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MADRAS RECORD OFFICE.**Government of Madras.***Public Works* **DEPARTMENT.**

G.O. No. 998	Press
157-158	Mis-
Dated 9-11	18-10

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
9th April 1870*

No 157. Note by the Acting Chief Engineer for Irrigation, dated Fort Saint George, 8th March 1870, No. 57 —

Read the following letter from Colonel E. A. FORD, R. E., Superintending Engineer, 5th Division, to the Chief Engineer for Irrigation and Joint Secretary to Government, Public Works Department, dated Villupuram, 2nd March 1870, No 204 —

I HAVE the honour to forward, for the sanction of Government, the plans and estimates connected with the improvement of the Allungal Channel, in the Villupuram Talook of South Arcot, but I am unable to furnish all the information called for in your Memorandum, No. 276, of the 22nd September 1869

One Survey, } per banghy.
Six Plans, }
Two Detailed Estimates
,, Abstract do
One General Abstract
One Report
Two Revenue Statements
One Register of Water

2. It is not possible to show what is expected from the channel if it is meant by that to state during how many days water will flow in the channel and how many cubic yards will enter each tank. The Pooniar is not a river, but a torrent. The freshes in it are most uncertain as to their period, duration, and depth, and there must be the same uncertainty as to the months in which the channels will receive water, the number of days or hours in each month during which the water will flow, and the average depth during that time. It is, of course, easy to assume that there will be an average depth of water of so many feet for so many days at the head of the channel; the quantity of water that will then pass down a channel, whose breadth and fall are known, follows as a matter of course, but in the present case there are no reliable data on which to make any assumption of the kind. None of the Pooniar channels have a conservancy establishment, except those connected with the anicut near Trikalore, at which place alone has any register of the water been kept, but the days on which water passed down the Allungal Channel last year and its depth were noted by the Talook Overseer. The proposed improvements to the Allungal Channel have not been based on any elaborate calculations of the quantity of water to be carried by it, as such calculations must be fallacious; but they have been designed with a view to the water flowing, without impediment, to all the tanks connected with the channel, during such time as there may be a fresh in the river. The tanks have been supplied by the Allungal Channel from time immemorial, but, for several years past, very imperfectly, owing to obstructions in its course and to the ryots neglecting to clear the head. It is now proposed to remove these obstructions, to regulate the width and the slope, strengthen the banks, and cut away unnecessary bends. These are the most essential works. It is also proposed to build some division sluices to prevent waste of water.

3. The survey and estimate were a long time in hand owing to several unnecessary details having been included in them, and, as the greater part of the work required was really of a very ordinary nature, I obtained the authority of Government at the beginning of August to commence the work in anticipation of sanction to the estimate. The work done last year was most successful, and all

the tanks received an abundant supply of water. Owing first to a reduction of the grant and afterwards to the stoppage of all new works, only Rupees 4,847 were expended on the channel between August and December, and the work done was confined to opening a new head and clearing and straightening the channel. On the resumption of works in April, the rest of the earth-work should be completed and the masonry works built.

4 Several of the suggestions contained in your memorandum have been adopted in the revised plans and estimates now forwarded. I intended to have substituted for the plan received from the Range Officer a plan of head-sluice, which has been successfully tried in several places in the district, and which will cost considerably less. But, having recently examined the head of the channel and made some inquiries on the spot, I am of opinion that this work can be deferred. I have also struck out the calingulah and the groyne at the head of the channel. Some clearing in the channel and river near the head-sluice will be required every year. This and the temporary corumboo should be the work of the ryots.

