M.R.O. I—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.	2435	Press / Mis.	4876
Dated	13 - 9 -		195—.

Not to be folded or roughly handled

Read the following:—

No. 157-W.

No. 179. *Note by the Chief Engineer for Irrigation.*

No. 1,027, dated 23rd June 1876.

THE following estimates from the No. 3 or Chingleput Range are forwarded by the Superintending Engineer, Chingleput, with his letter marginally noted.

Taluq.	Village.	Work.	Amount.
			RS.
Conjeveram	Govindavady	S. No. 180, V large Tank	3,200
Do.	Do.	Do. V Chittary Tank ..	1,645

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. Original Works.	OUTLAY. Proposed. Repairs.	OUTLAY. Proposed. Average Annual proportion of charges to Revenue.
	ACRES.	RS.	RS.	RS.	RS.	RS.	RS.	PER CENT. RS.
Govindavady large Tank	574	2,555	2,346	2,544	Nil.	320	2,880	27·2
Do. Chittary Tank	134	696	878	979	..	290	1,255	35·2
Total ..	708	3,251	3,224	3,523	..	610	4,135	46·1

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.
Govindavady large Tank ..	6·0	1,857	..	W 60+36 / W 96 / E 273	96 / 369	5·65 / 7·45	4·15 / 6·04	354·5 / 1,715·8	2
Do. Chittary Tank ..	5·0	1,644	992	W 38+31 / W 22+31 / E 285	69 / 338	3·00 / 5·00	1·50 / 3·50	237·1 / 1,499·8	1

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. S.—Revenue Survey. N.V.—Village.

3. The following is a summary of the work proposed to be carried out in each case:—

Govindavady Large Tank.—Constructing a loose stone escape, repairing the bund and five irrigation sluices, lowering the crests of the northern and southern weirs to

F.T.L., and also closing the vents in the body wall of the latter. The earthworks provided for are much in excess of the requirements; the top of the bund being shown in the longitudinal section at 6 feet above M.W.L., whereas 3 feet will be sufficient. The turf bund shown in the section II in the centre of the proposed new bund at the south end is altogether objectionable if intended as a substitute for a puddle wall, and the depth of water here being only 3·67 feet, an ordinary bund 3 feet instead of 5 feet above M.W.L. will be ample.

Govindavady Chittary Tank.—Constructing a loose stone escape, reconstructing an irrigation sluice, repairing the bund, closing the breaches and repairing an irrigation sluice. It is also proposed to lower the crests of both the existing weirs and to reduce the length of one of them from 38 to 22 feet and to build a new wing wall.

The Govindavady tanks are supplied from McLean's channel by a channel taking off at the Terumalpur dam. It is proposed to construct a head sluice to this channel to regulate the supply and secure the tanks which command the Conjeveram branch of the South Indian Railway. The plan will have to be returned for revision.

4. It is intended to use a portion of the stone of the existing revetments of the two tanks for the purpose of constructing the surplus escapes and to protect the denuded slopes by planting grass and turfing. This measure appearing to be one of doubtful economy, the Superintending Engineer was requested to report what would be the cost of conveying the stone required by railway from the nearest quarry adjoining the line which itself runs along the base of the bund of the Govindavady large tank. About 1,000 cubic yards of stone would be required, and the addition to the estimates involved by the use of new stone would, it is stated by Colonel Moberly, be Rs. 1,685. It would have been useful if an analysis of the items making up this sum had been given. It is doubtful whether the facilities which must now be often afforded by the railway for the carriage of building materials are fully appreciated or taken advantage of by officers of the department, and it would be as well to draw their attention to the subject. In the present case it is not proposed that the discretion of the Superintending Engineer should be interfered with.

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, Ordinary Agricultural.		Total for each Tank, &c.
		Original Works.	Repairs.	
		Rs.	Rs.	Rs.
Govindavady large Tank ..	Constructing a dry stone escape	320	..	3,200
	Repairing the bund	..	2,675	
	Repairing five irrigation sluices	..	185	
	Repairing the southern and northern weirs	..	20	
Govindavady Chittary Tank ..	Constructing a dry stone escape	290	..	1,545
	Reconstructing an irrigation sluice	..	190	
	Repairing the bund and closing the breaches ..	..	865	
	Repairing an irrigation sluice	..	18	
	Repairing the two existing weirs	..	182	

Ootacamund,
30*th August* 1876.

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

To the Secretary to Government, Public Works Department.

No. 180. Order thereon, 13th September 1876, No. 2,435.

IRRIGATION, No. 21.

Account.

No. 157-W, dated 30th August 1876.

The following estimates for Irrigation Works in the No. 3 or Chingleput Range, Chingleput District, forwarded by the Chief Engineer for Irrigation with his memorandum marginally noted, are sanctioned.

Name of Work.	Item of Estimate.	Fund. Ordinary Agricultural.	Amount.	Irrigation Registry No.
			Rs.	
Govindavady large Tank.	Dry stone escape	Original Works ..	320	1
	Repairing the bund	Repairs	2,675	2
	Repairing five irrigation sluices ..	Do.	185	3 } 145 I.
	Repairing the southern and northern weirs	Do.	20	4
Govindavady Chittary Tank.	Dry stone escape	Original Works ..	290	1
	Irrigation sluice	Repairs	190	2
	Repairing the bund	Do.	865	3 } 146 I.
	Irrigation sluice	Do.	18	4
	Repairing two weirs	Do.	182	5

2. These sanctions are registered as shown above.

(True Extract.)

