

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	2323	Press
B.P. No.		Mis.
Dated	19 - 8 -	C874 195

Not to be folded or roughly handled

172

*Proceedings of the Madras Government, Public Works Department,
19th August 1874.*

No. 448. Read the following letter from Captain J. MORANT, R.E., District Engineer, Neilgherries, to Colonel G. W. WALKER, R.E., Chief Engineer and Secretary to Government, Public Works Department, dated Ootacamund, 30th July 1874, No. 246:—

IN April last I undertook, on my own authority, some very necessary repairs to the Ootacamund Lake Sluice Drop. While these were in progress and nearly finished, a very extensive settlement of the whole of the two bottom steps of this drop took place, completely undermining the foundations of the eastern side-walls. You doubtless remember at this time being so good as to inspect the place at my request, and to allow me to underpin and otherwise render secure the whole work in anticipation of sanction.

2. I have now therefore, on the completion of the work, the honor to submit a sketch and an estimate, the latter amounting to Rupees 1,076, for the same. This estimate includes the work I undertook on my own responsibility, and for which Rupees 400 are available under the head of "Repairs, Miscellaneous Public Improvements." These are not likely to be needed for any other purpose this year; thus Rupees 676 alone remain to be provided.

3. In submitting this estimate, I beg to explain the cause of such extensive repairs being needed. The sluice drop was constructed in a stepped excavation on side-walls of brick and mortar laid over a floor of large rubble stone well pointed with hydraulic mortar, the lip of each step being further protected by a cross-wall of brick and mortar well let down into a foundation in the excavation. The ground on which this drop is built, like so many other parts of these hills, abounds in under-ground springs. These, acting on a bad soil, gradually undermined the two bottom steps and a portion of a third, and caused a subsidence of two feet of the whole of the floors of these steps, thus leaving the side-walls undermined and resting on nothing but their extremities, 20 feet apart. Still so good was the work of which these walls was composed that they stood in this way without cracking.

4. The work done has been to carefully underpin the eastern, and rebuild entirely the western side-walls, to take up the injured stone-floors, and to puddle under their sites with clay over which the floors have been carefully rebuilt. A great deal of the old plaster, although quite good but which had cracked, has been removed to see if the walls underneath had cracked. They were, however, found quite sound, and these places have been replastered; a great deal of turfing has been done, and the place where a catch-drain entered the drop, and the water in which doubtless leaked in behind the eastern side-walls, has been protected with brick and mortar masonry; and, lastly, a dry-stone apron well packed has been laid below the last step.

5. I have purposely delayed sending you in this estimate sooner, as the work was one of a very delicate nature and had to be carried out with the monsoon full upon us.

No. 449.

ORDER THEREON, 19th August 1874, No. 2,323.

CIVIL WORKS, No. 19.

ing off its water to a low depth, His Excellency the Governor in Council sanctions the estimate of Rupees 1,076 submitted with this letter, and authorizes a transfer of Rupees 676 from the funds at the District Engineer's disposal under "Repairs, Civil Buildings, Provincial."

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the District Engineer, Neilgherries.
" Officiating Controller of Public Works Accounts.
" Public Department.

Estimate No. 38 of 1874. 75. — 3^d
 Wigham District
 Work Cost of repairing the Lake sluice
 drop at Otacamunot

admission
L B & Co. Contnls

Particulars of Work

Cinereo

49 3 $\frac{1}{4}$ 57 $\frac{3}{4}$ Below side walls of lowest or 1st 2nd 3rd & 5th steps west side —

57½ cubic feet Concrete

3 3 3 $\frac{3}{4}$ 33 $\frac{3}{4}$ Foundation to side wall of 1st Step west side
4 2 $\frac{1}{2}$ 2 $\frac{1}{2}$ 46 $\frac{1}{2}$ ——— 00 — 00 — 00 — of 1st, 2nd, 3rd & 5th Dr.

