Public Works (1897) Department.

G.O., No. 169 I

DATED 18 February 1897

21/2/97

[Despatch Abstract.]

Meenjur branch channel: Estimate of Rs.
6400 for extending ~~irrigation under~~ the
—, Valluur anicut system, Chingleput Dt.,
sanctioned

100
6

T.C.
18/2/97

P.W. 26.
1,500—30-11-96

Indexed. 19/2/97

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. Enclosures
Regd. } Spare copies

G.O., No. 169 I., 18th February 1897.

FEBRUARY.

Meenjur Branch Channel

Estimate of Rs. 6,400 for extending the —, Vallur anicut system, Chingleput division, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

Read—the following papers :—

From Lieutenant-Colonel C. C. RAWSON, R.E., Superintending Engineer, V Circle, to the Chief Engineer for Irrigation, dated Chepâk, 10th May 1895, No. 148 E.I.

I have the honour to enclose the papers named in the margin relating to a proposal by the Executive Engineer, Chingleput division, to extend the area of cultivation under the Vallur anicut in the Ponnéri taluk of the Chingleput district.

One letter, No. 28, dated 3rd April 1895, in original, from Executive Engineer, Chingleput division, to Superintending Engineer, V Circle.
One letter, No. 3016/Eng., dated 25th August 1892, from Collector, Chingleput district, to Executive Engineer, Chingleput division.
One Ponnéri Tahsildar's statement, dated 4th September 1894, showing remissions of Vayalur, &c., tanks.
One statement, dated 3rd April 1895, showing quantity of water which passed over the Vallur anicut and the rainfall from 1891 to 1893.
One survey of proposed supply channel to Medavoyal tank, through Meenjur Branch channel.
Four sheets of longitudinal and cross sections of Juthur channel to head of Meenjur Branch channel.
(All in original.)

2. I should feel much obliged if you would look through the papers and favour me with your opinion as to whether plans and estimates should be prepared for the proposed work.

3. I think that it would be better to carry out all work considered to be necessary at one time; and believe that the providing of the head sluice with shutters worked by screw-gearing and the raising of the anicut one foot (if this be found necessary) should both be provided for in the estimates.

4. I request that the enclosures may be returned to me as soon as convenient.

Enclosures.

From D. MARSHALL, Esq., Executive Engineer, Chingleput Division, to the Superintending Engineer, V Circle, dated 3rd April 1895, No. 28.

I have the honour to submit the following suggestion for extending the Vallur anicut system for your orders.

2. It is proposed to feed the Madavoyal-Vayalur and Vayalur-Mamanikal tanks by water taken off from the Korttalaiyar river at Vallur anicut and passed down the Vallur and Meenjur channels. The latter branches from the former about half a mile below the head sluice (*vide* survey herewith sent).

3. It will be seen from the longitudinal section that scheme is feasible as regards levels; the crest of the anicut being taken as 15·55, that of the weir of the Medavoyal tank is 12·41.

4. It will be shown hereafter that there is ample water available at the anicut.

5. The project involves the following works :—

(*a*) A regulator across the Vallur channel just below the point where the Meenjur channel branches for diverting water from the main channel down the branch channel to the tanks (Rs. 600).

(*b*) The enlargement of the first half mile of the Vallur channel and the enlargement and extension of the Meenjur channel which at present extends as far as the Meenjur tangal, though for the last half mile it is little more than a field channel (cost about Rs. 3,000).

(*c*) The raising of the Vallur anicut one foot. This, however, is not at present necessary.

(*d*) It is also unnecessary to make any alteration in the head sluice of the Vallur channel which has 6′ vents 5′ × 5′ regulated with needle shutters, although at some future time the advisability of fitting it with screw-gearing shutter might be considered.

