M.R.O. 1—4,002—16 9-48.

(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. 1520 (?) Press
B.P. No. Mis.

Dated 20-6-- 1876.

Not to be folded or roughly handled

Read the following :—

No. 71 W.

No. 311. *Note by the Chief Engineer for Irrigation.*

The Officiating District Engineer, Tinnevelly, forwards, with his letter marginally noted, an estimate in connection with the Vellur Tank situated in the Tenkarai Taluq, Tinnevelly Range.

No. 2, dated 1st April 1876.

2. The nature of the work proposed for execution and the heads of account to which it is chargeable are as follow :—

Ordinary—Agricultural.

	Rs.
Improving and extending the existing calingulah and converting it into a weir. Original Works	5,315
Rebuilding a ruined calingulah and converting it into a weir. Repairs	4,620
Improving the Kunmarukal calingulah and converting it into a weir. Repairs	735
Constructing two irrigation sluices to replace the old ones. Repairs.	380
Raising the bund and repacking the old rough stone revetment and repairing the existing irrigation sluices. Repairs... ...	6,350
Total ...	17,400

3. The following particulars of this tank are recorded :—

Ayacut Area ... ... Acres $\frac{2179}{8952}$

Assessment ... ... Rs. $\frac{28,143}{95,605}$

Average revenue, not stated.

Highest do., do.

Expenditure during the previous four years... ... ... „ $\frac{1612}{9575}$

The works provided for the discharge of surplus appear to be in excess of the actual requirements. The area of country draining into the tank is stated to be 30 square miles, and the maximum flood discharge may, it is thought, be assumed to be about 4,342 cubic feet a second, and with two feet going over the weirs a length of 455 feet will suffice.

$d = 450 \times 30\frac{1}{2}$.

4. There are at present—

1. A short calingulah 42 feet which is proposed to be reconstructed as a surplus weir at a cost of Rupees 720.
2. A calingulah 245 feet long, between this tank and the Tenkarai Tank which is in ruins and which it is proposed to rebuild with a length of 330 feet at a cost of Rupees 4,520.
3. A surplus weir, 155 feet long, at the west end of the bund which it is proposed to lengthen to 315 feet. Estimate Rupees 5,195.

The crest of the 42 feet weir is intended to be 1 foot above F.T.L., probably because the discharge from it runs over cultivated land. The effect of this weir in relieving

the tank will be so small that it may be left out of the calculation. The 155 feet weir appears to be in working order, and it may be retained as it is. The length of surplus weir, No. 2 required, will then be 300 feet, and the work as designed being 330 feet long will be all that is necessary; but the following modifications should be made:—

1*st.*—The crest wall should be at F.T.L. throughout instead of being raised over the sluice vents.

2*nd.*—The cut-stone facing in rear of the crest wall should be omitted. Brick-work at 5 Rupees a cubic yard ought to be quite good enough.

3*rd.*—The shutter planks for the sluices should be 2 inches thick only. It is to be noticed that $3\frac{1}{2}$ Rupees a cubic foot are entered for "Congoo" wood, and this rate would be high for teakwood.

The estimate as revised amounts to Rupees 3,710.

5. The estimate for repairing the bund has an item for repacking the revetment, the rate being 12 Annas a cubic yard, which is about double what is usual. On the other hand no backing to this revetment is provided for, and it is improbable that the soil of the bund is such as to allow of its omission.

There is but one rate for earthwork, and that a very high one, *viz.*, $1\frac{1}{2}$ Annas a cubic yard. This should be examined into.

The repair of eleven out of seventeen sluices is provided for, but it is not clear whether the estimate for two new sluices is in both cases for the reconstruction of formerly existing sluices, though from the heading of the plan this would seem to be the case.

The items recommended for sanction are—

ORDINARY, AGRICULTURAL.

Original Works.

	Rs.
Constructing a weir	3,710
Do. two sluices	390
Total, Original Works ...	4,100

Repairs.

Repairs to bund...	4,500
Do. to sluices	1,860
Do. and improvements to Kunmarukal surplus weir	750
	7,110

The construction of the weir, Rupees 3,710, should be entered in Budget of 1877-78, the amount being in excess of the limit (Rupees 2,500) for Minor Works. The sluices can be built from the District grant for Minor New Works.

