

[L. & M.]
[2,000-8-8-25.]

Local & Munl. (1896) Department.

MISCELLANEOUS.

G.O., No. 938 M

DATED 6th June 1896

[Despatch Abstract.]

Water-supply.

Recording, with remarks, letter from the Chairman, Municipal Council, Srirangam, submitting the resolution of the council on the report of the Sanitary Engineer on the Srirangam ---scheme.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

1896
Local
SECRET NO

12 MAY 96
TRICHINOPOLY.

The Chief Secretary
to
Government of
Local & Madras
Departments
thru the Collector
of Trichinopoly

76
dated 9th May 1896
13 MAY 96

Enclosure 1

Reporting that the pro-
posal of the Sanitary
Engineer on the Spiran
water scheme is
ordered to lie over
pending the proposal of
the water scheme in
the Trichinopoly Town
with order

Dis no 506/96

Submitted.

I recommended that the
question of supplying Spiran
with water from the Trichinopoly
works be considered after the
latter town has been supplied for
some months during the dry
season of the present season, when
the requirements will be in a better
position to decide if the existing
headworks & wells are likely
to suffice for both towns. The Council
concerned, & the question may well
be considered a few months
hence.

Quadrant
Collector

15.5.96

N
Misc. Order No 938 mms 076.6.96

Records pending further report.

18
2/6/96

WSD
4.6.96

To
The Chairman M.C. Piranpanthis the Col.
Sanitary Engineer
16 2/2/96

S.E. 25-5-94-500.

Municipal Dept.
CURRENT NO. 519M

1896.

From

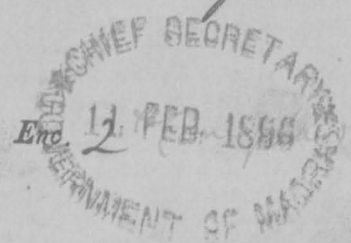
The Sanitary Engineer
to Government,

The Chief Secretary
to Government
Local & Municipal Dept

No. 407

Dated 10
Despd. 11
Recd.

February 1896.



Subject.

Submitting his
report on Srirangam Water
supply.

(with an endt)

1997 1028 11-95
1422 4-9-95
509 20-3-95
281 14-2-95

1994

220
28.2.96
meeting

no 268

Referred to the municipal
Council, Srirangam for remarks.

(By order)

W.D. Hills
Ag. Asst. Secretary.

V.R.
29/2/96
Fort St. George?
27 February '96

Mud. Officer, Srirangam

Enclosure No 5

6

Letter No 15 of 6 April
97

To The Chairman, M.C., Srirangam.

17/2 17/2 3/16 1648-97

173099

No. 4073

GOVERNMENT OF MADRAS

OFFICE OF SANITARY ENGINEER,

Fort St. George, 10 February 1896

Local & Municipal Department
CURRENT No. 519 M

From

J. A. JONES, Esq., MEM. INST. C.E., F.R.S.E.,

SANITARY ENGINEER TO GOVERNMENT,

To

The Chief Secretary to Government,

Local and Municipal Department

SIR,

With reference to G.O. No. 1997 M., dated 28th November 1895, I have the honor to report as follows:-

2. There are two means by which a water supply may be arranged for Srirangam, viz.:-
By carrying pipes across the river from the present Trichinopoly Pumping Station - Estimated cost including extension to Thiruvananthapuram Rs 116,896.
By carrying pipes over the Cauvery Bridge from point A (vide accompanying plan) - Estimated cost passing through Thiruvananthapuram Rs 119,246.
The latter is preferable. If the former plan is adopted steel pipes will be required across the Cauvery Bed and they will have to be securely fixed in the bed and provision made to protect them against floods. From the river east iron pipes

The Municipality of Srirangam comprises many villages, among others, the large village of Shiruvanakaval, to which place the pipes must be eventually carried, though at present the Council desires to limit the scheme to Srirangam proper. If the adoption of any scheme to rest merely on the figures relating to the cost of carrying the water to Srirangam itself without any reference to Shiruvanakaval the two figures would be Rs 105,340 as against Rs 119,246.