6. The following table shows the main hydraulic details, revenue, &c., of the tanks. This information has been got from the records of the Tank Restoration Scheme investigation in 1891. The information regarding the remissions in each case have been recently obtained from the Revenue Department :—

Tank.	Ayacut.	Assessment.	Capacity.	Drainage.		Average annual remissions for five years.	Remarks.
				Combined.	Free.		
Medavoyal	1,114	3,145	13·21	2·7	0·70	1,050	Receives surplus from Medavoyal.
Vayalur (1)	956	2,589	30·90	11·38	1·90	579	
Vayalur (2)	379	1,044	24·90	9·48	3·80	334	

In the project under consideration it is proposed to supply the Medavoyal tank directly by Meenjur channel, and the two Vayalur tanks will receive the surplus water after it has been filled. It will be observed that the free drainage area of the Medavoyal tank is very small, compared with its ayacut and capacity, and that the irrigation under it wants improvement is borne out by the fact that large sums of remission are annually granted. Could the annual remissions under this tank alone be saved by the execution of the scheme, it would be sufficient to justify the expenditure of Rs. 3,600 (the approximate cost of the project). The remissions granted for lands under the two Vayalur tanks are not so great in proportion to their assessment, but it will be observed that the conditions of these tanks with regard to drainage area and capacity are more favourable.

7. From the accompanying table which shows the discharge over the anicut rainfall, &c., it will be seen that there is ample water available for supplying the tanks in the manner suggested. On first looking at the table, the scheme appears useless as the periods of rainfall more or less coincide with the periods of discharge over the anicut. It will, on the other hand, be noticed that on an average there is seldom more than one inch of rain per day and that the rainfall is not continuous for any length of time. Moreover, the Ponnéri taluk in which the three tanks are situated is very flat, large portion of the drainage basins are under cultivation and the fields are surrounded with high "varappoos" or bunds. These facts show the figures of the table in a different light, as the run off or drainage from the catchment basins, except in abnormal circumstances, can only be a very small percentage of the actual rainfall.

8. The present cultivation under the Vallur anicut will, in no way, be affected by this scheme, as it is understood that water will only be allowed to pass down to the tanks when not required by any lands now irrigated by the Vallur channel or its branches. The existing area of cultivation under the Vallur channel head sluice is 5,475 acres (direct cultivation). As the large portion of this is supplied by baling a discharge of not more than 90 cubic feet per second can at any time be required. In addition to the direct cultivation a branch of the Vallur channel supplies the Senroyenpoliem tank. The water at present supplied through the head sluice is ample, and I find that the vents are frequently closed entirely during freshes; even when water is not discharging over the anicut, it is at times allowed to pass down the channel, though not required for irrigation, and flow to waste.

9. The cultivation supplied by water from the river below the anicut is about 1,451 acres in extent, but as the area is small and as it is supplied to a large extent by spring channels dug in the river bed, it cannot be affected in any way by the suggested extension of the anicut system.

10. On the whole, the scheme seems feasible and would, if carried out, reduce the amount of remissions annually granted. In addition to this it is stated that the cultivation could be extended by 2,000 acres, but I am doubtful of this figure.

I have the honour to request you will be good enough to inform whether detailed plan and estimate may be prepared.

From J. THOMSON, Esq., Collector of the Chingleput District, to the Executive Engineer, Chingleput Division, dated Saidapet, 25th August 1892, Ref. on No. 3016/Eng.

I have the honour to submit, for your consideration and remarks, the question of improving and extending the Meenjur channel (which branches from the Vallur anicut) for the purpose of supplying the tanks of Medavoyal and Vayalur villages in the Ponnéri taluk with the surplus water of the said channel. A sketch showing the course of the Meenjur channel and the position of the Medavoyal and Vayalur tanks is enclosed, together with copy of Arzi No. 1041, dated 28th June 1892, of the Tahsildar of Ponnéri, which deals with the proposal. It is expected that the proposed work will bring in an increase of revenue to the extent of over Rs. 2,500 annually. I shall feel obliged by an early intimation of your views.

Memorandum to the Superintending Engineer, VI Circle, dated 24th May 1895, No. V/31 C.N.

