

*Proceedings of the Madras Government, Public Works Department,
14th October 1875.*

No. 219. Read the following letter from Major C. J. SMITH, R.E., Officiating Consulting Engineer for Railways, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 4th October 1875, No. 548:—

With reference to the Proceedings of Government, No. 2,495, dated 1st September 1875, I have the honor to submit, for the sanction of the Government of India, four estimates of the cost of reconstruct-

3 Miles 11 Telegraph Posts...	{ Capital ... 8,734 } 6,000, Plan No. 208.
	{ Revenue ... 2,268 }
8 " 20 " " " "	{ Capital ... 2,913 } 3,944, " " 199.
	{ Revenue ... 1,031 }
10 " 8 " " " "	{ Capital ... 3,918 } 5,625, " " 200.
	{ Revenue ... 1,707 }
11 " 3 " " " "	{ Capital ... 3,649 } 5,275, " " 207.
	{ Revenue ... 1,626 }

ing bridges between Perambore and Arady on the South-West Line of the Madras Railway, amounting in the aggregate to Rupees 20,846.

2. With reference to the necessity for these works, the Agent and Manager quotes as follows from the Chief Engineer's letters:—

Bridge at 3—11 miles. "Both the arches of the present bridge are cracked, its foundations are 4 feet 9 inches in sandy clay, and it has no flooring; I therefore consider it expedient to pull down the present bridge and, with a view to increasing the waterway, replace it with a 12 feet opening."

Bridge at 8—20 miles. "The abutments of the existing arch are so low that but very little waterway is allowed; experience having proved this to be insufficient, it is proposed to replace the arch by a girder and so increase the waterway."

Bridge at 10—8 mile. "The present bridge requires complete renewal, and, as the new foundations are to be carried down to a considerable depth, it is considered desirable to substitute one 12 feet span for two 6 feet arches and thus save the pier."

Bridge at 11—2 mile. "Both the arches of the present bridge are cracked, and the foundations are only 3 feet deep; I therefore propose to substitute a 12 feet opening for the double 6 feet arch."

3. The amount which has been charged to Revenue in each case represents the probable cost of the original structure; the difference between that amount and the total cost of the new work having been charged to Capital in accordance with paragraph 17 of Sir Charles Woods' despatch, No. 17, dated 9th March 1864. This is virtually charging to Capital the cost of *improvement* only in accordance with the principle subsequently laid down by the Government of India in letter, No. 212 G.R., G. O., No. 519, dated 26th February 1872. dated 8th February 1872.

4. The necessity for these works was considered at several meetings of the Railway Committee held at Royapooram, and the Consulting Engineer approved of estimates being submitted. It would appear that a good many of the minor bridges on this portion of the line were originally built with foundations of insufficient depths, with the result that the arches have cracked and the bridges become unsafe. It is now proposed to carry the foundations to a depth of 10 feet, to substitute girders for arches, and to provide floorings with deep curtain walls. A single 6 feet rail girder opening is being rebuilt at mileage 5—12, but, as the entire cost of this is borne by Revenue, it does not appear necessary to submit the estimate for the sanction of the Government of India. The estimate (Rupees 3,345) will be found in the monthly schedule for July.

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5. Funds chargeable to Capital can, in the case of each estimate, be met from Schedule B, "unforeseen requirements" in the Budget estimate for 1875-76, and the Revenue portion from Schedule G.

6. The sanction will lapse at the end of the eighth quarter after its receipt in the case of each of the estimates for bridges at 3-11, 10-8, and 11-2 miles, and at the end of the fourth quarter for the bridge at 8 miles, 20 telegraph posts.

7. The estimates for these bridges being taken separately, and their several amounts being within the limit that the local Government are empowered to sanction, the Agent was authorized to commence with the work upon the approval conveyed in the Order of Government, No. 1,956, dated 10th July 1875.

Rupees 10,000.

No. 220.

ORDER THEREON, 14th October 1875, No. 2,933.

RAILWAY, No. 18.

ORDERED that the plans and estimates submitted with this letter be forwarded to the Government of India.

2. It is observed from paragraph 7 that the works are in progress, authority having been given by the Consulting Engineer for their commencement apparently in anticipation of the submission of the necessary detailed estimates. It does not appear that this course was necessitated by the urgency of the works.

