Public Works (1897) Department.

G.O., No. 229 I

6

DATED 6 March 1897

[Despatch Abstract.]

Pennagundapuram tank: Estimate of Rs. 13,000 for improving supply to —, Salem Dt., sanctioned.

6-3-97

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNT.

Government {1897} of Madras.

PUBLIC WORKS.

Recd. } 1897.
Regd. }

Enclosures

Spare copies

G.O., No. 229 I., 6th March 1897.

MARCH.

Pennagundapuram Tank

Estimate of Rs. 13,000 for improving supply to —, Salem division, sanctioned.

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G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

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Regd. } *Spare copies*

G.O., No. 229 I., 6th March 1897.

MARCH.

Pennagundapuram Tank

Estimate of Rs. 13,000 for improving supply to —, Salem division, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

Read—the following papers :—

From J. HANNAN, Esq., Superintending Engineer, IV Circle, to the Chief Engineer for Irrigation, dated Coimbatore, 26th October 1894, No. 240/E.I.

I have the honour to submit, for sanction of Government, plans and estimate, amounting to Rs. 12,800, for excavating a supply channel from Muthur river to Pennagundapuram tank in Krishnagiri taluk, Salem district.

2. The report accompanying the estimate explains the necessity of the works proposed in connection with the channel.

Enclosure.

Report to accompany the estimate of Rs. 12,800 for a supply channel from Muthur river to Pennagundapuram tank.

The restoration of Pennagundapuram tank and the excavation of a distributary channel therefrom about 7½ miles long were sanctioned in G.O., No. 598 I., dated 16th September 1880, at an estimated cost of Rs. 72,640, and the works were accordingly carried out. The proposed ultimate area to be irrigated was 2,000 acres and the catchment basin of the tank being 52 square miles,* it was expected there will be more than enough quantity of water for this area available. But experience has shown that the tank does not get the expected supply and the result is that the area now actually irrigated is so low as 467 acres. The failure of supply to the tank as mentioned in the Superintending Engineer's inspection notes, dated 17th and 18th June 1893, is due to two causes, namely :—

(1) the large number of tanks in the drainage basin; and

(2) the nature of the soil which readily absorbs a considerable proportion of the rainfall.

The tank receives little or no supply during the south-west monsoon. This retards the commencement of irrigation operations. It generally gets filled but once in the north-west monsoon, and the capacity having been about 112 millions of cubic feet, not much more than the present area could be irrigated. It is therefore proposed to bring in an additional supply to the tank from Muthur river which is close by. It is a perennial stream, and there is an anicut across it in the limits of Muthur village about 1½ miles from the tank. The area now supplied by the anicut is within 25 acres, and much water is going down to waste. The catchment basin of the river above it is 78 square miles,† and though there are about eight anicuts here (all except one minor) there are some good freshes down it in the south-west monsoon, and it is expected ample supply may be obtained for Pennagundapuram tank at the time it most needs water as also afterwards by the excavation of a channel therefrom.

* From the atlas sheet I make it 56 square miles.
(Intld.) J. H.

No less than twenty-five tanks from group map. I will find out the actual irrigating duty of this basin.
(Intld.) J. H.

Please see atlas sheet No. 77. The river takes its rise in the Unganamullai hills, latitude 12° 38″, longitude 78° 20″ and runs due south a mile east of tank.
(Intld.) J. H.

† I make it 74 square miles.
(Intld.) J. H.

All these eight anicuts do irrigate in all about 600 acres.

2. *Anicut across the river.*—This is on old work having a brick skin wall in front and a roughstone sloping apron packed dry in rear. The crest of the skin wall is not of one level throughout. It will be brought up to one level, no general raising of it being necessary. The roughstone apron is in order and does not need much repair. The catchment basin of the river above the anicut is 78 square miles, and the flood discharge therefrom is 8,215 cubic feet per second ($D = 450\ M^{\frac{2}{3}}$). The anicut has no wing walls nor are they necessary. The flood water may therefore rise and run over the ground level on either side for some distance. But owing to obstruction of trees and jungle, the effective length of water-way cannot be safely assumed as more than 200 feet. A depth of 5 feet over the anicut crest with a velocity of approach of 6 feet per second and a clear overfall will give a little more than the required discharge. From marks pointed out by villagers, it does not appear that more than 2 feet has passed over the anicut. This is apparently erroneous. A depth of 5 feet will therefore be taken as nearer the truth.