In reply to letter No. 148 E.S., dated 10th May 1895, from the Superintending Engineer, V Circle, the undersigned has the honour to say that the Chief Engineer for Irrigation approves the proposals of the Executive Engineer, Chingleput division, which are supported by the Superintending Engineer, for extending the area of cultivation under the Vallur anicut system in the Ponnéri taluk of the Chingleput district. The necessary plans and estimates for the proposed work may be prepared and submitted for sanction.

2. The enclosures of the Superintending Engineer's letter are herewith returned as requested.

T. W. S. SMYTH,
for Chief Engineer for Irrigation.

From Lieutenant-Colonel C. C. RAWSON, R.E., Superintending Engineer, V Circle, to the Chief Engineer for Irrigation, dated Chepâk, 16th January 1897, No. 10 E.I.

With reference to your memo., No. V/31 C.N., dated 24th May 1895, I have the honour to submit for sanction the enclosed plans and estimate of Rs. 5,240 with report for extending the area of cultivation under the Vallur anicut system in the Ponnéri taluk, Chingleput district.

2. The necessity for the work is explained in the report attached to the estimate.

ENCLOSURE.

REPORT to accompany the plans and estimates for the scheme for extending the Irrigation under the Meenjur branch channel, Vallur anicut system.

	RS.
Amount of estimate	5,240

This scheme has, for its object, the extension of the irrigation under the Meenjur branch channel, Vallur anicut system. The primary object of the scheme is to feed Medavoyal large tank by water taken off from the Korttalaiyar river at the Vallur anicut. But, indirectly, a number of other tanks will be benefited by the proposal. Medavoyal Bommasamudram tank, Vayalur large tank, and Vayalur Mamanikal tank would be fed by the surplus from Medavoyal large tank.

The necessity for the scheme arises from the fact that, owing to insufficient water-supply and the consequent failure of crops, on the lands under the Medavoyal and Vayalur tanks, large annual remissions have to be made to the ryots. This clearly shows that the present state of the irrigation is unsatisfactory and that it is capable of improvement, and that the "ayacut" or irrigated area under these tanks is also capable of extension.

The following table will show that, while the Medavoyal large tank, with a capacity of about 13 millions of cubic feet, has an ayacut of 1,114 acres, the Vayalur large tank with a capacity of 31 millions has an ayacut of only 956 acres, and that the Mamanikal tank, with a capacity of 25 millions, has an ayacut of 379 acres only. The desirability of the scheme will therefore be obvious.

Tanks.	Ayacut.	Capacity millions of cubic feet.	Remission, annual.
	ACS.		RS.
Medavoyal	1,114	13·21	1,050
Vayalur large tank	956	30·90	579
Vayalur Mamanikal tank	379	24·90	334

The success of the scheme will depend, however, on the amount of water available at the anicut.

The following table will show the time during which water was flowing over the anicut in each of the years from 1877 to 1894:—

Year.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
Days	48	83	67	60	15	20	98	96	58	176	94	30	60	20	26	25	30	65

The days in the above table represent the total duration of the May and October freshes. During the hot months the discharge over the anicut due to the freshes does not last on an average for more than two days at a time. If the scheme is to prove a financial success, the freshes in the hot months must be taken advantage of for supplying the ryots with water just at the time that they are most in need of it. The scheme would, however, be beneficial under any circumstances since the tanks that are to be benefited by the present proposal do not, except in years of very good rainfall, get their full supply of water as the discharge from the theoretical catchment basins is limited (in this case) by the fact that the fields which form part of the catchment areas are surrounded by high "varappoos" or bunds. The supply channel has, therefore, a discharge that satisfies this condition, viz., that it should be able to fill Medavoyal large tank within two days (1·12 days actually).

The scheme, as now submitted, involves the following works:—

(*a*) The enlargement of the Vallur main channel from its head up to the head sluice, and excavation of a fresh channel on a direct line from the head sluice to Medavoyal large tank.

(*b*) Division of the head sluice, two of the six vents being utilized for supplying the new channel.

(*c*) The construction of a retention sluice on the channel at Medavoyal tank.

