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(2) Date of repair 14.3.1970
(3) Initials of the Referencer _____

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No.	2505	Press
B.P. No.		Mis. ☒
Dated	30.10	1976

Not to be folded or roughly handled

of important service in cases ill obtained. The Range Officer should working of these shutters until the three years' use, because woodwork and when alternately wet and dry, upset calculation, such as those of regards details, it is to be noticed the axle iron continuous across the less flat. The Manager at the Koratur Nannam tank and its surplus works frequently, and to see that the latter are in proper order both in May and October of year, and periodical reports should be sent in by him to the Range Officer at such times.

5. The estimates are recommended for sanction.

OCTACAMUND,
30th September 1876.

To the Secretary to Government, Public Works Department.

No. 88-A. From Colonel F. Chingleput, to Lieutenant Irrigation, dated Mount Range, 1st June 1876.

2 Estimates.
2 Plans.
1 Plan of Callagulah.
1 Plan of Longitudinal Section.
1 Copy of Range Officer's letter, 12th June 1876.

much from the flood passing over quantity of sand.

3. The work now standing materials therefore can be used, is beyond the power of the existing

4. A new work must be of and shutters cost only Rupees 1, the tank which fills very rapidly

5. If early sanction is not even now.

From Captain A. C. SMITH, R. MOBERLY, R.E., Sup
12th June 1876, No. 753.

I have the honor to acknowledge the long delay in my office on

the present where long weirs cannot well be ve, however, special attention to the practical effectiveness has been demonstrated by two or wever carefully executed, is in this climate to change its form to an extent sufficient to rich the action of such shutters depend. As it will probably be found preferable to make the latter, and that the sill level would be better if less flat. The Manager at the Koratur Nannam tank and its surplus works frequently, and to see that the latter are in proper order both in May and October of year, and periodical reports should be sent in by him to the Range Officer at such times.

(Signed) A. DE C. SCOTT, Major, R.E.,
Dy. Chief Engineer for Irrigation,
for Chief Engineer for Irrigation.

MOBERLY, R.E., Superintending Engineer,
and J. MULLINS, R.E., Chief Engineer for
July 1876, No. 1,329.

estimates returned with your No. 1,072, 17th September 1875, for Nannam tank, and copy of a letter from the Executive Engineer, Mount Range, replying to your objections.

2. The villagers having land under the tank at its north end suffered very much escape which carried down a considerable

ins has no foundation, and only a portion of it is long enough to carry off the drainage which is to discharge.

long and cost Rupees 3,000, whereas the vents and give us, if necessary, an earlier command of repairs into Chembrambankum.

4. a good deal of good work might be done

Executive Engineer, Mount Range, to Colonel F. J. Chingleput, dated Camp at Chingleput,

also for the repairs of Nannam tank, the estimate has been pressed forward, and also because I wished to get the

opinion of the Chief Engineer on the self-acting works) before making out the estimate again.

2. I have been obliged to reduce the head of estimate by 6 inches, so that M.F.L. is now only 2 feet before, and even this reduction will only give a head of 3 feet 6 inches. I consider 3 feet 6 inches is the minimum where the waves rise so high during the monsoon at

3. The drainage running off the basin 53 square miles is (vide Chief Engineer's No. 1,072 of 17th September last) about 8,200 cubic feet per second, and I propose getting rid of this in the following manner.

4. The existing north weir is 96 feet long, and 100 feet on the south is 200 feet long; this total length of 296 feet will with a head of 2 feet 6 inches discharge 8,932 cubic feet per second. The body-walls of these weirs will be pierced with 4 feet wide by 3 feet high 16 in the north and 25 in the south weir, and these vents will with a head of 4 feet above their centre, discharge an additional 4,384 cubic feet per second, making a total discharge by the weirs and vents of 8,316 cubic feet per second, which is little over that from the catchment basin.

5. The weirs will be altered as under; in each case the existing body-walls which have now been cut into gaps for safety will be renewed.

North Weir.

No.	Length.	Feet.
2 Half piers one at each end	2	$2 \times 1 = 2$
9 Piers or portions of body-wall	9	$9 \times 6 = 54$
10 Vents in body-wall	10	$10 \times 4 = 40$
Total length	21	96

South Weir.

2 Half piers one at each end	2	$2 \times 2 = 4$
24 Piers or portions of body-wall	24	$24 \times 4 = 96$
25 Vents in body-wall	25	$25 \times 4 = 100$
Total	51	200
Total of two weirs	72	296

I propose filling these vents with the self-acting shutters which was inspected by the Chief Engineer and which has been approved of by him for the Red Hills Project upper supply

These shutters will be made of wooden plank or achi or yepi wood (on account of its weight), so that little over 1rd from the lower edge the shutters are strengthened by two flat iron straps and will be sunk in the body wall and countersunk into the floor.

The frame will be composed of 3 inches by 3 side battens as per sketch plan and a levelled sill.

The height of the shutter is 36 inches, horizontal axis, so that the upper portion is 22 inches these proportions it has been found by actual trial not move until the water rises to a height of 16 inches immediately over the shutter.

