

(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. 3808	Press
138-139	Mis.
Dated 7-12.	1867.

Not to be folded or roughly handled

No. 138. Read the following letter from the Secretary to the Government of India, Public Works Department, (Irrigation,) to the Secretary to the Government of Madras, in the Public Works Department, dated Simla, 25th October 1867, No. 162 I:—

1. I am directed to acknowledge receipt of your letter, No. 2,798, dated 11th September last, submitting an estimate, amounting to Rupees 3,55,435, for enlarging the Chembrumbaukum tank in the Madras District.

Three lakhs, fifty-five thousand, four hundred and thirty-five Rupees.

2. The works projected seem suitable, and call for no special comment, with one exception, which, however, is an important one. It is proposed to make the waste-weir 700 feet in length, or, under a contingency named, to extend it to 1,000 feet; but bearing in mind the serious catastrophe which the breach of such a tank would prove, the Governor General in Council is disposed to think that the length of the weir should, under any circumstances, be increased to 1,000 feet in order to render it perfectly secure from any risk of the water topping the bund in severe rain. An additional outlay of 5,000 or 6,000 Rupees, which is all that the extension seems likely to cost, would be of no practical moment in a financial point of view; and the money would be well laid out if it served to preclude all possible risk, such for instance as might arise from an accidental omission to cut off at the proper moment the supply of water thrown into the tank from the various sources intended to assist in filling it.

3. Further, the project does not appear to His Excellency in Council to be complete. The estimate apparently does not provide for certain works mentioned by the Executive Engineer, nor for other works, which, though hardly referred to by him, will almost certainly be required for such an extension of irrigation as is contemplated. These are, first, the re-arrangement of the supply-channels of the tank referred to by Mr. Fraser in paragraphs 14 to 26 of his Report, some of which he specially alludes to as essential. From the description of these works they are not likely to be very heavy or expensive, but they may possibly add a third or a fourth to the amount of the estimate. A supplementary estimate for these should be prepared and submitted; second, provision is not made for the irrigation channels which will probably be needed to carry the water to the new lands to which irrigation is to be extended. Some of these seem to be situated seven or eight miles from the tank; third, is an escape channel leading from the new waste-weir, which must, so far as can be judged, be opened out. It is observed that in the old tank the escape took place at six separate calingulahs. If necessary, estimates for these works should also be framed.

4. As to the first of these apparent omissions, it is true that allusion is made in your letter under reply to improvements about to be undertaken in some of the channels of supply. These improvements may possibly be profitable irrespective of the tank project; but how this may be, cannot be properly judged from the manner in which the matter is referred to, though, so far as an opinion can be formed, it would seem as though the expense should form a part of the project under discussion.

5. As regards the estimated returns from the work, I am directed to observe that, apart from the apparent omissions above noticed, no allowance is made for the cost of establishments for construction which will probably add not less than one-fourth to the whole expense; nor is the charge for maintenance or supervision reckoned as a set off against the income, though these charges cannot but be sensible in so large a work dependent on an extensive series of feeding channels. Allowing for the omissions, the entire cost of the work may perhaps be taken as more nearly approaching six lakhs, than three and a half lakhs. Also making an allowance for

* GROSS VOLUME OF WATER.
Additional ... 140 millions cubic feet.
Net, allowing for loss, ... 115 ... at 9,000
say, ... 115 ... at 9,000
cubic yards per acre of 1.32 acres.
Equivalent to say 17,000 acres.
loss by evaporation, &c., the additional area to be irrigated may be taken at 17,000* acres. If three and a quarter Rupees per acre be taken as the net revenue, after deducting the cost of maintenance, a total income of say 55,000 Rupees will be realized, giving about 9 per cent. on the capital invested.

6. Although the project might have been submitted in a more complete form, the Governor General in Council believes that it bears about it sufficient evidence of the proposed works being likely to be remunerative, and is not disposed to withhold his sanction from the estimate, subject, however, to the condition that the Government of Madras will ascertain what the additional outlay will be on account of the omitted works referred to above and satisfy itself that the cost will not be such as seriously to derange the calculations in the preceding paragraph.

7. The sanction above accorded has been registered as No. 81 of 1867-68.

8. The plans are returned.

No. 139.

ORDER THEREON, 7th December 1867, No. 3,593.

IRRIGATION, No. 9.

1. Communicated to the Superintending Engineer of the 4th Division, who will make arrangements for collecting the additional information regarding the subsidiary works of the Chembrambaukum tank, which the Government of India consider necessary, to allow of an accurate computation being formed of the remunerative effect of the proposed enlargement of the tank.

