

(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.	689	(2)	Press
B.P. No.			Mis.
Dated	11-3-		18 25

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
11th March 1875*

Read the following papers —

No. 291 From Lieutenant Colonel R. A. ROBERTS, R.E., Superintending Engineer, Tanjore, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Tanjore, 19th November 1874, No. 2,057.

I HAVE the honor to submit, for sanction, the accompanying estimate of Rupees 1,200 for the construction of a

- 1 Letter from 3rd Range Officer, No. 297, dated 11th September 1874
- 1 List of Estimate
- 1 Abstract Estimate of Rupees 1,200
- 1 Specification
- 1 Plan
- 1 Survey
- 1 Letter, No. 82, 17th July 1874
- 1 Detailed Estimate for repairing both banks of Nanulvarivoikal in Singalipuram
- 2 Letters, Nos. 107 and 220, dated 17th March and 22nd May 1874, from the Sub-Collector, to No. 3 Range Officer
- 1 Copy of letter, No. 236, 12th March 1874, from Collector, to the Sub-Collector
- 1 Estimate for earth-work and repairing old sluices
- 1 Rough Sketch of Singalipuram village from Tahsildar

sluice proposed to be constructed for the protection from inundation and for the better drainage of the lands of Singalipuram in the Nannulm Taluq of this District

2 In his letter, No. 131, dated 30th May 1874, the Collector called attention to the state of the village of Singalipuram "which suffers seriously from the absence of the requisite embankments and drainage sluices."

3 The Collector further mentioned that Mr. Stokes, the Sub-Collector, on personal inspection of the village at the end of January last, had found that the whole of the cultivation had been swept away by inundation, and that the villagers, while representing their grievances, had offered to pay a moiety of the cost of the works required to protect the village from future injury, provided that the Government would contribute the other moiety. With this view the villagers have already paid into the Taluq Treasury Rupees 3,059, i.e., the half of the total outlay, Rupees 7,731, as roughly estimated by the Tahsildar.

4 Mr. Arbuthnott, therefore, requested that the necessary plans and estimates might be prepared and submitted for sanction as soon as possible, and added that, if this office saw no objection thereto, he would have the work executed by the agency of the Revenue Department.

5. The question was accordingly referred to the Executive Engineer in charge of No. III. Range for report, and Mr. O'Shaughnessy's report, with the whole of its enclosures, is now forwarded with a view of your being put in possession of all the circumstances of the case.

6 I should mention here that the scheme advocated by the villagers comprised the embankment of a drainage channel that passes through their lands, and the reconstruction and repair of 21 distinct sluices in the banks of the drainage channel, as also the construction of a sluice at its mouth, to keep out the waters of the Vellapaur into which the drainage channel is emptied.

7 It will be observed from Mr. O'Shaughnessy's report* that that gentleman is, at all events, until further inquiry has been made, not in favor of a project entailing such a heavy expenditure as that desired by the ryots. He considers that, in the first instance, a sluice constructed in the bank of the Vellapaur, at the

* No. 297, dated 11th September 1874

mouth of the drainage channel, should be constructed, and its results ascertained before further outlay is incurred

8 The plan, specification, and estimate of Rupees 1,200, herewith submitted, show the nature of the work recommended by Mr O'Shaughnessy, viz, a self-acting sluice of three-arched vents, each 6' x 4'

9. I concur in Mr O'Shaughnessy's opinion that the construction of this sluice will go very far towards relieving the people of Singalipuram of all the evils of which they complain in regard to inundations and defective drainage of their lands, but I do not agree with him in wishing to refuse the contribution of a moiety of the cost offered by the people concerned

10. The amount at the disposal of Government for such works as that under notice is, as you are well aware, very limited; and the construction of many very necessary works in this district has to be deferred on that account In forwarding the plan and estimate, therefore, to the Collector for his counter-signature, I represented this fact, and recommended that the contribution of half the cost of the work should be accepted, and that I could provide the second moiety from the annual allotment for such works in the next official year

11 The Collector concurs with my suggestion, and has returned the plan and estimate duly countersigned in token of approval But as the total amount of the estimate is in excess of that which I am empowered to sanction, I submit the plan and estimate in due course, and I trust that I shall receive early instructions for the commencement of the work

12 The revised specification that now accompanies the plan and estimate furnishes every particular in regard to the manner in which the calculations have been made and the results arrived at And I can see no flaw in them in this respect

13. Considering the very emergent nature of the work, it is clear that, whatever plan be adopted, the work should be set in hand at the earliest practicable date, so that it may, without fail, be completed well before next year's freshes