3. *The supply channel.*—This will start from the river a short distance above the anicut and run along the best possible line. Levels of the country through which it is to go were taken and the line chosen for it is such as to avoid deep cuttings and heavy embankments. The crest level of the anicut across the river is 109·35 and that of the tank weir 100·00. The bed of the channel at the starting point will be placed at 3 feet below anicut crest. Placing it lower will become useless in a few years as it will get silted up. It will have a fall of 0·818 per 1,000 feet, or 4·32 feet per mile. This makes the bed level at the point of the crossing of the road from Muthur to Samelpatti, which is quite close to the tank and its weir 100·13 or 0·13 above the weir crest. To prevent chances of water going to waste over the weir before the tank gets filled up, a drop of 2 feet is given to the bed at the culvert to be constructed for the channel in the road. A greater fall may be given to the channel bed and the necessity for a drop avoided, but it will be more expensive as it will involve a greater depth of cutting above the road. The bottom width of channel is made 15 feet as proposed by the Superintending Engineer in his No. 195 S.L., dated 28th June 1893, as it is found suitable. The discharge with side slopes ½ to 1 (the soil being gravelly and rocky) and 3 feet depth of water will be 138·60 cubic feet per second. This will fill up the tank in twelve days, the capacity now being 146 millions of cubic feet, the weir crest having been raised this year by 1 foot. A depth of 1·25 foot running down the channel will give nearly 30 cubic feet per second enough for 2,000 acres, the proposed ultimate area under the tank. The channel will have the following works along it :—

(1) A head sluice for the regulation of supply of water during floods. It will be placed about 100 feet from the margin of the river, and no bank will be allowed to the leading channel, so that the flood water of the river may flow unobstructed. It is designed to give a discharge equal to the full supply the channel is intended to carry with a lead of 4½ inches or 0·38′.

(2) A short flood bank on the right running from the head sluice at right angles to its course to join the high ground to prevent flood water of the river turning round the sluice. It will have 6 feet top breadth, side slopes 1½ to 1, and a margin of 3 feet above flood level. The left bank of the channel from the sluice for at least 200 feet beyond point opposite the anicut will have the same section to serve as a flood bank as well.

(3) An under tunnel or syphon sluice at section No. 17, or 2,950 feet from head where the wet ayacut under a minor tank on the right is crossed. The drainage basin of the tank is 0·15 square mile and the surplus from it flows over its wet ayacut. To get rid of this surplus, to prevent the wet lands on the upper or right side of the channel becoming swamped, and not to interfere with the supply to lands on the lower or left side, the undertunnel is necessary.

(4) A combined road culvert and drop at section No. 51, or 7,600 feet from head. The culvert is required for taking the road from Muthur to Samelpatti over the channel. The necessity for the drop is already explained in paragraph 3.

The channel will have only one bank, and that is on the left or lower side except at the undertunnel, where a bank on the right for some distance above and below it is necessary. The minimum section of the bank will be 6 feet top breadth and margin 4 feet above F.S.L. Such a section is considered necessary for the safety of the channel as the country for some distance on the right will draw into it. Where the cutting is more than 3 feet deep, or such as the spoil obtained is in excess of what is required for the minimum section of bank, the height of the bank is so regulated as too much land may not be covered and yet it may not appear too high above ground level. The nature of the ground being gravelly and rocky, the channel will have side slopes of ½ to 1. A margin of 9 feet is allowed between the edge of the channel and the toe of bank. Where the channel is in embankment, *i.e.*, where the spoil obtained from cutting is not sufficient for bank, it will be widened out on the right to get the required quantity of spoil. The land to be taken up in such places on the right side of the centre line of channel will be wider than in other places. The right bank required at the undertunnel will have 4½ feet top breadth and margin 3 feet above F.S.L.

4. Sections and survey for the channel and designs for the masonry works required with necessary hydraulic and other informations recorded on them accompany the estimate.