5 With reference to your remarks on the Revenue statement, I have to observe that "extra assessment or water cess" has nothing to do with second crop, but is the amount levied on land not classed as nunjah, when water is supplied to it. Next, as to increase of revenue expected from the improvement of the channel, it will be seen that by far the greater part is to come from the Valavanur Tank. Whenever complaints have been made of the state of the Allungal Channel, it has always been with reference to the falling off of the revenue of that tank, and the improvement of the channel has now been undertaken, principally with a view to the better supply of that tank. Owing to the absence of a conservancy establishment and there being no division sluices, the Valavanur Tank, which is at the extreme end, has not received its proper share of the water that entered the channel. It was ascertained at the time the levels were taken that the Valavanur Channel, at one part of its course, had ceased to be the main channel and had become merely a branch. This will now be rectified. The sizes of the proposed division sluices are sufficiently correct for all practical purposes, and they will allow of a proper quantity of water going down to the Valavanur Tank, which is the main object of all the improvements. The surplus channel of the Valavanur Tank is called the Koodeveyar, and the water in it is utilized in the French territory. I propose removing the dam stones of the calingulah, lengthening it by eighteen feet, and raising it half a yard.

6. As regards the contour surveys of the tanks, they will be of use when the tanks are repaired. The Valavanur Tank is in good order. The repair of the others will be taken up separately, but the raising of the banks to increase their capacity can only be undertaken after a careful examination of the land that will be submerged. All over the Villupuram Talook the cultivation extends to the very margin of the waterspread of the tanks, and, in some cases, though improperly, into the beds of the tanks. The enlargement of the areas of the tanks will, in most cases, interfere with private rights.

7. The revised estimate now forwarded, after the alterations and deductions made by me, amounts to Rupees 12,620.

NOTE by the Acting Chief Engineer for Irrigation.

IN September last the Superintending Engineer of the 5th Division forwarded an estimate, Rupees 19,000, for the improvement of the Allungal Channel, in the South Arcot District. The project was in some important respects incomplete as regards the information required to show the probable effects of the expenditure contemplated, and the Superintending Engineer was, therefore, asked* to make a further report.

* Memorandum, No 276, dated 22nd September 1869

2. The letter, No. 204, of the 2nd instant, from Colonel Foord shows that he has been unable to obtain exact data on which to base the contemplated improvements, but that he considers that the past history of the channel, and the obvious tendency of the works proposed for making the channel more efficient, sufficiently clearly demonstrate that satisfactory results may be anticipated from the expenditure provided for in the estimates.

3 The estimates as revised amount to Rupees 12,620, and include the following items —

	RS
Compensation for land	960
Masonry works—Main Canal	400
Do —Distributing channels	1,750
Do. —Supply of Tanks.	900
	3,050
Earthworks—Main Canal	7,710
Do. —Distributing channel	900
	8,610
Total	12,620

Neither the plans nor the specification report show either the present or proposed dimensions of the main channel. The Index plan shows where bends are to be superseded by an improved alignment, and a longitudinal section is also there given. A register of water, stated in the heading to be for 1870, but which appears to be for September, October, and November 1869, indicates the depth of water in the channel during that time; and thus, taken with the remarks contained in paragraph 2 of the Superintending Engineer's letter, is all the information available regarding the water-supply.

4 It is not possible for me, under these circumstances, to offer an opinion regarding the project, neither can I say whether the straightening of the channel, thereby increasing the fall to about four-and-a-half feet a mile, is a proper arrangement. The Superintending Engineer reported in July last that the work had been commenced in anticipation of the sanction of Government, and this course was approved in the Order of the 31d August, No 2,546, and cubic yards 48,261 out of 1,10,727 are reported to have been executed.

5 From paragraph 5 of Colonel Foord's letter it will be seen that it is intended to raise the waste weir of the Valavanur Tank eighteen inches, and it is stated that the surplus is utilized in French territory. It is very probable that, with an improved supply, the surplus will not be diminished but rather increased, especially as the new crest will be lower than the tops of the present dam stones,

*Proceedings of the Madras Government, Public Works Department,
9th April 1870.*

which perhaps are allowed to be blocked up when necessary. At the same time it will be requisite that the Superintending Engineer should be able to demonstrate that the French ryots will have no ground of complaint, and it would have been better had this point been specially noticed in the letter transmitting the estimates.

