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(1) Number of pages 24
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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W. DEPARTMENT

G.O. No.	1418 W	Press.
B.P. No.		Mis.
Dated	4-6-1886	~~198~~

A.K-13

Not to be folded or roughly handled.

1418

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, 11th May
1886, No. 143 E.W.

I have the honor to inform you that the wooden bridge in the 3rd furlong of the
2nd mile of the Ootacamund-Mettapallaiyam road, near Barliyar, is considered to be in
a dangerous state, and should be rebuilt at an early date in a substantial manner.

2. The beams have rotted considerably at the ends, and the posts are cracked, and
supported by wooden braces strapped on to stone with iron bands. The beams have
been temporarily propped by wooden uprights and stone in mortar pillars. From a
careful inspection of the site, the Executive Engineer is satisfied that a temporary
structure might be put up at small cost to carry the roadway during reconstruction.

3. I send, herewith, for your information, two estimates for reconstructing the
bridge in a substantial manner. One estimate, amounting to Rs. 4,940, provides for a
wooden platform bridge on piers of rubble masonry in cement. The other estimate,
amounting to Rs. 2,070, shows the cost if the platform and hand rails be of iron on
rolled iron beams.

Note by the Chief Engineer, Public Works Department.

In the letter, the Superintending Engineer, IV Circle, reports that a bridge
near Barliyar, on Ootacamund-Mettapallaiyam road, is in a dangerous state, and he
submits two estimates for reconstructing it in a substantial manner. The first
estimate, amounting to Rs. 4,940, provides for a wooden superstructure, and the
second, amounting to Rs. 2,070, for a rolled iron girder bridge.

4. A timber bridge, if properly built and properly maintained, may be expected
to last 20 years, but if it can be retained on for a life of only 15 years, it will probably
be found in the long run to be cheaper to spend some Rs. 5,000 on it, than some
Rs. 8,000 on an iron bridge.

5. In the present financial position, it is considered that the cheaper alternative
must in any case be adopted.

6. The estimate of Rs. 4,940 is therefore recommended for sanction.

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Chief Engineer, P.W.D.

Order—Dated 4th June 1886, No. 1418 W., Public Works.

The estimate, amounting to Rs. 4,940, for reconstructing a wooden bridge at Barliyar,
on the Ootacamund-Mettapallaiyam road, is sanctioned.

4TH JUNE 1886, No. 1418 W., PUBLIC WORKS.

2. The requisite funds will be provided in the orders on the statements of demands on the reserve with Government.

3. This sanction has been registered as Provincial, No. 35 W. of 1886-87, 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 six enclosures.
" Examiner, Public Works Accounts, with duplicate abstract estimate.
" Financial Department.

Exd. P. L. Perera.
Spare Copies

2
14/8

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of (1886) Madras
PUBLIC WORKS.

Dated June, 4th.

Recd.

Encl.

G.O., 4th June 1886, No. 1418 W.

JUNE.

Bridge

Wooden — at Barliyar, on the Ootacamund-Mettupalaiyam road. — Estimate of Rs. 4,940 for constructing a —, sanctioned.

Letter from the S. E. IV Circle
No 1418 W. of 11.5.86

To D.W.

For scrutiny of
the estimates, & for
favour of remarks
as to the relative merits
of the two proposals.

13.5.86

Public Works Department, 1886-87.

Current No. 3665

Letter No. 143/67

Dated the 11th May 1886

From the Suptg. Engr. IV Circle

NOTE OF REMARKS.

The accompanying two alternative estimates provide for "Recon-structing a Bridge of three spans at the 3rd furlong of the 23rd mile on the road from Ootacamund to Mettupalaiyam."

One for a wooden bridge over rubble masonry amounting to Rs. 4,940, and the other for rolled iron girder bridge on rubble masonry amounting to Rs. 8,070.

2. In both these estimates, the piers, and abutments are of rubble masonry in Portland Cement and are to be founded on a solid rocky bed.
3. The ground plan of bridge shows wings but the elevation of wings is not shown either in the cross or longitudinal sections of bridge.
4. As there are no details or plan showing the rolled iron girders it is therefore difficult.

difficult to determine the weight or check the lump sum put down in the abstract estimate for each girder.

The amount for each is Rs. 1,500 but how this sum was arrived at is difficult to say.

5. The beams are to be of well seasoned Pegu teak. The joists and uprights, ^{planking} are to be of the best seasoned Vengay wood. The whole of the woodwork to be painted with 2 coats of tar.

6. The proposal to span the bays with rolled iron girders is I think the best and may prove a saving in the end as woodwork will after a few years decay and will have to be constantly examined and put in order from time to time as is the case in most of the bridges now constructed with woodwork.

7. With the exception of the lump sum provided for the rolled girders in the abstract

1418
abstract estimate the rates for the other items but cutstone seem fair. The amount allowed in the estimate for cutstone is Rs. 5 per cft. which seems rather high, but there is no rate for this nature of work in the schedule of rates for the Nilgiri District.