5. The soil along the line of the channel is gravelly and rocky as noted on the longitudinal sections. The informations recorded were obtained by an examination of the Local Fund department, quarry pits which are close to the line of the channel all along. As no proper rate can be fixed for excavation, an all-round rate of annas 4 per cubic yard or Rs. 9-4-0 per 1,000 cubic feet, is put down in the estimate with an extra provision of Rs. 500 for rock blasting.

Tenders will be invited for excavation in the several descriptions of soil to be met with and the most reliable tender will be accepted. The course of the channel for portions of its length is through Government waste. A provision of Rs. 300 for land compensation is considered sufficient.

5th October 1894.
(Signed) S. GOPALA KRISHNA AIYAR,
Executive Engineer.

From H. H. O'CONNELL, Esq., Executive Engineer, Salem Division, to the Superintending Engineer, IV Circle, dated 28th July 1896, No. 274.

With reference to your endorsement No. 319 S.C., dated 28th November 1895, on memo. No. IV./37 S.L. of 22nd idem from the Chief Engineer for Irrigation, Tank Restoration Scheme, I have the honour to submit herewith, for sanction, an estimate for completing the repairs to No. 1 Pennagundapuram tank and for distributaries in the Salem district.

The items of the estimate being *repairs* for existing works for which plans have already been drawn by the Tank Restoration Scheme, no plan is herewith submitted.

The works which have been estimated for and executed in the last one or two years both in the tank and in the tank channel, are not included in the estimate now submitted.

ENCLOSURE.

REPORT to accompany the estimate for repairs to Pennagundapuram tank and channel.

	RS.
Amount of estimate	200

The tank bund, whose top level is 5·25 above M.W.L., is in fair order; but the revetment in the inner face is displaced here and there, for the repacking of which a lump sum of Rs. 20 is provided in the estimate.

The tank sluice is in fair order.

The crest of the surplus weir which was lowered by one foot to save the tank (*vide* G.O., No. 5987 of 16th September 1880), has been restored to its original F.T.L. last year, and is in good order.

Channel.—An estimate, as instructed in your office No. 1250, dated 18th July 1894, for clearing the channel with bottom width 6 feet and bed fall one foot per mile, has been sanctioned under "repairs" and is now in hand. This estimate does not therefore provide for any clearance.

The cross drainage at 2nd mile, which brought much silt into the channel, has been provided with a rough stone inlet to prevent silt being brought into the channel. This acts satisfactorily; hence opening vents in outlets Nos. 3 and 5 as originally proposed by me, and for which a survey on a big scale was called for, has been dispensed with.

The sill of sluice No. 8 has been built up to its proper level, and the floor of the road culvert has also been lowered to its proper level.

The apron and revetment of outlets and aqueducts constructed to protect the bund at both ends are displaced, and the estimate provides for repacking the same and filling in the interstices in them where necessary.

There are seventeen masonry sluices in the left bank of the channel, which requires sundry repairs and platform stones to regulate the water. Provisions for these have been made in the estimate.

29th June 1896.
(Signed) T. RAMANUJAM PILLAI,
Sub-Engineer.

No. 161 I.

Copy submitted to the Chief Engineer for Irrigation, with reference to his memo. No. 37 S.L., dated 22nd November 1895, together with the estimate of Rs. 200 for completing the repairs to Pennagundapuram tank and distributaries for sanction as Tank Restoration Scheme work.

11th August 1896.
(Signed) J. HANNAN,
Supg. Engineer, IV Circle.

No. 26 I.

Note by the Chief Engineer for Irrigation in charge Tank Restoration Scheme.

The Pennagundapuram tank in the Salem district was restored as a famine work in 1877, and in G.O., No. 598 I., dated 16th September 1880, sanction was accorded to a regular estimate for putting the tank in order, amounting to Rs. 72,640, which included the normal value of work done under famine-relief.

2. The Restoration did not do all that was expected owing chiefly to insufficiency of water, and in 1893 Major Smart, Superintending Engineer, proposed to bring in an extra supply of water by excavating a channel from the Mallur river and to gradually increase the capacity of the tank. An estimate for a supply channel, amounting to Rs. 12,800, was submitted by the Superintending Engineer in 1894, but as other works might be affected, the approval of the Collector was asked for, and which has since been obtained.

