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(2) Date of repair 6-5-43
(3) Initials of the Referee

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 3320	Press ~~Mis~~
557-58	
Dated 25- 10	1867.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
25th October 1867.*

No. 557. Read the following letter from the Superintending Engineer, 6th Division, to the Secretary to Government, Public Works Department, dated Tanjore, 8th October 1867, No. 996:—

1. I have the honor to report upon the Salt* works and Salt road† at Tranquebar, which I have lately inspected. The estimate for the former has been exceeded by Rupees 507-13-9, subject to

a deduction of Rupees 16-2-6, which will be explained below, and the latter has been, or rather will be exceeded by Rupees 149-15-0. The former work has been completed and handed over to the Salt Department, and of the latter, the formation of a surface of clay over the sand-hill, on which a portion of the road runs, is still incomplete, and now that the country is under water, this portion of the work cannot be completed till January or February next.

2. In the accompanying abstracts, showing the expenditure on the various items included in the estimates, explanation is afforded as regards the excess on each particular item, which I need not, therefore, repeat here. I will only state, generally, that the cause of excess is attributable, first, to the great difficulty in procuring labor in the vicinity of Tranquebar; second, to the great objection the coolies have to work at the Tranquebar salt works, because they are situated in a low, feverish, salt swamp, where there is no shelter, and where no fresh water is obtainable. The latter has contributed in some measure to augment the cost of the masonry work; third, to the fact that the Railway Department, subsequent to the preparation of the estimate, increased the rate of carriage from 10 Annas to 1

Rupree per cubic yard for material conveyed for the Public Works Department from Tanjore to Negapatam or to intermediate stations; fourth, on account of a rise in the charges for bandy hire.

3. Mr. Supervisor Kinsella, who relieved Captain Hasted, appeared to be unable to separate the expenditure among the different works, and I therefore undertook the examination of the accounts; they were sufficiently clear for all the works but for that for the construction of the sluice, regarding the excess upon which I am not at all satisfied; it was one of the first works carried out, and was executed by departmental agency, and judging by the number of bricks and the quantity of chunam used, country or small sized bricks must have been used. The Overseer, Tiyyagaraja Pillay, who carried out the work, is dead, and it is now impossible to ascertain with accuracy whether a portion of the labor and of the material was not eventually transferred to the bridge work, for in the contract which was made, after Captain Hasted found that the work could not be carried out departmentally, a sum of Rupees 73-1-6 is deducted on account of chunam and cubes handed over to the contractor, and I am led the more to suppose that this was the case from the fact of the excess on the bridge work not covering the excess of the cost of conveyance of the stone from Tanjore.

4. The original entries in the estimate for the trench and platform and for Salt Cutcherry and watch tower were Rupees 4,430 and Rupees 925,* but it was eventually found necessary to provide 8 feet of foundations to the Salt

* Rupees 5,720, G. O. No. 578, dated 17th February 1866.

† Rupees 2,590, G. O. No. 259, dated 23rd January 1866.

In July 1866.

* G. O. No. 578, 17th February 1866.

Cutcherry instead of 6 feet, and I hoped that the excess might be covered from the sundries in the estimate for the salt works, and did not, therefore, refer the matter again to Government.

Rupees 5,720.

5. The excess shown on the Salt Cutcherry and watch tower is Rupees 222-8-8; in this, however, is included a sum of Rupees 16-2-6 on account of bricks transferred to the solitary cells in the Jail, which were charged at Rupees 3-4-0 instead of Rupees 3-9-6 per 1,000; the completion certificate of this work having been submitted, I asked the Controller how this sum should be adjusted, and he states† that as the addition of Rupees 16-2-6 will not cause an excess of 5 per cent. on the original estimate for the solitary cells the work may be brought again into the

† No. 2,376, dated 18th September.

Rupees 1,069.

Progress Report, or that Government may be requested to write off the amount to "profit and loss," and he recommends the latter alternative. I beg, therefore, that Government will sanction this sum of Rupees 16-2-6 being written off to "profit and loss."