14. I may mention in conclusion that the Collector agrees with me in thinking that no advantage will be gained in the construction of the work being undertaken by the Revenue Department, and he requests, therefore, that it may be carried out by this department

No 167-B

No 292 *Note by the Chief Engineer for Irrigation*

THE Superintending Engineer, Tanjore, has submitted an estimate, amounting to Rupees 1,200, for a surplus sluice at the junction of the Singalipuram drainage channel with the Vellapaur This work forms part of a series of improvements which are represented by the Revenue Officers to be urgently required for the removal of evils from which the Singalipuram Merassidars have long suffered The rest of the work needed, which consists of repairs to the banks of the channel and to sundry masonry works upon it, can be carried out as repairs, and towards these improvements the Merassidars interested have subscribed Rupees 3,059, and are willing to pay one half of the total cost.

2 It will be observed that the Range Officer is opposed to that part of the improvements which concerns the alteration or reconstruction of certain dams

across the drainage channel which appear to have been constructed by the Merassidars for irrigation purposes It would seem, however, that these dams, however irregular their first formation may have been, are necessary for the irrigation of the lands supplied from them, and, unless some better means of supply can be suggested and afforded, their removal, however desirable, cannot well be directed

3 In the absence of levels of the bed of the channel, of the crests of the dams and of the neighbouring fields, which are always essential to a scheme of this kind, I am unable to say what the arrangements should be, but it may suffice to say that the remedy for the evils attending the use of the dams may probably be found in making their crests of such a length and placing them at such a level that but very little afflux may be occasioned by them, and then they will do but little, if any, harm

4 All the rest of the work contemplated will apparently be entirely beneficial It will of course be desirable to limit the number of petty sluices for the drainage of fields to that which will make such drainage effectual The embankments of the surplus channel should be arranged on information based on levels

5 The design of the surplus sluice needs the modifications noted thereon, the most important alteration being the raising of the roadway so as to give a margin of 3 feet above flood level in the Vellapaur and the addition of an outer apron The cost of the sluice will probably be about 1,350 rupees.

6 The remarks in paragraph 3 of the specification appear to be based upon a misconception. The formula referred to would give a drainage from the basin of 3 square miles equivalent to 10 8 inches in the 24 hours. The time within which this drainage is to be disposed of is another matter, and one which is dependent on local circumstances, but probably as rainfall on paddy fields is ponded and runs off slowly, three days may be allowed for the disposal of a maximum rainfall, and the dimensions of the surplus sluice proposed will then do very well. The Range Officer assumes that 12 inches would be the maximum rainfall in 24 hours, and that 4 inches of this would be absorbed Probably more than the 4 inches would be ponded, but so much or so large a proportion of a very heavy fall does not usually sink into the ground, unless the soil be almost pure sand.

7 The construction of the sluice will be a Minor New Work chargeable to Revenue, Maintenance, Extensions and Improvements, the rest of the work contemplated may be charged to Repairs, and may be carried out on local sanction in conformity with the foregoing remarks, as soon as the levels have been taken and the details settled, except that the designs of masonry works estimated to cost more than Rupees 750 should be transmitted to this office for approval.
CAMP AT CUDDAPAH, (Signed) JOHN MULLINS, Lieut-Colonel, R E,
10th February 1875 Chief Engineer for Irrigation

No 293

ORDER THEREON, 11th March 1875, No 689

IRRIGATION, No 19.

HIS EXCELLENCY the Governor in Council is pleased to approve of the improvements to the Singalipuram surplus channel in the Nunnium Taluq of Tanjore being carried out in the manner

*Proceedings of the Madras Government, Public Works Department,
11th March 1875.*

proposed, viz, at the expense of Government and of the Merassidars interested in equal proportions. The expenditure which may be incurred on account of the Government share will be charged to Revenue, Extensions and Improvements, and Repairs, respectively

2. The estimate for the surplus sluice has been raised by the Chief Engineer for Irrigation to Rupees 1,350 to admit of certain modifications being made, and this work can be gone on with at once. The rest of the improvements can be sanctioned locally, and should be determined in detail with reference to the considerations noticed in paragraphs 3 and 4 of the foregoing note.

(True Extract.)

Colonel, R E,
Secretary to Government.

