

Public Works (1898) Department.

G.O., No. 586
587

DATED 29 July '98

Seriyar Project [Despatch Abstract.] Estimates aggregating Rs 21410, connected with the Seriyar Distribution, sanctioned, with remark on copy of the order ordered to be forwarded to the Govt of India.

Seriyar Project. Forwarding copy of the Sanctioning, with remark, estimates aggregating Rs 21410, connected with the Seriyar Distribution.

Forwarding copy of Proceedings sanctioning, with remark, estimates aggregating Rs. 21,410, connected with the Periyár distribution.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.

READ—the following papers:—

From Lieut.-Col. O. V. BODDY, R.E., Superintending Engineer, VI Circle, to the Chief Engineer for Irrigation, dated Kodaikānal, 5th May 1898, No. 657 M.D.

* Increased to Rs. 8,790 in the office of the Chief Engineer for Irrigation owing to provision having been made for revetting the slopes of the channel at the pipe culvert.

I have the honour to forward, for your approval and sanction, an estimate amounting to Rs. 8,750 * for excavating the tail end of Pappagudi offtake branching from the 9th branch channel, and constructing the necessary masonry works in the same.

2. The offtake at present ends in an inam tank, and in order to supply Government lands without the intervention of inam tanks, the extension now estimated for is proposed. For purposes of irrigation ten pipe sluices of 6 inches diameter, two of 9 inches diameter and two masonry sluices having vents of $1\frac{1}{2}$ feet square, are provided.

3. The two 12-inch culverts are proposed to prevent the banks from becoming water-logged and the lands from being kept under submergence. The quantity of drainage to be disposed of is very small.

4. Five byewashes which are spaced over a length of $1\frac{1}{2}$ miles are designed to carry the drainage of $\frac{1}{2}$ of a square mile which is considered a sufficient provision.

5. A considerable portion of the channel (*vide* longitudinal section) is in heavy embankment, but this is quite unavoidable.

6. Where the line of channel crosses the road or cart-tracks, the banks will be sloped with a gradient of 1 in 5, and bridges are not considered to be necessary. The mileages of all these works are shown in the accompanying tabular statement which shows hydraulic information in addition.

7. The work is classed as remunerative, and the expected return on the whole ayacut, which is 1,500 acres, is estimated to Rs. 7,500 at Rs. 5 per acre.

8. The Executive Engineer reports that the quarries are near the line and the rates provided are therefore sufficient.

9. The estimate is recommended for sanction.

ENCLOSURES.

REPORT to accompany the estimate for excavating the tail end of Pappagudi offtake and constructing masonry works in the same.

Amount of estimate RS. 8,790

AYACUT, 1,500 ACRES.

Tanks commended and to be maintained.

1. Elamanur Peria Kommoyi No. 213.
2. Kolikudi Peria Kommoyi No. 203.
3. Pattappanaiyur Kommoyi No. 212.
4. Elampallam tank (not in Government Order as it was then thought it could not be easily commanded).

Tanks to be abandoned.

1. Ponnangulam (not in Government Order).
2. Elamanur Pudu Kommoyi No. 214.
3. Kolikudi Pudu Kommoyi No. 209.
4. Andi odaikulam No. 210.
5. Achangulam.
6. Kurunjapallam Kommoyi. } not in Government Order.
7. Sattamuttu.

Length of channel, 4 miles 3,380 feet.
Length maintained, 3 miles 4,260 feet.

Pappagudi offtake at present ends in an inam tank (Poolangulam tank) and consequently the Government tanks lower down could not be supplied with Periyar water except through a group of inam tanks.

It is therefore proposed to continue the tail end of the offtake along the line shown in the accompanying survey plan and construct the necessary masonry works for irrigating the Government dry lands and the mamool wet lands.

This channel will be maintained up to 201st chain.

The work will be carried out in accordance with the standard specification current in the department.

(Signed) T. W. S. SMYTH,
Ex. Engineer, Special Periyar Works.

23rd March 1898.

Estimate Form—Abstract—Classified.

Sub-head.	Names of works.	Amount of estimate for individual work.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.
1	2	3	4	5	6
	CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.	RS.	RS.	RS.	RS.
	49. IRRIGATION WORKS.				
	Periyar Project.				
	Open Capital Account.				
	3. Distributaries.				
	9th Branch Channel.				
	*Remunerative Work.				
	Excavating the tail end of Pappagudi offtake and constructing masonry works in the same.				
2. Land	1. Compensation for land	829	829		
3. Works	2. Drop of 4 feet at 0/1100	400			
	3. Do. at 1/220	400			
	4. Drop of 6 feet at 1/620	480			
	5. Two 12-inch pipe culverts at 0/2100 and 0/3700, each Rs. 100	240			
	6. Three 10-ft. cross drainage weirs, each Rs. 80	240			
	7. Two 20-ft. cross drainage weirs, Rs. 115 each	230			
	8. Two masonry sluices $1\frac{1}{2} \times 1\frac{1}{2}$, Rs. 95 each	190			
	9. Two 9-inch pipe sluices, Rs. 70 each	140			
	10. Ten 6-inch pipe sluices, Rs. 45 each	450			
	11. Two feet tail drop	140			
4. Earthwork	12. Excavating tail channel and distributaries	4,989	4,989		
5. Miscellaneous	13. Demarcation stones	62	62		
	Total I. Works			8,790	
	II. Establishment			1,831	
	III. Tools and plant			9	
	Total Estimate				10,630

(Signed) O. V. BODDY, Lieut.-Col., R.E.,
Supg. Engineer, VI Circle.

5th May 1898.