37 $2\frac{1}{2}$ $3\frac{1}{4}$ 300-2 Unwarping sidewalls of 1st & 2nd steps East side

$8\frac{1}{2}$ $4\frac{1}{4}$ $4\frac{1}{2}$ $162\frac{1}{2}$ Foundation of drain opening on sluice—

$1\frac{3}{4}$ $\frac{3}{4}$ $1\frac{1}{2}$ 2 ——— $\frac{1}{2}$ ——— $\frac{1}{2}$ ——— $\frac{1}{2}$ ———

6 12¹/₂ 12¹/₂ 18¹/₂ ————— No. ————— No. ————— No. —————
 903 Littlefield St No. 111

$1\frac{1}{4}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $2\frac{1}{2}$ Side walls of — $1\frac{1}{2}$ — $1\frac{1}{2}$ —
 $1\frac{1}{4}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $2\frac{1}{2}$ — $1\frac{1}{2}$ — $1\frac{1}{2}$ —

112. P_4 $4\frac{1}{2}$ 83 ——— $\frac{1}{2}$ ——— $\frac{1}{2}$ ——— $\frac{1}{2}$ ———
 113. P_4 3 45 ——— $\frac{1}{2}$ ——— $\frac{1}{2}$ ——— $\frac{1}{2}$ ———

12 1/4 3 48 _____
113 1/2 Cubic feet Brick in mortar

1136 $\frac{1}{2}$ Combiefest Bricks in Brostar

6. 2 12. Side wall of 1st steps West side—

106. 3 318 ——— W. of 1st 22.30.455. Stop East & West side

109 2. 218 Top and ends of sidewalls—
22 41 and 42 and 43 other walls

18 1/2 12 1/4 . 32 Floor of brain opening on spine—
3 3 1/2 Side wall of 1st 1st

12 3 36 Side Walls of — No. — W. —
1 1 24 — — — — —

6. 4 1/2 2 1/4 ————— do. ————— do. ————— do. —————
 10. 3 1/4 2 1/4 ————— do. ————— do. ————— do. —————

$\frac{1}{2}$, $\frac{2}{4}$, $\frac{2}{8}$, _____
 $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, _____

35 16, 404

714 Squarefoot Plastering

1 46 18 833 1st and 2nd steps and 1/2 of 5th steps
 833 square feet Roughstone Flooring with
 stone chips and soothee mortar well rammed
 between interstices
 1 18 18 324 Bottom of sluice drop
 324 square feet Flooring without mortar
 1 15 2 2 60 Foundation
 1 15 1 5 112 1/2 Wall above
 172 1/2 cft
 6 1/2 Cuyards Roughstone Rivetment
 1 46 18 2 166 1/5 1st & 2nd steps and 1/2 of 5th steps
 1 106 1 3 477 Bottoms side walls of 1st 2nd 3rd & 5th steps
 2142 cft
 79 Cuyards of Puddling
 1 90 20 1800 East side
 1 100 4 400 West side
 1 30 3 90 Slopes round drain opening on sluice
 2290 sq ft Surfing
 1 3 3 4 36 Foundation to 1st side wall West side
 1 74 3 23 1102 Dr. to 1st 2nd 3rd & 5th side walls Dr.
 1 6 6 1/4 5 127 1/2 Drain opening on sluice
 1 6 1 1/4 3 77 Dr.
 851 1/2 cft
 32 Cuyards Excavation
 1 83 2 3 198 Side wall of 1st 2nd 3rd & 5th steps
 1 20 5 498 cft Pulling down old wall & removing debris
 100 Side walls of 1st step East side
 833 sq ft Pulling up Roughstone & Mortar

Estimate No. 38 of 1871. 75. 5th
 Nilgerry District
 Work Cost of Repairing the Lake Sluice
 Drop at Ottacamund

Quantity	Description of Work	Rate Per Amt	Total
57 1/2	Cubic feet Concrete	50. cft 19 1/4.	
1136 1/2	Bricks in soothee	15. cft 5 1/2 8 7	
711	Sq. feet Plastering with soothee & mortar including Polishing	10. 716 5	
833	Roughstone flooring in soothee & mortar well rammed between interstices	20. 1669 7	
324	Sq. feet Roughstone flooring dry	8. 2592 9	
6 1/2	Cuyards Rough Stone work	18. cft 9 12.	
79	Dr. Puddling	8. 398.	
23	Squares Trimming & dressing Slopes & turfing	1. cft 23. 3. cft 6.	
32	Cuyards Excavation		
198	cft Pulling down old wall & removing debris	6. cft 29 1/4 1	
1	Square Removing old plaster & raking out mortar joints	18. 18.	
833	Sq. feet Pulling up roughstone & mortar flooring	8. 6610 3	
	Palmyravati from foundations	50. 1020 15 8	
	Superintendence & Ammies	55. 4	
	Total Estimate Rs 1076. 11 1/2		

District Engineer's Office
 Ottacamund
 30th July 1871.
 J. A. Munn
 Captain R. B. O.
 District Engineer

District Engineer Office
Ootacamund 30th July
1894.
75

No. 246,
From.