3. The Superintending Engineer has now submitted an estimate amounting to Rs. 200 for completing the repairs necessary to the tank and distributaries in the Salem district, which, with the estimate for the channel, are recommended for sanction from Tank Restoration Scheme funds.

4. The proposed channel will be a flood channel, from which an uncertain supply will be obtained, but it will certainly greatly improve the tank supply. The area draining into the tank would only be enough for the projected acreages if there were no other tanks in this area, but of which there are actually 37.

CHEPÂK,
29th January 1897.
(Signed) F. J. WILSON,
for Chief Engineer for Irrigation.

ORDER—No. 229 I., dated 6th March 1897.

The following estimate is sanctioned:—

Irrigation.
43. Minor Works and Navigation.
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.
Tank Restoration Works.
Repairs.
Salem Division.
Improving supply to Pennagundapuram Tank.

	RS.
Estimate	13,000

2. This sanction is registered as No. 196 I. of 1896–97.

(True Extract.)

Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" " Tank Restoration Scheme.
" Superintending Engineer, IV Circle, with ~~nineteen~~ 14 enclosures.
" Examiner, Public Works Accounts.

Exd. T. K. Narayana Aiyangar.

His Excellency the Governor

Improving supply to Pennagundapuram Tank

PUBLIC WORKS DEPARTMENT.
Irrigation Branch.

No 229 I of 6 March 1897

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Irrigation Act

READ the following

Letter from the Supg: Engr: IV Circle (H. E. No: 240 E. I. dated 26th Octr: 94)
......Do...............Do....... (H. E. No: 161 I dated 11th August 1896)
Note by the Cief Engineer for Irrign: (H. E. No: 26 I, d/29th Janry: 1897)
T. R. S.......

The following estimate is sanctioned:-

Irrigation

43 Minor Works & Navigation.

Minor Works for which neither Capital nor Revenue Accounts are kept

P. W. D.

Tank Restoration Works.

Repairs

Salem Division

Improving supply to Pennagundapuram Tank.

Estimate.... Rs 13,000

2. This sanction is registered as No: 196 I, 1896-1897.

The irrigating power of this tank seems to have been carelessly estimated. Estimated area 2000 acres; actual, 467 acres. Is it not possible to state with greater precision than in the Sec's Note of the 29th Jan. 1897, the result expected from the expenditure of this additional Rs. 13000.?
A. G. H
10.2.97

6/2/97

Lott
6 2 97

To,
The Chief Engineer for Irrign:
" ......Do...........T. R. S.
" Supg: Engr: IV Circle. with ~~19~~ 18 enclos.
" Examiner P. W. Accounts.

D 18/3/97

Issue

27/2/97.

Please say whether the report is the printed one
Yes printed book 5/3/97

Res from Office 5/3/97

1018
6/3/97

26.2.97

[P. W. 40. 2,000—6-6-96]

His Excellency the Governor. Improving supply to Pennagundapuram Tank

PUBLIC WORKS DEPARTMENT.
Irrigation Branch.

No 229 I of 6 March 1897

PROCEEDINGS OF THE MADRAS GOVERNMENT.

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The irrigating power of this tank seems to have been carelessly estimated. Estimated area 2000 acres; actual, 467 acres. Is it not possible to state with greater precision than in the Sec's Note of the 29th Jan. 1897, the result expected from the expenditure of this additional Rs. 13000.?
10.2.97

6/2/97

6.2.97

To,
The Chief Engineer for Irrign:
" ......Do...........T.R.S.
" Supg: Engr: IV Circle. with 18 enclos.
" Examiner P.W.Accounts.

18/3/97

Issue
27/2/97

Please say whether the report is to be printed
Yes print both
5/3
6/3/97
26.2.97

Recd from Office 5/3/97

6/3/97

[P. W. 40. 2,000—6-6-96]

His Excellency the Governor.

Note.

With reference to His Excellency's remark dated 10th February 1897 on my note on the estimate for improving the supply to Pennagundapuram Tank I wish to explain that I cannot state with precision the result which the expenditure of Rs 13000 on a channel from the Mathur river will bring about. I do not believe the statement that the river will yield a perennial supply or even that there are, except rarely, good freshes in the South West Monsoon. The drainage area is 78 sq: miles and there are already 8 anicuts I look on the proposed channel as almost entirely a flood channel ~~and~~ but believe that it should ensure the filling of the tank in the North East Monsoon. If the tank fills even once there will be enough water for 700 acres or 230 more than now irrigated. The revenue from this extension will pay for the maintenance of the channel and a fair per centage on its first cost.