From Lieut.-Col. O. V. BODDY, R.E., Superintending Engineer, VI Circle, to the Chief Engineer for Irrigation, dated Kodaikānal, 13th May 1898, No. 696 M.D.

I have the honour to forward, for your approval and sanction, a revised estimate amounting to Rs. 3,840 for excavating distributary and field channels from the left sluice above drop No. 14 in the 9th Branch channel.

2. The estimate is submitted in supersession of that for Rs. 3,090 sanctioned in G.O., No. 572 I., dated 23rd June 1897, and the excess amount now requiring sanction is Rs. 750. The necessity for the estimate is explained in the report attached to the estimate. It is reported that Government waste lands to the extent of 41 acres lying between 6th and 8th furlongs cannot be irrigated under the existing arrangement. It is therefore proposed to raise the water level sufficiently by the introduction of a 2 feet drop in the 6th furlong making the bed level of the reach above this drop level. The channel below this drop will remain as originally designed, that is, with a fall of 1 in 1,000. At the tail end another 2 feet drop is now proposed. To make provision for these additional works the original estimate has been revised, and for the reasons given in the report, the Executive Engineer's proposal is approved and the estimate recommended for sanction.

ENCLOSURES.

No. 143 E.

REPORT to accompany the Revised Estimate for excavating Distributary and Field Channels from the Left Sluice of Drop No. 14, 9th Branch Channel.

	RS.
Amount of revised estimate	3,840
„ of original estimate	3,090
Excess	750

The revised estimate provides for building a 2-feet drop at the 6th furlong and raising the banks for a length of 2 furlongs above.

The lands between the 6th and 8th furlong were Government waste lands now sold, and it is found impossible to irrigate them under existing conditions.

The area not at present commanded is 41 acres and was sold for over Rs. 100 per acre, the total area of 218 acres bringing Rs. 24,537.

The income to be derived from the interest on this sum and water-tax will be nearly Rs. 500. So the extra work is well worth doing.

A 2-feet tail drop of the same design is also provided.

15th March 1898.

(Signed) T. W. S. SMYTH,
Ex. Engr., Spl. Periyār Works.

Estimate Form—Abstract—Classified.

Sub-head.	Names of Works.	Amount of estimate for individual work.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.
1	2	3	4	5	6
	CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.	RS.	RS.	RS.	RS.
	49. IRRIGATION.				
	Periyār Project.				
	Open Capital Account.				
	3. Distributaries.				
	9th Branch Channel.				
	Remunerative Works.				
	Excavating Distributary and Field Channels from Left Sluice above drop No. 14.				
	Revised Estimate.				
2. Land ..	1. Compensation for land ..	138	138		
3. Works ..	2. Constructing 9-inch pipe sluice at 300 feet ..	90			
	3. Do. do. at 2,280 feet ..	50			
	4. Do. 3-ft. drop at 2,300 feet ..	150			
	5. Do. Melur road culvert at 2,500 feet ..	370			
	6. Do. two masonry sluices at 2,000 feet and 5,300 feet, each 56 rupees ..	112			
	7. Do. four 6-inch earthenware pipe sluices. 6-ft. drop at 5,300 feet ..	120			
	8. Do. two 2-ft. drops at 4,000 feet and tail end, each Rs. 110 ..	390			
	9. Do. ..	220			
4. Earthwork ..	10. Earthwork cutting distributary ..	2,180	1,502		
5. Miscellaneous.	11. Demarcation stones ..	20	2,180		
	Total, I. Works ..	..	..	3,840	
	II. Establishment ..	..	..	851	
	III. Tools and plant ..	..	..	9	
	Total Estimate ..	..	..	..	4,700

13th May 1898.

(Signed) O. V. BODDY, Lieut.-Col., R.E.,
Suptg. Engineer, VI Circle.

From Lieutenant-Colonel O. V. BODDY, R.E., Superintending Engineer, VI Circle, to the Chief Engineer for Irrigation, dated Kodaikānal, 18th May 1898, No. 720 M.D.

I have the honour to forward, for your approval and sanction, an estimate, amounting to Rs. 8,770,* for excavating XI and XI A Distributary of 12th Branch channel and constructing the necessary masonry works.

2. The head sluice is situated at the 10th mile of the 12th Branch channel. The length of the distributary channels is 4 miles and 4,180 feet, of which 3 miles and 2,560 feet will be maintained by Government.

3. A survey showing the course of these distributaries accompanies the estimate; also a statement to indicate the position of the masonry works and in which the hydraulic details of these channels are given.

4. The area to be commanded by the channels is 1,500 acres and the increase of revenue expected is roughly Rs. 7,500 at Rs. 5 an acre. The works are classed as remunerative and the probable date of completion of the works will be 31st March 1899.

5. The rates have been revised by the Executive Engineer and are considered fair; the estimate is recommended for sanction.

ENCLOSURES.

REPORT to accompany the estimate for excavating XI and XI A Distributary, 12th Branch Channel.

Amount of estimate RS. 8,780

The channel takes off at 10 miles of the 12th Branch channel and is intended to irrigate about 1,500 acres besides filling in the tanks, Sattan Endal, Siliandaikudi Kommoyi and Arangudi Endal proposed to be maintained.

At 139th chain, where the distributary bifurcates, there will be a dividing dam to regulate the water. One of these is XI A Distributary irrigating 600 acres. Part of the banking of this branch distributary will be formed from the spoil earth available from the side drainage channel (*vide* survey plan accompanying) to pass the drains of Sinnapanian Endal through which it runs.

Necessary drops and sluices are provided in the estimate. The works will be carried out in accordance with the standard specification current in the department.