The rate in the Coimbatore District for the same description of work is Rs. 1 1/4 per cft.

C.E.
19.5.86

To J.W.

Note 6/19/18

There can be no doubt that it would be much better to build an iron bridge than a wooden one; the former would last much longer and though much more expensive to erect would be cheaper in the long run.

The details of the wooden bridge seem correct, but no details whatever are given regarding the iron one and a lump sum of Rs. 1,500 is allowed in the estimate for girders, roadways, &c. how this sum was arrived at cannot be ascertained.

If it is settled to have an iron bridge it would be well if a proper plan were submitted for sanction

abstract

sanction. If a wooden
bridge is to be constructed,
the estimate for it can be
sanctioned.

4/5/86

I am somewhat doubtful whether
the iron bridge would be cheaper
in the long run.

The timber bridge, if properly
built, & properly maintained,
may certainly be expected to
last 25 years, — and, on
that assumption, it will
probably prove cheaper to spend
some 5,000/ on it, than some
some 8,000/ on an iron bridge.

But, as matters stand, I
think we must in any case
be contented with the cheaper
alternative.

24.5.86

If the timber bridge can be
counted on for a life of only
15 years, I think it will be
found to be cheaper than an
iron bridge.

Qno 3665.

4/5/86

Note by D.W.

for his orders

No 143
R.W.

Supg. Engineer's office to Circle
Bombay, 11 May 1886

From,

The Superintending Engineer
Bombay Circle

To

1418

The Chief Engineer
Public Works Department

Sir,

Enclosures:

1. Tracing
2. Estimates
2. Duplicate
Abstract
Estimates
1. Report.
1. Specification

I have the honor to inform you
that the wooden bridge in the 3rd furlong
of the 23rd mile of the City Northpol.
Limi Road, near Burhan, is considered to
be in a dangerous state; and should be
rebuilt at an early date in a sub-
stantial manner.

2. The beams have rotted consider-
ably at the ends, and the piers are
cracked, and supported by wooden braces
strapped on to stone with iron bands.
The beams have been temporarily prop-
ped by wooden uprights and stone in
mortar pillars. From a careful in-
spection of the site, the Executive Engineer
is satisfied that a temporary structure

might be put up at small cost to carry
the roadway during re-construction.

3. I send herewith for your infor-
mation two estimates for reconstructing
the bridge in a substantial manner.

One estimate, amounting to Rs 4,940.,
provides for a wooden platform bridge
on piers of rubble masonry in cement.

The other estimate, amounting to Rupees
8070 shows the cost if the platform and
handrails be of iron, on rolled iron
beams.

I have the honor to be
Sir,

Yours most obedient servant.

L. Beatty Colonel R.E.
Superintending Engineer & Circle

[Signature]

8/1918

File 3665

From

The Supr. Engineer,
Fourth circle



Dated 11th }
Sept. 12th } May 1886.
15

No. 143

W.

Chief Engineer

Wooden Bridge at Bur
Lis:—

Forwarding for
information 2 estimates
one of Rs. 4,940 for pro-
viding wooden plat-
form Bridge on pier of
rubble masonry in cement
and the other of Rs. 8,070
showing the cost on

Public Works Department

Note by the Chief Engineer. 9/18

Letter from S. E. IV Circle No. 143 W. d/11.5.86.

In this letter, the
Suptg Engineer IV Circle
reports that a bridge
near Burhar on the
Ootacamund-Metturpalem
Road is in a dangerous
state; and he submits
two estimates for recon-
structing it in a
substantial manner.
The first estimate—

On 5.5.86
Transmitted to 10.5.86

No. 1418 W.

13 1/2
cl. writer.
PUBLIC WORKS DEPARTMENT.

X/c
11/4/18
PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 14th June 1886

READ the following

Letter from J. E. W. Girdle (A.C. No. 143 W. d. 11. 1886)
Note by the Chief Eng. P. W. D. (d. 27. ")

The estimate
amounting to Rs 4940,
for constructing a wooden
bridge at Burlina
on the Ootacamund
Mettupalayam Road,
is sanctioned.

2. The requisite funds
will be provided in

the orders on the
statements of demands
on the reserve with
Government.

3. This sanction has
been registered as
Provincial No 35 W of
1886-87, and classified
as Communications -
Original Works.

W
27.5-86

3/6/86

Cu

55/5. Cu 27/5.

~~12/14/86~~

W
4/6

I E IV Circle ✓
with 6 enclosures

4 PW Accts. with
dupls abt 40

Financial dept

Newspapers.

sent
10/6/86

12/14/86

2805

Gobt. of 1886 Madras.
PUBLIC WORKS.

Dated

5/6/86

Recd.

Encl.

G.O. 4th June 1886, No. 1418w

Bridge
≡≡≡

Wooden — at
Burliat on the

G. S. Kacurum — Metturpalaing
road. Estimate
of Rs 4,940 for
constructing a —
embankment.

70
5

44/20 4/6