

(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.	3495	Press	Original
B.P. No.		Mrs.	
Dated	19. 12.	193.	1876

Not to be folded or roughly handled

Read the following:—

No. 297-W.

No. 492. *Note by the Chief Engineer for Irrigation.*

THE Superintending Engineer, Chingleput, forwards, with his letter marginally noted, an estimate in connection with the Chinnumbadu Tank and Supply Channel situated in the Ponnary taluq, No. 1 or Serooloor range.

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

ORDINARY AGRICULTURAL.
Original Works.

	RS.
Reconstructing a head-sluice across the supply channel	3,600
Converting the calingulah into a weir	530
Constructing new wing walls to the smaller weir	255
<i>Repairs.</i>	
Clearing the silt in supply channel	1,180
Repairing the tank, bund and Irrigation sluices and closing the breaches	9,535
Total...	15,100

3. The following particulars of this tank are recorded—

Ayacut	1,507 Acres.
Assessment	9,164 Rupees.
Average revenue... ..	9,000 ..
Highest do.	9,637 ..
Expenditure during the previous four years... ..	1,066 ..

The area of the catchment basin is 4 square miles; the maximum flood supply is calculated at 1,417 cubic feet per second, for discharging which as surplus there are two outlets, one a calingulah 127 feet in length, and the other a weir 10 feet in length. Total length 137 feet.

It is proposed to remove the dam stones of the calingulah to raise the body wall to the height of F.T.L., and to raise the wing walls 2 feet higher than they are at present. New wing walls are proposed to be added to the other weir. It is also proposed to reconstruct the ruined head sluice across the supply channel near Periapoliam in order to regulate the supply of the Chinnumbadu, Thoranulloor and Peraloor tanks. The estimate further provides for clearing the silt in the supply channel, raising and repairing the tank bund, closing the breaches, turfing and planting nanal, and also repairing the Irrigation sluices.

The plans have been revised with reference to instructions from this office, but the design for the head sluice is still very defective and unnecessarily expensive. The Superintending Engineer mentions that it has been prepared in his own office, which renders the defects the more remarkable. The wells of the foundations are shown as carried up to the level of the sill of the sluice, which is altogether wrong. There must be at least 3 feet of solid foundations above the tops of the wells. The abutments are 5 feet thick, which for a 6 feet vent is quite unnecessary; 3 feet would be

more than ample. Full supply level in the channel has not been shown, and probably a vent 6 feet high and rear wings 6 feet high at the end are not needed. Though the Superintending Engineer has considered 16 feet foundations necessary under the wings and abutments, the flooring will, as drawn, be only a narrow strip of masonry and concrete 3 feet deep between the wells. There is no rear retaining wall and no outer loose stone apron. There is also no apron above the vent, and the shutter is only about a couple of feet from the edge of the flooring which has no retaining wall. Not only would there be risk of scour, but were the sluice closed in a high fresh water would find its way under the floor without difficulty. The square projections to carry the cross stones are bad; there should be a proper lead for the water up to the vent.

The sluice appears to bear no relation to the section of the channel, which latter has a bottom width of 33 feet against 6 feet the size of the vent. Elsewhere the channel has apparently a bottom width of 12 to 15 feet. The site of the head sluice is not marked on the longitudinal section of the channel. The front wings should be altered to the form shown in pencil. Then there should be a line of wells along the front wing returns and the retaining wall; also a second line for the rear wing returns and the retaining wall between them. These deep foundations will prevent all movement of sand, and the rest of the foundations may be laid at 6 feet below sill level, the lower foot or 18 inches being of concrete and the rest of masonry. The Superintending Engineer, who states that he had authorized the construction of the sluice in anticipation of sanction, has been instructed accordingly.

FORT ST. GEORGE,
14th December 1876.

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

To the Secretary to Government, Public Works Department.

No. 493.

ORDER THEREON, 19th December 1876, No. 3,495.

IRRIGATION, No. 38-A.
Account.

THE following estimate from the No. 1 or Seroosloor Range, forwarded by the Superintending Engineer, Chingleput, is sanctioned.

CHINNUMBADU TANK AND SUPPLY CHANNEL.
Irrigation.

Group or Project.	Fund.	Class.	Name of Tank, Canal or Channel.	Particulars of Work.	Amount
..	Ordinary Agricultural.	Original Works.. Repairs..	Chinnumbadu Tank and Supply Channel.	1. Converting calingulah into a weir.	rs. 530
				2. Constructing new wing walls to smaller weir.	255
				3. Clearing supply channel.	1,180
				4. Repairing tank bund, irrigation sluices and closing the breaches.	9,535
				Total ..	11,500

To be carried out by the Public Works Department officer in charge No. 1 or Seroosloor Range.

2. This sanction has been registered as No. 212 I. of 1876-77.

(True Extract.)

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

To the Superintending Engineer, Chingleput.

- .. Collector of Chingleput.
- .. Chief Engineer for Irrigation.
- .. Examiner of Public Works Accounts.
- .. Revenue Department.

Ed. E. C. Shunker.

Spare Copies

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OFFICE OF THE CHIEF ENGINEER
FOR IRRIGATION,

Fort St. George, 14 December 1876.

No. 297-W.

Note by Chief Engineer for Irrigation.

Encls. 6 THE Superintending Engineer, Shringepet,
forwards, with his letter marginally noted, an Estimate in connection
No. 2020 with the Chinnumbadu Tank and Supply Channel
Dated 9th Sept. 76, situated in the
Ponnary Taluq, N. 1st Seroolam Range.