By the adoption of the Bauvery Bridge the main will at once pass the latter village and it will require no special works in laying it; the cost of this route is some Rs 2,300 more even than that of laying the main across the Bauvery and afterwards extending it to Shiruvanakaval, but this route is strongly recommended.

I regret I am unable to reply to the question as to the sufficiency of the present number of wells in the Bauvery to meet the increased demand, there are as yet no data to go on. In my approximate estimate attached the cost of an additional well and steel piping has been allowed for, in case they may be required.

50% of the cost.

5. The pumping power at Trichinopoly is for the present ample.

6. Trichinopoly water works scheme has several contributors each of whom has paid a certain amount towards the cost of the works and who will pay an amount for water they use according to the quantity and the height to which it is raised.

7. The Srirangam Municipality will eventually require a supply of 10 gallons per head for 25,000 people. This amount will have to be lifted 60 feet high. The contribution, which the Municipality should pay is the same proportion to the total cost of the head works as the quantity it will use bears to the quantity for which these works were constructed viz - 1

$$\frac{25,000 \times 10}{\text{Total supply to Trichinopoly } 1057,000 \text{ gals}} = \frac{250}{1057} \text{ or of } 25\% \text{ (say)}$$

The cost of these works including contingencies will be about Rs 2,15,412.

8. Thus the two schemes would work as follows:-

Scheme across river	Rs 116,896
25% of cost of Head Works	53,853
or	170,749
Scheme via Bauvery Bridge	119,246
25% of cost of Head works	53,853
	173,099

The cost of pumping should be similarly charged. The annual cost to the Municipality of Trichinopoly raising an amount of 900,000 gallons per diem 105 ft high is estimated at Rs 23,491 and supposing that Srirangam at first takes only 5 gallons per head for 10,000 people the cost would be represented by the fraction $\frac{60 \times 5 \times 10000}{105 \times 900000} \times \text{Rs } 23491 = \text{Rs } 745$ per annum, but if more water is taken the cost will be more.

9. For annual charges however the most simple plan would be for the Srirangam Municipality to pay for the water actually used as measured by meter and this might be fixed at about Rs 2 for each 50,000 gallons or say about $\frac{1}{2}$ anna per 1000 gallons—a very low charge.

10. The above are only approximate figures and some of them are incapable of exact determination until the Trichinopoly Water Works are in operation; but accepting these figures the total annual charges for a supply of 5 gallons a head to 10,000 people (capable of extension to 10 gallons per head for 25,000 people) would be, supposing that Government made the usual grant of

50%

50% of the cost.

Cost of pipes, fountains &c $\frac{96540}{2}$ @ 6% — Rs 2890

Contribution Rs $\frac{76559}{2}$ @ 6% — 229

For water annually 74

Total Rs 593

11. Part of the sum of Rs 76,559 would be repayable to Government as an existing participant in the Trichinopoly Water Supply Scheme and portion to the Railway and Municipality but on the other hand if it is found necessary for Srirangam to provide the additional filtration well and length of steel pipe in the river (which are included in the estimate as explained before and which is estimated at Rs 10,490) the contributors including the Municipality of Srirangam should bear the cost of these works in the same proportion.

12. It is useless in the incomplete state of the works to go into details; if the proposed method of allocation of charges is agreed to details can be settled here and here.

13. As to the ability of the Council to carry out the scheme, the Council can increase the House Tax which is only $6\frac{1}{4}\%$

present and levy a water tax. The closing balance in the Budget for 1895/96 was Rs 4,150

If the Government consider that the scheme, which is simply an extension of the pipe system of Trichinopoly, is within the means of the Municipality a complete estimate can be drawn up and submitted.

I have the honor to be
Sir
Your most obedt servant

H. J. J.

Sanitary Engineer to Govt.

