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.	595	(9)	Press
B.P. No.			Mis.

Dated 6 3. 1876.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 6th March 1876.

Read the following :—

No. 150.

No. 65. *Note by the Chief Engineer for Irrigation.*

THE following estimates from the Mount Range are forwarded by the Superintending Engineer, Chingleput, with his letter marginally noted :—

No. 2,753, dated 4th October 1875.

Taluq.	Estimate No. 187	Work.	Amount.
			RS.
Chingleput ...	...	Kachadimangalum Tank	440
Do. ...	...	Do. Tangle...	180
Do. ...	...	Mambakum Tank	300
Sydapet ...	...	Nandambakum Large Tank	675
Do. ...	...	Do. Tangle	395
Do. ...	...	Menambakum Tank	955

2. The financial and hydraulic details of the Irrigation Works concerned are exhibited in the following statement :—

I.—Financial Details.

Name of Work.	Ayacut Area.	Assessment.	Average Revenue for 5 years.	Highest Revenue for 5 years.	Expenditure during previous 4 years.	Amount of Estimate.		
						Capital.	Revenue.	Total.
	ACRES.	RS.	RS.	RS.	RS.	RS.	RS	RS.
Kachadimangalum Tank	44	157	158	185	...	...	440	440
Do. Tangle	12	61	57	77	...	...	180	180
Mambakum Tank	68	206	202	229	...	...	300	300
Nandambakum Large Tank	56	231	212	235	...	300	375	675
Do. Tangle	46	133	101	125	...	140	255	395
Menambakum Tank	154	456	342	411	...	175	780	955

II.—Hydraulic Details.

Name of Work.	Catchment Basin Area.	Maximum Supply.		Length of Escape.		Average Height of Bund.		Surplus discharged at M.T.L. per Sec.	Tanks above.
		Catchment per Second.	Channels per Second.	Total.	Effective.	Above F.T.L.	Above M.T.L.		
	SQ. M.	C. FT.	C. FT..	FT.	FT.	FT.	FT.	C. FT.	No.
Kachadimangalum Tank.	1	562	Not stated.	...	...	3	1	0 0	Not stated.
Do. Tangle	·5	354	...	E. 59 E. 13	59 13	4 3·37	2 1·37	280·3 82·3	...
Mambakum Tank ...	·75	464	...	E. 37 C. 24 5	37 20·5	4 3·67	2 1·67	175·8 184 6	...
Nandambakum Large Tank.	·5+·37	614 9	...	W. 24·5 E. 24·5	49	4	2	388·0	...
Nandambakum Tangle...	·37	348·3	...	...	...	3	1·5	0·0	
Menambakum Tank ...	·75	553	...	E. 91 ...	91 ...	4 2 25	2·5 ·75	374·4 0·0	1
				E. 68 ...	68 ...	3·75 3 25	2·25 1·75	279·8 0·0	...
				W. 90	90	4·5	3	555·5	...

NOTE.—The proposed dimensions of escapes and heights of bund are printed in large type. The existing dimensions in small type. The following abbreviations are used :—C. Calingulah with dam stones. W. Weir with flush crest. E. Escape at ground level. B. Bund of tank.

3. The following is a summary of the work proposed to be carried out.

Kachadimangalum Tank.—This tank was breached in two places and was temporarily repaired. The bank is eroded and the sluice is leaky. It is proposed to raise and section the bank. To cut the end of the bund for a temporary escape. To turf, plant grass, clear away bushes and repair sluice.

Kachadimangalum Tangle.—This tank was breached in two places by floods and was temporarily repaired. The estimate submitted is for raising and sectioning the bank, turfing, clearing away bushes, planting grass, revetting the end of the bund next to the temporary sluice, and repairing sluice.

Mambakum Tank.—This tank was breached and temporarily repaired. The estimate submitted provides for raising and sectioning the bund, planting grass, and repairing the calingulah.

Nandambakum Large Tank.—It is proposed to construct a rough-stone outlet to this tank, to cut a surplus channel, and to extend a flood bank up to a drainage channel. A damaged sluice is replaced by an 8-inch pot sluice; another is proposed in the northern portion of the bund. The estimates submitted also provides for repairs, such as raising and sectioning the bank. The Nandambakum tank receives the local drainage besides the surplus of the village tangle situated immediately above, and surpluses into the Sydapet or Adyar river.

Nandambakum Tangle.—It is proposed to construct a rough-stone flush escape in the bund of this tangle, also to build a pot sluice. The estimates submitted provide also for repairs, such as raising and sectioning the bund, turfing slopes, &c. The Nandambakum tangle receives the drainage of the adjacent hills and surpluses into the village tank, from thence into the Sydapet river.

Menambakum Tank.—The bund of this tank is cut up in places and requires raising and sectioning, and its two irrigation sluices need repairing. The estimates submitted provide for the above as well as for a new rough-stone flush escape proposed to be built in the southern extremity of the bund. The Menambakum is an isolated tank, drains from the adjacent hills, and surpluses at the south end into the Adyar.