6. On taking into consideration the other localities at which Salt Cutcheries and watch towers are required, I have come to the conclusion that the foundations of the Cutcheries must be laid some two or three feet below the surface of the platforms, and that eight feet of foundations are necessary, and also that owing to the difficulty of procuring fresh water, and to the distance from which bricks must be obtained, the rate for brickwork-in-clay must be increased from $1\frac{1}{2}$ to $1\frac{3}{4}$ Annas per cubic foot, and I have altered the estimates accordingly to Rupees 1,034, in the entries made in the Budget of 1863-69 for Cutcheries and watch towers. I would observe that the Police complain bitterly of the floor of the Salt Cutcherry, which consists of earth well rammed, and ask for a brick-in-chunam floor, as they say, and that very truly, that the mud or clay floor being more or less impregnated with salt, becomes very damp after the fall of a shower of rain, and continues so for a long time; a sum of Rupees 64 is required to provide the floor with a brick-in-chunam covering, and I have referred the matter for the consideration of the Deputy Collector in charge of the Salt Department.

7. The Salt Superintendent at Tranquebar asks for a platform along the side of the Vadi, to admit of bandies being loaded from the Vadi itself. This appears to be very necessary, though it was not asked for on the preparation of the original estimate; the Bandy Vadi provided in that estimate is some 250 yards from the Salt Vadi, and is used as a halting place for bandies. I have forwarded an estimate of Rupees 220 to the Deputy Collector, Salt department, for the platform asked for, and have requested him, if he can provide funds from the allotment in the Salt Budget of 1867-68, to execute the work through the agency of his own department; and as regards the earth-work in connection with all Salt Depôts, I think the Salt department should undertake the work, for the only method of carrying out such works economically or rapidly is by a levy *en masse* of the laborers in the neighbourhood through the agency of the Tahsildar. The Contractor for the Salt works at Tranquebar, though a wealthy Mirasidar, and with a large number of

Pullers at his disposal has, I am sure, found the execution of the work anything but remunerative.

Rupees 507 13 6
" 16 2 6
491.11 0

8. I beg that an allotment of Rs. 492 may be made for the completion of the Salt works from the Reserve or from the allotment for Civil Buildings, 'Minor New Works,' of which a sum of Rs. 1,631 is still unappropriated, and that provision may be made for the extra Rupees 160 required for the road, if not available from other sources, from the Rupees 1,370-11-9 lately allotted from the balance of the "Income Tax Fund" to the Canal Works, leaving Rupees 1,210-11-9 to the latter, and augmenting the allotment for the approach to the salt platform at Tranquebar to Rupees 1,250.

G. O. No. 2,804, dated 11th September.

Abstract showing the expenditure on the various items in the Estimate for the Road work sanctioned in G. O. No. 259, dated 23rd January 1866.

Name.	Estimated amount.	Expenditure.	Excess.	Remarks.
	RS.	RS. A. P.	RS. A. P.	
Bridge ...	1,220	1,204 7 11	74 7 11	This excess is due to the cost of conveying cut-stone from Tanjore, for which sufficient provision was not made in the estimate.
4. Tunnels ...	880	880 0 0	...	
Road work ...	490	575 7 1	85 7 1	Where the road passes over a sand heap for a distance of 532 yards, the estimate provides only Rs. 4-2-11 for levelling; much of the sand had to be cut away to a depth of $\frac{3}{4}$ yard, and in some places hollows had to be filled, 2,328 $\frac{1}{2}$ cubic yards of sand work have actually been carried out at a cost of Rupees 72-12-3. The rate allowed for earth-work was only 8 Pice per cubic yard, this was insufficient, and 10 Pice had to be given, and hence the excess. Work to the amount of Rupees 111-6-6 still remains to be done, but this is included in the Rupees 575-7-1 in column 3.

TANJORE,
8th October 1867.

(Signed) R. F. OAKES, Captain, R. E.,
Superintending Engineer, 6th Division.

Abstract showing the expenditure on the various items in the Estimate for Salt Works sanctioned in G. O. No. 578, dated 17th February 1866.