The District Engineer,
Nilgheries

To.

The Chief Engineer,
& Secretary to Govt. P.W.D.

Sir,

In April last I undertook on my own authority some very necessary repairs to the Ootacamund Lake sluice drop. While these were in progress and nearly finished a very extensive settlement of the whole of the 2 bottom steps of this drop took place completely undermining the foundations of the Eastern side walls. You doubtless remember at this time being so good as to inspect the place at my request and to allow me to under pin and otherwise render secure the whole work in anticipation of sanction.

I have now therefore on the completion of the work the honor to submit a sketch and an estimate, the latter amounting to Rs 1076 for the same. This estimate includes the work I undertook on my own responsibility and for which Rs 200 are available under the head of Repairs Miscellaneous.

Ms. 2719 Aug 1/94
In A.A. 4/4/8
M 4896/14.

Miscellaneous Pub. Improvements.
These are not likely to be succeed
for any other purpose this year.
Thus the byb. alone remains to be
provided.

In submitting this Estimate, I
beg to explain the cause of such
extensive repairs being needed. The
Shower Drop was constructed in a
stepped excavation in side walls of
brick & mortar laid over a floor
of large rubble stone well pointed with
hydraulic mortar; The lip of each
step being further protected by a cross
wall of brick & mortar well let down
into a formation in the excavation.
The ground on which this drop is
built like so many other parts of
these Mills abounds in underground
springs. These acting on a bad soil
gradually undermined the two bottom
steps & a portion of a third, and caused
a subsidence of 2 feet of the whole
of the floors of these steps thus leav-
ing the side walls undermined and
resting on nothing but their exten-
sities. 20 feet apart. Still so good
was the work of which these walls
was composed that they stood
in this way without cracking.
The work done has been to con-
solidate the Eastern and
Rebuild

rebuild entirely the western side walls,
to take up the injured stone floors and
to puddle under their sites with clay
over which the floors have been care-
fully rebuilt. A great deal of the
old plaster, although quite good, but
which had cracked has been removed
to see if the walls underneath ^{had} cracked
(they were however found quite sound)
and these places have been replastered
a great deal of turfing has been done
and the place where a catch drain
entered the drop, and the water in
which doubtless leaked in behind
the eastern side walls has been protec-
ted with brick & mortar masonry;
and lastly a dry stone apron well
packed has been laid below the
last step.

I have purposely delayed
sending you in this Estimate sooner
as the work was one of a very delicate
nature and had to be carried out
with the Monsoon full upon us.

I have the honor to be,
Sir,
Your most Obedt. Servant.
James Horant Captain R.E.
District Engineer

2323 J. W. Depts
11/2

Proceedings of the Madras Government
Read the following

From
The Lt. Engr. Hedges (H.E. No. 246 of 30th July/94)

Admitting the
necessity of the work
undertaken for the
security of the new
sluice to the Cotacamund
Lake for draining off
its water to a low
depth, His Excellency
the Governor in Council
sanctions the estimate
of Rs. 1076 submitted

M. S.
3/3

P. W. 1874 Depts.
No. 246 of 30th July/94
No. 4896

The District Engineer
Hedges

The Chief Engineer
& Secretary to Govt.
of P.W.D.

Letter No. 307
Recd 5th August 1894.
Enclosures: two

For enclosure in estimate
& schedule for 1894-95
to be submitted to
the Local Board
with certain proposals
and plans.

Obd 448
E.O. No. 2723 of 8-8-94.

With this letter, and
authorizes a transfer
of Rs 676 from the funds
at the District Engi-
neers' disposal under
"Repairs, Civil Buildings
Provincial."

Emm

34
To the Dy. Engr. Kailashram
Controller of P.W.D.
Pub. Dept.
J. Copies despatched 28/8/74.

448-449

Recd 30/8/74
Ltr 3/8/74, Rtd 3/8/74

531.

4896 J

Govt. of 1874 Madras.
PUBLIC WORKS.

To
The Dist. Ingr.
Nellore

Dated

Recd.

Encl. 2

G. O. 15 Aug 74, No. 2328

Nos. 148-469.

Two Shice to the Botacamma
Lake - Estimate amount-
ing to Rs. 1076, for certain
repairs to the Shice, same-
tioned, and a transfer of Rs.
676 from the funds at
the disposal of the Dist. Ingr.
Nellore under "Repairs,
Civil Building, Provincial"
authorized

N

Recd 3/8/74 Retd 3/8/74