

(1) Number of pages 18(2) Date of repair 18-1-43

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 2099	Press ~~Mis~~
53-54	
Dated 3-9	1862

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
3rd September 1862.*

No. 53. Read the following letter from Captain E. HEMERY, R. E., Acting Deputy Chief Engineer, Central Circle, to Colonel W. I. BIRDWOOD, R. E., Secretary to Government, Public Works Department, dated Chepauk, 9th August 1862, No. 51 :—

SIR,

1 Letter from the District Engineer Cuddapah, No. 208, dated 26th June 1862, with one enclosure.
1 Do. No. 227, dated 3rd July 1862, with one enclosure.
4 Comparative Statements.

1. I have the honor to submit for sanction revised estimates for four bridges now being constructed on Trunk Road No. XI, within the limits of the Cuddapah District, between Guvalcherru and Kalkada.

2. The original estimates for these works, included in a general estimate for bridges and tunnels along the whole line from Cuddapah to Chittoor, were sanctioned by Government on the 6th July 1855.

3. In 1857, work was commenced on the Ethlacherru and Saddamalla bridges, but all operations were soon after suspended owing to the disturbances in Bengal, and were not again resumed until last year, when Government in their Order No. 2,336, of the 19th December 1861, sanctioned the expenditure of Rupees 15,000 out of one item of the general estimate amounting to Rupees 55,742 for eight bridges and thirty tunnels between Guvalcherru and Kalkada.

4. The bridges over the Denpatla, Bandapallee, Saddamalla and Ethlacherru streams were then taken in hand by the District Engineer, who soon ascertained that the estimates prepared in 1855 by the late Road Department would be greatly exceeded for the following reasons, "the omission in the original estimates of items for approaches, including earthwork, turfing, metalling and gravelling; the great rise in rates of labor and materials during the past seven years owing to the competition on account of the North West Railway, the lately imposed tax on timber, charcoal, and firewood, and lastly, a continuation of bad seasons which has greatly affected the cost of carriage, no inconsiderable item in bridge building.

5. The following statement shows the amounts of the original estimates for these four bridges and the sums required to build them according to revised estimates prepared on rates now obtaining in that part of the Cuddapah District :—

	Original estimate.			Revised estimate.			Excess.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Bridge at Denpatla	1,908	7	0	2,938	7	0	1,030	0	0
Bandapallee	5,558	13	0	9,438	13	0	3,880	0	0
Saddamalla	6,905	1	0	10,625	1	0	3,720	0	0
Ethlacherru	5,974	13	0	11,374	13	0	5,400	0	0
Total...							14,030	0	0

6. It thus appears that Rupees 14,030 are required to complete the four bridges now in course of construction in excess of the amounts originally sanctioned in 1856, but the District Engineer points out that this sum will be more than met from savings effected on the following bridges and tunnels on the same road with the full approval of Government.

* Extract Proceedings Chief Engineer, No. 8,391, 22nd December 1860.

† G. O. No. 2,811, 2nd December 1859.

‡ G. O. No. 241, 18th February 1862.

7. A tunnel of six vents has been built over the Mangabanda* stream in lieu of a bridge of two arches: a road dam has been substituted for a bridge in the bed of the Chitlar† river, and ramps have been constructed, on each bank of the Mandaver‡ river instead of a bridge of nine arches.

8. Another project included in the estimate amounting to Rupees 55,742 for a bridge of nine arches of 18 feet span over the Yerraguntla river may well be cancelled; during the past six years this stream has not been impassable for an hour at a time, it offers no obstruction to traffic and a substantial road dam has been constructed across it from the annual maintenance allowance for the Trunk Road.

Actual Expenditure.

*Proceedings of the Madras Government, Public Works Department,
3rd September 1862.*

9. By these alterations and by cancelling the estimate for the bridge over the Yerraguntla stream above alluded to, a saving of Rupees 18,621-13-2 as shown below has been effected or Rupees 4,591-13-2 in excess of the amount required to complete the four bridges now in progress:—

	Estimated cost of work.			Cost of alteration.			Saving.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Chittlar Bridge	3,025	0	0	1,549	15	4	1,475	0	8
Mangabanda do.	1,986	12	0	1,330	0	6	656	11	6
Mandavir do.	13,652	0	0	2,000	0	0	11,653	0	0
Yerraguntla do.	4,837	1	0				13,784	12	2
							4,837	1	0
Total saving ..							18,621	13	2

No. 51.