So that in case of merely moderate floods the vents will remain closed, but in heavy floods direct the shutters will fall and the vents commence discharge

er (which I proposed for this and other

ter which was allowed in the original estimate 6 inches above F.T.L. instead of 3 feet as at of 3 feet 6 inches of top of bund above at should be allowed in so large a tank as.

miles is (vide Chief Engineer's No. 1,072 of 17th September last) about 8,200 cubic feet per second, and I propose getting rid of this in

it on the south is 200 feet long; this total discharge 8,932 cubic feet per second. The body-walls of these weirs will be pierced with 4 feet wide by 3 feet high 16 in the north and 25 in the south weir, and these vents will with a head of 4 feet above their centre, discharge an additional 4,384 cubic feet per second, making a total discharge by the weirs and vents of 8,316 cubic feet per second, which is little over that from the catchment basin.

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utter which was inspected by the Chief for the Red Hills Project upper supply

Be upper portion tank, the lower portion is suspended on a horizontal iron axis a main perpendicular. The shutter will be d in a frame which will be let into grooves

a tank wood, and will be provided with vent leakage.

it is divided into two portions by the id the lower portion 14 inches high. By the F.T.L. since weir that the shutter will lead measured back in eastern, or of 14

ght be passed off by the weir walls the water rises over 16 inches above F.T.L.

Proceedings of the Madras
5th Oct

Directly the flood subsides to an ft above vent floor, the shutters will close excessive. The closing is a dead certain to act at any time by opening two or three.

The only drawback to these shutters two methods; firstly, by placing the pressure on the lower portion than on when the shutter is in equilibrium, so that by pressure; secondly, by having a level by which means the shutter is jammed in.

Further, I have ascertained by experiment that the levelled sill will prevent the greatest amount of jamming produced. Fully near the axis, I found an extra height necessary to re-open the vent.

Also, as regards leakage, there are two small irrigation sluices one in each weir which supply respectively 195 and 283 acres, so that no leakage through vents will be wasted.

In his memorandum No. 1,072, the Chief Engineer stated that he thought the doing away with the flash escape of the north end was unnecessary; but when the floods do surplus over it the lands below the north sluice get so cut up that the crops are almost destroyed (vide petition from the villagers attached and report thereon). Besides, if this escape (which at present is in ruins, and the portion that is standing is 6 inches above the F.T.L. which will be a length of 692 feet to carry off the balance had no vents.

This would cost considerably over cost Rupees 1,411, and will do away with water is least required.

In addition to the above reasons for the adoption of the shutters, I beg to bring to your notice that in my No. 1,023 I have already reported that mistaking your No. 678 of 25th May 1876, I had ordered these shutters to be set in hand, and before I discovered my error I found them all commenced in the rough, and they now only require frames and proper fitting, the expenses incurred up to date being Rs. 3,000.

Finally, with regard to shutters, within 24 miles of the interior plain, the flood responsible that no damage is done are almost kept clear.

With regard to paragraph 2 of the the floor of the north sluice is obliged to the lands that it waters are very high.

The Coethumbakum sluice is now Longitudinal and cross sections of and all details called for are given there.

In conclusion, I have to report that No. 678 of 25th May last, and that the

Earthwork ...
Tamping ...
Sundries ...
Chingulaks, including ...

ment, Public Works Department,
76. No. 2,689.

above the level of the axle or about 15 inches I not again fall unless the floods again become ters now on view at Polai sluice and can be made s in the sluice).

le leakage, but this has been greatly reduced by in the shutter, and thereby gaining a greater per till the water rises to 16 inches above F.T.L. A water only at F.T.L. the shutter is jammed to all at bottom and battens at the sides of the frame o close fittings all round.

ut that no amount of jamming of the lower edge ter from falling when the water rises. With the shutter hanging to violently directly the water holes or 19 inches over F.T.L. was all that was

3,000 to construct; whereas the shutters will only complaints from villagers of being flooded when

3,000 to construct; whereas the shutters will only complaints from villagers of being flooded when

in is between Chembrambakum and Korattur and car there might be put in charge of these weirs and shutters by mischievous persons, and that the vents

Engineer's memorandum No. 1,072, the level of lower than 25-33 or 34 feet below F.T.L. because the falls, weirs are used to take into the sluice d in accordance with instructions

nd are also forwarded in support of the estimates

earthwork is completed in accordance with your ture up to date on the estimate is as follows, viz. —

	Rs.	A.	P.
Earthwork	...	...	...
Tamping	...	...	...
Sundries	...	...	...
Chingulaks, including ...	...	...	...
Total	1,599	8	0

Proceedings of the Madras Governm
5th October 18

Public Works Department,
No. 2,689.

No. 89.

ORDER THEREON, 5th Oct

876, No. 2,689.

IRRIGATION, No. 11.

Account.

NEMAM HISSA
Irrigation

Group or Project.	Fund.	Class.	Name Tank, or Char.	Particulars of Work.	Amount.
...	Ordinary Agricultural.	Repairs.	Nemam Hissa Tank.	1. Reconstructing Coethumbakum and north end irrigation sluices. 2. Repairing the bund, south and north end callingulaks and four irrigation sluices.	1,540 6,550

To be carried out by the Public Works Department Office in charge of Joint Range.

2. This sanction has been registered as N° 162 I. of 1876-77.

(True Extra.)

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

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

Ed. E. C. Shumker
Spore Conier

Revenue Department

4536

Sept. of 1876

PUBLIC WORKS.

THE DISTRICT ENGINEER,

CHANDLER

San Francisco

1876

30th

1876

OCTOBER

Nov. 22-59

1876

Comd to the
Board of Revenue
1876