4. The escape for the Kachadimangalum tank should be 100 feet, and that for the tangle 55 feet in length. The general slope of the bed of the surplus channel from the Nandambakum tank should have been stated. The side slopes as shown in section are too steep; they should not be less than 1 to 1. The sketches of the pot sluices proposed for this tank should show the grooves for the shutters in section, and also some rough stone at the inlet and outlet. The discharge in cubic feet per second should be written on the plans. The concrete should be made with soorkee. The escape of the Nandambakum large tank should not be less than 120 feet in length. The ends of the bund which form the wings of Nandambakum tangle escape should be at a slope of not less than $1\frac{1}{2}$ to 1. Rough stone is required at the orifices of the pot sluice. The shutter should be shown. Subject to the alterations above noted, the estimates are recommended for sanction.

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

Proceedings of the Madras Government, Public Works Department, 6th March 1876.

No. 66. ORDER THEREON, 6th March 1876, No. 595.

IRRIGATION, No. 7.
Account.

THE following estimates for works in the Mount Range, forwarded by the Superintending Engineer, Chingleput, are sanctioned, and will be registered and charged to the heads of account shown below:—

				RS.
Irrigation Register, No. 28 I. of 1875-76			Repairing Kachadimangalum Tank. Revenue (Repairs.)	440
Do.,	No. 29 I. of	do.	Do. do. Tangle. Do.	180
Do.,	No. 30 I. of	do.	Do. Mambakum Tank ... Do.	300
Do.,	No. 31 I. of	do.	Do. Nandambakum Tank Do.	375
			New pot sluices, and rough-stone escape Nandambakum Tank. Revenue Extensions and Improvements	300
Do.,	No. 32 I. of	do.	Repairing do. Tangle. Revenue (Repairs.)	255
			New pot sluice rough-stone escape Nandambakum Tangle. Revenue Extensions and Improvements	140
Do.,	No. 33 I. of	do.	Repairing Menambakum Tank. Revenue (Repairs.)	780
			Rough-stone escape do. do. Extensions and Improvements	140

2. The escapes severally noticed in the Note of the Chief Engineer for Irrigation should be lengthened as described therein.

3. The above sanctions have been registered as shown against each work.

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government.

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

Exd. E. C. Shunker.

Spare Copies

I. Form No. 1.

OFFICE OF CHIEF ENGINEER FOR IRRIGATION,

Fort St. George. Madras. 3rd February 1876.

No. 150

Note by the Chief Engineer for Irrigation.

No. 2753
Dated 4th Oct. 1875.
Enclos 33

THE following Estimates from the Mount Range are forwarded by the Superintending Engineer Chingleput with his letter marginally noted :—

Taluq.	Estimate No.	Work.	Amount. Rs.
Chingleput	187	Kachadinangalam Tank	440 — —
do		Kachadinangalam Tanks	180 — —
do		Maunbakam Tank	300 — —
Sydapet		Nandambaukkum large Tank	675 — —
do		Nandambaukkum Tanks	395 — —
do		Menambakam Tank	955 — —

2. The Financial and Hydraulic details of the Irrigation works concerned are exhibited in the following statement :—

I.—Financial Details.

Name of Work.	Ayacut Area.	Assessment.	Average Revenue for 5 years.	Highest Revenue for 5 years.	Expenditure during previous 4 years.	Amount of Estimate		
						Capital.	Revenue.	Total.
	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kachadinangalam Tank	44	157	158	185	Nil	—	440	440
Kachadinangalam Tanks	12	61	57	77	—	—	180	180
Maunbakam Tank	60	206	202	229	—	—	300	300
Nandambaukkum large Tank	56	231	212	235	—	300	375	675
Nandambaukkum Tanks	46	133	101	125	—	140	255	395
Menambakam Tank	154	456	342	417	—	175	780	955

II.—*Hydraulic Details.*

Name of Work.	Catchment Basin Area.	Maximum Supply. Catchment per Second	Maximum Supply. Channels per Second	Length of Escape. Total.	Length of Escape. Effective.	Average Height of Bund. Above F. T. L.	Average Height of Bund. Above M. T. L.	Surplus discharged at M. T. L. per Sec.	Tanks above.
	Sq. M	C. ft.	C. ft.	Ft.	Ft.	Ft.	Ft.	C. ft.	No.
Kachadinangalam tank	1	562	not stated	nil	nil	3	1	0.0	not stated
Kachadinangalam tangle	·5	354	-	E 13	13	3.37	1.37	82.3	"
Manikakam tank	·75	464	"	C 24	20.5	3.67	1.67	164.5	"
Nandambakkum large tank	5·07	6149	"	nil	nil	3	1.5	0.0	1
Nandambakkum tangle	·37	343	"	nil	nil	2.25	·75	0.0	"
Menambakkam tank	·75	553	"	nil	nil	3.25	1.75	0.0	"

NOTE.—The proposed dimensions of escapes and heights of bund are entered in red. The existing dimensions in black. ~~In this MS. the entries in red denote proposed dimensions.~~ The following abbreviations are used:—C.—Calingulah with dam stones. W.—Weir with flush crest. E.—Escape at ground level. B.—Bund of tank.