9
Comparative statement of the estimated cost of Water Supply Scheme for the town of Srirangam.

Particulars	(1) Route Across the river Cauvery	(2) Route across the Cauvery Bridge passing through Thiruvanaikaval
	Rs	Rs
Infiltration well	3,310	3,310
Collecting Pipe (Steel)	7,180	7,180
umping main (Steel pipe)	34,640	"
do (cast iron pipes)	20,300	47,330
distribution Cast iron pipes and fittings	20,300	20,300
do Laying and Joining	5,420	5,420
Contingencies 5%	4,558	4,177
ools and Plant 2½%	2279	2088
Establishment 7½%	7,353	6,735
Total	1,05,340	96,540
add for extension to Thiruvanaikaval	11,556	nil
proportionate cost of Trichinopoly main to be used	nil	22,706
proportionate payment for Head Works	1,16,896	1,19,246
	53,853	53,853
	1,70,749	1,73,099

Note. If the work is to be executed by Public Works Department, item (a) must be altered to Rs 12,248 or 9383 (depending on the basis fixed for their charges and that of (b) to Rs 11,226 or Rs 6365 (less)

H. J. J.

Sanitary Engineer to Govt.

Sanitary Engineer to Govt.

Enclosure to letter No. 467 of 1896.

nt.

Present.

Mr. K. Seshadriyengar, auzgal. Chaitanyam
" " " Mr. Subramania Sastri, auzgal. ^{Baru.} ^{Chit.}
" " " C. Mr. Narayanaiyengar, auzgal. "
" " " B. Ramaswamiiah, Garu. "
" " " Mr. Muthuswami Pillay, auzgal. "
" " " Mr. Katakristna Saide, Garu. "
" " " R. Venkataraghava Aiyar, auzgal. "
" " " J. R. Kuppuswami Aiyangar, auzgal. "
" " " Mr. Ramaswami Aiyangar, auzgal. "
" " " Mr. Prinsivalu Saide, Garu. "
" " " Mr. R. Rengar Aiyangar, auzgal. "

Ordered to lie over
pending the result of the Scheme at
Treichinopoly

Ans

$\frac{2}{1648m.987}$

Trichinopoly
Signed / R. Seshadrayengar
Chairman

(True Copy)
R. Seshadrayengar
Chairman

12/9/96

etc 76

From
Mr. R. Seshadrayengar

Municipal Council
Trichinopoly
Local & Municipal Dept
CURRENT No. 1473
Chairman,
Municipal Council,
Trichinopoly.

To

The Chief Secretary to Government of
Madras
through the Collector of
Trichinopoly.

Sir,

With reference to the endorsement of
the Asst Assistant Secretary to Government,
No. 268, 27.2.96, referring for remarks, the report
of the Sanitary Engineer on Trichinopoly
Water Supply Scheme, I have the honor to
report that the Council at its meeting
held on the 12th ult. ordered the subject
to lie over pending the result of the water
Scheme at Trichinopoly, in pursuance
of the views of the Collector.

A copy of the resolution of the Council
is

Trichinopoly

Submitted for the information

I have the honor to be,

Sir,

Your most obedient servant,

J. E. Seshadriengar

Chairman

When given for copying
When copied
When examined
When signed

189

AD AGAIN G.O., No.
189

DATED

ST No.

REF TO C. No.

GOVERNMENT A A A A A A A

GOVERNMENT.

WITH - TO.

NOT FILLED UP, BEING MEANT FOR DESPATCH
IN ORIGINAL.

A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only.