(*d*) The construction of a culvert on the Ponnéri road.

(*e*) The diversion of the cart-track from the head sluice to the Ponnéri road, for part of its length from A to B on the compass survey plan (new scheme).

(*f*) A dam just below the railway line. There is also the usual item of land compensation.

The present scheme will in no way disturb existing right, as water will be sent down to the tanks only when it is not required by the lands now irrigated by the Vallur main channel or its branches; neither will the cultivation below the anicut suffer on account of the present scheme, since the lands are irrigated by spring channels dug in the bed of the river and will in no way be affected by the suggested extension of the system.

(Signed) A. T. MACKENZIE,
Ex. Engineer, Chingleput Divn.

18th December 1896.

No. 31 I.

Submitted to Government. The amount of the estimate has been increased in this office from Rs. 5,240 to Rs. 5,290 owing to errors found in the calculations in the detailed estimate.

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

9th February 1897.

ORDER—No. 169 I., dated 18th February 1897.

The following estimate is sanctioned :—

Irrigation.
43. Minor Works and Navigation.
Minor Works for which Capital and Revenue Accounts are kept.
Vallur Anicut System.
Open Capital Account.
3. Distributaries.
Extension of Meenjur Branch Channel.
Channel from Head sluice to Medavoyal tank.

	RS.	RS.	RS.
2. Land—			
1. Compensation for land	642	642	
4. Earthworks—			
2. Cutting and banking	2,378	2,378	
5. Miscellaneous—			
3. Demarcation stones	120	120	3,140
3. Works—			
4. Proposed diversion of head sluice and diversion of cart-track	720		
5. Constructing a road culvert at 3,000 feet from head sluice	620		
6. Constructing a dam at 5,100 feet from head sluice	310		
7. Constructing a retention sluice at 10,170 feet from head sluice	500	2,150	2,150
Total I. Works			5,290
II. Establishment ...			1,069
III. Tools and plant ...			41
Total estimate ...			6,400

2. This sanction is registered as No. 183 I. of 1896–97 and will expire on the 31st March 1899.

(True Extract.)

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

To the Chief Engineer for Irrigation.
„ Superintending Engineer, V Circle, with fifteen enclosures.
„ Examiner, Public Works Accounts.

Exd. T. K. Narayana Aiyangar.

A

~~A.E.~~ No. 169 I of 18.2.97

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

Public works (1897) Department

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Current No: 1678
Recd: 15.2.97
UNDER date the
Enclos: 19 (+7 Plans)

READ the following

From Supg Eng, V Circle, No. 48 E.I. d/ 10.5.95.
To do. 31 C.N. d/ 24.5.95.
From do. 10 E.I. d/ 16.1.97
No 31.I d/ 5.2.97

G.R.

Submitted to Govt. The amount of the estimate has been increased in this office from Rs 5240 to Rs 5290 owing to errors found in the calculations in the detailed estimate

Order thereon.

The following estimate is sanctioned.

Irrigation

43. Minor Works Navign.

Minor Works for which Capital & Revn. Accts

Irrigation Asst

A.S.H.
12.2.97

Issue

D.I.

13.2.97

ar. Kept.

Vallur Anicut System

Open Capital Account

3. Distributaries

Extension of Meenjur Branch channel.

Channel from head sluice to Medavoyal tank.

		Rs	Rs	
2. Land	1. Compensation for land . .	642	642	
4. Earthwork.	2. Cutting & banking	2378	2378	
5. Miscellaneous	3. Demarcation stones .	120	120	
				3140
3. Works.	4. Proposed diversion of head sluice & diversion of cart track . . .	720		
	5. Constructing a road culvert at 3000' from head sluice . .	620		
	6. Constructing a dam at 5100 ft from head sluice . . .	310		
	7 Constructing a retention sluice at 10170 ft from head sluice . .	500	2150	2150
	Total I. Works.			5290
	II Establishment			1069
	III Tools & Plant			41
	Total Estimate			6400

10 B

2. This sanction is registered as No. 183 I of 1896-97 & will expire on the 31st March/99.

J.J.h
8/2/97

W.H
9/2

7.E.I
17/2/97

ICW
18/2/97

Regd.
19/2/97

To
The Chief Engr for I. (15)
Supg Engr & with ~~15~~ enclos.
Ex. Engr – T.W.R

ICW
5/2/97 BR

for Collector.

