

- (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.	3024	Press
B.P. No.		Mis.
Dated	27 - 10	68-75-195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
27th October 1875.*

No. 416. Read the following letter from Lieut.-Colonel J. F. FISCHER, R.E., District Engineer, Madura, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Madura, 5th October 1875, No. 2,728 :—

I HAVE the honor to forward the accompanying irrigation revised estimate of Rupees 195 for repairing the bund of Punnean tank of Teroomungalum taluq, prepared according to the instructions contained in your circular, No. 60, of 1st May 1874.

2. I beg to state that the Overseer in charge of Pereacolum Sub-division reports in his letter, No. 236, of 4th September 1875, that the tank has had no repairs for the last twenty years; the bund is too low and weak; it is proposed and provided for in the estimate to raise the bund 3 feet above full tank level.

3. The area of catchment basin is $\frac{1}{4}$ square mile and the maximum quantity of flood water per second 220 feet, and with 1 foot of water passing over a surplus escape to a length of 63 feet will be required; the sum of the two openings at each end of the bund being 60 feet, they are quite sufficient to discharge the surplus, and, as the soil in the openings is hard gravel, no masonry escape is needed; the difference between F. T. L. and M. W. L. to be, as stated above, 1 foot.

4. Since the soil is gravelly a rate of $1\frac{1}{4}$ Annas has been allowed per cubic yard, which is very moderate for that taluq.

No. 417. ORDER THEREON, 27th October 1875, No. 3,024.

IRRIGATION, No. 41.
Account.

THE following estimate is sanctioned :—

	Madura District.	Revenue. RS.
Punnean Tank		195
The average revenue is only Rupees 56, but it is stated that there has been no outlay during the last twenty years.		
2. Care should be taken that the area of the catchment basin* has been correctly estimated. It is not usual for the drainage from a square mile of country to be capable of irrigating 84 acres.		

* $\frac{1}{4}$ square mile, average cultivation 21 acres.

(True Extract.)

Major-General, R.E.,
Secretary to Government.

To the District Engineer, Madura.
" Chief Engineer for Irrigation.
" Controller of Public Works Accounts.
" Collector of Madura.
" Revenue Department.

Exd. E. C. Shunker.
Spare Copies

Revised Estimate 8th Division P.W.D.

Revised Agricultural

Madras District District Range Tirumangalam Taluk

Name and nature of work. Repairing Pummian Tank of Pummian Village
Class of work 3^d No. of irrigation rights 115

Statistics of Cultivation						Total Repair		Details of Tank		
Type of		S. good average		Highest of year		during last year		Length of bund in feet	No. of sluices	No. of channels
Canal (Acres)	Pommian	Canal (Acres)	Pommian	Canal (Acres)	Pommian	Year	Amount			
24.32	120.00	21.12	56.00	23.76	62.72	"	"	2628	1	"

Tank how supplied Rain fed
Estimated by whom & when Collected for P.W.D. the Village
Date of inspection of work by Range Officer
Remarks in the Statement accompanying -

Widening		1 1/2	1	18 1/2
Raising	12	1 3/4	2	10 1/2
Widening		1 1/2	1 1/2	2 7/8
Raising	108	1 3/4	1 1/2	9 1/2
Widening		1 1/2	1	16 1/2
Raising	132	1 3/4	1 1/2	11 1/2
Widening		1 1/2	1	9 1/2
Raising	68	1 3/4	2	23 3/8
Widening		1 1/2	1 1/2	12 1/2
Good up to west end	110			

Total Gravel 231 1/2

Remarks

An estimate for repair of this tank No. 164 of 1872-73 was sanctioned during last official year, the material of the bund being actually gravel through out the village & stranger's children

Detailed Estimate No. of 1872-73

Particulars of work	Measurements			Cubic Feet
	Length	Breadth	Height	
<u>Colt from east end.</u>	20	1 3/4	1/2	6 3/4
Raising	12			
Gravel	20	1 3/4	1/2	6 3/4
Raising	64	1 3/4	1/2	56 1/2
Raising		2	1/2	64
Widening	68	1 3/4	1/2	59 1/2
Raising		1 3/4	3/4	76 1/2
Widening	140	2 1/4	3/4	223 1/2
Raising		2 3/4	2	77
Widening	68	1 3/4	1/2	59 1/2
Raising		1 1/2	1 1/2	153
Widening up to sluice				
Sluice good	12	1 3/4	1/2	
Raising		1 1/2	4	78 1/2
Widening	12	1 3/4	1/2	10 1/2
Raising		1 1/2	1 1/2	27 1/2
Widening	108	1 3/4	1/2	94 1/2
Raising		1 1/2	1	162
Widening	132	1 3/4	1/2	115 1/2
Raising		1 1/2	1	99
Widening	68	1 3/4	1/2	59 1/2
Raising		3/4	1/2	12 1/2
Widening	100			
Good up to west end				

Total Gravel 2316 1/2

Remarks

An estimate for repair of this tank No. 166 of 1872-73 was sanctioned during last official year, the nature of the soil being actually gravel throughout the village & it was found that

Convergence Monthly
School Overlook

a sluice, ...

[illegible]

* Here enter
depth of founda-
tion.

2

11. The trenches for foundation to be dug to a depth of not less than *
feet & the bottom taken out to a uniform level well
watered and rammed before filling in the same.
The foundations are to be inspected and approved by
the Range or Sub Division Officer before the super-structure is commenced.