2nd November 1897.

(Signed) A. JOYCE,
Ex. Engineer, Special Periyár Works.

Estimate Form.—Abstract—Classified.

Sub-head.	Names of works.	Amount of estimate for individual work.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.
1	2	3	4	5	6
	CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.	RS.	RS.	RS.	RS.
	49. IRRIGATION WORKS.				
	Periyár Project.				
	Open Capital Account.				
	3. Distributaries.				
	XI. Distributary at 10th mile, XII Branch Channel.				
	Remunerative Work.				
	Excavating XI and XI-A Distributary from 10th mile, 12th Branch Channel.				
2. Land	1. Compensation for land	677	677		
3. Works	2. Head sluice XI distributary at 10th mile, 12th branch channel	380			
	3. Five 6-ft. falls in the XI distributary, each Rs. 470.	2,350			
	4. One 6-ft. fall, small, in the XI-A distributary	435			
	5. Two tail drops, each Rs. 70	140			
	6. Dividing dam at 139 chain, XI distributary	200			
	7. Twelve 6-inch pipe sluices in 11 and 11-A distributaries, each Rs. 55	660			
	8. Two 9-inch pipe sluices in the XI distributary, each Rs. 75	150			
4. Earthwork	9. Excavating 11 and 11-A distributaries	3,746	4,315		
5. Miscellaneous	10. Demarcation stones	42	3,746		
	Total, I. Works			8,780	
	II. Establishment			1,864	
	III. Tools and plant			6	
	Total Estimate				10,650

18th May 1898.

(Signed) O. V. BODDY, Lt.-Col., R.E.,
Supg. Engineer, VI Circle.

No. 192 I.

Note by the Chief Engineer for Irrigation.

The marginally-noted estimates connected with the Periyár distribution are submitted for sanction.

- (1) Ninth branch channel.—Revised estimate for distributary from left sluice above drop No. 14 ... 3,840
 - (2) Ninth branch channel.—Extending Pappagudi offtake ... 8,790
 - (3) Twelfth branch channel.—Excavating distributaries XI and XI-A ... 8,780
2. Of the area under the first of these works, 218 acres of Government waste were sold for Rs. 24,537. It was subsequently found that 41 acres, which were sold for over Rs. 100 an acre, are not at present commanded, and in order to command this land it is proposed to re-grade the channel from 2,200 feet where there is a 3-foot drop to 4,000 feet where a 2-foot drop is to be constructed. This will necessitate raising the bank in this length. The bed will by degrees adjust itself to the altered surface fall. Another small drop is proposed at the tail end of the channel. The excess over the estimate sanctioned in G.O., No. 572 I., dated 23rd June 1897, will be Rs. 750.

3. The second estimate is for carrying the Pappagudi offtake of the 9th branch channel round a group of inam tanks and extending it to supply 1,500 acres (including present wet) of Government land. This land cannot now be irrigated until water has filled and surplused from the inam tanks. The channel will unfortunately be very expensive, nearly Rs. 6 per acre irrigated.

4. The last estimate is for distributaries from the 12th branch channel to supply 1,500 acres. Apparently much of this area is already irrigated from over twenty small tanks which are to be abandoned or at least lowered, and three which are to be retained.

The Superintending Engineer's attention will be drawn to the provision for pipe sluices in the first reach which appear insufficient either in number or size for the area it is contemplated to irrigate. Another point requiring attention in the designs, both for this and other channels, is the excessive height of the steps in the foundations of wings of drops. This is always a dangerous system of construction where there is any appreciable head of water and when it is resorted to the steps should not exceed two or three feet and the excavation should be completely filled with masonry, with concrete by preference.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

23rd June 1898.

ORDER—No. 586 I., dated 29th July 1898.

The estimates referred to in the foregoing note by the Chief Engineer for Irrigation are sanctioned. The attention of the Superintending Engineer is directed to the remarks of the Chief Engineer for Irrigation regarding the sluices and drops.

2. This sanction is registered as No. 57 I. of 1898-99 and will expire on the 31st March 1900.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. 587 I., dated 29th July 1898.]

(True Extract.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, VI Circle, with enclosures. 7
" Examiner, Public Works Accounts.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

8

No. 586 I., 29TH JULY 1898.

ENDORSEMENT—No. 587 I., dated 29th July 1898.

Forwarded.

(By order.)

(Signed) J. C. LARMINIE,
Ag. Joint Secy. to Government,
Irrigation Branch.

Under date the

Read the following

Estimate for excavating a distributary
+ full channels - Periyar Project

From Supp Engr, VI Cutch, No 696 in D,	4.13.5.98
From do	657 in D, 4.5.5.98
From do	720 in D, 4.18.5.98

Note by the Chief Engr for
Irrigation - No 192 J & 13.6.98
No 586 I. of 29.7.98

Issue

7.7.98

W.H.

I

The estimates

referred to in the
foregoing note by
the Chief Engr for
Irrigation are sanc-
tioned.

2. This sanction
is registered as No.
57. I of 1898-99 &
will expire on the
31st March 1900.

3. Ordered that
a copy of these Passes
be forwarded to
the Govt of India
for

The attention of the Sup^r Engr.
is directed to the remarks of
the Chief Engr. for irrigation
regarding the ~~attempts~~ sluices
and drops—

Sanctioned R.H.

6.7.98

for information.

Endorsement ¹⁶ 5872729.7.28

Forwarded.

2/2/58

W.H.
4.7.98

13/8/96

To The Chief Eng for Inspection
Supp Eng. 17 Circa of the Encls.
24 9.42

100

E. J. Form No. 1-600-1-11-97

Public Works (1898) Department.