E. I. Form No. 1—500—3-12-95.

14E 9/2 R.13/2

Public Works
~~Judicial~~ (1895) Department.

CURRENT No. 31 CN

Order

From The Suptg Engineer
I of the Circle

No. 148 E I

Dated 10 May 1895

Received

Registered

Enclosures

Spare copies

SUBJECT.

Extension of Irrigation under Valliur Channel System
Forwards certain plans &c relating to the proposal of — and requests the favour of opinion

for Collector.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Ref: on No 3016 / English of 1892.

Chingleput Dt: Collector's O
Saidapet, 25 August 1892

2

From
J. Thornton Esquire
Collector of the Chingleput Dt.

To
The Executive Engineer
Chingleput Division.

Sir,

I have the honor to submit for your consideration and remarks the question of improving and extending the Minjur Channel (which branch from the Vallur anicut) for the pur-pose of supplying the tanks of Meda-voyal and Voyalur villages in the Ponneri taluq with the surplus wate of the said channel. A sketch showin the course of the Minjur channel and the position of the Medavoyal and Voyalur tanks is enclosed together with copy of Arzi No 1041 dated 28 June 1892 of the Tahsildar of Ponneri which dea with the proposal. It is expected that the proposed work will bring in an increase of revenue to the extent of over Rs 2500 annually. I shall feel obliged by an early intimation of your views.

I have to
(Sd) A Pinto
for Collector.

P. W. D.
Chingleput Division Office
3d April 1895

rom

D. Marshall Esquire
Executive Engineer, Chingleput Dn:

o

The Supg: Engineer, V Circle

Sir;

I have the honor to submit the following suggestion for extending the llur anicut system for your orders.

It is proposed to feed the Madavoyal Voyalur and Voyalur Mamanikal Tanks by water taken off from the Kortilliyar iver at Vallur anicut and passed down the Vallur and Meenjur channels. The latter branches from the former about ½ mile below the head sluice vide Survey herewith sent.

3. It will be seen from the longitudinal section that scheme is feasible as regards levels; the crest of the anicut being taken as 15.55 that of the weir of the Medavoyal tank is 12.41.

4. It will be shown hereafter that there is ample water available at the anicut.

5. The project involves the following works

(a) A regulator across the Vallur channel just below the point where the Meenjur channel branches for diverting water from the main channel down the branch channel to the tanks (Rs 600)

(b) The enlargement of the first half mile of the Vallur channel and the enlargement and extension of the Meenjur channel which at present extends as far as the Meenjur tangal though for the last half mile it is little more than a field channel (cost about Rs 3,000).

(c) The raising of the Vallur anicut 1 foot. This however is not at present necessary

(d) It is also unnecessary to make any alteration in the head sluice of the Vallur channel which has 6 vents 5'×5' regulated with needle shutters although at some future time the advisability of fitting it with screw gearing shutter might be considered.

6. The following table shows the main Hydraulic details Revenue &c of the tanks. This information has been got from the records of the T.R.S. investigation in 1891. The information regarding the remissions in each case have been recently obtained from the Rev: Dept:

Tank	Ayacut	Assessment	Capacity	Drainage		Average annual remissions for 5 years	Remarks
				combined	free		
Medavoyal	1114	3145	13.21	2.7	0.70	1050	
Voyalur (1)	956	2589	30.90	11.38	1.90	579	Receives surplus from Medavoyal.
Voyalur (2)	379	1044	24.90	9.48	3.80	334	

In the project under consideration it is proposed to supply the Medavayal tank directly by Meenjur channel and the 2 Voyalur tanks will receive the surplus water after it has been filled. It will be observed that the free drainage area of the Medavayal tank is very small compared with its ayacut and capacity and that the irrigation under it wants improvement is borne out by the fact that large sums of remission are annually granted. Could the annual remissions under this tank alone be saved by the execution of the Scheme it would be sufficient to justify the expenditure of Rs 3600 (the approximate cost of the project). The remissions granted for lands under the two Voyalur tanks are not so great in proportion to their assessment but it will be observed that the conditions of these tanks with regard to drainage area and capacity are more favorable.

