

(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.	1135	Press
B.P. No.		Mis.
34-35		
Dated	19. 12. 1893	

Not to be folded or roughly handled

Read the following papers:—

No. 314. From the District Engineer, Salem, to the Chief Engineer, Public Works Department, dated Salem, 13th March 1873, No. 37.

I HAVE the honour to forward the correspondence noted in the margin for the consideration of Government and for an expression of opinion as to the course pursued by the Collector in regard to Irrigation Estimates forwarded for his countersignature.

- 1 Letter from the Collector of Salem, dated 23rd January 1873, No. 11.
1 Letter to the Executive Engineer, Oosoor Range, dated 29th January 1873, No. 104.
1 Letter from the Executive Engineer, Oosoor Range, dated 6th March 1873, No. 882.
1 Letter from the Sub-Collector, Salem, to the Collector of Salem, dated 14th December 1872, No. 680.

2. That course is briefly as follows:—
Estimates after examination in my office are forwarded for the Collector's

countersignature. These are forwarded by the Collector to the sub-divisional officer for report. After the work in question has been inspected by the latter, the estimate is returned by him to the Collector with his report or remarks.

3. Government will understand that there may be some delay in forwarding the estimates from the Collector's office to the sub-divisional officer, that there must necessarily be considerable delay before the latter can inspect the work and send in his report, and finally, just as often as not, the estimate is returned by the Collector to the district office, with a request that the estimate be reduced, as it exceeds the highest year's revenue derived from the tank.

4. With regard to this procedure I would point out,

1st.—The very serious delay it causes in the repair of works.

2nd.—The utter absurdity of an officer, more particularly an unprofessional, riding round a tank and pronouncing on the sufficiency or otherwise of an estimate.

3rd.—The necessity for some change in the rule (if rule there be) which permits the Revenue Authorities to reject an estimate if it exceed the highest revenue derived in one year.

5. With regard to the last, I would remark that Superintending Engineers (and now District Engineers) were empowered to pass Irrigation Estimates which did not exceed four years' revenue.

6. Further, the Revenue Authorities in this district seem to be under the impression that an estimate can generally be reduced to accord with the revenue of the work to which it refers. Mr. Paynter very properly remarks in his letter that frequent repairs to a certain tank have been rendered necessary by the tank having been insufficiently repaired—presumably from the enforced reduction of estimates submitted for its repair.

7. I would now remark that when in charge of the 5th Division the Executive Engineer, Oosoor Range, complained bitterly of this action exercised by the Sub-Collector in regard of his estimates. Entirely agreeing with him, I brought the matter to the notice of the Collector, who apparently concurred with me, as he said he would speak to the Sub-Collector on the subject. Judging from appearances I cannot but think that he omitted to do so. I took the same opportunity to point out to him, that refusal to pass an estimate, presumed to embody nothing but requirements, was a virtual abandonment of the tank.

8. In conclusion, I would say that I see little, if any, good resulting from requiring the countersignature of the Collector to these estimates. Most works of irrigation are repaired on the requisition of the Revenue Authorities, and if some rule be laid down as to the proportion an estimate may bear to the revenue of the work, and, failing this, that the work be recommended to be abandoned, in such case I do think the countersignature of the Collector quite unnecessary; the more so as, being furnished with a monthly Progress Report, he is kept well acquainted with what is going on.

9. Be that however as it may, I strongly object to the continuance of the present system, which must to a certain extent be responsible for unspent allotments.

No. 171.

No. 315.

Note by the Chief Engineer for Irrigation.

Two questions are referred to in this letter from the District Engineer of Salem. First the delay, in disposing of estimates for the repair of tanks and other irrigation works, occasioned by the steps taken by the Collector to satisfy himself of the necessity for the outlay, is noticed. I do not see anything objectionable or indeed that could with advantage be altered in the action of the Collector in the instances brought to notice. It was only reasonable that the Sub-Collector should have an opportunity of expressing an opinion, and it was perhaps only natural that he should wish the proposed outlay to be more in proportion to the revenue dependent upon the tanks.