The Estimate is now sanctioned.
AGH
24.2.97

W. Hughes

" I "

Regd 16/3/97

P.W. E.1/2314/97

H.E. 23/2 R26/2

Public Works (1897) Department.

CURRENT No. 2314

Order

From The Chief Engineer
for Irrigation

No. 26 I.

Dated 29. 1. 97
Received 4. 3. 97
Enclosures 24 (9 plans)
Spare copies

SUBJECT.

Irumogandapuram Tank –
Estimate for improving supply.
To – Note recommending for sanction
the – from I.R.S funds

Irrigation Brh :

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

Note by the Chief Engineer for Irrigation in charge T.R.S.

Nr 26-J.

The Pennagondapuram Tank in the Salem District was restored as a famine work in 1877 and in G.O. No:598 I, dated 16th September 1880 sanction was accorded to a regular estimate for putting the tank in order amounting to Rs 72,640 - which included the normal value of work done under Famine relief.

2. The restoration did not do all that was expected -- owing chiefly to insufficiency of water, and in 1893 Major .. Smart, Superintending Engineer, proposed to bring in an extra supply of water by excavating a channel from the Mallur - river and to gradually increase the capacity of the tank. An estimate for a supply channel amounting to Rs 12,800 was submitted by the Superintending Engineer in 1894, but as other- works might be affected the approval of the Collector was - asked for, and which has since been obtained.

3. The Superintending Engineer has now submitted an estimate amounting to Rs 200 for completing the repairs necessary to the tank and distributaries in the Salem District - which with the estimate for the channel are recommended for sanction from Tank Restoration Scheme funds.

4. The proposed channel will be a flood channel from which an uncertain supply will be obtained but it will --- certainly greatly improve the tank supply. The area draining- into the tank would only be enough for the projected acreages if there were no other tanks in this area but of which there are actually 37.

Chepauk.
29th January 1897.

For Chief Engineer for Irrigation.

To,
The Joint Secretary to Government P.W.D. Irrigation Brh :

Public Works (1894) Department.

CURRENT No. R435.L

2291

Order

From the Supdg Engineer 4 Circle

No. 240 E.I

Dated 26th October 1894

Received

Enclosures

Spare copies

SUBJECT.

Supply Channel from Mathur river to Pennagondapur Tank in Krishnagiri taluq of Salem Dt Submitting for sanction of Govt plans and Estes of Rs 12800 for excavating a —

BACK PAPERS.		FURTHER PAPERS.	
No.	Date.	No.	Date.
R 43 S.L	26 10 94		
P W C 1356	11 8 96		
R 2.S L	15. 1 97		
R 20 S.L	28 6 93		
G O 1055 I	2 12 93		
G O 598 I	15 9. 80		

No. 240 / E.I. Suptg: Engr's Office 4 C:
Coimbatore 26th October 1894.
Despd 30 — Do —

From,

J. Hannan, Esq.
Suptg: Engineer
IV Circle

To

The Chief Engineer,
for Irrigation,

Enclosures 12

- 1 Site plan
- 4 Sheets of levels
- 3 Plans of Masonry works
- 1 File of Estimate
- 1 Report
- 1 General Abstract.
- 1 Data . . .

Separately Sent Per Packet Post

Sir,

I have the honor to submit for sanction of Government plans and estimate amounting to Rs 12,800 for excavating a supply channel from Mathur river to Pennagondapuram Tank in Kristnagiri Taluq, Salem District.

2. The report accompanying the estimate explains

BACK

No.

-plains the necessity of the works proposed in connection with the Channel-

I have the honor to be
Sir,
Your most Obedt. Servt.
J H Hamell
Suptg. Engineer 4th Cl.

R 43 SL
P W C 13
R 2.S
R 20 S
G O 1058
G O 598

4386

From

The Supg. Engineer,
4th Circle.

Dated 26th }
Despd 30th } October 1894.

No 240/E.I.

Enclos: 12.