7 — From the accompanying table which shows the discharge over the anicut rainfall &c, it will be seen that there is ample water available for supplying the tanks in the manner suggested. On first looking at the table, the Scheme appears useless as the periods of rainfall more or less coincide with the periods of discharge over the anicut. It will, on the other hand be noticed that on an

an average there is seldom more than one inch of rain per day and that the rainfall is not continuous for any length of time. Moreover, the Ponneri Taluq in which the three tanks are situated is very flat, large portion of the drainage basins are under cultivation and the fields are surrounded with high "varappoo" or bunds. These facts show the figures of the table in a different light, as the run off or drainage from the catchment basins, except in abnormal circumstances can only be a very small percentage of the actual rainfall.

8. The present cultivation under the Vallur anicut will in no way be affected by this Scheme, as it is understood that water will only be allowed to pass down to the tanks when not required by any lands now irrigated by the Vallur channel or its branches. The existing area of cultivation under the Vallur Channel Head sluice is 5475 acres (direct cultivation) As a large portion of this is supplied by baling a discharge of not more than 90 c. ft per second can at any time be required. In addition to the direct cultivation a branch of the Vallur Channel supplies the Sentoyenpoliem tank. The water at present supplied through the Head sluice is ample and I find that the vents are frequently closed entirely

during freshes; even when water is not discharging over the anicut it is at times allowed to pass down the channel, though not required for irrigation, and flow to waste

9. The cultivation supplied by water from the river below the anicut is about 1451 acres in extent, but ~~also~~ as the area is small and as it is supplied to a large extent by spring channels dug in the river bed it cannot be affected in any way by the suggested extension of the anicut system.

10. On the whole the scheme seems feasible and would if carried out reduce the amount of remissions annually granted. In addition to this it is stated that the cultivation could be extended by 2000 acres but I am doubtful of this figure.

I have the honor to request you will be good enough to inform whether detailed plan and estimate may be prepared.

I have &c
(Sd) D. Marshall
Exe: Engineer

R3ICN
10. 5. 96

P.W. E.3
16/8/97

Report to accompany the plans and estimates for the scheme for extending the irrigation under the Mesanjur branch channel. Vallur Anicut system.

5290

Amount of Estimate Rs. 5,240.

This scheme has for its object the extension of the irrigation under the Mesanjur branch channel, Vallur Anicut system. The primary object of the scheme is to feed Medavoyal Large tank by water taken off from the Kortelliar River at the Vallur Anicut. But, indirectly, a number of other tanks will be benefited by the proposal. Medavoyal Bommasamudram Tank, Voyalur Large Tank, and Voyalur Mamanikal Tank would be fed by the surplus from Medavoyal Large Tank.

The necessity for the scheme arises from the fact that owing to insufficient water supply and the consequent failure of crops on the lands under the Medavoyal and Voyalur Tanks large annual remissions have to be made to the ryots. This clearly shows that the present state of the irrigation is unsatisfactory and that it is capable of improvement & that the "ayacut" or irrigated area under these tanks is also capable of extension.

The following table will show that while the Medavoyal Large Tank, with a capacity of about 13 millions of C ft. has an ayacut of 1114 acres,

the

the Voyalur Large Tank with a capacity of 31 millions has an ayacut of only 956 acres, and that the Mamanikal Tank with a capacity of 25 millions has an ayacut of 379 acres only. The desirability of the scheme will therefore be obvious.