To the Superintending Engineer, Tanjore
" Chief Engineer for Irrigation, with 13 Enclosures
" Controller of Public Works Accounts

Exd A Grubert.
Share Copies

10
No 2057 Superintending Engineer's Office
Tanjore 19th November 1874

To,
Lieut. Colonel R. A. Robertson
Superintending Engineer
Tanjore

Lieut. Colonel J. Mullins R.
Chief Engineer for Irrigation
Madras

Sir, I have the honor to submit
for sanction the accompanying Estimate
of Rs 1200 for the construction of a
sluice proposed to be constructed for the
protection from inundations and for the
better drainage of the lands of Singaleppuram
in the Sunkulam Talook of this
District.

In his letter, No 131, dated
30th May 1874, the Collector called attention
to the state of the village of Singaleppuram
which

Proceedings of the Madras Government, Public Works Department,
11th March 1875.

proposed, viz, at the expense of Government and of the Merassidars interested in equal proportions. The expenditure which may be incurred on account of the Government share will be charged to Revenue, Extensions and Improvements, and Repairs, respectively

2 The estimate for the surplus sluice has been raised by the Chief Engineer for Irrigation to Rupees 1,350 to admit of certain modifications being made, and thus work can be gone on with at once. The rest of the improvements can be sanctioned locally, and should be determined in detail with reference to the considerations noticed in paragraphs 3 and 4 of the foregoing note.

(True Extract.)

Colonel, R E,
Secretary to Government.

To the Superintending Engineer, Tanjore
,, Chief Engineer for Irrigation, with 13 Enclosures
,, Controller of Public Works Accounts

Exd A Grubert.
Spare Copies

No 2057 Superintending Engineer's Office
Tanjore 19th November 1874
To,
Lieut. Colonel R. A. Robertson
Superintending Engineer
Tanjore
Y.
Lieut. Colonel J. Mullins R.
Chief Engineer for Irrigation
Madras
Sir, I have the honor to submit
for sanction the accompanying Estimate
of Rs 1200 for the construction of a
sluice proposed to be constructed for the
protection from inundations and for the
better drainage of the lands of Singaleepooram
in the Sunkulam Talook of this
District. —
In his letter, No 131, dated
30th May 1874, the Collector called attention
to the state of the village of Singaleepooram
which

which suffers seriously from the absence of the requisite embankments and drainage sluices.

3. The Collector further mentioned that Mr. Stokes, the Sub Collector, on personal inspection of the village at the end of January last had found that the whole of the cultivations had been swept away by inundations; and that the villagers, while representing their grievances, had offered to pay a moiety of the cost of the works required to protect the village from future injury; provided that the Government would contribute the other moiety. With this view the villagers have already paid into the Talook Treasury Rs 3039, i.e. the half of the total outlay, Rs 7,431, as roughly estimated by the Shasildar.

4. Mr. Arbuthnot therefore requested that the necessary plans & Estimates might be prepared and submitted for sanction as soon as possible; and added that if the Office saw no objection thereto, he would have the work executed by the agency of the Revenue Department.

5. The question was accordingly referred to the Executive Engineer in charge of N. III Range for report; and Mr. O'Shaughnessy's report, with the whole of its Enclosures, is now forwarded, a view of yours being put in possession of all the circumstances of the case.

6. I should mention here that the scheme advocated by the villagers comprised

Empowered the embankments of a drainage Channel that passes through their lands, and the re-Construction and repair of 21 distinct sluices in the banks of the drainage Channel, as also the Construction of a sluice at its mouth, to keep out the waters of the Vellapaur into which the drainage Channel is emptied. —

7. It will be observed from Mr. O'Raughness's reports that that gentleman is, at all events until further enquiry has been made, not in favour of a project entailing such a heavy expenditure, as that desired by the

* No 297
dated 11th
September 1874

Peasants. He considers that, in the first instance, a sluice constructed in the bank of the Vellapaur, at the mouth of the drainage Channel

should be constructed, and its results ascertained, before further outlay is incurred. —

8. The Plan Specifications and Estimate of Rs 1200 herewith submitted show the nature of the work recommended by Mr. O'Raughness, viz. a self-acting sluice of 3 arched vents, each 6 ft. x 6 ft.