CURRENT No. 5800.

from the Chief-Eng
for Inspr

Order

No. 192 J

Dated 23-6-98

Received 3 11.7.1898

Registered

Enclosures ~~82~~^{82*} (23 plans)

Spare copies

SUBJECT.

Periyar Distribution
Estimates amounting
to Rs 21410 connected
with the — note recom-
—mending for sanction
certain —

BACK PAPERS.

FURTHER PAPERS.

No. 192. I 29 23. 6-28

Note by the Chief Engineer for Irrigation

The marginally noted estimates connected

1. 9th Branch Channel. Revised estimate for Distributary from left sluice above Drop No. 14. Rs. 3840
2. 9th Branch Channel. Extending Pap-pagudi offtake Rs. ⁸⁷⁹⁰⁰~~87500~~
3. 12th Branch Channel. Excavating Distributaries XI and XI A. Rs. ⁸⁷⁷⁰⁰~~87400~~

subsequently found that 41 acres which were sold for over Rs 100 an acre are not at present command-
-ed and in order to command this land it is proposed to regrade the channel from 2200 feet where there is a 3 ft drop to 4000 feet where a 2 ft drop is to be constructed. This will necessitate raising the bank in this length. The bed will lay degrees adjoin itself to the altered surface fall. Another small drop is proposed at the tail end of the channel. The excess over the estimate sanctioned in G.O. No. 572 I, dated 2nd June 1897, will be Rs 750.

3. The second estimate is for carrying the Pahlgundi

Pappagudi offtake of the 9th Branch Channel round a group of ^{Inam} ~~small~~ tanks and extending it to supply 1500 acres (including present wet) of Government land. This land cannot now be irrigated until water has filled and surplused from the inam tanks. The channel will unfortunately be very expensive, nearly Rs 6 per acre irrigated.

4 The last estimate is for distributaries from the 12th Branch Channel to supply 1500 acres. Apparently much of this area is already irrigated from over 20 small tanks which are to be abandoned or at least lowered and 3 which are to be retained.

The Superintending Engineer's attention will be drawn to the provision for pipe sluices in the first reach which appear insufficient either in number or size for the area it is contemplated to irrigate. Another point requiring attention in the designs both for this and other channels is the excessive height of the steps in the foundations of wings of drops. This is always a dangerous system of construction where there is any appreciable head of water and when it is resorted to the steps should

Should not exceed two or three feet and the excavation should be completely filled with masonry, with concrete by preference

W. Hughes

Chief Engineer for Irrigation

Rs
42
58

To.

The Joint Secretary to Government
P. W. D. Irrigation Branch

These estimates should
not have been obtained. They
must be treated as approximate.

23/8 Mo

Note by the Chief Eng for
Irrigation

The marginally noted estimates
connected with the Pappagudi distribution
are submitted for sanction.

1. 9th Branch Channel. Revised Est.
for Distributing from left channel
above drop No 14 - Rs 3840
2. 9th Branch Channel. Extending
Pappagudi off take Rs 2750
3. 10th Branch Channel. Cross
Drainage works in Chinimukh
off take Rs 3570
4. 12th Branch Channel.
Extending Distributors
x1 and x1A - Rs 2770

With regard to the
2. Of the area under the fruit of these
works 218 acres of Govt. waste was
sold for Rs 24537. It was subsequently
found that 41 acres which were
sold for over Rs 1000 an acre are
not at present commanded and
in order to command them land it
is proposed to regrade the channel
from 2200 ft where there is a
3 ft drop to 4000 ft where a
2 ft drop is to be constructed. They
regrading will be effected with
renewable raising the banks in their
length. The best rule by degrees
adjust itself to the altered surface
fall. Another small drop is
proposed at the tail end of the
channel. The 4th estimate is
estimated sanctioned on 20. 12. 5721
of 23 June 1897 with Rs 750.

3. The second estimate is for carrying
the Pappagudi off take of the 9th
Branch Channel round a group of
main tanks and extending it to supply

1500 acres (including present wet
of government land. This land
cannot now be irrigated until
water has filled and displaced
from the main tanks. The
channel will unfortunately be very
expensive, nearly Rs 6 per acre
irrigated.

4. The third estimate is for work
which should have been provided
for in the estimate for the 10th
Branch channel.

5. The last estimate is for
distributaries for the 12th
Branch channel to supply
1500 acres. Apparently
most of this area is already
irrigated from over 20 small
tanks which are to be abandoned
or at least lowered and 3
which are to be retained. The
Sup^r Engineer's attention will be
drawn to the provision for proper
stones in the first reach which
appears unsatisfactory either in
numbers or size for the area it
is contemplated to irrigate. Another
point requiring attention in the
designs both for this and other
channels is the excessive height
of the steps in the foundations of
walls of drops. This is always
a dangerous system of construction
where there is any appreciable head
of water and when it is resorted
to the successive steps should not
exceed ten or three feet and the
excavation should be completely

filled with masonry, with
curb by preference

23.6.98 MM

C.E.D.
21-5-9

Public Works (1898) Department.

CURRENT No. 48 and

Order

SI
May this be sanctioned
after check
H.S.
22/6.

From

The Sup^r Engineer
B. Circle

No. 720. D.D.

Dated 18th May 1898

Received 21 — 80 —

Enclosures 19. (10 plans)

Spare copies

SUBJECT.

X1. & X1.A. Distributary
of 12th Branch Channel
Forwards for sanction
an bill of Rs 8770 for
excavating the — and
masonry works.