12*th June* 1876.

(Signed) A. DEC. SCOTT, Major, R.E.,
Depy. Chief Engineer for Irrigation,
for *Chief Engineer for Irrigation*

Proceedings of the Madras Government, Public Works Department,
20th June 1876. *No.* 1,520.

No. 312. ORDER THEREON, 20th June 1876, No. 1,520.

IRRIGATION, No. 22.
Account.

The following estimate from the Tinnevelly Range, forwarded by the District Engineer, Tinnevelly, is sanctioned.

VELLUR TANK.

IRRIGATION.

Ordinary, Agricultural.

			Rs.
No. 48 I of 1876-77.	1.	* Constructing a weir. Original Works ...	3,710
	2.	„ two sluices „	390
	3.	Repairs to bund. Repairs	4,500
	4.	„ to sluices. „	1,860
	5.	„ and improvements to Kunmarukal surplus weir	750
		Total ...	11,210

* Item No. I for entry in the Budget of 1877-78.

2. This sanction has been registered as No. 48 I of 1876-77

(True Extract.)

Colonel,
Offg. Under Secy. to Govt., P.W.D.,

To the District Engineer, Tinnevelly.
„ Collector of Tinnevelly.
„ Chief Engineer for Irrigation.
„ Examiner of Public Works Accounts.
„ Revenue Department.

Exd. E. C. Shunker.
Spare Copies

I. Form No. 9.

11-9

OFFICE OF THE CHIEF ENGINEER
FOR IRRIGATION, 12th June 1876.

No. 71. W.

Note by Chief Engineer for Irrigation.

Circls. 18. THE Offg. District Engineer, Tinnevelly forwards, with his letter marginally noted, an Estimate in connection
No. 2
Dated 1st April 1876 with the Vellaur Tank situated in the Tenkarai Taluq, Tinnevelly Range.

2. The nature of the work proposed for execution and the heads of account to which it is chargeable are as follows:—

Ordinary - Agricultural

Improving & extending the existing Kalingulah & converting into a weir - Original Works	Rs. 5315
Rebuilding a ruined Kalingulah & converting it into a weir - Repairs	" 4620
Improving the Kuru Marakal Kalingulah and converting it into a weir. Repairs	" 735
Constructing 2 irrigation sluices to replace the old ones. Repairs	" 380
Raising the bund & repacking the old rough stone pavement & repairing the existing irrigation sluices - Repairs	" 6350
Total Rupees	17400

3. The following particulars of this Tank are recorded—

Ayacut area. 2179/8952 Acres.
Assessment. 28143/96606 Rupees
Average revenue. Not stated
Highest do. Not stated
Expenditure during the previous four years. 1612/9576 Rupees.

~~The area of the catchment basin is ——— square miles; the maximum flood supply is calculated at ——— cubic feet per second for discharging whirl, a surplus there is ———~~

The works provided for the discharge of surplus appear to be in excess of the actual requirements. The area of country draining into the tank is stated to be 30 square miles, and the maximum flood discharge may, it is thought, be assumed to be about 4,342 cubic feet a second and with 2 feet going over the weirs a length of 455 feet will suffice.

$d = 450 \times 30$

4 There are at present

1. A short calingulah 42 feet which is proposed to be reconstructed as a surplus weir at a cost of Rupees 720
2. A calingulah 245 feet long, between this tank and the Irukarai Tank, which is in ruins and which it is proposed to rebuild with a length of 330 feet at a cost of Rupees 4,520.
3. A surplus weir 155 feet long at the west end of the bund which it is proposed to lengthen to 315 feet Estimate Rupees 5,195.

The crest of the 42 feet weir is intended to be 1 foot above F.T.L. probably because the discharge from it runs over cultivated land. The effect of this weir in relieving the tank will be so small that it may be left out of the calculation. The ~~length of this~~ 155 feet weir appears to be in working order and it may be retained as it is. The length of surplus weir, viz 2 required, will then be 300 feet, and the work as designed being 330 feet long will be all that is necessary, but the following modifications should be made

1st The crest wall should be at F.T.L.

throughout instead of being raised over the sluice vents.

2nd the cut stone facing in rear of the crest wall should be omitted. Brickwork at 5 Rs a cubic yard ought to be quite good enough.