Name.	Estimated amount.	Expenditure.	Excess.	Remarks.
	RS.	RS. A. P.	RS. A. P.	
Trench and Platform.	4,378	4,459 1 5	81 1 5	This excess is due to the fact that the earth in some cases could not be conveyed from the trench to the Vadi, owing to the nature of the ground to be crossed.
Salt Cutcherry and Watch Tower.	977	1,199 8 8	222 8 8	This work was commenced on Amani, and the wood-work was purchased at Negapatam at a higher rate than was anticipated, the bricks prepared by the department cost Rs. 3-9-6 per 1,000, and had to be conveyed about four miles. It is very difficult to procure labor at Tranquebar, especially skilled labor, and the locality was unfavorable, being in a salt marsh and entirely without shelter or fresh water which had to be brought from a distance.
Sluices ...	365	569 3 8	204 3 8	The cause of the excess on this work is fully explained in the accompanying letter.

(Signed) R. F. OAKES, Captain, R. E.,
Superintending Engineer, 6th Division.

ORDER THEREON, 25th October 1867, No. 3,320.

1. Under the explanations afforded in this letter, the Government pass the expenditure of Rupees 507-13-9 which

2. The transfers and appropriation of funds recommended in paragraph 8 are approved.

(True Extract.)
(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 6th Division.
 „ Controller of Public Works Accounts.
 „ Accountant General.
 „ Revenue Department.

Érd. S. T. Augustin.

Abstract showing the expenditures on the various lines in the last month for the Road book sanctioned in G.O. No 254, dated 23rd January 1886.

Name	Estimated Amount	Expense ditto	Expense Receipt
Bridge	1220	1294 7/11	747 11/8
4 Lumsels	880	880	" " "
Panc Crook	490	575 7/1	857 1/8

Parsons

This excess is due to the cost of Consequent Cart-stones from Langoor for which sufficient provision was not made in the Estimate.

where the Road passes over a sand heap for a distance of 532 yards, the Estimate provides only Rs 4-2-11 for gravel; much of the sand had to be cart away to a depth of $3\frac{1}{4}$ yards and in some places hollows had to be filled 232 $8\frac{1}{2}$ Cubic yards of sand work have actually been carried out at a cost of Rs 72-12-3. The rate allowed for earth work was only 8 pice per Cye, this was insufficient and 10 pice had to be given, and hence the except. work to the amount of Rs 111-6-6 still remains to be done but this is included in the Rs 575-7-1 in Column 3-

Sup. Secy's Office 6 Dec
 1867

W. F. A. Beck ^{Capt.} B. E.
Subj. Engineer & Dr.

7123329457

Certificate in re-
 lation to the
 application of the
 Government
 to the
 State of
 1893-

Abstract showing the expenditures on the various items in the Postmaster's
for Salt over the year ended in G. O. No 578, ended 17 February 1888.

Name	Estimated Expense	Amount	Actual	Balance
Truck and Platform	1378 44/100	1581 15		
Salt Cartage and water towers	977 1/99	83 222 8		
Prices	365	569 38	204 38	

This expense is due to the fact that the earth in some cases could not be conveyed from the trench to the 'Bardi' owing to the nature of the ground to be crossed.

This work was commenced on Anani, and the Wood-work was purchased at Negapatnam at a higher rate than was anticipated - the bricks per yard by the Department cost Rs 3-9-6 per 1000 and had to be conveyed about 4 miles - It is very difficult to procure labour at Tranquebar, especially skilled labour, and the locality was unfavorable being in a salt marsh and entirely without shelter or fresh water which had to be brought from a distance.

The cause of the excess on this Work is fully explained in the accompanying letter.

Supplies Office - Muz
Janjore 8th September 1887

Wm. L. Garrison

No 996

Supy Engineer's Office 6th D^r 9
Bangore - 8th October 1867 -

From
Captain P. F. Baker - P. E.
Supy Engineer 6th D^r

To
Colonel C. A. Orr - P. E.
Secretary to Government P. R. D.

Sir,
I have the honor to report upon the
Salt works and Salt Road at Tranquebar
which I have lately inspected. The
Estimate for the former has been exceeded
by Rs 507-13-9, subject to a deduction
of Rs 16-2-6 which will be explained
below, and the latter has been, or rather
will be exceeded by Rs 159-15- - The
former works has been completed and
handed over to the Salt Department, and
of the latter, the formation of a surface
of clay over the sand hill on which
a portion of the Road runs is still
incomplete, and now that the country
is under water, this portion of the
works cannot be completed till
January or February next.