2. The remedy for the inconveniences referred to is to be found, I think, in attention to the arrangements sketched out in this Office Circular No. 20 of the 23rd November 1870. A Range Officer well acquainted with his range and a District Engineer similarly acquainted with his district, will have no difficulty in selecting works for repair, deciding what expenditure upon them is necessary, and satisfying the Revenue Officers as to the appropriateness of the estimates framed. It is usually capable of demonstration that such and such work is necessary to the security of a tank, and though such improvements as revetments may be open to consideration, probably every other description of work can be shown to be required.

3. It may then become a question as to what should be done, and here time money, available superintendence, amount of revenue at stake, the greater or

less urgency of the work, taking the state of other works into account, will influence the District Engineer's proposals. If then the bulk of the estimates for any season be sent to the Collector for countersignature early in the year, and if a day be fixed for discussing them, it seems probable that a very large proportion of them would be passed at once, and only a few be left for further consideration.

4. It may here be noticed that it is in every way desirable that the entire requirements of a tank, to put it in a thoroughly efficient and secure state, should be ascertained. Otherwise year after year comparatively small amounts may be expended, perhaps money wasted, and a total outlay incurred which might not have been sanctioned had the real wants of the work been brought forward in the first instance. In the way in which estimates are for the most part prepared, District Engineers cannot be at all certain, unless indeed they are very well acquainted with the majority of the irrigation works of their districts, that the work provided for is both that which is most needed and that which is essential to security and efficiency. For tanks the only proper basis for estimating the earthworks required is a longitudinal section of the bund, with a sufficient number of cross sections; with these sections, which would show also the lengths of the escape weirs, their level and that of the maximum height reached by the water, the District Engineer would be able to judge whether the estimates were correct, and whether modifications of arrangements were or were not required. He would be in a position also to discuss with the Collector whether the work should be carried out or not should the revenue involved be small compared with the outlay shown to be necessary. At present the amount of an estimate depends far too much on the individual judgment of the officer or subordinate who frames it, instead of upon the actual facts, which can be put on paper and be made apparent to every one. No doubt it will take more time to prepare estimates properly than to make a few rough measurements with a bamboo, but in the end time as well as money will be economized, and this proper way is essential to effective control of expenditure on the part of the District Engineer.

5. With regard to the second question, the limit of power of sanction to repair estimates by the District Engineer, with the Collector's concurrence, I think the present rule under which an estimate, not exceeding four times the revenue involved, may be passed, may with advantage be retained. Major Vertue appears to be under a misapprehension when he supposes that the Revenue Authorities rejected certain estimates because they exceeded the highest year's revenue. For reasons given they wished these estimates to be revised, and had the District Engineer possessed clear information as to the state of the tanks, he would have been able to discuss the question with the Collector on its merits, and no doubt then a satisfactory conclusion would speedily have been reached. District Engineers should require far more complete and satisfactory evidence of the necessity for expenditure than would generally suffice to obtain the Collector's countersignature; and, if this evidence be forthcoming, there should not be any difficulty in disposing of the comparatively few estimates which may seem to call for special explanations.

FORT ST. GEORGE,
17th March 1873.

(Signed)

JOHN MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

*Proceedings of the Madras Government, Public Works Department,
19th April 1873.*

No. 316.

ORDER THEREON, 19th April 1873, No. 1,135.

IRRIGATION, No. 15.

ORDERED that this Note by the Chief Engineer for Irrigation be communicated to the District Engineer, Salem, and to all other Engineers in charge of Irrigation Districts for information and guidance.

(True Extract.)

Captain, R.E.,
For Joint-Secretary to Government.

To the District Engineer, Salem.
All other District Engineers, (Neilgherries, South Canara, Special
Executive Engineer, Wynaad excepted.)

Revenue Department.
Chief Engineer for Irrigation.

Exd. S. T. Austin.

No. 171

Note by the Chief Engineer for Irrigation

Two questions are referred to in
Enclosure 5. this letter from the District Engineer of Salem.

First the delay in disposing of Estimates for the repair of Tanks and other irrigation works, occasioned by the steps taken by the Collector to satisfy himself of the necessity for the outlay, is noticed. I do not see any thing objectionable or indeed that could with advantage be altered in the action of the Collector in the instances brought to notice. It was only reasonable that the Sub Collector should have an opportunity of expressing an opinion, and it was perhaps only natural that he should wish the proposed outlay to be more in proportion to the Revenue dependent upon the Tanks.