3rd the shutter planks for the sluices should be 2 inches thick only. It is to be noticed that 3½ Rupees a cubic foot are entered for "Congoo" wood, and this rate would be high for teakwood.

The estimate as revised amounts to Rupees 3,710..

5. The estimate for repairing the bund has an item for re-packing the revetment, the rate being 12 annas a cubic yard, which is about double what is usual. On the other hand no backing to this revetment is provided for, and it is improbable that the soil of the bund is such as to allow of its omission.

There is but one rate for earthwork, and that a very high one, viz 1½ annas a cubic yard. This should be examined into.

The repair of 11 out of 17 sluices is provided for, but it is not clear whether the estimate for 2 new sluices is in both cases for the re-construction of formerly existing sluices, though from the heading of the plan this would seem to be the case.

The items recommended for sanction are

Ordinary Agricultural

Original Works

Constructing a weir	Rupees	3,710
—"— 2 sluices	—"—	390
Total Original Works		4,100

Repairs

Repairs to bund	Rupees	4,500
—"— to sluices	—"—	1,860
—"— & improvements to Kum-		
-marukal surplus weir	—"—	750
		7,110

The construction of the weir Rupees 3,71

shoul

should be entered in Budget of 1877-78; the amount being in excess of the limit (Rupees 2,500) for Minor Works. The sluices can be built from the District grant for Minor New Works.

Asst Secty.
Major R.E.
Dy. Chief Engineer for Insp.
for Chief Engr. for Insp.

To
The Secretary to Govt.

FORMER CASES.

No. of 187 .
" "

ISSUE No. 71-W.
Dated 12 June 1876

LATER CASES.

No. of 187 .
" "

Sent to Government with No. W. of
18
Printed with G. O. No. dated

REMINDERS ISSUED.

No. 1, dated 187 .
" 2, " "
" 3, " "
" 4, " "
" 5, " "

№ 311

KEEP-WITHS.

Cir - 18-6-76. Rtd 20/6/76
D.L. Short 18 June

For Circulation

Issue Case.

I. E. Form No. 31.

P. W. 1876. Department No. 1454

From The Chief Engineer for Irrigation.

RECEIPT No. 1978
Dated 4th April 1876.
Received 21st June "

№ 71 W.

Subject:—
Vellur Tank - Tinnevelly District. Submits for sanction estimate for repairs &c to the —

ENCLOSURES. 18
Ltr from No 2 of 15th Feb 76.
5 Plans.
2 Descrip. Reports.
2 Reports.
4 Detail Estis.
8 Abst. Estis.
1 Memo. of Classif. of Expenditure.

№ 1520 Public Works Dept.

E. I. Form No. 4.

Proceedings of the Madras Government
Under date the 20th June 1876.
Read the following

Note by the Chief Engr. for Irrign. dt 12th June 1876
No 71 W.

THE following Estimate from the Tinnevelly Range forwarded by the District Engineer, Tinnevelly is sanctioned :—

Vellur Tank.

Irrigation.

Ordinary Agricultural

~~48 I~~ 1	Constructing a weir.	Original works	3710
~~48 I~~ 2	—— " —— 2 sluices	—— " ——	390
~~48 I~~ 3	Repairs to bund -	Repairs —	4,500
~~48 I~~ 4	—— " —— to sluices	—— " ——	1,860
~~48 I~~ 5	—— " —— & improvements to Kunnarukal surplus weir	" ——	~~750~~
		Total Rupees.	11,210

No 48 I of 1876-77

Item № 48. I for Entry in the Budget of 1876-77.

2. This sanction has been registered as No. 48. I / 1.2.3.4.5 of 1876-77.

D. C. Jamieson ✓
Collector — do ✓
C. Gov. Sworth 18 Cents ✓
Ex. P. Lud ✓
Rec. Depth ✓

No. 311 - 312

Dated 7/7/76

4454

Govt. of [1876] Madras.

PUBLIC WORKS.

To

The District Engr Tunnerally

Dated

Issued

Recd Encl.

G. O 20th June 1876. No. 1520

Nos. 311 & 312

Vellur Tank Tanjore Dt.

Estimate for certain repairs & improvements to the same ordered.

Exd. Pie Rs. 8-7-1876.