R 4 Supply Channel from
P W Mathur river to Penna-
R -gondapuram tank in
R Kristnagiri taluq, Salem
G O District.
G O

Submitting for sanction of Government plans & estimate of Rs 12,800 for excavating a —

P.W. E.I. 23/4/97

1

Report to accompany the Estimate of Rs 12800 for a supply channel from Mathur river to Pennagonda-puram Tank.

The restoration of Pennakonda-puram tank and the excavation of a distributary channel therefrom about 7½ miles long were sanctioned in G.O. No 598. I, dated 16th September 1880 at an estimated cost of Rs 72,640 and the works were accordingly carried out. The proposed ultimate area to be irrigated was 2000 acres and the catchment basin of the tank being × 52 Sq. miles, it was expected there will be more than enough quantity of water for this area available. But experience has shewn that the tank does not

× From the Atlas sheet I make it 56 Sq miles
JH

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(1) the large number of tanks in the drainage basin and,

(2) the nature of the soil which readily absorbs a considerable proportion of the rainfall. The tank receives little or no supply during the South-West Monsoon. This retards the commencement of irrigation operations. It generally gets filled but once in the North-West Monsoon & the capacity

No less than 25 tanks per group map. I will find out the actual irrigating duty of this basin

Ht

37 Tanks according to the group map furnished by Ex. Engr D.R.S. – a Tracing is put up.

having been about 112 Million of c. ft., not much more than th present area could be irrigated. It is therefore proposed to bring an additional supply to the tank from Inuthur river which is close by. It is a perennial stream and there is an anicut across it in the limits of Inuthur Village about 1½ miles from the tank. The area now supplied by the anicut is within 25 acres & much water is going down to waste. The catchment basin of the river above it is 78× sq. miles and though there are about 8 anicuts here (all except one minor) there are some good freshes down it in the South-West Monsoon & it is expected ample supply may be obtained for Pennakondapuram Tank at the

Please see Atlas sheet no 77 The river takes it rise in the Unganamullai Hills L 12°.38" Long 78°.20" and runs due south a mile east of tank

Ht

× In-take at 74 sq. m.

Ht

All these 8 anicuts do irrigate in all about 600 acres.

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2. Anicut across the river.

This is an old work having a brick skin wall in front and a rough stone sloping apron packed dry in rear. The crest of the skin wall is not of one level throughout. It will be brought up to one level no general raising of it being necessary. The rough stone apron is in order and does not need much repair. The catchment basin of the river above the anicut is 78 sq. miles, & the flood discharge therefrom is 8215 cft. per 1" Secs ($D = 450 M^{\frac{2}{3}}$).

Place in Atlas sheet no 77 the river takes it rise in the Nagamamalai Hills L 12°28" Long 78°20" and flows due South

The Anicut has no wing walls are they necessary. The flood wa may therefore rise and run over the ground level on either side for a distance. But owing to obstruction of trees & jungle the effective length of water way can't be safely assumed as more than 200 ft. A depth of 5 ft over the anicut crest with a velocity of approach of 6 ft. per 1" Secs & a clear overfall will give a little more than the required discharge. From marks pointed out by villagers, it does not appear that more than 2 ft. has passed over the anicut. This is apparently erroneous. A depth of 5 ft. will therefore be taken as nearer the truth.

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waste over the weir before the
gets filled up a drop of 2 feet is
to the bed at the culvert to be c
-tructed for the channel in the
road. A greater fall may be gi
to the channel bed and the nec
for a drop avoided but it will b
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proposed ultimate area under
the tank. The channel will have
the following works along it:—

In p. 3 it is
stated to be
112 mcft
146
34 [illegible]

(1) A head sluice for the regu-
lation of supply of water during
floods. It will be placed about
a 100 ft. from the margin of the
river and no bank will be
allowed to the leading channel
so that the flood water of the
river may flow unobstructed.

It is designed to give a discharge
equal to the full supply the
channel is intended to carry

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the river or

with a head of 4½ inches or 0.38.

(2) A short flood bank on the
running from the head slui
at right angles to its course to g
the high ground to prevent flood
of the river turning round the sl
It will have 6 feet top bread th
side slopes 1½ to 1 and a margi
of 3 feet above flood level. The
left bank of the channel from th
sluice for at least 200 ft. beyon
point opposite the anicut will ha
the same section to serve as a flo
bank as well.