9. I concur in Mr. O'Raughness's opinion that the construction of this sluice will go very far towards relieving the people of Singalee of all the evils of which they complain, in regard to inundations and defective drainage of their lands, but I do not agree with him in wishing to refuse the contribution of a moiety of the cost offered by the people concerned. —

10. The amount at the disposal of

Empowered the embankments of the drainage
Channel that passes through their lands,
and the re-construction and repair of
21 distinct sluices in the banks of
the drainage Channel, as also the
construction of a sluice at its mouth,
to keep out the waters of the Vellapaur
in which the drainage Channel is
emplied. —

7. It will be observed from
Mr. O'Shaughnessy's reports that that
gentleman is, at all events until further
enquiry has been made, not in favour
of a project entailing such a heavy
expenditure, as that desired by the
Rajots. He considers that, in
the first instance, a sluice constructed
in the bank of the Vellapaur, at
the mouth of the drainage Channel

* No 297
dated 11th
September 1874

should be constructed, and its results
ascertained, before further outlay is
incurred. —

8. The Plan Specifications and
Estimate of Rs 1200 herewith submitted
show the nature of the work recommended
by Mr. O'Shaughnessy, viz. a self-acting
sluice of 3 arched vents, each 6 ft. x 6 ft.

9. I concur in Mr. O'Shaughnessy's
opinion that the construction of this
sluice will go very far towards relieving
the people of Lingalepore, of all the
wile of which they complain, in regard
to inundations and defective drainage
of their lands, but I do not agree with
him in wishing to refuse the contribu-
tion of a moiety of the cost offered
by the people concerned. —

10. The amount at the disposal
of

of Government for such works as
that under notice, is as you are
well aware, very limited; and the
Construction of many very necessary
works in this District has to be
deferred on that account. In forwarding
the Plan and Estimate therefore to
the Collector for his countersignature,
I represented this fact and recommended
that the contribution of half the cost
of the work should be accepted, and
that I could provide the second moiety
from the annual allotment for such
works in the next official year.

11. The Collector concurs with
my suggestions and has returned the
Plan and Estimate duly countersigned
in token of approval. But as the

4
total amount of the Estimate is in
excess of that which I am empowered
to sanction, I submit the Plan and
Estimate in due course, and
I trust that I shall receive early
instructions for the commencement
of the work.

12. The revised specification
that now accompanies the Plan and
Estimate furnishes every particular
in regard to the manner in which
the calculations have been made,
and the results arrived at. And I
can see no flaw in them in this
respect.

13. Considering the very urgent
nature of the work, it is clear that
whatever plan be adopted, the work
should

Should be in hands at the earliest practicable date, so that it may without delay

next year
that the
in shank
be given
the work
Revenues
requests
Carried on

20 Emb. 1875. 10.275
CE No. 2165
The Supy Engineer
Tanjore
20 The Chief Engineer
for Irrigation
No. 2057
Dated 19 November 1874
Received 23rd
Inclosures. 13
P W 1081/75
Forwarded for sanction
plan and estimate of
Rs. 1200, for constructing a
surplus sluice proposed to
be built in the right bank
of the Vallapour for the drainage
of Singalipuram

Op 291

Superintendent Engineer Tanjore

No. 167 B.

Note by the Chief Engineer for Irrigation
The Superintending Engineer, Tanjore,
has submitted an estimate amounting
to Rupees 1200 for a surplus sluice at
the junction of the Singalipuram drain
-age channel with the Vallapour. This
work forms part of a series of im-
-provements which are represented by
the Revenue Officers to be urgently
required for the removal of evils from
which the Singalipuram Merafsidars
have long suffered. The rest of the
work needed, which consists of repairs
to the banks of the channel and to
sundry masonry works upon it, can be
carried out as repairs, and towards these
improvements the Merafsidars interested
have subscribed Rupees 3059, and are
willing to pay one half of the total cost.
2 It will be observed that the
Range Officer is opposed to that part
of the improvements which concerns the
alteration

alteration or reconstruction of certain
dams across the drainage channel,
which appear to have been constructed
by the Meerasaidars for irrigation pur-
poses. It would seem however that
these dams, however irregular their
first formation may have been, are
necessary for the irrigation of the lands
supplied from them, and unless some
better means of supply can be sug-
gested and afforded their removal
however desirable cannot well be
directed.

3 In the absence of levels of the
bed of the channel, of the crests of the
dams and of the neighbouring fields,
which are always essential to a scheme
of this kind, I am unable to say what
the arrangements should be, but it
may suffice to say that the remedy
for the evils attending the rise of the
dams may probably be found in
making their crests of such a length
and placing them at such a level that
but

but very little afflux may be occa-
sioned by them, and then they will
do but little, if any, harm.

4 All the rest of the work con-
templated will apparently be entirely
beneficial. It will of course be desira-
ble to limit the number of petty
sluices for the drainage of fields to
that which will make such drainage
effectual. The embankments of the
surplus channel should be arranged
on information based on levels.