3. The following is a summary of the work proposed to be carried out

Kachadinangalam tank. This tank was breached in two places and was temporarily repaired. The bank is eroded and the sluice is leaky. It is proposed to raise and section the bank—to cut the bund of the bund for a temporary escape—to turf, plant grass, clear away bushes and repair sluice.

Kachadinangalam tangle. This tank was breached in two places by floods and was temporarily repaired. The estimate submitted is for raising and sectioning the bund, turfing, clearing away bushes, planting grass, resetting end of bund next to the waste-weir sluice, and repairing sluice.

Manikakam tank. This tank was breached and temporarily repaired. The estimate submitted provides for raising and sectioning the bank, planting grass and repairing the calingulah.

Nandambakkum large tank. It is proposed to construct a pucka stone outlet to this tank, to cut a surplus channel and to extend a flood bank out to a drainage channel. A damaged sluice is replaced by a 9" pot sluice; another is proposed in the bottom portion of the bund. The estimate submitted also provides for repairs such as raising and sectioning the bank. The Nandambakkum tank receives the local drainage besides the overflow of the village tanks situated immediately above, and overflows into the Vydapet or Adiyar river.

Nandambakkum tangle. It is proposed to construct a pucka stone sluch escape in the bund of this tangle also to build a pot sluice ~~under a maximum~~. The estimates submitted provide also for repairs such as raising

raising and sectioning the bund, turfing slopes &c. The Nandanthankum Tank receives the drainage of the adjacent hills and surpluses into the village tank, from thence into the Vydaputt river

Menamkakum Tank. The bund of this tank is cut up in places and requires raising and sectioning, and its two irrigation sluices need repairing. The estimates submitted provide for the above as well as for a rough stone flush escape proposed to be built in the southern extremity of the bund. The Menamkakum is an isolated tank, drains from the adjacent hills and surpluses at the south end into the Adyar.

4. The escape for the Kachadurangalam tank should be 100 feet and that for the tangle 65 feet in length. The general slope of the bed of the surplus channel from the Nandanthankum tank should have been stated. The side slopes as shown in section are too steep, they should not be less than one to one. The sketches of the pot sluices proposed for this tank should show the for the shutters in section and also some rough stone at the inlet and outlet. The discharge in

Note for Printer — Redraw the plan and

cubic feet per second should be written on the flume. The concrete should be made with Lyge toak Gravel. The escape of the Nandankakum tank should not be less than 120 feet in length. The inside of the bund which forms the wings of the Nandankakum tangle escape should be at a slope of not less than 1½ to 1. Rough stone should be provided at the orifices of the pot sluices. The shutters should be shown. Subject to the above observations I have noted the estimates are recommended for sanction.

Capt Scott.
Major R.E
Superintending Engineer for Irrigation

To
The Secretary to Government
P.W.D.

Copy to Mr

C.M.R.

Rec'd March 76 B/F 65.

No. 8795. Public Works Dept.

Proceedings of the Madras Government

under date the 6th March 1876.

Read the following:-

From

The Chief Engineer
for Irrigation

(W.C. No. 150 dt. 3rd Feby 1876)

The following estimates
for works in the Mount Range,
forwarded by the superintending
Engineer, Chingleput are sanctioned,
and will be charged to the heads
of account shown below:-

Revision Register No. 283 of 1875	Repairing	Kachatinnagalam Tank	Revenue (Repairs)	Rs. 440
No. 292	do	Kachatinnagalam Supply	do	" 180
No. 308	do	Manchalani Tank	do	" 300
	do	Nandambakkam do	do	" 375
No. 312	New Sluice Escape	do	Capital	" 300
		do	Revenue (Repairs)	" 255
	Repairing	Nandambakkam Supply	Capital	" 140
No. 322	New Sluice Escape	do	Revenue (Repairs)	" 780
	Repairing	Vedambakkam Tank	Capital	" 140
No. 332	Escape	do		

The

2. The escapes annually noticed in the Note of the Chief Engineer for Irrigation should be lengthened as described therein.

Adopted

G.W.

The above Sanitions have been registered as shown against each work.

D.E. Chinglepet
Collector
Ch. E. for I. with 33 Encls
Ex. E. Local
Rev. Depart.
Desps 22 3-76

Comp. 822

FORMER CASES.

Current No. of 187 .

" "

" "

" "

" "

M. WORKS FORM No. 3.

Current No. 1536

From The Chief Engr for Irrign.

No. 150
Dated 3 } Feby 1876.
Recd. 29

Subject:— Note on Estimate for the repair of certain Tanks, Mount Range Chinglepet Distt.

LATER CASES.

Current No. of 187 .

" "

" "

" "

" "

ENCLOSURES. 33

From to

" "

" "

" "

Orders and Proceedings in file.

Department.	No.	Date.	ENDORSEMENTS.		
			Department.	No.	Dated.

Cir 2-3-76.

1580

Govt. of 1876 Madras.

PUBLIC WORKS.

To

The Dt Engineer
Chengleput

Dated

Issued

Read

Encl

G. O. March 1876, No. 515

Nos. 65 - 66

Repairs of certain tanks in the Tirumlr Tamp.t Chingleput Dist — The Estimates for same sanctioned.