6. The Revenue statements, which, it may be remarked, are signed by the Tahsildar only, show that the increase of revenue expected from the improvement of the Allungal Channel amounts to Rupees 10,233-15-0. The returns will depend upon the water-supply, and about this but very little is known. An improved channel will doubtless carry an increased supply of water, supposing that the Pooniaur brings down such a supply, but if the Valavanur Tank, from which seven-tenths of the expected increase are expected, may be taken as a criterion, it would appear that want of water in the Pooniaur, rather than the inability of the Allungal Channel to carry a proper supply, has been the cause of a falling off of revenue in certain years, and that the average area cultivated and paying assessment was, leaving out the exceptional years, (Fushies 1275, 1277, and 1278,) 1,665 acres, or 119 acres less than the area stated to have been cultivated when the channel was in good order. The Superintending Engineer says that the work done during the past season has been very successful, and that all the tanks have received an abundant supply of water. This is certainly very satisfactory, but the monsoon was, in the South Arcot District, a good one, and this in itself, if taken in connection with the past history of the channel, would account for the facts adduced.

7. I may point out, in conclusion, that not only is the information of the kind asked for in my memorandum on the original estimates very requisite for the proper determination of the details of such a project as that under notice, but that Chapter V, Paragraphs 41 and 42 of the Code require such data to be obtained and reported.

(Signed) J. MULLINS, Major, R. E.,
Acting Chief Engineer for Irrigation.

To the Secretary to Government, Public Works Department

No. 158.

ORDER THEREON, 9th April 1870, No. 998.

IRRIGATION, No. 17.

In July last the Superintending Engineer, 5th Division, reported that estimates had been completed for the improvement of the Allungal Channel in the South Arcot District, and that he had authorized the commencement of the work in anticipation of the sanction of Government. As the need of improvement had been several times brought to notice, the proceedings of the Superintending Engineer were approved in G. O. No. 2,546, of the 3rd August 1869.

2. The estimates were forwarded to the Acting Chief Engineer for Irrigation in September, but, as the information furnished with them was incomplete and insufficient, a further report was called for. It now appears that reliable data regarding the water-supply in the Pooniaur are not available, but that Colonel Foord has satisfied himself that the work provided for in the revised estimates, which amount to Rupees 12,620, will have a very beneficial effect upon the cultivation under the tanks which are supplied by the channel; and, as nearly half the

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earth-works are reported to have been executed, the Government sanction the estimate. The attention, however, of the Superintending Engineer will be called to the remarks of the Acting Chief Engineer for Irrigation, and Colonel Foord will be careful in future to make timely provision for obtaining all such information as may be necessary to show clearly the probable effect of the works which he may propose to submit for sanction. A further report should be made as to the effect of raising the waste weir of the Valavanur Tank on the amount of surplus, which is, it is stated, utilized in French territory.

(True Extract.)

Major, R. E.,
Acting Joint Secretary to Government.

To the Superintending Engineer, 5th Division
,, Controller of Public Works Accounts.
,, Accountant-General.
,, Chief Engineer for Irrigation.

Exd. A. S. Rodgers

N^o 57
Note by the Acting Chief Engineer for Irrigation

Enclos 17

* Memo. 1.276
22^d September 1869

In September last the Superintending Engineer of the 5th Division forwarded an estimate of Rs 19,000 for the improvement of the Allungal Channel in the South-East District. The project was in some important respects incomplete as regards the information required to show the probable effects of the expenditure contemplated, and the Superintending Engineer was therefore asked to make a further report.

2. The letter N^o 204 of the 2nd Instant from Colonel Ford shows that he has been unable to obtain exact data in which to base the contemplated improvements, but that he considers that the past history of the channel, and the obvious tendency of the works proposed for making the channel more efficient, sufficiently clearly demonstrate that satisfactory results may be anticipated from the expenditure provided for in the estimate.