ORDER THEREON, 3rd September 1862, No. 2,099.

- Under the circumstances represented the Governor in Council sanctions the sum of Rupees (14,030) fourteen thousand and thirty, required for completing the bridges over the Denpatla, Bandapallee, Saddamalla, and Ethalacherru streams in the Cuddapah District, in excess of their original estimates sanctioned in 1856, and which were included in the general estimate of Rupees 55,742 for bridges and tunnels on the Trunk Road No. XI in the same District.
- For the reasons stated by the Acting Deputy Chief Engineer in paragraph 8 of his letter above recorded, the estimate for the Yerraguntla bridge, which was also included in the general estimate above mentioned, is hereby cancelled.
- Adverting to the last paragraph of Captain Hemery's communication the Government observe that the whole amount of saving effected by the substitution of a road dam for the bridge over the Chittlar river, viz., Rupees 1,475, is not available, as stated by him, towards meeting the enhanced expenditure on the four bridges mentioned in paragraph 1 of these Proceedings; as Rupees 1,070 out of that amount was taken to compensate for the supplemental estimates for the completion of the bridges over Kang Vanka and the surplus channel of the Chittlar large tank, sanctioned in G. O. dated 2nd December 1859, No. 2,811.
- The saving now available under the item of the Chittlar bridge is therefore 405 Rupees and not Rupees 1,475.

(Signed) W. I. BIRDWOOD, Colonel, R. E.,
Secretary to Government.

*Centre Circle Office
Chepauk
9 August 1862.*

*From
Captain C. Hemery R. E.
Acting Deputy Chief Engineer
Central Circle.*

*To
Colonel W. I. Birdwood R. E.
Secretary to Government P. W. D.*

*Letter from the Chief
Engineer to the
Secretary to Government
dated 21st June 1862 with
estimate for 4 bridges*

*I have the honor to submit for sanction
revised estimates for 4 bridges now being constructed
on Trunk road No. XI within the limits of the
Cuddapah District between Yerralacherru and
Kilbada.*

*2. The original estimates for these works,
included in a general estimate for bridges and
tunnels along the whole line from Cuddapah to
Chittur, were sanctioned by Government on the
6th July 1855.*

*3. In 1857, work was commenced on
the Ethlacherru and Saddamalla bridges, but
all operations were soon after suspended owing to
the disturbances in Bengal, and were not again
resumed*

until operations.

resumed until last year when Government in their order N. 2336 of the 19th December 1861 sanctioned the expenditure of Rupees 15,000 out of one item of the general estimate amounting to Rupees 55,742 for eight bridges and thirty tunnels between Guralcheru and Kalkudda.

4. The bridges over the Denpatla, Randapalle, Suddamalla and Ethlacheru streams were then taken in hand by the District Engineer who soon ascertained that the estimates prepared in 1855 by the late road Department would be greatly exceeded for the following reasons: the omission in the original estimates of items for approaches, including earth work, turfing, metalling and graveling; the great rise in rates of labor and materials during the past seven years owing to the competition on account of the North West Railway, the lately imposed tax on timber, charcoal, and firewood; and lastly a continuation of bad seasons which has greatly affected the cost of carriage, an inconsiderable item in bridge building.

5. The following statement shows the amounts of the original estimates for these four bridges and the sums required to build them according to revised estimates prepared on rates now obtaining

obtaining in that part of the Cuddapah District.

	Original Estimate	Revised Estimate	Excess
Bridge at Denpatla	1908. 7	2938. 7	1030
Randapalle	5558. 13	9438. 13	3880
Suddamalla	6905. 1	10625. 1	3720
Ethlacheru	5974. 13	11374. 13	5400
		Total	14030

6. It thus appears that Rupees 14,030 are required to complete the four bridges now in course of construction in excess of the amounts originally sanctioned in 1856, but the District Engineer points out that this sum will be more than met from savings effected on the following bridges and tunnels on the same roads with the full approval of Govt.

7. A Tunnel of 6 vents has been built over the Mangabanda stream in lieu of a bridge of 2 Arches: a road Dam has been substituted for a bridge in the bed of the Chittur river; and ramps have been constructed on each bank of the Mandaver river instead of a bridge of 9 arches.