Tank.	Ayacut acres.	Capacity mill. of cft.	Remission annual. Rs.
Medavoyal Large Tank	1114	13.21	1,050
Voyalur Large Tank	956	30.90	579.
Voyalur Mamanikal Tank	379	24.90	334.

The success of the scheme will depend, however, on the amount of water available at the anicut.

The following table will show

Year	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
Days	48	83	67	60	15	20	98	96	58	176	94	30	60	20	28	25	38	65.

the time during which water was flowing over the anicut in each of the years from 1877 to 1894. The days in the above table represent the total duration of the May & October freshes. During the hot months the discharge over the anicut due to the freshes does not last on an average for more than two days at a time. If the scheme is to prove a financial success the freshes in the hot months must be taken advantage of for supplying the

to?

the ryots with water just at the time that they are most in need of it. The scheme would, however, be beneficial under any circumstances since the tanks that are to be benefited by the present proposal do not, except in years of very good rainfall, get their full supply of water, as the discharge from the theoretical catchment basins is limited (in this case) by the fact that the fields which form part of the catchment areas are surrounded by high "varapoo" or bunds. The supply channel has, therefore, a discharge that satisfies this condition, viz, that it should be able to fill Medavoyal Large tank within two days — 1.12 days actually.

The ~~new~~ scheme, as now submitted, involves the following works:—

(a). The enlargement of the Vallur main channel from its head up to the head sluice, and excavation of a fresh channel on a direct line from the Head sluice to Medavoyal Large Tank.

(b). Division of the Head sluice, two of the six vents being utilized for supplying the new channel.

(c). The construction of a retention sluice on the channel at Medavoyal Tank.

(d) The construction of a culvert on the Ponneri Road.

(e). The diversion of the cart track from the Head sluice to the Ponneri Road for part of its length from A to B on the compass survey plan (new scheme),

(f). A dam just below the Railway Line.

There is also the usual item of land compensation.

The present scheme will in no way disturb existing right as water will be sent down to the tanks only when it is not required by the lands now irrigated by the Valler main channel or its branches, neither will the cultivation below the anicut suffer on account of the present scheme, since the lands are irrigated by spring channels dug in the bed of the river and will in no way be affected by the suggested extension of the system.

18th December
1896.

A. W. Mackenzie

Executive Engineer,
Chingleput Dn.

Superintending Engineer's Office, V Circle, P.W.D., Madras.
No. 6.C.I.
6 - JAN 1897

Chief Engineer for Irrigation.
6 Jan 97
No. 5 M/97

Pw. E. of 1678/97

6.1.97
ED

No. 148 E.I.

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Chepâk, 10th May 1895.

From
Lieut: Col: C. C. Rawson R.E.
SUPERINTENDING ENGINEER, V CIRCLE,

To
THE Chief Engineer for Irrigation

Enclosures.

1. Letter No. 28 d/3.4.95 in original from E.E. Cn to S.E.V.
1. Letter No. 3016/Eng d/25.8.92 from Collr: Cn to E.E. Cn
1. Ponneri Tahsildar's St: d/4.9.94 showing remissions of Vayaloor tanks.
1 St: d/3.4.95 showing quantity of water which passes over the Valler anicut & the Rainfall from 1891 to 1893.
1 Survey of proposed Supply chl: to Madavayal tank thro' Mangapur Branch channel.
4. Sheets of Long: and Cross sections of Jettur chl to Head of Mangapur Branch chl:

(all in original)

SIR,

I have the honour to enclose the papers named in the margin relating to a proposal by the Executive Engineer Chingleput Division to extend the area of cultivation under the Valler Anicut in the Ponneri Taluq of the Chingleput District.

2. I should feel much obliged if you would look through the papers and favour me with your opinion as to whether plans and estimates should be prepared for the proposed work.

3. I think that it would be better to carry out all work considered to be necessary at one time; and believe that the providing of the Head sluice with shutters worked by screw gearing and the raising of the anicut 1' —

(if this

(if this be found necessary) should both be provided for in the Estimates.