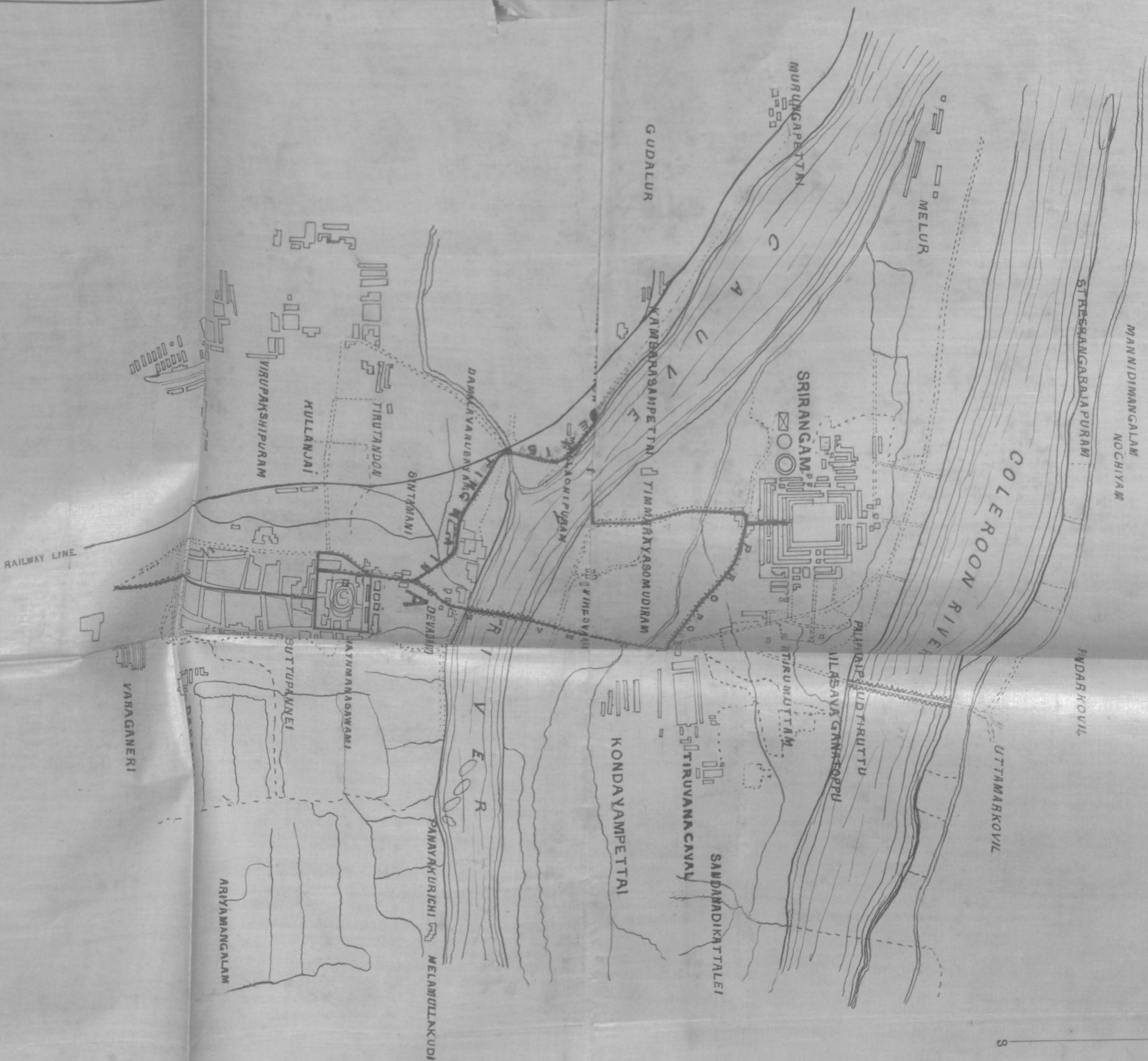
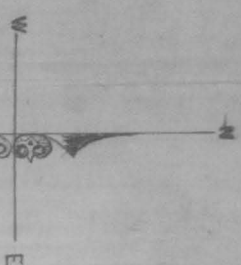
SHEWING TOWN OF SRIRANGAM

SKETCH

SCALE 2.01 MILE

TO ACCOMPANY SANITARY ENGINEERS LETTER# DATED

DATED



OFFICE OF SANITARY ENGINEER
FORT SAINT GEORGE 10-2-96

MEM: INST: C.I.E.;

SANITARY ENGINEER TO GOVT