

No 948. W. a/18 April/82

Communicated to
the Sup^r. Engineer, 4th
Circle for full in-
quiry and report.

14.4.82

S. E. 4th Circle

Recd 18-4-82

10/4

P. W. C. No 2301

Govt. of (1882) Madras
FINANCIAL.

Recd 14 April/82

Order, dated 28th March 1882, No. 311.

55c

B. No 948. W. a/18 April/82.

Municipal—Water-supply. — Referring to the
Public Works Department, for inquiry, letter
from the Acting President of the Municipal Com-
mission, Coimbatore, submitting a scheme for the
supply of Coimbatore with good water.

Entd. in Receipt Bk.

With Order

28TH MARCH 1882, No. 311, FINANCIAL.

GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

READ—the following letter from A. J. STUART, Esq., Acting President of the Municipal Commission, Coimbatore, to the Chief Secretary to Government, dated Coimbatore, 15th March 1882, No. 20:—

I have the honor to report that the Municipal Commissioners of Coimbatore have unanimously resolved to submit to Government the enclosed scheme for the supply of Coimbatore with good water in the hope that the Government will be pleased to order it to be thoroughly investigated by the Public Works Department, and estimates prepared if, on full investigation, it appears likely to be successful.

2. The scheme also depends upon the pleasure of Government as regards the funds by which it is to be carried out. The Commissioners would ask for a loan of the amount of the estimates, and hope that the Government will be pleased to make over to them the difference between the dry assessment now paid and the wet assessment which will be payable upon whatever lands are brought under wet cultivation by means of the proposed reservoir.

3. I may add that the salt nature of the water in the wells used over a large part of the town has been more than once remarked upon by the medical officers who have inspected and reported upon its sanitary condition.

ENCLOSURE.

Coimbatore Town Water-supply.

It is proposed to arrange for the supply of Coimbatore with fresh water by constructing a tank about a mile west of the Mettupálaiyam road at about the third mile from Coimbatore.

2. The tank is intended to provide water at the rate of three gallons a day for 40,000 people, or six gallons for half that number, all that are likely to use it, and to hold a surplus supply for cultivation of lands lying below it, the revenue from which, it is intended, shall, as a first charge upon it, pay off the interest and principal of the money to be borrowed from Government for carrying out the scheme.

3. From data roughly put together through the kindness of the Executive Engineer by him a tank having a bank a mile long and water of average depth of six feet would hold 811,200 cubic yards, being three times the quantity required for one year's supply (270,400 cubic yards) at the rate per head of population given in paragraph 1. Such a tank with sluice and calingula sufficient for the discharge of the water likely to require surplusage, viz., 300 feet long, the Executive Engineer calculates roughly at Rs. 8,900.

4. It is proposed to restore the small now ruined Muthanamkolam Tank at the north-west corner of the town and to the east of the road, and toll-gate to keep up a sufficient head of water for the required pressure in the pipes below. This tank it is calculated will hold about three days' supply when improved. The repairs and a sluice are calculated roughly at Rs. 1,000.

5. The channel between the main reservoir and this small tank close to the town will be $3\frac{1}{2}$ miles long, and if made so as to carry the requisite supply will be 4 feet bottom width supposing the fall to be 6 inches a mile, and its cost would roughly be Rs. 5,140.

6. The President, Madras Municipal Commission, has been so good as to supply information as to the size and cost of iron pipe required for the supply of 40,000 people with fall of 2 feet per mile, length of piping half mile, and head above sluice 6 feet. It appears that a 6-inch pipe will suffice and that half a mile of this laid down may be put at Rs. 5,000.

7. The drainage area judging from the map is calculated by the Executive Engineer at 20 square miles, which he calculates with a rainfall of 4.78 inches in 24 hours would give a discharge of over 82 millions of cubic yards, of which only 800,000 are required to fill the reservoir.

It is evident therefore that the supply is far more than ample, and it would be matter for further consideration whether it would not be better to make the bank of the tank $1\frac{1}{2}$ miles long at an additional cost of Rs. 3,000, giving a supply equal to $4\frac{1}{2}$ times what is needed for the town and a surplus probably sufficient for the cultivation of from 300 to 400 acres.

8. At the end of the half mile of pipe it is proposed to have a reservoir 3 feet deep and 10 yards diameter, from which the people will carry water in pots. It is probable that the cost of this will not exceed Rs. 1,000.

9. Finally, compensation for land will probably vary between 5,000 and 7,500 rupees according as the smaller or larger tank is decided upon.

10. The estimates therefore in one view stand thus:—

						Smaller Scheme.	Larger Scheme.
						RS.	RS.
Tank bank	..	..	..	..	..	8,900	12,900
Small tank restoration	..	..	..	..	..	1,000	1,000
Channel	..	..	..	..	..	5,140	5,140
Half mile Pipes	..	..	..	..	..	5,000	5,000
Distributing Reservoir	..	..	..	..	..	1,000	1,000
Compensation for Land	..	..	..	..	..	5,000	7,500
						26,040	32,540

Interest.—On the former at 4 per cent. would be a yearly charge of .. 1,040
On the latter 1,300

11. The returns from 200 acres of irrigated land would be 1,200 rupees a-year, and from 400 acres Rs. 2,400; in either case enough to pay the interest of the loan and leave a surplus to form a sinking fund to pay off the debt.

12. The tank would, it must be remembered, fill several times during the interval between May and December, the average rainfall being about 20 inches, and as a single filling will hold enough water for the entire cultivation of 100 to 150 acres besides a year's water-supply for the town, it is clear that his estimate of returns from irrigation is not excessive.

ORDER—dated 28th March 1882, No. 311, Financial.

Referred for inquiry to the Public Works Department.

(True Extract.)

G. Munster
Ag. Chief Secretary.

To the Public Works Department. ✓
,, President of the Municipal Commission, Coimbatore.

Exd. J. Wright.

P. W. C. No. 2301

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/ True Entrust
Sd/ Ross Thompson
Lt Col R.E.
As Under Secy to
Govt.
Pl. d

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C. G. MASTER,
Ag. Chief Secretary.

To the Public Works Department.
„ President of the Municipal Commission, Coimbatore.

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