2. The remedy for the inconveniences referred to is to be found, I think, in attention to the arrangements sketched out in this Office Circular No. 20 of the 23rd November 1870. A Range Officer well acquainted with his Range and a District Engineer similarly acquainted with his District will have no difficulty in selecting works for repair, deciding what expenditure upon them is necessary, and satisfying the Revenue Officers as to the appropriateness of the Estimates framed. It is usually capable of demonstration that such and such work is necessary to the security of a tank, and though such improvements as revetments may be open to consideration, probably every other description of work can be shown to be required.

3. It may then become a question as to what should be done, and here time, money, available superintendence, amount of Revenue at stake, the greater or less urgency of the work, taking the state of other works into account

49
account, will influence the District Engineers' proposals. If then the bulk of the Estimates for any season be sent to the Collector for countersignature early in the year, and if a day be fixed for discussing them, it seems probable that a very large proportion of them would be passed at once, and only a few be left for further consideration.

It may here be noticed that it is in every way desirable that the entire requirements of a tank, to put it in a thoroughly efficient and secure state, should be ascertained. Otherwise year after year comparatively small amounts may be expended, perhaps money wasted, and a total outlay incurred which might not have been sanctioned had the real wants of the work been brought forward in the first instance. In the way in which estimates are for the most part prepared, District Engineers cannot be

be at all certain, unless indeed they are very well acquainted with the majority of the irrigation works of their Districts, that the work provided for is both that which is most needed, and that which is essential to security and efficiency. For tanks the only proper basis for estimating the earth works required is a longitudinal section of the bund, with a sufficient number of cross sections; with these sections, which would show also the lengths of the escape weirs their level and that of the maximum height reached by the water, the District Engineer would be able to judge whether the estimates were correct, and whether modifications of arrangements were or were not required.

He would be in a position also to discuss with the Collector whether the work should be carried out or not, should the Revenue involved be small compared

39
compared with the outlay shown to be necessary. At present the amount of an estimate depends far too much on the individual judgment of the officer or subordinate who frames it, instead of upon the actual facts, which can be put on paper and be made apparent to every one. No doubt it will take more time to prepare estimates properly than to make a few rough measurements with a bamboo, but in the end time as well as money will be economized, and this proper way is essential to effective control of expenditure on the part of the District Engineer.

5 With regard to the second question, the limit of power of sanction to repair estimates by the District Engineer, with the Collector's concurrence, I think, the present rule under which an estimate, not exceeding 4 times the Revenue involved, may be passed, may

may, with advantage be retained. —
Major Vertue appears to be under a
misapprehension when he supposes
that the Revenue authorities rejected
certain estimates because they exceeded
the highest years' Revenue. For reasons
given they wished these estimates to
be revised, and had the District
Engineer proposed clear information as
to the state of the Tanks, he would
have been able to discuss the question
with the Collector on its merits, and
no doubt then a satisfactory conclu-
sion would speedily have been
reached. District Engineers should
require far more complete and satis-
-factory evidence of the necessity for
-expenditure, than would generally
suffice to obtain the Collector's coun-
-ter signature, and, if this evidence
be forthcoming, there should not
be any difficulty in disposing of
the comparatively few estimates
which

which may seem to call for
special explanations.

Fort St. George
17th March 1873

W. S. D. S. R. S.
Chief Engineer for Irrigation

To,
The Secretary to Government
Public Works Department.

W. S. D.

From,

The Chief Engineer } (H. E. Dec 14/8 17 March/73)

met with all other
~~District~~ Inspectors
in charge of distribution & guidance
Districts

Mar. 20/3/73

hurry

170
23

26
The Dist Engrs. & all other District Engineers
Rev. Dept. of the Interior, (Washington) & the
Chf Engrs. for Migration (South America) & the
Spt. Engrs. My name
Dec 21-11-73.
Accepted.

1870 & 1873

Govt. of 1873

PUBLIC WORKS.

To The District Commr
Salem

Date

Recd.

Encl. 5

G. O. 19 April 1135.

Nos. 314 & 316

Irrigation Works. Note
by the Chief Eng^r for Irrigation
on letter from the Dist Engr,
Salem, relative to the delay
occasioned by Collectors in
disposing of estimates for
repairs of Irrigation works,
Comm^d to Dist Engr^s concerned