2. The Government observe that the tank is directly connected with a channel leading from the anicut across the Cortilliar near Kasavaram; and that it is also in communication with the Palar through the Kumbam kal channel, which, when improved and enlarged, will year by year afford a more full and certain supply. Mr. Fraser in his report on the tank proposes to improve the supply from both sources, and he describes the nature of the works which he considers necessary. These are—

1. The rectification of the surplus channels from Streeparmatar and Pelli-pakum tanks.
2. The improvement of the old Bangairoo channel.
3. The construction of sluices at the heads of channels leading to various tanks, which are supplied by the old Bangairoo.
4. Additions to Koratur dam and to the head sluice of the new Bangairoo, and enlargement of the channel.

3. The execution of the above works is being provided for by separate estimates: but as the Government of India require that they shall be taken into consideration as portions of the Chembrambaukum project, Colonel Boileau will have the goodness to submit a report showing to what extent they will be efficacious in securing a proper supply to Chembrambaukum tank when enlarged, together with plans and estimates for the whole of the works.

4. He will also report on the expediency of enlarging the proposed calingulah for the Chembrambaukum tank as suggested by the Government of India, and the means available for disposing of surplus water. If necessary, an estimate may be prepared for a surplus channel.

5. The Government of India point out that no provision has been made for the excavation of channels for the conveyance of the water to the new land to which irrigation is to be extended. The Collector, in reporting on the probable increase of revenue, states that it is obvious that almost the entire area included between the Cooum and the Adyar which lies to the eastward of Chembrambaukum, would be under the command of the water from the tank, and that the twenty-eight villages named by Mr. Fraser will of course be open to its influence, in addition to the fifty-eight villages now watered by it. The majority of the villages are therefore already in possession of distribution channels, and the Government conclude that any extension which may be required to bring the lands of the remaining villages under the influence of the tank, will be carried out by the cultivators. It is not customary for the Government to undertake the management of such channels, and it would not, in their opinion, be desirable in this instance to depart from the established custom.

(True Extract.)

Lieut.-Colonel, R. E.,
Joint Secretary to Government.

To the Superintending Engineer, 4th Division.

- .. Accountant General.
- .. Controller of Public Works Accounts.
- .. Revenue Department.

Erd. S. T. Augustin.

No 162 I.

Government of India.
Public Works Department.
Irrigation.

To
The Secretary to the Govt of Madras,
in the Public Works Department.

Simla, 25th October 1867.

Sir,

Three Lakhs, fifty
five thousand,
four hundred and
thirty five Rupees

I am directed to acknowledge
receipt of your letter No 2798 dated 11th
September last submitting an estimate
amounting to Rupees 3,55,435 for enlarging
the Chhambambakum Tank in the
Madras District. —

2. The works projected seem suitable
and call for no special comment, with one
exception which, however, is an important
one. It is proposed to make the Waste
Weir 700 feet in length or, under a contingency
named, to extend it to 1000 feet; but bearing
in mind the serious Catastrophe which the
breach

breach of such a Tank would prove, the Governor General in Council is disposed to think that the length of the weir should under any circumstances, be increased to 1000 ft in order to render it perfectly secure from any risk of the water topping the bund in severe rain. An additional outlay of 5 or 6,000 Rupees, which is all that the extension seems likely to cost, would be of no practical moment in a financial point of view; and the money would be well laid out if it served to preclude all possible risk, such for instance as might arise from an accidental omission to cut off at the proper moment the supply of water thrown into the Tank from the various sources intended to assist in filling it.

3. Further, the project does not appear to His Excellency in Council to be complete. The Estimate apparently does not provide for certain works mentioned by the Executive Engineer, nor for other works, which though hardly referred to by him, will almost certainly be required for such an extension of irrigation as

as is contemplated. These are first, the re-arrangement of the supply Channels of the Tank referred to by Mr. Fraser in paras 14 to 26 of his report, some of which he specially alludes to as essential. From the description of these works they are not likely to be very heavy or expensive, but they may possibly add a third or a fourth to the amount of the estimate. A supplementary Estimate for these should be prepared and submitted. Second, provision is not made for the irrigation Channels which will probably be needed to carry the water to the new lands to which irrigation is to be extended. Some of these seem to be situated 7 or 8 miles from the Tank. Third, is an escape Channel leading from the new waste weir, which must, so far as can be judged, be opened out. It is observed that in the old tank the escape took place at six separate Calingulabs. If necessary, estimates for these works should also be framed.

4. As to the first of these apparent omissions

omissions, it is true that allusion is made in your letter under reply to improvements about to be undertaken in some of the channels of supply. These improvements may possibly be profitable irrespective of the Sank project; but how this may be, cannot be properly judged from the manner in which the matter is referred to, though, so far as an opinion can be formed, it would seem as though the expense should form a part of the project under discussion.