3. The general sanction accorded to the works included in the half-yearly schedules must be considered provisional, pending the submission of detailed plans and estimates, and should not be held to convey authority for the commencement of works that have not been approved in detail, and for which specific appropriations of funds have not been made.

(Here enter No. 2,934, dated 14th October 1875.)

(True Extract.)

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

To the Consulting Engineer for Railways
Examiner of Railway Accounts.

Exd. E. C. Shunker.
Spare Copies

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 14th October 1875.

No. 221.

No. 2,934.

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. 19.

SIR,—In your letter, No. 2,098 R., dated 21st August 1875, reviewing the schedule of works proposed to be undertaken on the Madras Railway from Capital and Revenue during the half-year ending 31st December 1875, it was stated that before any portion of the outlay for repairs and renewals in connection with item No. 2 is charged to Capital, full explanation of each case should be laid before the Government of India.

2. I am now directed to forward plans and estimates, amounting in the aggregate to Rupees 20,846, for the reconstruction of the four bridges between Perambore and Avady. The works have been treated separately; each item costing less than the sum* within which the Local Government are authorized to sanction expenditure.

* Rupees 10,000.

3. The principle on which the charges have been apportioned between Capital and Revenue is explained in paragraph 3 of the Officiating Consulting Engineer's letter, to which I am to invite attention.

I have the honor to be,

Sir,

Your most obedient servant,

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

Exd. E. C. Shunker.
Spare Copies

necessity
paraphrase

Govt. of (1875) Madras.
PUBLIC WORKS.

THE SECRETARY TO THE GOVERNMENT
OF INDIA.

Dist. Order 146.

Issued

Recd.

G.O. Dist. Order 146, No. 1924.

NOTED
11th Oct.

Enclosed please find estimates amounting to Rs. 20,846 for the reconstruction of the four bridges between Tellicherry and Avas of the Madras Railway.

Railway Departt.

Cons. Engng. Office
Madras 11 Oct. 1875.

No. 548

From
Major C. J. Smith R.E.
Offs. Cons. Engng. for Railways
To
Major Genl. G. H. Walker R.E.
Secy. to Government
P. W. Department.
Fort St. George

Sir,
With reference to the
Proceedings of Government
No. 2495, dated 1st September
1875, I have the honour to
submit for the sanction of
the Government of India four
estimates of the cost of reconstruct-
ing bridges between Perambore
and Madras on the South-West
line of the Madras Railway
amounting in the aggregate to
Rs 20,846.

With reference to the
necessity
paragraphs

2 miles 11.50. (Capt. 2734 6000 Planets 200
2268 1913 2944 199
8 20 2918 5625 200
10 8 2707 5275 207
11 2 2626 5275 207

necesity for these works the Agent and Manager quotes as follows from the Chief Engineer's letters:-

Bridge at $\frac{7}{11}$ miles. Both the arches of the present bridge are cracked, its foundations are 4.9' in sandy clay and it has no flooring. I therefore consider it expedient to pull down the present bridge and with a view to increasing the waterway replace it with a twelve feet opening.

Bridge at $\frac{8}{20}$ mile. The abutments of the existing arch are so low that but very little waterway is allowed; experience having proved this to be insufficient it is proposed to replace the arch by a girder and so increase the waterway.

Bridge at $\frac{10}{8}$ mile. The present bridge requires complete renewal.

renewal and as the new foundations are to be carried down to a considerable depth it is considered desirable to substitute one 12 feet span for two 6 feet arches and thus save the pier.

Bridge at $\frac{11}{12}$ mile. Both the arches of the present bridge are cracked and the foundations are only 3 feet deep. I therefore propose to substitute a 12 feet opening for the double 6 feet arch.

3. The amount which has been charged to Revenue in each case represents the probable cost of the original structure the difference between that amount and the total cost of the new works having been charged to Capital in accordance with paragraph

paragraph 17 of Sir Charles Woods' despatch No. 17, dated 9th March 1864. This is virtually charging to capital the cost of improvement only in accordance with the principle subsequently laid down by the Government of India in letter No. 212 G. P. dated 8th February 1872. G.O. No. 519 dated 26th Feb 1872.