At check the
estimate

Accepted

The estimates have been
checked, increased from Rs 8770 to
Rs 8,780, owing to raising the side
walls of the tail drops by 6" wide
Also remarks on plans of tail drop

30/6/98

30-6-98

21

No. 720. L. D.

Kodai Kanah
Trichinopoly,
6TH CIRCLE,
18th J

18th May 1898.
2/20.

Lt Col. O. V. Boddy, R.E.
Superintending Engineer,

6th Circle.

The Chief Engineer,

for Irrigation

SIR,

- 1. Curves.
- 3. Shuts Long. Section
- 6. Plans of masonry, zone
- 7 Individual Dikes
- 1. G. Lake with report
- Mileage table tea
- 1. Classified abstract

+ Increased to Rs 8700 in the office of the Chief Insp. for negotiation owing to provision having been made for raising the side walls of the tail drops by 6".

I have the honor to forward for
your approval and sanction an esti-
mate amounting to \$ 8,770 for ex-
cavating XI & XI A Distributary of
12' Branch Channel and Constructing
the necessary masonry works.

2. The Head sluice is situated at the 10 mile of the 12 Branch Channel. The length of the distributary Channels is 4 miles and ⁴¹⁸⁰~~4280~~ ft, of which 3 miles and ²⁵⁶⁰~~2460~~ ft will be maintained by Government.

3. A survey showing the course of these distributaries, accompanies the estimate, also a statement to indicate the position of the masonry works and in which the hydraulic details of these channels are given.

CR
10/5/98

Public Works (1898) Department.

CURRENT No. 44

Order

It may thus be said
after check.

From

The Supy Engineer
Bl. Circle

No. 657. L.D.

Dated 5th May 1898.

Received

Enclosures 21. (Sent Separately)

Spare copies 1 (10 plans)

SUBJECT.

Tail end of Pappagudi
offtake. Forwards for
sanction on bill of Rs 8750
for excavating the
branching from the
main branch channel
to CR to check
the stream.

10/5/98

10/5/98

The estimates have been checked,
and increased from Rs 8750 to
8790, owing to provision having
been made for revetting the
slopes of the channel at the
Pipe culvert. vide E's remarks
on the plans.

Sh.
29/5/98
10/5/98

4. The area to be commanded by
the channels is 1500 acres and the
increase of revenue expected is
roughly Rs 7500 at Rs 5 an acre. The
works are classed as remunerative
and the probable date of completion
of the works will be 31 March 1899.

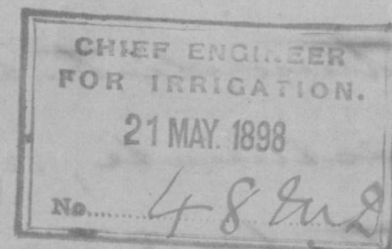
5. The rates have been revised by
the Executive Engineer and are
considered fair; the estimate is re-
commended for sanction.

I have the honor to be
Sir,

Yours truly &c
Sd/-

H. B. D. M. L. S. R. S.

Supy Engineer, Bl. Circle



10/5/98
5801/98

10/5/98

BACK PAPERS.

FURTHER PAPERS.

ESTIMATE FORM--ABSTRACT--CLASSIFIED.

Sub-head.	Names of Works.	Amount of Estimate for individual Work.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each main head.	REMARKS.
1	2	3	4	5	6	7
	<u>Capital Expenditure not charged to Revenue</u>					
	<u>49 Irrigation</u>					
	<u>Periyar Project</u>					
	<u>Open Capital account</u>					
	<u>3- Distributaries</u>					
	<u>9th Branch Channel</u>					
	<u>Remunerative works</u>					
	Excavating distributary & field channels					
	from left sluice above drop No 14.					
	<u>- Revised Estimate.</u>					
Land-1.	Compensation for land	138				
			138			
Works 2.	Constructing 9" pipe					
	sluice at 300 feet	90				
3	Do Do at 2280 ft	50				
4	Do - 3 feet drop at 2300 feet	150				
5	Do Melur road culvert at 2500 feet	370				
6	Do Two masonry sluices at 2000 ft & 5300 ft each 56 Rs.	112				
7	Do Four 6" earthen ware pipe sluices	120				
8	Do 6 feet drop at 5300 feet	390				
	Carried over	1282	138			

STATION

Dated

188

Executive Engineer.

REFERENCE TO MADRAS P. W. D. CODE,
CHAPTER VII—PARAS 968 & 968 A.

P. W. D. Madras.
Form No. M. 71 g.

ESTIMATE FORM—ABSTRACT CLASSIFIED.

IRRIGATION.

CIRCLE.

DIVISION—

DISTRICT—

To accompany the Detailed Estimate No.
of 188 -8 for

* Here enter the Name and Description of work in full.

ESTIMATE FORM—ABSTRACT—CLASSIFIED.

Sub-head.	Names of Works.	Amount of Estimate for individual Work.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each main head.	REMARKS.
1	2	3	4	5	6	7
	Brought forward	1282	138			
	9. Constructing - Two 2 feet drops at 400 ft and tail end each Rs. 110—	220				
			1502			
	Earth work - 10. Earth work cutting distributary—	2180				
			2180			
	Miscellaneous - 11. Demarcation stones	20				
			20			
	Total Works		3840			
	II Establishment		885			
	III Tools & Plant		9			
	IV Other Estimates		4700			

Sanctioned in G.O. No. 586 of 29-1-98
& registered as No. 578 of 1898-99

O. V. R. M. G. Lt. Col. R. S.
Superintending Engineer
6th Circle
13-5-98

STATION

Dated

188

Executive Engineer.

ESTIMATE FORM—ABSTRACT CLASSIFIED.

IRRIGATION.