(3) An under tunnel or syphon sl
at section No. 17 or 2950 ft. fro
head where the wet ayacut und
a minor tank on the right is
crossed. The dra
of the tan

plus from it flows over its t ayacent. To get rid of this rplus, to prevent the wet nds on the upper or right side the Channel becoming swamped not to interfere with the supply t lands on the lower or left side the undertunnel is necessary.

4) A combined road culvert and drop at section no. 51 or 7600 feet from head. The culvert is required for taking the road from Muthur to Samel patti over the channel. The necessity for the drop is already explained in para 3.

The channel will have only one bank and that is on the left Channel except at the undertunnel

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where a ba[illegible] on the righ distance above and below it necessary. The minimum sectio of the bank will be 6ft. top breadth and margin 4 feet above F.S. Such a section is considered ne-cessary for the safety of the Chan as the country for some distance on the right will drain into it. Where the cutting is more than 3f drop or such as the spoil obtaine is in excess of what is required f the minimum section of bank, height of the bank is so regulated as too much land may not covered and yet it may not appear too high above ground. The nature of the ground bein gravelly and rocky the Cha will have side slopes of 1/2. A margin of 9 feet is allow between the edge of the Chan

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The nature of the ground bein
gravelly and rocky the cha
will have side slopes of 1/2.
A margin of 9 feet is allow
between the edge of the chan

Government waste. A provision of Rs 300 for land Compensation is considered sufficient.

SUPG. ENGINEER'S OFFICE No. 4/533 13 OCT. 94 P.W.D. FOURTH CIRCLE.

5.10.94.
Executive Engineer.

CHIEF ENGINEER No. 4354 1 NOV. 94 FOR IRRIGATION
4

14/5
28/4/97

Public Works (1896) Department.

CURRENT No. 1356

Order

From The Suptg Engr 4 Circle

No. 161 I

Dated 11 August 1896
Received
Enclosures
Spare copies

SUBJECT.

Pennagondapuram tanks and distributaries Submits for Sanction as I R S work plans and estimates, together with an Estimate of Rs 200 for completing repairs to—

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

No 274

Executive Engineer's Office
Salem Dn, 28th July 1896.

From,

H. H. O'Connell Esq
Executive Engineer, Salem Dn

To,

The Superintending Engineer
4th Circle, Coimbatore

Sir,

Enc: 33.
30 Sheets of Plan
3 Files of Est:

With reference to your Endorsement No $\frac{319}{SE}$ dated 28th November 1895 on Memo No $\frac{IV}{3754}$ of 22nd Idem from the Chief Engr for Irrigation I. R. S., I have the honor to submit herewith for Sanction an Estimate for Completing the repairs to No 1 Pennoogoondapuram Tank and for distributories in the Salem District.

The items of the estimate being repairs for existing works, for which plans have already been drawn by the I. R. scheme, no plan is herewith submitted.

The works which have been Estimated for and executed in the last one or two years both in the tank and in the Tank Channel are

are not included in the estimate now submitted.

I have &c
Sd/ H. O'Connell
Executive Engineer

No. $\frac{161}{I}$ d/11-8-96. [illegible] 10

Copy submitted to the Chief Engineer for Irrigation with reference to his Memorandum No. 37 S.L. dated 22nd November 1895, together with the estimate of Rs 200 for completing the repairs to Pennagondapuram Tank and distributaries for sanction as T.R.S. Work.

Enc: 33.×
3. Files of Estimates
30 Sheets of plans

× separately sent per Book post

Mannin
Supg. Engr. 4th Circle

TANK RESTORATION SCHEME
R. No. 1356
15 AUG 96
CENTRAL OFFICE

From

The Supg. Engineer
4th Circle.

Dated 11th }
Despd. 13th } August 1896

No. 161/I

Enclos: 33.

Pennagondapuram tank
and distributaries.

Submits for sanction as T. R. S. work, plans & estimates together with an estr. of Rs 200 for completing the repairs to——

P.W. E. 12/2 3/12/97

Repairs to Pennakondapuram
Tank and channel.