4. I request that the enclosures may be returned to me as soon as convenient.

I have the honour to be
Sir,
Your most obedt. servt.

C S Evans
10/5/95
Lt Col: R.E.
Supg. Engineer V Circle

20.5.95

2

From

The Superintending Engineer,
V Circle,

R31CN
11 MAY.95

To

The Chief Engineer
For Irrigation

Dated 10th
Recd. } May 1895.

Enclosures. 9.

P.W. E.4
1678/97

No. 148 E.I.

Extension Irrigation under Vallur ancient System. —

Forwarding certain Plans &c relating to the proposal of — & requests the favor of opinion —

C.E.I.
20-1-97.

Public Works (1897) Department.

CURRENT No. 5. CN

Order

4.E.I.

The estimate has been revised and the total amount increased from Rs 5240 to Rs 5950 [illegible] [illegible] [illegible]

S.E.
2/11/97

From The Supdg Engineer
5th Circle

No. 10 E.I

Dated 16th January 1897
Received 16-1-97
Enclosures 14.
Spare copies

SUBJECT.

Vallur ancient System in the Ponneri Taluq, Chingleput District

Submitting for Sanction the plans & Estimate of Rs 5240 for extending the area of cultivation under the —

Entered 18/1
B.R.
Refd. 4.400 M
16-1-97

18/1

BACK PAPERS.

G.O.	No.	Department.	Date.
I	31 CN	I	24-5-95

FURTHER PAPERS.

G.O.	No.	Department.	Date.

3 P

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8 R.

No. 1082

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Chepák, 16 January 1897.

From
Lieut. Colonel C. C. Rawson R.E.,
SUPERINTENDING ENGINEER,
V CIRCLE,

To
THE Chief Engineer for Irrigation
Madras.

SIR,

With reference to your memorandum No. $\frac{\text{V}}{\text{31 CN}}$ dated 24th May 1895, I have the honour to submit for sanction the enclosed plans and Estimate of Rs. 5240 with report for extending the area of cultivation under the Vallur Anicut System in the Ponneri taluq, Chingleput District—

2. The necessity for the work is explained in the report attached to the estimate—

Enclosures. 14.
1. Report.
1. Earthwork calculation sheet.
4. Detailed estimates.
1. General abstract estimate.
1. Survey plan in tracing
1. Longitudinal section in tracing.
2. Sheets of levels.
3. Masonry plans.
14

I have the honour to be,
Sir,
your most obedient servant.

C Rawson Lt Col. R.E.
16/1/97
Superintending Engineer, V Circle

1,000—25-2-96.

From

The Superintending Engineer,

V Circle,

CHIEF ENGINEER
FOR IRRIGATION
1 . JAN 97
No. 5 CN

To

The

Dated } 189 .
Recd.

Enclosures.

No.

Public Works (1895) Department.

CURRENT No.

Order

To
~~From~~

The Supdtg Engineer 5 Circle

No. 31 CN

Dated 24 May 1895
Received
Enclosures
Spare copies

SUBJECT.

Cultivation under the Vallur Anicut System in the Ponneri Taluk. Approves the proposals of the E. Engineer for extending the area of — and requests that necessary plan and Estes for the proposed work may be prepared and submitted for Sanction

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

6
No 31 CN of 24-5-95

Ens G.

Memo.

In reply to letter No. 148-E.I. dated 10 May 1895 from the Superg. Engineer, Fifth Circle, the undersigned has the honor to say that the Chief Engineer for Irrigation approves the proposals of the Executive Engineer, Chingleput division, which are supported by the Superg. Engineer, for extending the area of cultivation under the Vallur Anicut System in the Ponneri taluq of the Chingleput district. The necessary plans & estimates for the proposed work may be prepared and submitted for sanction.

2. The Enclosures of the Supdg. Engineer's letter are herewith returned, as requested.

24/5

Please copy of [illegible] Engineer
[illegible] Collector's letters before
returning [illegible]

24/5 attended to
Br.
28/5/95

Fdd. 24/5/95.