8. Another project included in the estimate amounting to Rupees 55,742 for a bridge of 9 arches of 18 feet span over the Yerragumtha river may well be cancelled; during the past six years this stream has

* Extract P^rs Chief
Eng. N. 8391. 22 Dec/60

* L.O. N. 2811. 2 Dec/59

* L.O. N. 241-18 Feb/62

has not been impassable for an hour at a time, it offers no obstruction to traffic and a substantial road dam has been constructed across it from the Annual maintenance allowance for the trunk road.

9. By these alterations and by cancelling the estimate for the bridge over the Yerrangutta stream above alluded to, a saving of Rupees 18,621.

13-2 as shown below has been effected or Rupees 4591-13-2 in excess of the amount required to complete the 4 bridges now in progress.

	Estimated cost of work - expenditure - saving			
Chittar Bridge	3,025	1549. 15. 4	1,475	" 8
Mangabanda D.	1,986. 12	1,330. " 6	656.	11. 6
Mandavir D.	13,652.	2,000 " "	11,653	" "
			13,784. 12. 2	
Yerrangutta D.	4,837. 1.	"	4,837. 1	

Total Saving. 18,621. 13. 2

I have the honor, Sir,

Dear Capt. P.E.

Acting Dy. Commr. C.E.

To
Colonel W. J. Birdwood P.E.

Secretary to Government P.W.D.

Actual Expenditure.

180 of 1862/63.

Mayaecto
21 June 1862.

From

Mr. John George
Ag. 1st Asst. District Engineer

Captain E. Amery

District Engineer

Mayaecto

Referring a revised estimate for the Maya-
palla Bridge, I have the honor to submit the follow-
ing particulars, but must first observe that the origi-
nal estimate was framed five years ago, since which
the cost of materials and labor has risen considerably.

1. In foundations, the comparative statement
shows a decrease in cost of Rupees 113. 12. In the origi-
nal estimate a solid masonry flooring is allowed, but
I have packed between the retaining walls with large
rough stone. The contents of foundations are shown as
182 cubic yards, but I have only 157 cubic yards. This
I account for by the fact that in the original estimate
the bottom for the course is taken as the length, where as
an average should have been struck as the foundations
are built in steps according to original plan.

2. Work above foundations, The increase here is due
entirely to enhanced rates, Rs 4 1/4 per yard is the ac-
tual cost of work including cutting quoins & doing masonry
own superintendence.

3. Arch work, Personally superintended the
whole of the arch work, was on the spot all day long
and every day, and the actual cost per cubic foot was
annas 3. 3 1/2.

4. Binding, as the materials of which the bridge is
built are sound and strong, I have pointed instead
of plastered the work.

5. Spacing foundations, The actual cost of
spacing foundations was Rupees 249. 8. 2 which
gives a rate of annas 11 1/3 per cubic yard for the ac-
tual spacing.

Dec. 6. July 1855 219-209
" 2nd. Dec 1859-26-272
" 19th. " 1861-250-257
" 18th. Dec. 1862-276-277.

23rd July 1862
J. G. George
Ag. 1st Asst. District Engineer

Mr. John George

Ag. 1st Asst. District Engineer

dated 9th August 1862

Enc. 8

Submitted for sanction

revised estimate for 4

bridges now being construct-

ed on Maya Palla

within the limits of the

Maya Palla District

Engineer Maya Palla

Maya Palla

223 Aug 1862

1/1

1862-3

183 of 1862/63.

Pag. 20 to
23^a June 1862.

- The actual cost of baling was about 5 annas per
cubical yard and the rest was simply for excavating.
The measurement given in my revised Estimate does
not allow for tips, nor for the accumulation of mud, and
then we were cutting through the blue clay, the mud
collected in the course of a night was enormous; on
Monday I had 12 men and 30 bullocks (including 6
men baling, excavating in mud, and on loading in the
booming) found they had not cleared away more than
8 inches in depth, making the cost of calculating drying
cubical contents, $14\frac{1}{2}$ annas per yard.
6. Approaches, Surging, Excavating and Spalling,
in the original Estimate nothing was allowed for these
items.
7. Cherting, Here again the actual cost of the
work, whereas in the original Estimate, no calculation
appears to have been made but simply a certain sum
allowed for arch.

Handed
[Signature] John George
to 1st Lt. Pitt Rivers
[Signature]

Qcccccc

Captain
Arthur Pitt Rivers
Bridgford.

22

Red. ditto flat.