Rs 5120
Rs 507 13 9
Rs 16 2 6
Rs 5259 5

Enclosure in a
letter from the Supy
Engineer 6th D^r to the
Secretary to Government
D. 4. 8. 1867
8th October 1867 -

No 996

Westcott shows
the expenditure on the
reconstruction of the
Salt works for Salt Road
mentioned in P. O.
No 578, dated 17th 1867
January 1868 -

2 In the accompanying Abstracts showing the expenditure on the various items included in the Estimate, explanation is afforded as regards the excess on each particular item, which I need not therefore repeat here. I will only state generally that the cause of excess is attributable, 1st to the great difficulty in procuring labour in the vicinity of Tranquebar, 2nd to the great objection the Coolies have to work at the Tranquebar Salt Works because they are situated in a low grassy salt swamp where there is no shelter and where no fresh water is obtainable. The latter has contributed in some measure to augment the cost of the Masonry Work - 3^d is the fact that the Railway Department subsequent to the preparation of the Estimate, increased the rate of Carriage from 10 Annas to 1 Rupee per Cubic Yard for materials conveyed for the P. W. D. from Tanjore to

to Nagapalan or to intermediate Stations, 4th On account of a rise in the charges for Bandy fire. 3 Mr. Supervisor Kinnella, who relieved Captain Hasted, appeared to be unable to separate the expenditure among the different works, and I therefore undertook the examination of the Accounts; they were sufficiently clear for all the works but for that for the Construction of the Sluice regarding the excess upon which I am not at all satisfied; it was one of the first works carried out, and was executed by Departmental Agency, and judging by the number of bricks and the quantity of Churnam used, Country or small sized bricks must have been used. The Overseer Jayagajappa Pillay who carried out the work is dead and it is now impossible to ascertain with accuracy whether a portion of the labour and

of the material was not eventually transferred to the Bridge Works, for in the Contract which was made after Captain Hasted found that the work could not be carried out Departmentally, a sum of Rs 73-1-6 is deducted on account of Churn and Cakes handed over to the Contractor, and I am led the more to suppose that this was the case from the fact of the excess on the Bridge work not covering the excess of the cost of Conveyance of the Stone from Tanjore.

4. The original entries in the Estimate for the Spinal and Platform and for the Salt Cutcherry and Watch Tower were Rs 4430 and Rs 925, but it was eventually found necessary to provide 8' of foundations to the Salt Cutcherry instead of 6' and I hoped that the excess might be covered from the Sundries in the Estimate for the Salt Works, and

Q. C.

18/9/20

18/9/20

18/9/20

did.

13/ did not therefore refer the matter again to Government.

5. The excess shown on the Salt Cutcherry and Watch Tower is Rs 222-8-8, in this however it included a sum of Rs 16-2-6 on account of bricks transferred to the Solitary Cells in the Jail which were charged at Rs 3-1-0 instead of Rs 3-9-6 per 1000. The Completion Certificate of this work having been submitted, I asked the Controller how this sum should be adjusted and he states that as the addition of Rs 16-2-6 will not cause an excess of 5 percent on the original Estimate for the Solitary Cells the work may be brought again into the Progress Report on that Government may be requested to write off the amount to "Profit and Loss", and he recommends the latter alternative. I beg therefore that Government will.

2376
18/9/20
18/9/20

will sanction this sum of Rs 16-2-6
being written off to "Profit and Loss"
6 On taking into consideration
the other localities at which
Salt Hutcheries and Watch Towers
are required, I have come to the
conclusion that the foundations
of the Hutcheries must be laid
some 2 or 3 feet below the surface
of the Platforms, and that 8' of
foundations are necessary, and
also that owing to the difficulty
of procuring fresh water and to
the distance from which bricks
must be obtained, the rate for
brick work in clay must be increased
from $1\frac{1}{2}$ to $1\frac{3}{4}$ Annas per Cft. and I
have altered the Estimates accordingly
to Rs 1034, in the entries made
in the Budget of 1868/69 for Hutcher-
ies and Watch Towers. I should
observe that the Police Complain-
tively of the floor of the Salt
Cutcherry which consists of earth
well rammed, and ask for a brick-

17
in Chumam floor as they say, and
that very truly, that the mud on
clay floor being more or less im-
pregnated with salt becomes very
damp after the fall of a shower
of rain, and continues so for a
long time; a sum of Rs 64 is
required to provide the floor with
a brick in Chumam covering, and
I have referred the matter for the
consideration of the Deputy Col-
lector in charge of the Salt De-
partment.

