M.R.O. 1—10,006—28-2-50.

(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. / ~~B.P. No.~~ 2426	Press / ~~Mis.~~
Dated 13-9-	8876 ~~195~~.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
13th September 1876. *No.* 2,426.

Read the following:—

No. 180-W.

No. 161. *Note by the Chief Engineer for Irrigation.*

No. 29, dated 9th May 1876.

THE following estimates from the Shermadevi Range are forwarded by the Officiating District Engineer, Tinnevelly, with his letter marginally noted:—

Taluq.	Village.	Work.	Amount.
			RS.
Ambasamudrum	Vickramasingapuram.	Singaperumal Tank ...	180
Do.	Alwarkurchi	Odapun Tank	420
Tenkasy	Nelagram	Pasupathiperi Tank ...	810
Do.	Kulasagaraputti ...	Kulasagaraperi Tank ...	1,280

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.	During the previous 4 years.	OUTLAY. Proposed. Capital.	Revenue.	Average Annual Proportion of Charges to Revenue.
	ACRES.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Singaperumal Tank	52	157	133	133	Nil.	...	180	
Odapun Tank	16	90	152	152	...	...	420	
Pasupathiperi Tank	38	285	294	297	...	...	810	
Kulasagaraperi Tank...	121	521	521	600	...	...	1,280	

II.—Hydraulic Details.

Name of Work.	Catchment Basin Area.	Maximum Supply. Catchment per Second.	Channels per Second.	Length of Escape. Total.	Effective.	Average Height of Bund. Above F.T.L.	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.
Singaperumal Tank ...	...	...	28·62	Not stated.	Not stated.	Not stated.	Not stated.	Not stated.	Nil.
Odapun Tank	...	...	60·00	Nil. Not stated.	Nil. Not stated.	3·0 Not stated.	2·0 Not stated.	... ...	...
Pasupathiperi Tank ...	...	...	38·67	Nil. Not stated.	Nil. Not stated.	4·5 Not stated.	3·5 Not stated.	... ...	...
Kulasagaraperi Tank ...	2	711	67·00	Nil. W 36 **W 36**	Nil. 36 **36**	3·75 Not stated. **3·75**	3·0 Not stated. **1·75**	... 500·9 **500·9**	...

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 in each case :—

Singaperumal Tank.—Repairing the bund and sluice.

Odapun Tank.—Raising the bund and repacking the revetment.

Pasupathiperi Tank.—Raising and repairing the bund, and constructing an irrigation sluice.

Kulasagaraperi Tank.—Raising and repairing the bund, and also repairing the weir.

Whereas in the case of the first three tanks no weirs exist or have been provided for, it is explained in the reports that ample means of disposing of surplus over rock or hard gravel exist and may be safely continued.

4. No plans accompany these estimates, but without longitudinal and cross sections of the bunds the quantity of earth required cannot well be estimated, and certainly for the three last tanks on the list such data are necessary.

The revetment for the Kulasagaraperi tank should be pitched at a slope of 45° with a backing 9 inches thick of gravel and a foundation of broken stone. The stones need not be squared as shown in the sketch to the specification. The weir should be of sufficient length to discharge the surplus irrespective of the aid of the vents, unless indeed a supplementary escape can be formed at the flank of the bund. This question should be considered and dealt with before the repairs are taken up.

The District Engineer should be reminded that the instructions already issued require that tanks should, as far as practicable, be dealt with in groups having a natural connection, and that all considerations of revenue and expenditure should extend over the whole group.

With reference to rates it is to be remarked that the charge of Annas 8 per cubic yard for rebuilding the Odapun tank revetment with the old material is too high, judging from experience in other localities, and a reduction should be made.

