 10-6-85
2006 24 5-6-85



196.15

J - BH

BH

Dec 11/85

S.E. III circle, with ²⁸enclaf

Ex: P.W. accts. with original
general abstract estimate

Sub: Sept.

Novy. Secy. Wynaad Planters

Assets with copy of

h.o. 1356. W 2/10-6-85.
A

25-6-85