Sixth CIRCLE.

DIVISION—*Madura*

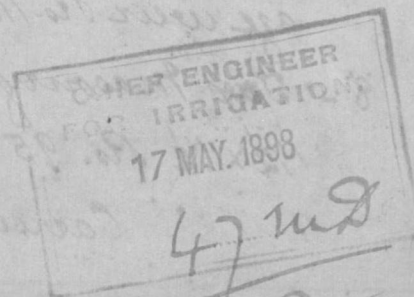
DISTRICT—*Madura*

To accompany the Detailed Estimate No.

of 188 -8 . for * *excavating distributary and field channels from left sluice above drop No 14- 9th Branch Channel*

Revised Estimate

* Here enter the Name and Description of work in full.



696. 2d.
Line No 5 to S. & 6" No 13-5-98

ESTIMATE FORM—ABSTRACT—CLASSIFIED.

Sub-head.	Names of Works.	Amount of Estimate for individual Work.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each main head.	REMARKS.
1	2	3	4	5	6	7
	<i>Capital expenditure not charged to Revenue</i>					
	<i>49 Irrigation works</i>					
	<i>Perma prof. cd.</i>					
	<i>Open Capital Account</i>					
	<i>Work</i>					
	<i>3. Distributaries</i>					
	<i>9th Branch Channel</i>					
	<i>Permanerative work</i>					
	<i>excavating the tail end of Pappagudi offtake & constructing masonry works in the same</i>					
	<i>2. Land & Compensation for land</i>	<i>829</i>				
	<i>3. Works</i>					
	<i>2- Drop of 4 ft. at 1/100</i>	<i>400</i>				
	<i>3- do do at 1/220</i>	<i>400</i>				
	<i>4- do of 6 ft. at 1/220</i>	<i>480</i>				
	<i>5- Two 12" pipe culverts</i>					
	<i>at 2/100 + 3/400 each 100</i>	<i>240</i>				
	<i>6- Three 10 feet Cross drainage weir each</i>					
	<i>Rs. 80.</i>	<i>240</i>				
	<i>7- Two 20 ft Cross drain age weir Rs. 115 each</i>	<i>230</i>				
	<i>8- Two Masonry Sluice</i>					
	<i>1 1/2 x 1 1/2 Rs. 95 each</i>	<i>190</i>				
	<i>Carried over</i>	<i>2180</i>				
						<i>829</i>

STATION

Dated

188

Executive Engineer.

REFERENCE TO MADRAS P. W. D. CODE.

CHAPTER VII—PARAS 968 & 968 A.

P. W. D. Madras.
Form No. M. 77 g.

ESTIMATE FORM—ABSTRACT CLASSIFIED.

IRRIGATION.

CIRCLE.

DIVISION—

DISTRICT—

To accompany the Detailed Estimate No.

of 188 -8 . for *

* Here enter the Name and Description of work in full.

ESTIMATE FORM—ABSTRACT—CLASSIFIED.

Sub-head	Names of Works.	Amount of Estimate for individual Work.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each main head.	REMARKS.
1	2	3	4	5	6	7
	Brought forward	2180 2140	829			
3-Works	Continued 9- Two-9" pipe sluices Rs. 70 each	140				
	10- Ten-6" pipe sluices Rs. 45 each	450				
	11- 2 feet Tail Drop	140	2910 2870			
Earth work	12- Excavating tail channel & Distributaries	4989	4989			
Miscellaneous	13- Demarcation Stones	62	62			
Total ^{Works} Plafus			8790 8750			
IV Establishment			1831			
III Tools & Plant			91			
Both Estimates			10080			

Sanctioned in G.O. No. 586 of 29-7-98
& registered as No. 57 of 1898-99

O.V. Boddy Lt Col R.E.
Supy Engineer 6" Circle
5-5-98

STATION

Dated

188

Executive Engineer.

ESTIMATE FORM—ABSTRACT CLASSIFIED.

IRRIGATION.

6th CIRCLE.

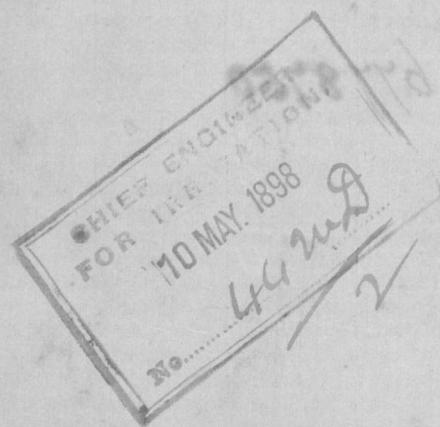
DIVISION—Madura

DISTRICT—Madura

To accompany the Detailed Estimate No.

of 188 -8 for excavating the tail end of Pappagudi offtake and constructing masonry works in the same -9 Branch Channel. 8797.

* Here enter the Name and Description of work in full.



0.0.2.19
580/98

Enclosure 5 to S.E. 6th No 657.22
5-5-98

ESTIMATE FORM—ABSTRACT—CLASSIFIED.

Sub-head.	Names of Works.	Amount of Estimate for individual Work.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each main head.	REMARKS.
1	2	3	4	5	6	7
	Capital Expenditure not charged to Revenue					12
	49 Irrigation Works					
	Periyar Project					
	Open Capital Account					
	1- Work					
	3. Distributaries					
	XI Distributary at 10 mile XII Branch Channel					
	Remunerative works					
	Excavating XI and XI A Distributary from 10 th mile 12 th Branch Channel					
	2. Land Compensation for land 677					677
	3. Works 2-Head Sluice XI of try at 10 th m. 12. B. Channel	380				
	3. Five 6 feet falls in the XI Distributary					
	each Rs. 470	2350				
	4- one 6 feet fall small in the XI A Distrib.	435				
	5- Two tail Drops					
	each Rs. 65	130				
	6. Dividing dam at 139 chain XI Distrib	200				
	Carried over	3565				
		3495				677
		3505				

STATION

Dated

188

Executive Engineer.