The following statement shows the proposed distribution of the outlay recommended for sanction, to the debit of the several heads of account involved :—

Name of Tank.	Item of Estimate.	FUND. Capital Ordinary.	Ordinary Agricultural. Original Works.	Ordinary Agricultural. Repairs.	Total for each Tank, &c.
		RS.	RS.	RS.	RS.
Singaperumal Tank ...	Repairing the bund and sluice	...	...	180	180
Odapun Tank	Raising the bund and repacking the revetment	...	...	420	420
Pasupathiperi Tank ...	Rasing and repairing the bund	...	...	670	810
	Constructing an irrigation sluice	...	140	...	
Kulasagaraperi Tank ...	Raising and repairing the bund and also repairing the weir	...	...	1,280	1,280

OOTACAMUND,
7th September 1876.

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

To the Secretary to Government, Public Works Department.

No. 162. ORDER THEREON, 13th September 1876, No. 2,426.

IRRIGATION, No. 20.
Account.

No. 180-W, dated 7th September 1876.

THE following estimates for Irrigation Works in the Shermadevi Range, Tinnevelly District, forwarded by the Chief Engineer for Irrigation with his Memorandum marginally noted, are sanctioned :—

Name of Work.	Item of Estimate.	Fund.	Amount.	Irrigation Registry No.
			RS.	
Singaperumal Tank ...	Repairing the bund and sluice ...	Ordinary Agricultural Repairs.	180	141-I.
Odapun Tank	Raising the bund and repacking the revetment	Do. do. ...	420	142-I.
Pasupathiperi Tank ...	Raising and repairing the bund ...	Do. do. ...	670	1 } 143-I.
	Constructing an Irrigation sluice ...	Do. Original Works.	140	2 }
Kulasagaraperi Tank ...	Raising and repairing the bund, and also repairing the weir	Do. Repairs ...	1,280	144-I.

2. These sanctions are registered as shown above.

(True Extract.)

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

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

Exd. A. Grubert.
Spare Copies

E. I, Form No. 1.

OFFICE OF CHIEF ENGINEER FOR IRRIGATION,

No. 180-W. Ootacamund 7th September 1876.

Note by the Chief Engineer for Irrigation.

No. 29.
Dated 9 May 1876.
Encls. 5

THE following Estimates from the Shermadevi Range are forwarded by the Offg. District Engineer Tinnevelly with his letter marginally noted:—

Taluq.	Village.	Work.	Amount. Rs.
Ambasamudrum	Vickramasingapuram	Singaperumal Tank	180
— Do. —	Alwarkurichi	Odapan Tank	420
Tenkasy	Melagram	Pasupathiperi Tank	810
— Do. —	Kulasagarapatti	Kulasagaraperi Tank	1,280

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.	Outlay. During the previous 4 years.	Outlay. Proposed. Capital.	Outlay. Proposed. Revenue.	Outlay. Proposed. Average annual proportion of Charges to Revenue.
	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Singaperumal Tank	52	157	133	133	Nil	"	180	
Odapan Tank	16	90	152	152	"	"	420	
Pasupathiperi Tank	38	285	294	297	"	"	810	
Kulasagaraperi Tank	121	621	521	600	"	"	1,280	

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.
Singapernmal Tank	"	"	28.62	Not stated		Not stated		Not stated	Nil
Odapun Tank	"	"	62.00	Not stated		Not stated		"	
Paenpathiperi Tank	"	"	36.67	Not stated		4.5	3.5	"	"
Kulasagaraperi Tank	2	711	67.00	W 36	36	Not stated	3.0	"	"
				W 36	30	3.5	1.5	500.9	"

NOTE.—The proposed dimensions of escapes and heights of bund are entered in red. The existing dimensions in black. The following abbreviations are used:—K.—Kalingulah 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 in each case—:

Singapernmal Tank. Repairing the bund and sluice.

Odapun Tank. Raising the bund and repacking the revetment.

Paenpathiperi Tank. Raising and repairing the bund and constructing an irrigation sluice.

Kulasagaraperi Tank. Raising and repairing the bund and also repairing the weir.

Whereas in the case of the first 3 tanks no weirs exist or have been provided for it is explained in the reports that ample means of disposing of surplus over rock or hard gravel exist and may be safely continued.