Report to accompany the Estimate
for

TANK RESTORATION SCHEME
R. No. 1356
AUG 9
CENTRAL OFFICE

Amount of Estimate Rs. 200,

The tank bund whose top level is 5·25 above M. W. L. is in fair order; but the revetment in the inner face is displaced here and there, for the repairing of which a lump sum of Rs. 20 is provided in the estimate.

The tank sluice is in fair order.

The crest of the surplus weir which was lowered by 1 foot to save the tank vide G. O. No. 5987 of 16th September 1880; has been restored to its original F. T. L. last year, and is in good order.

Channel:— An Estimate, as instructed in your Office No. 1250/18-7-94 for clearing the channel with bottom width 6 feet and bed fall 1 foot per mile, has been sanctioned under "Repairs" and is now, in hand. This estimate does not therefore, provide for any clearance.

The cross drainage at 2nd mile, which brought much silt into the channel, has been provided with a rough stone inlet to prevent silt being brought into the channel; this acts satisfactorily; hence opening vents in outlets Nos 3 & 5 as originally proposed by me and for which, a survey on a big scale was called for, has been dispensed with.

The sill of Sluice No 8 has been built up to its proper level and the floor of the road culvert has, also, been lowered to its proper level.

The apron and revetments of outlets and aqueducts constructed to protect the bund at both ends are displaced and the Estimate provides for repacking the same, and filling in the interstices in them where necessary.

There are 17 masonry sluices in the left bank of the channel which requires sundry repairs and platform stones ~~for~~ to regulate ~~of~~ the water. Provisions for these have been made in the Estimate.

Sub Engineer.
29/8/96

Hugh O'Connell
Executive Engineer,
Salem Dn.

AKS

TANK RESTO

From
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Dated 11th
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Penn
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T. R.
together
for Com

EXECUTIVE ENGINEER'S OFFICE
[illegible] JUL 96
P.W.D.
SALEM.

SUPG. ENGINEER'S OFFICE, P.W.D.
No.
30 JUL. 96
Circle
FOURTH CIRCLE.

P.W.E. 8/23/4/97

Public Works (1897) Department.

CURRENT No. 2. S. L

Order

From The Supg. Engineer 4th Circle.

No. 10/I

Dated 15th January 1897
Received 19–1–97
Enclosures 10.
Spare copies –

SUBJECT.

Supply Channel from Mathur river to Pennagondapuram tank.

Requesting sanction to the estimate submitted with No. 240/I d/26th October 1894 for cutting a –

BR

EXEC[illegible]S OFFICE
12 JUL 96
P.W.D.
SALEM.

SUPG. ENGINEER'S OFFICE, P.W.D.
No. ....
30 JUL. 96
Circle ....
FOURTH CIRCLE.

P.W. E. 8/23/4/97

Public Works (1897) Department.

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No. 10/g

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Enclosures 10.

Spare copies –

SUBJECT.

Supply Channel from Mathur river to Pennagondapuram tank.

Requesting sanction to the estimate submitted with No. 240/9 d/26th October 1894 for Cutting a —

BACK PAPERS.

G.O.	No.	Department.	Date.
R	38 SL.		13.11.96

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Ex: Engrs: Office Salem Dn
8th: January 1897

No. 17/S-E

From
H. H. O. Connell Esq
Executive Engineer Salem Dn

To
The Superintending Engineer
4th Circle
Coimbatore

Sir,

I have the honor to bring to your notice that the Somagondapuram tank has received hardly any water this year and very little in previous years. This tank is the terminal tank of a group and the upper tanks absorb all the rainfall. An estimate for cutting a channel from the existing Mathur Anicut was submitted with this Office No 502 S E. dated 15-10-94.

I request you will be good enough to bring this matter to the notice of Government, so that funds may be provided for excavating this channel at a very early date.

I have the honor &c &c

(Signed) H. H. O. Connell
Executive Engineer

Copy

No. $\frac{10}{9}$ d/ 15-1-97.

Copy forwarded to the Chief Engineer for Irrigation in continuation of this Office No. $\frac{220}{9}$ dated 13th November 1896, with a request that he will be good enough to sanction the estimate for the supply channel forwarded with this Office No. $\frac{240}{9}$ dated 26th October 1894

Hannan

Supdg. Engineer

CHIEF
FOR
No. 2 SL

OLSC023
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