5 The design of the surplus sluice
needs the modifications noted thereon,
the most important alteration being
the raising of the roadway so as to
give a margin of 3 feet above flood
level in the Valapaur, and the addition
of an outer apron. The cost of the sluice
will probably be about 1350 Rupees.

6 The remarks in para 3 of the
specification appear to be based upon
a misconception. The formula referred
to

alteration or reconstruction of certain dams across the drainage channel, which appear to have been constructed by the Meerafidars for irrigation purposes. It would seem however that these dams, however irregular their first formation may have been, are necessary for the irrigation of the lands supplied from them, and unless some better means of supply can be suggested and afforded their removal however desirable cannot well be directed.

3 In the absence of levels of the bed of the channel, of the crests of the dams and of the neighbouring fields, which are always essential to a scheme of this kind, I am unable to say what the arrangements should be, but it may suffice to say that the remedy for the evils attending the use of the dams may probably be found in making their crests of such a length and placing them at such a level that
but

but very little afflux may be occasioned by them, and then they will do but little, if any, harm. All the rest of the work contemplated will apparently be entirely beneficial. It will of course be desirable to limit the number of petty sluices for the drainage of fields to that which will make such drainage effectual. The embankments of the surplus channel should be arranged on information based on levels.

5 The design of the surplus sluice needs the modifications noted thereon, the most important alteration being the raising of the roadway so as to give a margin of 3 feet above flood level in the Valapaur, and the addition of an outer apron. The cost of the sluice will probably be about 1350 Rupees. The remarks in para 3 of the specification appear to be based upon a misconception. The formula referred to

to would give a drainage from the basin of 3 square miles equivalent to 10 8 inches in the 24 hours. The time within which this drainage is to be disposed of is another matter, and one which is dependent on local circumstances, but probably as rain fall on paddy fields is ponded and runs off slowly, 3 days may be allowed for the disposal of a maximum rain fall, and the dimensions of the surplus sluice proposed will then do very well. The Range Officer assumes that 12 inches would be the maximum rain fall in 24 hours, and that 4 inches of this would be absorbed. Probably more than the 4 inches would be ponded, but so much or so large a proportion of a very heavy fall does not usually sink into the ground, unless the soil be almost pure sand.

7 The construction of the sluice will be a minor new work chargeable to Revenue, Maintenance, Extensions and Improvements

8
Improvements, the rest of the work contemplated may be charged to Repairs, and may be carried out on local sanction in conformity with the foregoing remarks, as soon as the levels have been taken and the details settled, except that the designs of masonry works estimated to cost more than Rupees 750 should be transmitted to this Office for approval.

Camp at
Lenddapaah
10th February 1875

19
John Collins Lieut Col. R.E.
Chief Engineer for Irrigation

To the Secretary to Government
P. W. D.

S.H.D.

Proceedings of the Madras Govt. Read the following

From The Chief Engineer
for Irrigation } H. E. Secy 16/13/87 10 Feb/88

1889

His Excellency the Governor in Council is pleased to approve of the improvements to the Singalipuram surplus channel in the Kunnulam Taluq of Tanjore being carried out in the manner proposed viz at the expense of Government and of the Marassidars interested in equal proportions. The expenditure which may be incurred on account of the Government shares will be charged to Revenue Expenditures and Improvements, and Repairs respectively. The

[Signature]

None

To Mr. Secy to Govt.
16/13/87
10 Feb/88

The Chief Engineer
for Irrigation

To The Secy to Govt.
P. W. Dept

Mr. 10 Feb/88
R. 18/2/88

Enc. 14

Note on the estimate
for a surplus sluice
at the junction of
the Singalipuram
drainage channel
with the Valapaur
S. No. 889. 11-2-95.

1889-2-75

2 The estimate for the surplus since has been raised by the Chief Engineer for Irrigation to Rupees 1350 to admit of certain modifications being made, and this work can be gone on with at once. The rest of the improvements can be sanctioned locally and should be determined in detail with reference to the considerations noticed in paras 3 and 4 of the foregoing notes.

By 15/7/75

GMR.

To The Suptg Engrs Bangalore
5 - Chief Engrs for Irrigation
5 - Controller of P. W. Accounts

35

12-3-75. A

1081-

Govt. of 1875 India

PUBLIC WORKS.

The Supergr.
Engine

Dated

Recd

Encl

G O / Merr. No 689

Nov. 25-1873

Singalipuram Surplus chan-
-nel. Tanjore Dt. Improve-
ments to the — approved &
the surplus sluice ordered
to be carried out at once with
certain instructions.