The actual cost of building was about 5 annas per
cubical foot and the rest was simply for carrying

Enclosed in a letter from
the District Engineer of
Madras dated the
26th June 1862 N^o 208.

To
The Ag. Dy. Commr. of Engineer
Madras District S. P. W.

PN^o 2440/62

Copy of letter from Mr. C.
George, Ag. Dy. Commr. of Engrs.
Madras District, regarding the
estimated cost of the Kanchi
Bridge.

183 of 1862/63.

Rajahmundry
23rd June 1862.

From

Mr. John George
Ag. Dy. Commr. of Engineer

To

Captain C. Murray
District Engineer of
Madras District

Sir,

With reference to the accompanying revised
estimate for Kanchi Bridge, I have only to remark
in the rate I have allowed for arch work $3\frac{1}{2}$ annas
and the cost of centering.

2. At Kanchi, bricks will have to be made at
some distance from the work and the cost of the bricks
delivered at the bridge will be proportionally greater;
could bricks have been made near the work, $3\frac{1}{2}$ annas
per foot would have been sufficient.

3. With regard to centering, I have only repeat what
I wrote about the Kanchi Bridge, that no scaffolding
was used to have been made to the probable cost
of erecting substantial centering. If few pillars are
built, wood of greater length and scantling than that
now intended to use must be obtained, and such timber
must be brought from Kanchi or from Rajampett.

4. The rate allowed for masonry pillars is low, (the
price 3 per yard) but much of the stone can be worked
into the face and retaining walls, but I do not re-
duce the rate for building the face walls, as the stones
laid in the curve of the arch must be dressed.

I have &c.
(Signed) John George
Ag. Dy. Commr. of Engineer
[Enclosed]

Captain
District Engineer of
Madras District.

N^o 2099 P. H. Department
 Proceedings of the Madras Government
 Under date the 3rd Sept 1862

Read the following letter
 From the Deputy Chief Engineer (Central, &c.)
 Submitted for sanction revised Estimate
 for 4 Bridges now being constructed on
 Spont road at N. XI within the limits of
 the Cuddalore District between
 Guralacherry and Kalkadla -

S. D. 9th August 1862 N^o 51

Under the circumstances pre-
 sented the Government in Council
 sanctioned the sum of Rs (14,000)
 fourteen thousand and thirty ru-
 pias for completing the Bridges
 over the Kuppalla, Bandapalle,
 Padalamalla, and Athalacherry
 streams in the Cuddalore District
 in excess of their original Estimates
 sanctioned in 1856, and which
 were included in the general
 Estimate of Rs 55,742 for
 Bridges on Tunnels on the Spont

W. L.

W. L.

Proclamation of the Government
 in the District of Cuddalore
 dated the 10th of the 3rd of
 1862 N^o 2099

to
 the Deputy Chief Engineer
 Cuddalore District N^o 51

W. L. 20/10/62
 2/10/62

Copy of the Government
 Order N^o 1 of the 3rd of
 1862 N^o 2099
 in the District of Cuddalore
 dated the 10th of the 3rd of
 1862 N^o 2099

Road at XI in the same
District.

For the persons stated
by the Acting Deputy Chief
Engineer in paras 8 of his letter
above recorded, the Estimate
for the Yerraguntla Bridge,
which was also included in the
general estimate above mentioned,
is hereby cancelled.

Adverting to the last
para. of Captain Henry's
communication, the Government
observe that the whole amount of
saving effected by the substitution
of a road dam for the bridge
over the Chittar river, vizt
Rs 1475, is not available, as
stated by him, towards
meeting the enhanced expenditures
on the four bridges mentioned

in paras one of these Proceedings;
as Rs 1070 out of that amount was
taken to compensate for the
supplemental Estimates for the
completion of the Bridges over
Bang Tank and the surplus
channel of the Chittar large
Tank, sanctioned in G.O. dated
22 December 1859. No 2811.

The saving now available
under the item of the Chittar
bridge is therefore 405 Rupees
and not Rs 1475.
D.A.

13 Copies

The Acting Deputy Chief Engineer
" Accountant General

with 6 Encls.
Disp 10

Revised estimates for certain
bridges on the Trunk Road
No ~~VI~~ in Cassapah District

1883-84

Wm. L. Smith 1882 & 84
No. of Good for the
C.A. 2099.
No. of the old Road
of 2000

1882
1884

Comparing with
certain observations the
sum of 14000 ft or
comparing certain
over some distance in
the Cassapah District
in respect of the original
estimates.