4. The necessity for these works was considered at several meetings of the Railway Committee held at Poyapooram, and the Consulting Engineer approved of estimates being submitted. It would appear that a good many of the minor bridges on this portion of the line were originally built with foundations of insufficient depths, with the result that the arches have cracked and the bridges become unsafe. It is now proposed to carry the foundations to a depth of 10 feet, to substitute

girders

girders for arches, and provide floorings with deep curtain walls. A single 6 feet rail girder opening is being submitted at mileage $\frac{5}{12}$ but as the entire cost of this is borne by Revenue it does not appear necessary to submit the estimate for the sanction of the Government of India. The estimate (Rs 3,360) will be found in the monthly schedule for July.

5. Funds chargeable to capital can in the case of each estimate be met from schedule B unforeseen requirements in the Budget estimate for 1875-76, and the Revenue portion from schedule G.

6. The sanction will lapse at the end of the eighth quarter after its receipt in the case of each of the estimates for bridges at $\frac{3}{11}$, $\frac{10}{8}$, and $\frac{11}{12}$ miles, and at the

the end of the fourth quarter
for the bridge at 8 miles 20
telegraph post.

The estimates for
these bridges being taken sepa-
rately and their several amounts
being within the limit that the
local Government are empowered
to sanction, the Agent was au-
thorised to commence with the
work upon the approval conveyed
in the Order of Government.

Nº 1906, dated 10th July 1895.

I have the honour to be,

Sir,

Your most Obedt. Servant,

W. L. L. R. E. Captain

for Offs Cons Eng for Railways

dated 29/7/95

Dear Sir
I have the honour to
acknowledge the receipt
of your letter of the 27th
inst.

I am sorry to hear
that you are unable to
attend to the work
of the office at present.

I am, Sir, very
truly yours,

W. L. L. R. E.

I am, Sir, very
truly yours,
W. L. L. R. E.

W. L. L. R. E.
29/7/95

W. L. L. R. E.
29/7/95

1815-1816 to 233 final by 1816
 - 22-1817/2 - 364 to 366
 - 26-1818 - 411-412
 - 10-1819/24 - 196-197
 - 10-1820/25 - 299-301
 - 12-1821 - 18-19

O. W. / 85 Sept.

From No. 6336

The Consulting Engineer
 for Railways
 Madras

To
 The Secretary to
 Govt.

P. W. Depot

Fort Saint George

Dated 4

Recommended Octo 1/75

No 548

with 8 enclosures

Submitting for the
 sanction of the Govt.
 of India Plans and
 estimates of the cost
 of certain bridges
 between Pambone and

12-219

Ci - 8-10-75 B.L. 14-10-75

Madras 5-10-75

No 2933

P. W. Dept

Proceedings of the Madras Govt.

Under date the 14 Oct 75

Read the following

From the Consulting Engineer for
 Railways { R. No 548 of 4 Oct 75

Ordered that the
 plans and estimates sub-
 mitted with this letter
 be forwarded to the
 Govt. of India.

It is observed from para-
 graph that the works are in
 progress, authority having
 been given by the Con-
 sulting Engineer for their
 commencement appar-
 ently in anticipation
 of the submission of the
 necessary detailed esti-
 mates. It does not
 appear that this course
 was necessitated by

M.L.
 12/10

the progress of the works.

The general sanction accorded to the works included in the half yearly schedules must be considered provisional, pending the submission of detailed plans and estimates, and should not be held to convey authority for the commencement of works that have not been approved in detail, and for which specific appropriations of funds have not been made.

(N.A. No. 2934 of 14 Oct/75)

No 2934

The Secy. to the Govt of India

Sir,

In your letter No 2090R dated 21 August 1875 reviewing

Drps 26-10-75

Conf. Memo by 12
to Mr. Rydbeck. 7

Office 17
26 Oct 75

the schedule of works proposed to be undertaken on the Madras Railway from Capital and Revenue during the half year ending 31 Dec/75, it was stated that before any portion of the outlay for repairs and renewals in connection with them No 2 is charged to Capital, full explanation of each case should be laid before the Govt of India.

I am now directed to forward plans and estimates amounting in the aggregate to Rs. 20,846 for the reconstruction of the 4 bridges between Perambore and Avady. The works have been treated separately; each item costing less than the sum within which the Local Government are authorized to

x Rs 10,000

Sanction expenditure.

The principle on which the charges have been apportioned between Capital and Revenue is explained in para. 3 of the Official (presenting) Engineers letter to which I am to invite attention.

6 SC of present
6 SC of letter with
4 Estimates & 4
Plans propd -
26-10-75