REFERENCE TO MADRAS P. W. D. CODE.

CHAPTER VII—PARAS 968 & 968 A.

P. W. D. Madras.
Form P. M. 77 g.

ESTIMATE FORM—ABSTRACT CLASSIFIED.

IRRIGATION.

CIRCLE.

DIVISION—

DISTRICT—

To accompany the Detailed Estimate No.

of 188 -8 . for *

* Here enter the Name and Description of work in full.

Sub-head.

Names of Works.

Amount
of
Estimate
for
individual
Work.Total
of
Sub-heads.Total for
each
Canal or
Distribu-
tary.Total of
each
main head.

REMARKS.

1

2

3

4

5

6

7

Brought forward 3495 ✓
 7- Twelve Inches pipe 3505 ✓
 sluice in 11 1/4 A Distributary
 each Rs. 55 660 ✓

8- Two 9" pipe sluice
 in the XI Distributary
 each Rs. 75- 150 ✓

arthwork-9- Excavating 11th &
 11th A Distributaries 3746 ✓

Miscellaneous 10- Demarkation Stones 42 ✓
 42 ✓

Total ^{Works} Rs. 8780 ✓
 8770 ✓
 8780 ✓

II Establishment 1864 ✓

III Tools & Plant 6 ✓

Total Estimate 10650 ✓

O.V. Board Lt. Col. R. L.
 Supy Engineer 6" Circle
 18-5-98

STATION

Dated

188 }

Executive Engineer.

ESTIMATE FORM—ABSTRACT CLASSIFIED.

IRRIGATION.

6th — CIRCLE.

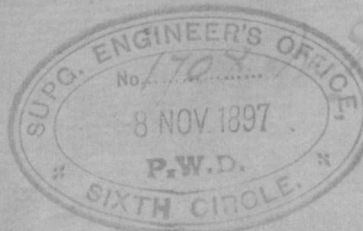
DIVISION—Madura

DISTRICT—Madura

To accompany the Detailed Estimate No.

of 188 -8 for * XI & XI A Distributary
from 10th miles in 12th Branch
channel—excavating, etc.—

* Here enter the Name and Description of work in full.



No. 98 dated 2nd November 1897
Report to accompany the
Estimate for excavating XI & XI A Distributary
12th Branch ch. — P 8780
S.P. 8770

Amount of Estimate Rs. 8120

The channel takes off at 10 miles
of the 12th Branch channel & is intended
to irrigate about 1500 acres besides
filling in the tanks, Sathan Endal,
Siliandaikudi kummayi & Arangudi
Endal, proposed to be maintained.

At 139th chain where the distributary
bifurcates, there will be a dividing
dam to regulate the water. One of these
is XI A Distributary irrigating 600 acres.
Part of the banking of this Branch
distributary will be formed from
the Spoil earth available from the
side drainage ch. (vide survey plan)
to pass the drains of Sinnapanian
Endal through which it runs.

Necessary drops and sluices are
provided in the Estimate.

The.

Enclosures
1 G.L. Est.
7th mile & 1/2
10 Tracings
18

Enclosure 19 to S. & 6th No. 720. 2nd
18. 5. 98

works will be carried out
in accordance with the Stand-
ard Specification current in
the department.

Ajaye
Executive Engineer
Special Penadur

2/11/97

S.L.
H.D.

Report to accompany the estimate
for excavating the tail end of Pappa-
gudi offtake and constructing masonry
works in the same.

Amount of Estimate Rs 8750

10 tracings
9 Rate detail
9-abstract
1 Calculated
4 Station
1 Est. abstract

adjacent 1500 acres Pappagudi offtake at present ends
Tanks Commanded &
to be maintained. in an Inam tank (Poolangulam tank)
And consequently the Government tanks
lower down could not be supplied
with Periar water except through a
group of Inam tanks.

Tanks to be
abandoned.
1. Ponnangulam
not in G.O.
2. Ilamanur Pudu
no 214. Komunoyi
3. Kolikudi Pudu
Komunoyi 209.
4. Andi odai kulam
no 210
5. Achaugulam
6. Kurungapallam
7. Sattakurthi
not in G.O.
Continue the tail end of the offtake
along the line shown in the accompany-
ing survey plan and construct the
necessary masonry works for irrigating
the Government dry lands and the
Inamool wet lands.

This Chl. will be maintained
upto 201" Chain.

The work will be carried out
in accordance with the Standard
Specification current in the Dept.

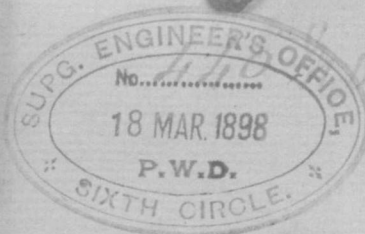
W. S. S. S.
Executive Engineer
Special Penadur

23/3/98

never sufficiently by the introduction

P.W. 552
58000/28

M. 435 Dated 15th March 1898



Report to accompany the revised estimate
for excavating distributary & field chls
from the left sluice of drop notch - 7 Br. Chls.

Amount of revised Est. 3840
" Original Est. 3090
Excess Rs. 750

Encls 1 Est
3 tracings
4

The revised estimate provides for
building a 2 feet drop at the 6" furlong
and raising the banks for a length of
2 furlongs above.