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

Ordinary Agricultural.

Original Works.

	Rupees.
Reconstructing a Head Sluice across the supply Channel.	3,600.
Converting the Kalingulah into a Weir.	530.
Constructing new Wing Walls to the smaller Weir.	255.

Repairs.

Clearing the silt in supply Channel.	1,180.
Repairing the Tank bund and Irrigation Sluices and closing the breaches.	9535.

Total Rupees 15,100.

3. The following particulars of this Tank are recorded—

Ayacut area.	1507 Acres.
Assessment.	9164 Rupees.
Average revenue.	9000 Rupees.
Highest do.	9637 Rupees.
Expenditure during the previous four years.	1066 Rupees.

The area of the catchment basin is 4 square miles; the maximum flood supply is calculated at 14 1/2 cubic feet per second for discharging which, as surplus there ~~is~~, are two outlets, one a kalingula h 127 feet in length and the other a weir 10 feet in length. Total length 137 feet.

It is proposed to remove the dam stones of the Kalingulah, to raise the body wall to the height of F.T.L., and to raise the wing walls 2 feet higher than they are at present. New wing walls are proposed to be added to the other weir. It is also proposed to reconstruct the ruined Head Sluice across the supply channel near Periapoham in order to regulate the supply of the Chinnumbadu, Thoranulloor, and Ceraloor Tanks. The estimate further provides for clearing the silt in the supply channel, raising and repairing the tank bund, closing the breaches, twiping and planting nānal, and also repairing the irrigation sluices.

The plans have been revised with reference to instructions from this Office, but the design for the head sluice is still very defective and unnecessarily expensive. The Superintending Engineer mentions that it has been prepared in his own Office which renders the defects the more remarkable. The walls of the foundations are shown as carried up to the level of the sill of the sluice which is altogether wrong. There must be at

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the well. The amount of steel thick which I would
a 6 foot vent is quite unnecessary.

be more than ample. Full supply level in the chan-
-nel has not been shown and probably a ^{small} 6
feet high and rear wings 6 feet high at the end
are not needed. Though the Superintending Engineer
has considered 16 feet foundations necessary under
the wings and abutments, the flooring will, as drawn,
be only a narrow strip of masonry and concrete
3 feet deep between the walls. There is no rear retain-
-ing wall and no outer loose stone apron. There is
also no apron above the pent and the shutter is
only about a couple of feet from the edge of the floor-
-ing which has no retaining wall. Not only would
there be risk of scour but were the sluice closed in
a high fresh water would find its way under the
floor without difficulty. The square projections to carry
the cross stones are bad: there should be a proper
lead for the masonry up to the pent.
It appears to bear no relation to the section
which has a bottom width

The sluice appears to bear no relation to the section of the channel which latter has a bottom width of 33 feet against 6 feet the size of the pent. Elsewhere the channel has apparently a bottom width of 12 to 15 feet. The site of the head sluice is not marked on the longitudinal section of the channel. The front wings should be altered to the form

shown in pencil. Then there should be a line of
wells along the front wing returns and the retain-
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returns and the retaining wall between them. These
deep foundations will prevent all movement of
sand and the rest of the foundations may be
laid at 6 feet below sill level the lower foot or 18
inches being of concrete and the rest of masonry.
The Superintending Engineer who states that he had
authorized the construction of the sluice in anti-
cipation of sanction has been instructed ac-
cordingly.

Ans. S. C. O.

Major R. E.

Dy. Chief Engineer for Irrigation
to Chief Engineer for Irrigation.

To
The Secretary to Govt.
P. W. D.

crit.

C. P. O.

Chromium bader Tank—
— Note forwarded for sanction
Estimate for certain works, to
the —.

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16-12-76

E. I. Form No. 4-A

E. I. Form No. 4-A.

Photo of the Madras Govt.
Under date 19 Dec 1916
Read the following
from the Chief Magistrate
for Irrigation (No. 297 W. of 14th Dec 1916).

THE following Estimate from the
N:1 or Serooloor ^{house} forwarded by the
Superintendent
District Engineer, *Chingleput*
is sanctioned:—

Chinnumbada Tank, & Supply Channel

Irrigation.

Group or Project.	Fund.	Class.	Name of Tank, Canal, or Channel.	Particulars of Work.	Amount. Rs.
H.A.	Ordinary Agricultural	Original Works.	Chinnurhadu tank and Supply Channel.	Converting Kaliugulak into a weir.	530.
				Constructing new wing walls to small -er weir.	255.
		Repairs		Clearing sup- ply channel	1180.
				Repairing and bund, & raising sluice & closing the breaches	9535.
To be carried out by the P. W. Depart- ment Officer in charge the ~~water~~ Range.					

Total Rupees 11,500.

2. This sanction has been registered
as No. 212 I. of 1876

S. L. Chingleput ✓
Collector of Chingleput ✓
Ch. & Co. Secy. & M. & Co. Secy.
R. S. N. S. ✓
Revenue Dept. ✓

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Govt. of Madras.
PUBLIC WORKS.

To *the S. S. Chengelput*

Dated

Issued

Recd.

() Encl.

G. O. 19th Decr 1876, No. 3498

No. 492/3

*Chinnambadu Tank & its
Channel, Chengelput*
Mr. -- sanctioning the
estimate of Rs. 11,500
for repairs to the

But in Rep.