7. The Salt Superintendent
at Tranquebar asks for a Platform
along the side of the Vadi to
admit of Bandies being loaded
from the Vadi itself - This appears
to be very necessary though it
was not asked for on the pre-
paration of the original Estimate,
the Bandy Vadi provided in
that Estimate is some 250 yards
from the Salt Vadi and is
used as a halting place for Bandies
J.

I have forwarded an Estimate of
 Rs 220 to the Deputy Collector
 Salt Department for the Platform
 asked for, and have requested
 him, if he can provide funds
 from the allotment in the Salt
 Budget of 1867-68 to execute the
 work through the agency of
 his own Department, and as
 regards the earthworks in con-
 nection with all Salt Depots,
 I think, the Salt Department
 should undertake the works for
 the only method of carrying out
 such works economically or
 rapidly is by a large "mase"
 of the labourers in the neighbour-
 hood through the agency of the
 Laksildar - The Contractor for
 the Salt works at Tranquebar
 though a wealthy Mirasidar
 and with a large number of
 Pullis at his disposal has,
 I am sure, found the execution
 of the work anything but remunerative.

1867-11-6
 16-6-6
 471 11-6

8- I beg that an allotment of
 Rs 472 may be made for the
 completion of the Salt works
 from the Reserve or from the
 allotment for Civil Buildings
 "Minor New Works", of which a
 sum of Rs 1631 is still unap-
 propriated, and that provision
 may be made for the extra
 Rs 160 required for the Road,
 if not available from other
 sources, from the Rs 1370-11-9
 lately allotted from the balance
 of the "Income Tax Fund" to
 the Canal works leaving
 Rs 1210-11-9 to the latter, and
 augmenting the allotment for the
 approach to the Salt Platform
 at Tranquebar to Rs 1250-

I have the honour to be

Sir

Your most obedient servant.

W. T. Baker Captain R.E.
 Superintending Engineer B.D.

16 Oct 1871

155

No 3320-25 October 1871
Regarding upon the
salt works and
salt brand at
Tranquebar

Enclosed is
a letter from
the Secy to
the Govt of
Madras dated
25 October 1871

15-9-76.
The Secy to
the Govt of
Madras

15-9-76.
The Secy to
the Govt of
Madras

8

155

3320

3320

Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 25 October 1871

Read the following

From The Supy Engineer (Here enter No. 3320 dated 8th October 1871)

N.

W. G.

Under the explanations
afforded in this letter, the
Government pass the expenditure
of Rs 507. 13. 9 which has
been incurred in excess of
the estimate of Rs 5720 for
at Salt Catchment, Watch Tower
at Tranquebar, and they
authorize the sum of Rs 16.2.6
referred to in Para 5 to be
written off to Profit and Loss.
Referring to Para 6
Capt. Baker will quote his
letter above read in support
of the increased amounts of the

C. 1600/10/11/1917

(18)

estimates for the Light Canteen
& Watch Towers for which he
reports having made provision
in his Budget.

The transfers and
appropriation of funds recom-
mended in Para 8 are ap-
proved.

[Signature]

[Faint handwritten text, possibly "19/10/17"]

To		44
6	The L. Engr & Dr	5
4	" Controller	
3	" Asst. Secy	
21	Revenue Dept	

C. 1600/10/11/1917

Recd 28/10/17

[Signature]

8-558/69
Pub. Works 1867 Depant.

Pro. of Govt for October

Ch. 3320

Pro. of the Madras Govt
Of 25th October 1867

Sanctioning the excess
over the estimate for Salt
Cutcherry Hatch Lower 88^{rs}
at Tranganbar in the
Sangre District and
certain transfer of funds.

Ch. 557-558