12. The reconstruction of the sluice &c. to consist of roughly dressed
wedges stones in chunam prepared in proportion
of one of lime to 3ths of sifed river sand and 2ths
of fine soorkoe or pounded brick, well beaten or
ground. The stones collected for the work to be of
as uniform a size and as rectangular as possible, so that there may be no difficulty
in filling in the interstices closely with mortar—each course of stone work to be suc-
cessively finished to a uniform level in a substantial manner. The joints to be
scraped out & pointed with lime putty prepared in proportion of one of lime to 1 of
fine soorkoe mixed and ground together and well thrown in when applied to the wall.

13. The whole of the foundations and superstructure of the sluice to con-
sist of sound and well burnt bricks of Government
size in chunam, prepared in proportion of one of
lime to 3 of river sand & 2 of soorkoe well beaten
or ground, care must be taken that the water and
English bond to be observed throughout. The mortar joints not to exceed 1/4 inch
thick. Water when used. The bricks to be dipped in
sand used are altogether free from salt.

14. The whole of the sluice is to be coated with two coats of chunam
plastering (when required) the 1st coat to consist of mortar prepared
in proportion of one of lime to one of soorkoe and
half of river sand well beaten and mixed together.
The powdered brick is to be pounded as fine as sand before being used. The 2nd
coat is to be of good lime putty prepared in proportion of one of lime to 1 of fine
white sand and 2 of soorkoe well mixed and ground together.

15. On the completion of the sluice the ground around it is to be carefully
packed with clay and puddled and the bund raised to its original or the proposed
height, with successive layers * of feet each of earth well watered & tamped.

16. All lime used on the work is to be slaked after delivery on the spot.
The water used for slaking lime is to be that in which Gall-nuts have been soaked
for 24 hours. One pound of Gall-nuts should suffice for 7 or 8 paras of chunam.
The color of the water is the best test as to the amount of soaking required. When
used for slaking the water should be only slightly discolored by the gall-nuts.

17. Each plank is to be pierced with a hole corresponding in height to a
few inches above the top of the top-most cross stones
of calingulah shutters.

18. The centre planks of each vent should be one foot longer than the
other planks and be slightly tapered, wedge shaped & rounded at top, & provided
with an aperture through which a small crow bar can be passed so as to enable the
shutter to be well gripped and joggled easily into its place, and removed as required
without difficulty.

19. The Neeranikum or Mooppen should in addition to the lever crow-
bar be provided with a steel headed iron rod 18 inches long and of 1 1/2 inch iron.
By putting this bolt through the hole in each plank one after another, the plank
can be levered up with facility in each case.

20. The shutters to be made of sound and seasoned * wood free
from knots and cracks and to be of the scantlings provided in the estimate.

21. All rejected materials whether stone lime kuppy &c. if not at once re-
moved by the individual contracting for the same will be carted away at his cost.

22. All rubbish collected during the execution of the work to be carried
off and shot at *
the locality to
be expressly spe-
cified by the fra-
mer of the Esti-
mate.

reference to para 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22

No. 2728.

District Engineer's office
Madurai 5 October 1895.

Punnam Kolam Tank, 5 years average Pucker
Revenue Report of 1895 and Estimate Report of
1900. Drainage area is about 15 square
miles. At present there are 2 openings
one at each end of bund; the soil
being of hard gravel no masonry
work is required now to discharge the
surplus. The tank had had no
repairs for the last 20 years the
bund is too low & weak hence extra
live repairs are required. The bund is
to be raised 12 feet above full tank level.

7-3-75

J. Chinnadaw
Persecut.

the tank has had no repairs for last 20
years, the bund is too low and weak, it is
proposed and provided for in the estimate
to raise the bund 3 feet above full tank
level.

3. The area of catchment basin

* Here enter depth of foundation.

11. The trenches for foundation to be dug to a depth of not less than * feet & the bottom taken out to a uniform level well watered and rammed before filling in the same.

* height of lay to be filled in the frame of Estimate.

* description of wood to be filled in by the framer of the Estimate.
* the locality to be expressly specified by the framer of the Estimate.

20. The shutters to be made of sound and seasoned wood free from knots and cracks and to be of the scantlings provided in the estimate.
21. All rejected materials whether stone lime kuppy &c. if not at once removed by the individual contracting for the same will be carted away at his cost.
22. All rubbish collected during the execution of the work to be carried off and shot at *.

referred to Nos 1-2-3-4-5-6-7

No 2728.

District Engineer's office
Madras 5 October 1875

From,

Acctt. Coll. J. H. Fisher Esq
District Engineer of
Madras.

To,

Acctt. Coll. John Mullins Esq
Chief Engineer for
Irrigation
Madras.

Sir,

Enc 1

I have the honor to forward the accompanying Irrigation Revised Estimate of Rs 175 for repairing the bund of Pannam Tank of Seromungalam Taluk prepared according to the instructions contained in your circular No 60 of 1st May/74.

2. I beg to state that the Officer in Charge Peracolum Sub Division reports in his letter No 236 of 4 September/75 that the tank has had no repairs for last 20 years; the bund is too low and weak, it is proposed and provided for in the estimate to raise the bund 3 feet above full Tank Level.

3.

The area of catchment basin

miles of country the capacity
of irrigating is immense.

by 12/10

Dr. Duff Madera - 5
Chief for Duff 5
Comptroller - with 10000 55
Collr. of Madera - 55
Rev. Dept. - 15

Ac 416-417

Dr. Duff - 5-11-75

mile of country to be cap-
able of irrigating 84 acres

Aug. 12/10

010665b

Act. of 1875) ~~United~~
PUBLIC WORKS.

To *Dist. Eng. Madras*

29/10

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G. O. 27/10 1875, No. 3074

Nos. 416-417

Revenue Secy, Madras

20th The estimate of Rs 19.5
for repairing the —, Cutchin
with remarks

N-416-417