As regards the estimated returns from the work, I am directed to observe that, apart from the apparent omissions above noticed, no allowance is made for the cost of establishments for construction which will probably add not less than one-fourth to the whole expense; nor is the charge for maintenance or supervision reckoned as a set off against the income, though these charges cannot but be sensible in so large a work dependent on an extensive series of feeding channels. Allowing for the

*Gross Volume of water
Additional - 140 mil. Cub ft.
Net, allowing for loss, say 115-80
at 9000 cub: yds per Canonic
1.32 acres.
equivalent to say 17,000 acres

the omissions the entire cost of the work may perhaps be taken as more nearly approaching six Lakhs, than $3\frac{1}{2}$ Lakhs. Also making an allowance for loss by evaporation &c., the additional area to be irrigated may be taken at 17,000 acres. If $3\frac{1}{4}$ Rupees per acre be taken as the Net revenue, after deducting the cost of maintenance, a total income of say 50,000 Rupees will be realised, giving about 9 per cent on the Capital invested.

6. Although the project might have been submitted in a more complete form, the Governor General in Council believes that it bears about it sufficient evidence of the proposed works being likely to be remunerative, and is not disposed to withhold his sanction from the estimate, subject, however, to the condition that the Government of Madras will ascertain what the additional outlay will be on account of the omitted works referred to above, and

and satisfy itself that the cost will
not be such as seriously to derange the
calculations in the preceding para. -

7. The sanction above accorded
has been registered as Ck 8 I. of 1867/68.

8. The plans are returned.

Have the honor to be

Sir,

Your Most Obedt. Servant,

(William Colonel R. A.

Secretary to the Govt of India

WJ

Public Works Department

135
C133808

Proceedings of the Madras Government
Under date the 7th December 1867
Read the following

From The Secretary to the Govt. of India } H. C. No. 162 Dated 25th October 1867.

Communicated
to the Superintendant of the
4th Division who will make
arrangements for collecting
the additional informa-
tion regarding the subsid-
ary works of the Chem-
brimbantankam Tank,
which the Govt. of India
considers necessary to
allow of an accurate com-
putation being formed
of the remunerative ef-
fect of the proposed en-
largement of the Tank.

The Govt. observe
that the Tank is directly
connected

Re: 11th Sept. 1867

11th Sept. 1867
11th Oct. 1867

From
The Secy to the Govt.
of India

25th Oct. 1867
20th Nov. 1867

Re: 21st Nov.

Copy notes on plan
and estimate accompanying
H. C. 133808-7 for enlarging
the Chembrimbantankam
Tank in the Madras Dist.

C133808

C133808-7 20th Dec. 1867

22nd Dec. 1867

connected with a channel leading from the Aicut across the forkhar near Kasaveram; and that it is also in communication with the Palar through the Kumbur Kal Channel, which when improved and enlarged, will year by year afford a more full and certain supply. Mr. Traer in his report on the bank proposes to improve the supply from both sources and he describes the nature of the works which he considers necessary. These are

The rectification of the surplus channels from Sheerematur and Pelli. Pakur Tanks

2. The improvement of the Old Bungaloro Channel.

3. The construction of sluices at the heads of channels leading to various

Tanks

Tanks, which are supplied by the old Bungaloro.

4. Additions to Koratur dam and to the head sluice of the new Bungaloro, and enlargement of the channel.

The execution of the above works is being provided for by separate estimates: but as the Govt. of India require that they shall be taken into consideration, as portions of the Chemburambakkam project, Colonel Beau will have the goodness to submit a report showing to what extent they will be efficacious in securing a proper supply to Chemburambakkam Tank, when enlarged; together with plans and estimates for the whole of the works.

He will also report on the expediency of enlarging the proposed Calingulah for the Chem-burribankum Tank as suggested by the Govt. of India, and the means available for disposing of surplus water. If necessary, an estimate may be prepared for a surplus channel.

The Govt. of India point out that no provision has been made for the excavation of channels for the conveyance of the water to the new land to which irrigation is to be extended. The Collector in reporting on the probable increase of revenue, states that it is obvious that almost the entire area included between

between the Jorum and the Adyar which lies to the eastward of Chem-burribankum, would be under the command of the water from the tank, and that the 28 villages named by Mr. Fraser will of course be open to its influence, in addition to the 58 villages now watered by it.

The majority of the villages are therefore already in possession of distribution channels, and the Govt. conclude that any extension which may be required to bring the lands of the remaining villages under the influence of the Tank, will be carried out by the cultivators. It is not customary for the Govt. to undertake the

the management of
such channels, and it
would not in their opinion
be desirable in this
instance to depart
from the established
Custom.

Ad

Ad

To the Suppl^y & Bu^y Co^{rs}
Acct. Gen^l & Treas^r
Comptroller
Rev. Dept.

Recd 9/12/07

Sub. Works 1867 Departt.

Pro: of Govt for December

No 3808

Pro: of the Madras Govt
Dy 7th December 1867

Further No 745 D/9-3-71

Passing orders on a letter
from the Govt of India sanction-
ing conditionally the estimate of
Rs 3,55,435 for the enlarging
of the Chembrumbaikulm Tank
in the Madras District.

No 138-152