(1) Number of pages 8

(2) Date of repair 14-6-43

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. <u>2677</u>	Press ~~Mis.~~
<u>187-188</u>	
Dated <u>10. 11.</u>	<u>1862.</u>

Not to be folded or roughly handled

92

*Proceedings of the Madras Government, Public Works Department,
10th November 1862.*

No. 187. Read the following letter from W. J. RAYNOR, Esq., Officiating Civil Paymaster, to Colonel W. I. BIRDWOOD, R. E., Secretary to Government, Public Works Department, dated Fort Saint George, 27th October 1862, No. 451 :—

SIR,

I have the honor to forward for the information of Government, copy of a letter from the Government of India, No. 591G, dated 29th September last, in reply to a reference made by this Office as to the applicability of the Resolution of the Government of India, No. 330, dated 5th May last, to Military Officers employed in the Public Works Department.

No. 188. ORDER THEREON, 10th November 1862, No. 2,699.

Recorded; a copy of the letter having been received by the Chief Engineer direct from the Civil Paymaster's Office.

(Signed) W. I. BIRDWOOD, Colonel, R. E.,
Secretary to Government.

W. I. B.

*Proceedings of the Madras Government, Public Works Department,
10th November 1862.*

No. 187. Read the following letter from W. J. RAYNOR, Esq., Officiating Civil Paymaster, to Colonel W. I. BIRDWOOD, R. E., Secretary to Government, Public Works Department, dated Fort Saint George, 27th October 1862, No. 451:—

SIR,

I have the honor to forward for the information of Government, copy of a letter from the Government of India, No. 591G, dated 29th September last, in reply to a reference made by this Office as to the applicability of the Resolution of the Government of India, No. 330, dated 5th May last, to Military Officers employed in the Public Works Department.

No. 188. ORDER THEREON, 10th November 1862, No. 2,699.

Recorded; a copy of the letter having been received by the Chief Engineer direct from the Civil Paymaster's Office.

(Signed) W. I. BIRDWOOD, Colonel, R. E.,
Secretary to Government.

C. M.

N. 5914

Sir,

C. Bernard, Esq.^r

Under Secretary to the Govt. of India

Financial Department.

To

The Officiating Civil Paymaster
Madras.

Sir,

I am directed to acknowledge the receipt of your letter N. 387 dated the 3rd Instant, and in reply to inform you that the orders of the 5th May last regarding Staff Corps pay being allowed by the Military Department to Staff Corps Officers in Civil employ during transit from one Civil appointment to another do not affect Military Officers in the Public Works Department. Their allowances are guided by the Special Rules in the Code of that Department.

Yours faithfully,

The 27th September 1867.

I have, &c.

(Signed) C. Bernard

Under Secy. to the Govt. of India

Yours truly

C. Bernard

As Secy. to the Civil Paymaster

C. Bernard

Public Works Department.

Civil Pay Master Office,
Fort Saint George,
27th October 1862.

N^o 451

From

W. J. Raynor, Esq^r.

Off^r Civil Pay Master.

To

Colonel W. J. Birdwood, R. E.

Secretary to Government

Public Works Department.

Sir,

I have the honor to forward for the information of Government, Copy of a letter from the Government of India N^o 571 G. dated 27th September last, in reply to a reference made by this Office as to the applicability of the Resolution of the Government of India N^o 330 dated 5th May last, to Military Officers employed in the Public Works Department.

I have the honor to be,

Sir,

Your most Obedient Servant.

W. J. Raynor

Off^r Civil Pay Master.

O. J. H.

W. J. 230

N^o 451

571-160-1-Admndt
1930

John C. Davis
John C. Davis

1/2 The new to go to

Phil.

Recd 27th October 1862.

1947

Ed. Stearns.

Deutsche Literatur

Copy of minutes of the Dept of Indian
affairs of 1857. D. dated 29th September 1857.

fact, in reply to the reference

Respectfully,
Dellany C. Jones

improved in the "Indian" work

53/paralel-

410-2699-2

Enclosed, a copy of the letter

Having been awarded by the King

2
Boys were drafted from the Erie City-

- marketing office -

bit

Edgar Allan Poe

18th November 1862

1871-1872

With an order.

1899-10: November.

Colt Mack / 12225-11