3. The estimate as revised amounts to Rs 12,620, and includes the following items:
Compensation

Compensation for land	Rupies 960	
Masonry works, main canal	400	
distributing channels	1750	
Supply of Tanks	900	3050
Earthworks, main canal	7750	
distributing channels	900	8650
Total		12620

Neither the plans, nor the specifications report show either the present, or proposed, dimensions of the main channel. The Index plan shows where lines are to be superseded by an improved alignment, and a longitudinal section is also there given. A register of water, stated in the heading to be for 1870, but which appears to be for September, October & November 1869, indicates the depth of water in the channel during that time, and this, taken with the remarks contained in para 2 of the Superintending Engineer's letter, is all the information available regarding the water supply.

It is not possible for me under these circumstances to offer an opinion regarding the project, neither can I say whether the straightening of

of the channel, thereby increasing the fall to about 4 1/2 feet a mile, is a proper arrangement. The Superintending Engineer reported in July last that the work had been commenced in anticipation of the sanction of Government, and this course was approved in the order of the 3rd August A. 2546 and cubic yards 48261 out of 110727 are reported to have been executed.

From para 5 of Colonel Stingle's letter it will be seen that it is intended to raise the water level of the Valavani Tank 18 inches, and it is stated that the surplus is utilized in French territory. It is very probable that with an improved supply the surplus will not be diminished but rather increased, especially as the new crest will be lower than the tops of the present dam stones, which perhaps are allowed to be latched up when necessary. At the same time it will be requisite that the Superintending Engineer should be able to demonstrate that the French Ryots will have no ground of complaint, & it would have been better had this point been specially noticed in the letter transmitting the estimates.

The Census Statements, which it may be

he remarked are signed by the Tahsildar only, show that the increase of Revenue expected from the improvement of the Allungol channel amounts to Rupees 10233-15-0. The return will depend upon the water supply, and about this but very little is known. An improved channel will doubtless carry an increased supply of water, supposing that the Pomians brings down such a supply, but if the Valavannur Tank, from which 70% of the expected increase is expected, may be taken as a criterion, it would appear that want of water in the Pomians, rather than the inability of the Allungol channel to carry a proper supply has been the cause of a falling off of Revenue in certain years, & that the average area cultivated and paying Assessment was, leaving out the exceptional years A.D. 1275, 1277 & 1278, 1665 acres, or 119 acres less than the area stated to have been cultivated when the channel was in good order. The Superintending Engineer says that the work done during the past season has been very successful, and that all the tanks have received an abundant supply of water. This is certainly very satisfactory, but the monsoon runs

in the South Arcot District, a good one, & this in itself, if taken in connection with the past history of the channel, would account for the facts adduced.

7. I may point out in conclusion that not only is the information of the kind asked for in my Memorandum on the original estimates very requisite for the proper determination of the details of such a project as that under notice, but that Chapter V paras 41 & 42 of the Code require such data to be obtained and reported.

Fort St. George 2 John Lumsden Major R.E.
8th March 1878 3 Acting Chief Engineer for Irrigation
7

The Secretary to Government
P. H. S.

N. 20/4

Supg Engineer's Office, 5th Div.
Villapouram 2nd March 1870

From
The Superintending Engineer,
5th Division

To
The Chief Engineer for Irrigation
& Joint Secretary to Government,
Public Works Department,
Madras

Enclosures 16

Sir,

- 1 Survey per
6 Plans & roughly
- 2 Detailed
Estimates.
- 2 Abstract - Do -
- 1 General abstract.
- 1 Report.
- 2 Revenue
statements.
- 1 High level water.

I have the honor to forward, for
the sanction of Government, the plans
and estimates connected with the
improvement of the Allungal channel
in the Villapouram Taluk of South Arcot,
but I am unable to furnish all
the information called for in your
Memorandum N. 276 of the 22nd
September 1869.

2 It is not possible to shew
what is expected from the channel,
if it is meant by that to state
during how many days water will
flow in the channel, and how many
cubic yards will enter each tank.
The Poorniar is not a river, but a torrent.