The lands between the 6" & 8" fur-
- long were Government waste land
now sold and it is found impossible
to irrigate them under existing conditions

The area not at present com-
manded is 41 acres and was sold for
over 100 Rs per acre, the total area of
218 acres bringing Rs 24,537

The income to be derived from
the interest on this sum and water tax
will be nearly Rs 500. So the ^{extra} work is
well worth doing.

A 2 feet tail drop of the same
design is also provided

W. S. Singh

15/3/98. Executve Engineer
S. P. D. W. D.

P.W.D. 13
5800/98

No. 657.2.D.

OFFICE OF THE SUPERINTENDING ENGINEER,
6TH CIRCLE,

Kodaikanal 5th May 1898.
Trichinopoly.

From Lt Col. C. V. Bodd, D.C.
The Superintendent Engineer,
6th Circle. SP

To
The Chief Engineer,
SIR, for Irrigation

21. ENCLOSURES.

- 1. Survey.
- 2. Sketch of M. Section.
- 3. Hb. Take with reports &c.
- 4. Classified abstract.
- 5. Masonry plans.
- 6. Detailed notes.
- 7. Earthwork take.

+ Sent Separately
+ Amount now
increased to
Rs 8790 in the
office of the
Chief Eng. for
improvement
proposed having
been made for
revetting of the
slopes of the
channel at
the pipe culvert.

I have the honor to forward
for your approval and sanction an
estimate amounting to Rs 8750 for ex-
cavating the tail end of Pappazudi
off take branching from the 9" Branch
Channel, and constructing the necessary
masonry works in the same.

2. The offtake at present ends in
an Inam Tank and in order to supply
Government lands without the inter-
-vention of Inam Tanks, the extension
now estimated for is proposed. For
purpose of irrigation ten pipe sluices
of 6 inches diameter, two of 9 inches dia-
-meter and two masonry sluices having
recess of 1 1/2 feet square are provided.

3. The two 12 inch culverts are pro-
-posed to prevent the banks from becoming

P.W.D.
5/5/98

water logged and the lands from being kept under submergence. The quantity of drainage to be disposed of is very small.

4. Five Byewashes which are spaced over a length of $1\frac{1}{2}$ miles are designed to carry the drainage of $\frac{1}{5}$ of a square mile which is considered a sufficient provision.

5. A Considerable portion of the Channel, vide longitudinal section, is in heavy embankment but this is quite unavoidable.

6. Where the line of Channel crosses the road or East tracks, the banks will be sloped with a gradient of 1 in 5 and bridges are not considered to be necessary. The mileages of all these works are shown in the accompanying Tabular statement which shows hydraulic information in addition.

7. The work is classed as remunerative and the expected return on the whole against which is 1500 acres, is estimated to be \$7,500 at \$5 per acre.

per acre.

8. The Executive Engineer reports that the quarries are near the line and the rates provided are therefore sufficient.

9. The estimate is recommended for sanction.

I have the honor to be
Sir,
Yours most obedt. Servant,

J. V. Doolittle, Lt. Col. R.E.
Supt. Engineer, Circle

3/5/92

P. W. D. 6th CIRCLE.

FROM
THE SUPERINTENDING ENGINEER,
6TH CIRCLE.

TO
THE CHIEF ENGINEER,

NO.

Dated. }
Received. } 189

Enclosure.



P.W.D. 12
5800/28

Public Works (1898) Department.

CURRENT No. 47 m. D.

Order

CS
May this be sanctioned after
check.

AB
22/6

HL

The estimate has been
checked

HL
29/12/98

HL
29-6-98

From
The Super Engineer.
61. Circle

No. 696. L.D.

Dated 13th May 1898.

Received 17 - 50 -

Enclosures 2. (x 3 plans)

Spare copies

SUBJECT.

Distributary & Field Channels.
Forwards for sanction a
revised estimate of Rs 3840
for excavating — from the
left sluice above Drop No.
14. in the 1x Branch Channel
Dungu Subject.

To check the revised estimate
1cc
17/5/98

BACK PAPERS.

No.	Date.
R 379 Id	8 ⁷ / ₉₈ ✓

FURTHER PAPERS.

No.	Date.

No. 696. L. D.

OFFICE OF THE SUPERINTENDING ENGINEER,

Kodaikanal
Trichinopoly

6th CIRCLE,

13th Day 1898.

From

Col. O. V. Boddie, R.E.
Superintending Engineer,
6th Circle.

To

The Chief Engineer,

for Irrigation

SIR,

5 ENCLOSURES.

1. To the report
for complete
long. Section
like Survey
2. To the plan of
2 ft drop
3. To the plan of
clarified channel

I have the honor to forward
for your approval and sanction a
revised estimate amounting to Rs
3840 for excavating distributary &
field channels from the left side above
Drop No. 14 in the 9 Branch Channel.

2. The estimate is submitted in
suppression of that for Rs 3090 sanctioned
in G.O. No. 572 I dated 23 June 1897 &
the excess amount now requiring sanction
is Rs 750. The necessity for the estimate
is explained in the report attached to
the estimate. It is reported that high
waste lands to the extent of 41 acres
lying between 6° & 8° furlongs cannot be
irrigated under the existing arrangement.
It is therefore proposed to raise the water
level sufficiently by the introduction

t.

CHIEF ENGINEER
FOR IRRIGATION.
17 MAY. 1898
No. 47922

Yours truly A. L. Sirovacki.

J. V. Dudley L. Cab. R.C.

Superintending Engineer
M. Leitch

0.1251
5800/98

11/5/28