4. As plans accompany these estimates, but without longitudinal and cross sections of the bunds the quantity of earth required cannot well be estimated, and certainly for the three last tanks on the list such data are necessary.

The revetment for the Kulasagaraperi Tank should be pitched at a slope of 45° with a backing 9" thick of gravel and a foundation of broken stone. The stones need not be squared as shown in the sketch to the specification. The weir should be of sufficient length to discharge the surplus irrespective of the aid of the vents unless indeed a supplementary escape can be formed at the flank

of the bund. This question should be considered and dealt with before the repairs are taken up.

The District Engineer should be reminded that the instructions already issued require that tanks should as far as practicable be dealt with in groups having a natural connection, and that all considerations of revenue and expenditure should extend over the whole group.

With reference to rates it is to be remarked that the charge of annas 8 per cubic yard for rebuilding the Odiapan Tank pertinent with the old material is too high, judging from experience in other localities, and a reduction should be made.

Note for Printer — Red entries in this note are to be printed in Clarendon type — & note in para 2 altered to suit —

E. I. Irrn 201

The following Statement shows the proposed distribution of the outlay recommended for sanction, to the debit of the several heads of account involved :—

Name of Tank.	Items of Estimate.	Fund. Capital Ordinary.	Fund. ~~Extension and Improvements~~ ~~Ordinary~~ ~~Revenue~~ ~~Agricultural~~	Fund. Repairs.	Total for each Tank, &c.
Singapermal Tank.	Repairing the bund & sluice -	"	"	180	180
Odiapan Tank	Raising the bund & repacking the revetment -	"	"	420	420
Paenpatteperi Tank	Raising & repairing the bund -	"	"	670	810
	Constructing an irrigation sluice	"	140	"	
Kulasagaraperi Tank	Raising & repairing the bund and also repairing the weir -	"	"	1280	1280

A. L. Smith

Major R.E.
Dy. Chief Engineer for Irrgn
for Chief Engr for Irrgn.

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

18 P.W.D.
15 SEP 76
No.

From
The Chief Engr. for Irrig.
To
The Secretary to Govt
P. W. D.

Dated 7
Recd. 8 } Sep. 1876

Encls.

R: 180-W.

Irrigation Estimates — Rode submitting for sanction certain — from the Tinnevelly District.

No. 161

Ord 13-9-76
Cir 9.9.76 O.K. Shed 9 Sep

No. 2426 dt 13th Septr 1876

E. I. Form No. 3.

No. 180-W.
dated 7th September 1876

The following Estimates for Irrigation works in the Shermadevi Range, Tinnevelly District, forwarded by the Chief Engineer for Irrigation with his Memo. marginally noted are sanctioned :—

Name of Work.	Item of Estimate.	Fund.	Amount	Irrigation Registry No.
Singaperumal Tank	Repairing the bund & sluice	Ordinary Agricultural Repairs	180	141 I
Odapam Tank	Raising the bund & repacking the revetment	Do - Do -	420	142 I
Pacupathiperi Tank	Raising & repairing the bund	Do - Do -	670 1	143 I
	Constructing an Irrigation Sluice	Do Original Works	140 2	
Kulasegaraperi Tank	Raising & repairing the bund & also repairing the weir	Do Repairs	1280	144 I

2. These sanctions are registered as shown above.

Secy

S. E. Tinnevelly ✓
Collector — do ✓
C. E for — I. with 5 Encls ✓
Ex. P. W. D. ✓
Recd Sept ✓

Desp 30/9/76

6695-41

Govt. of {1876} Madras.

PUBLIC WORKS.

To

Mr. W. C. Linnevally

Dated

Issued

Recd. *Encl.*

G. O., 13th Septr 1876, No. 2426

Nos. 16/2

Tanks. Linnevally

Dr. Estimates for the repairs & improvements to certain — passed.

Cir. 9.9.76