The

2-12-1870

Handwritten notes and signatures on the left side of the page, including dates like 1870 and 1871, and names like 'The Secretary to Govt'.

The freshes in it are most uncertain as to their period, duration and depth, and there must be the same uncertainty as to the months in which the channel will receive water, the number of days or hours in each month during which the water will flow, and the average depth during that time. It is of course easy to assume that there will be an average depth of water, of so many feet, for so many days, at the head of the channel, the quantity of water that will then pass down a channel, whose breadth and fall are known, follows as a matter of course; but, in the present case, there are no reliable data on which to make any assumption of the kind. None of the Poonian channels have a Conservancy Establishment, except those connected with the annicut near Tribhulore, at which place alone has any register of the water been kept, but the days on which water passed down the ^{channel} last year and its depth

depth were noted by the Taluk overseer. The proposed improvements to the Allungal channel have not been based on any elaborate calculations of the quantity of water to be carried by it, as such calculations must be fallacious, but they have been designed with a view to the water flowing without impediment, to all the tanks connected with the channel, during such time as there may be a fresh in the river. The tanks have been supplied by the Allungal channel from time immemorial, but, for several years past, very imperfectly, owing to obstructions in its course and to the ryots neglecting to clear the head. It is now proposed to remove these obstructions, to regulate the width and the slope, strengthen the banks, and cut away unnecessary bends. These are the most essential works. It is also proposed to build some division sluices to prevent waste of water.

3. The survey and estimate were a long time in hand, owing to several unnecessary details having been included in them, and as the greater part of the work required was really of a very ordinary nature, I obtained the authority of Government at the beginning of August, to commence the work in anticipation of sanction to the estimate. The work done last year was most successful, and all the tanks received an abundant supply of water. Owing, first to a reduction of the grant, and afterwards to the stoppage of all new works, only Rupees 4,847 were expended on the channel between August and December, and the work done was confined to opening a new head and clearing and straightening the channel. On the resumption of works in April, the rest of the earth work should be completed and the masonry works built.

4. Several of the suggestions contained in your Memorandum have been adopted in the revised plans and estimates now forwarded. I intended to have substituted for the plan received from the Range Officer, a plan of head sluice, which has been successfully tried in several places in the district, and which will cost considerably less. But, having recently examined the head of the channel and made some enquiries on the spot, I am of opinion that this work can be deferred. I have also struck out the Calingulah and the groyne at the head of the channel. Some clearing in the channel and river near the head sluice will be required every year. This and the temporary corumbos should be the work of the ryots.

5. With reference to your remarks on the Revenue statement, I have to observe that "extra assessment on water cess" has nothing to do with second crop, but is the amount levied on land, not classed as munyah, when

when water is supplied to it. Next,
as to increase of revenue expected
from the improvement of the channel,
it will be seen that by far the
greater part is to come from the
Talavaniir tank. Whenever com-
plaints have been made of the
state of the Allungal channel,
it has always been with reference
to the falling off of ^{the} revenue of that
tank, and the improvement of the
channel has now been undertaken,
principally with a view to the better
supply of that tank. Owing to the
absence of a Conservancy establishment,
and there being no division sluices,
the Talavaniir tank, which is at
the extreme end, has not received
its proper share of the water that
entered the channel. It was
ascertained at the time the levels
were taken that the Talavaniir channel,
at one part of its course, had ceased
to be the main channel and had
become merely a branch. This will
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ciently correct for all practical
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a proper quantity of water going
down to the Talavaniir tank, which
is the main object of all the im-
provements. The surplus channel of
the Talavaniir tank is called the
Koodaveyar and the water in it is
utilized in the French territory. I
propose removing the dam stones of
the Calingulak, lengthening it by
18 feet and raising it half a yard.
6. As regards the contour surveys
of the tanks, they will be of use when
the tanks are repaired. The Talavaniir
tank is in good order. The repair of
the others will be taken up separately,
but the raising of the banks to increase
their capacity can only be undertaken
after a careful examination of the
land that will be submerged.
All over the Villupuram taluq the
cultivation extends to the very
margin of the water spread,

of the tanks, and, in some cases,
though improperly, into the beds of the
tanks. The enlargement of the
areas of the tanks will, in most
cases, interfere with private rights.