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

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

E. I. Form No. 1.

OFFICE OF CHIEF ENGINEER FOR IRRIGA

No. 157-W. Dated camp 30th August 187

Note by the Chief Engineer for Irrigation.

No. 1027
Dated 25 June 1876.
Encls. 17

THE following Estimates from the N°3 or Chingleput Range are forwa
by the Superintending Engineer Chingleput with his
marginally noted:—

Taluq.	Village.	Work.	Rs.	Amou
Conjeveram	Govindavady	S. N° 180 V. large Tank	"	320
do.	do.	do. V. Chittary do.	"	134

2. The Financial and Hydraulic details of the Irrigation works concer
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.	Proposed. Original work.	Repairs	Average annual
	Acres.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Govindavady large Tank	574	2555	2346	2544	Nil	320	2330	2
do. Chittavy do.	134	696	878	979	do.	290	1255	3
Total	718	3251	3224	3523	"	610	4135	4

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.
Govindavady large Tank	6·	1857	"	W 60+36	96	5·65	4·15	3525	2
Do Chittavy do.	5·	1644	992	W 38+1	69	3·00	1·50	257·1	1

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. S. Revenue Survey No. V. Kellagu

3. The following is a summary of the work proposed to be carried out in each case—:

Govindavady large Tank.— Constructing a loose stone escape, repairing the bund and five irrigation sluices, lowering the crests of the Northern and Southern weirs to F.T.L. and also closing the vents in the body wall of the latter. The earthworks provided for are much in excess of the requirements the top of the bund being shewn in the longitudinal section at 6 feet above M.W.L. whereas 3 feet will be sufficient. The turf bund shewn in the Section II in the

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

centre of the proposed new bund at the South end is altogether objectionable if intended as a substitute for a puddle wall and the depth of water here being only 3·67 feet an ordinary bund 3 feet instead of 5 feet above MWL will be ample

Govindavady Chittavy Tank. Constructing a loose stone escape, reconstructing an irrigation sluice, repairing the bund, closing the breaches and repairing an irrigation sluice. It is also proposed to lower the crests of both the existing weirs and to reduce the length of one of them from 38 to 22 feet and to build a new wing wall

The Govindavady tanks are supplied from M'Leans channel by a channel taking off at the Tirumalpur dam. It is proposed to construct a head sluice to this channel to regulate the supply and secure the tanks which command the Conjeveram branch of the South Indian Railway. The plan will have to be returned for revision It is intended to use a portion of the stones of the existing revetments of the two tanks for the purposes of constructing the surplus escapes and to protect the denuded slopes by planting grass & turfing. This measure appearing to be one of doubtful economy the Superintending Engineer was requested to

report what would be the cost of conveying the stone required by railway from the nearest quarry adjoining the line which itself runs along the base of the bund of the Govendavady large tank. About 1000 Cyds of stone would be required and the additions to the estimates involved by the use of new stone would, it is stated by Colonel Mohierly, be Rupees 1685. It would have been useful if an analysis of the items making up this sum had been given. It is doubtful whether the facilities which must now be often afforded by the railway for the carriage of building materials are fully appreciated or taken advantage of by officers of the department and it would be as well to draw their attention to the subject. In the present case it is not proposed that the discretion of the superintending Engineer should be interfered with.

The following statement shews 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 Ordinary Agricultural: Original works	Repairs	Total for each Tank
Govendavady large Tank	Constructing a dry stone escape	320	.	3260
	Repairing the bund	.	2675	
	Repairing & irrigation sluices	.	185	
	Repairing the Southern Southern weirs	.	20	
Govendavady Chittavary Tank	Constructing a dry stone escape	290	.	1545
	Reconstructing an irrigation sluice	.	190	
	Repairing the bund & closing the breaches	.	865	
	Repairing an irrigation sluice	.	18	
	Repairing the two existing weirs	.	182	

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

To
The Secretary to Government
Public Work Department

1876 P.W.D.
15SEP76
No. 1179

From
The Chief Engineer for Irrigation
To
The Secretary to Govt
P. W. D.

Dated 30 August } 1876.
Recd. 8th Sept. }

Encls. 4

No. 157-W.

Corondavady large Chittary Tanks—
Chingleput District—Not submitting
for sanction, with remarks, Estimate for
Rs. 3200 & 1545 for certain works to
be ——.

No. 179-180

Recd 13.9.76

P.W. Sheil Esqre

E. I. Form No. 8.

No. 2435 d/ 13th Sept. 1876

No. 157 W.
dated 30th August 1876.

The following Estimates for Irrigation works in the No 3 or Chingleput Range, Chingleput 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.	
Corondavady large Tank	Dry stone escape	Original Work	320	1	1457
	Repairing the bund	Repairs	2675	2	
	Repairing three irrigation sluices	Repairs	135	3	
	Repairing the Southern and Northern weirs	Repairs	20	4	
Corondavady Chittary Tanks	Dry stone escape	Original Work	290	1	1461
	Irrigation sluice	Repairs	190	2	
	Repairing the bund	Repairs	865	3	
	Irrigation sluice	Repairs	18	4	
	Repairing 2 weirs	Repairs	182	5	

2 These sanctions are registered as shown above.

Recd

D.E. Chingleput ✓
Collector do ✓
C. Eng for I. with 4 Encls
Ex P. Secs. ✓
Reg sept ✓

Desp 4/10/76

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Govt. of {1876} Madras.

PUBLIC WORKS.

To The D. C. Chengleput

Dated

Issued

Recd. Encl.

G. O., 18 Sept. 1876, No. 2435

Nos. 179-180

Tanks - Chingleput

Estimates for repairs & improvements to certain ——— Tanks