7 The revised estimate now
forwarded, after the alterations
and deductions made by me,
amounts to Rupees 12,520.

I have the honor to be
sir,

Your most obt. servant,
Edw. Colclough,
Superintg. Engineer.

Thomomys talpae L. L. N. Y.

The opening of the new head and clearing year of the main channel was commenced under the orders of Government, No 2546 dated 31st August 1869, and up to the present time 48,261 cubic yards of earth work have been completed. The results of the work already executed have proved very satisfactory, as the

Valavamin Tank has received a very full supply of water from the Ponnian, which will give a great increase of Revenue, as in consequence of the bad state of the channel in previous years the remission on lands under the Valavamin Tank has been very high.

The revised plans herewith forwarded are No 6 A detailed plan of the arrangements of the new head of the channel [as carried out] with the position of the proposed Head sluice.

No 10 A revised plan of the division sluice to Kolator Tank embodying the suggestions of the Chief Engineer for irrigation.

No 17 A plan of the proposed alterations to the Calingulah of the Valavamin tank.

The new head as shown in plan No 6 is a partial reopening of the head of the old channel with the curves reversed

Both sides of the Head channel to be revetted with rough stone work, to

New Head

Revetment of new head.

a mean perpendicular height of 4'-6" above bed of channel and 18" below, the total length being 600 yards both sides inclusive.

All exterior masonry work in brick and chunam to be plastered with 2 coats of chunam.

In plan No 10 the division sluice to have a rectangular vent of 3'x4'.

Ed Mrd Colonel R.E.
Superinty. Engineer,
5th Division.

Statement showing the increase of Revenue expected from the execution of repairs to the Allangal Channel in the Villapuram Taluk—

Number	Name of Village	Increase of culti- vation		Extra App. rent or water up		Total
		Kanja stems	Apprent	Water up		
1	Kavanipattanam	"	"	"	56	56
2	Pullur	"	"	"	180	180
3	Malavarayanur	8 13 3	36	" 4	50	86
4	Srinadi Anjalur	"	"	"	30	30
5	Anangur	200	"	1000	"	1750
6	Srinantadu	"	"	"	500	500
7	Kolattur	2 4	11 14 8	100	"	111 14 8
8	Valavanur	920	"	6700	"	7270
9	Venkatadriyaram	10	"	100	"	250
		1141	1 3 8,447 15	"	1786	10,233 15

*. This is under the Valavanur large tank, and there will be no increase under the other tanks of the village.

By improving the Allangal Channel not only the increase of revenue, as detailed above, will be realized, but it also appears that there will be no occasion in future, as at present, for falling off in cultivation by deficiency in the supply of water, and the consequent remissions for waste & heavy.

Villapuram } (True Translation) / Signed / C. Srinivasan
14th August 1869 } Tahsil-dar—
Edward Collett Esq.
Superintendent Engineer

5th Division D.M.
Chennai District

10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21th 22th 23th 24th 25th 26th 27th 28th 29th 30th 31st

Received Report and

Specification for the

improvement of the

Allangal channel

with the branch channels

from it, it is proposed to carry

on the one hand, in the

Villapuram Taluk of the

Chennai District

Amount of Estimate Rs. 12610

Agricultural. Fifth Division D. & W. New Work
South Arcot District. No. 1 Range. Villapuram Taluq.
Masonry Works.
Main Canal and Branches.
Abstract Estimate of 1869. 70.

Work. Constructing Dams and Divisional Sluices at the head of branch Channels from the Allungat main channel from the Ponnar.

Quantities	Particulars of Work	Rate Per	Amount Total
Constructing a Dam and Divisional Sluice at the head of Holatoor supply channel as per Plan No. 10.			
80 $\frac{3}{4}$	Cub. yds of Brick in chunam	3 8	Cyp 282 5 4
10 $\frac{10}{27}$	—do— of Arch work	4	do 1 7 8
6	Squares of Plastering with 2 Coats of Chm	3	Sqr 18
15	Cub. yds of Surfing the embankment adjoining the wing and divisional wall	5 8	Cyp 7 8
	Sundries and Superintendence	10	Cent 30 11 340
Constructing Aqueducts as per Plan No. 9 to carry the irrigating channels over the Holatoor supply channel.			
21 $\frac{23}{27}$	Cub. yds of Brick in chunam	3 8	Cyp 74 10 8
5	—do— of Rough Stone in chunam	1	do 5
3 $\frac{1}{2}$	Squares of Plastering with 2 Coats of Chm	3	Sqr 10 2
	Sundries and Superintendence	10	Cent 9 10 2
			100
4	Aqueducts as above		400

Carried forward 740

Enclosed is the
 Certificate No. 1110 of 1869
 of the 1869 from the
 Surveying Engineer
 to the District Engineer
 for Bangalore.
 The amount showing the
 increase of Revenue expected
 from the execution of
 repairs to the abutment
 formed in the Allungat
 Taluq. of South Arcot.

Brought forward

Constructing a Dam and Divisional Sluice at the head of Karampattam, Anangoor and Panampul branch channels as per Plan No. 12.

79 ²³/₂₇ Cub yds of Concrete work
222 ¹/₂ —do— of Brick in chunam
2 —do— of Arch work
17 —do— of Rough Stone work
13 ¹¹/₁₀₀ Squares of Plastering with 2 Coats of

Chunam

Sundries and Superintendence
Constructing a Dam and Divisional Sluice at the head of Seroventhand branch channel as per Plan No. 13.

56 ⁹/₉ Cub yds of Brick in chunam
¹/₂ —do— of Arch work
16 ¹/₂ —do— of Rough Stone work
5 ⁴⁶/₁₀₀ Squares of Plastering with 2 Coats of

Chunam

Sundries and Superintendence

Improving the present Surplus Weir of the Valavanoor Tank.

143 ¹/₃ Cub yds of Brick in chunam
155 ⁵/₇ —do— of Half of old and half of new Rough Stone work pointed with chunam
34 ⁵/₈ Squares of Plastering with 2 Coats of chunam
Carried forward

767 3 4 2150

Brought forward

767 3 4 2150

42 Cub yds of Demolishing old work
Sundry repairs to the Surplus Weir and excavating foundation

50

Sundries and Superintendence 10 . . . Cont 74 14 8 900 . . .

Total Amount of Estimate for Masonry Works Rs - 3050 . . .

Superintending Engineer's Office
Vellapurem, 2^d March 1910

Edwrd Colonel A.C.
Superintending Engineer's Office

Agricultural 5th Division D.W. New Works
South. West District. No. 1 Range Vellupuram taluk
Earth Works

Main Canal and Branches.

Abstract - Estimate of 1869-70.

Work - Straightening and Improving the Allengal channel from
 the Coombar river for the better supply of several tanks, depend-
 ing upon it & cutting & improving branch channels from
 the main channel.

With Division D.P.W.
 South West District
 No. 1 Range
 Vellupuram Taluk
 Abstract Estimate for
 straightening and
 improving the
 Allengal channel
 from the Coombar
 river for the better
 supply of several
 tanks depending
 upon it & cutting
 & improving
 branch channels
 from the main
 channel.

Description of Work - Rate per Amount Total.
 Strengthening & Improving
 Allengal Channel.

Sloping the north bank of the
 Coombar river at the new head.
 Total Cycles 14,685 1/2 of which

538 1/2	Cycle	Earth work	18	Cy	56	16
2490 3/4	"	"	15	"	220	8
334 5/8	"	"	1	"	20	14 1
122 1/2	"	"	12	"	8	14 11
1179 1/2	"	"	15	"	106	4

Cutting a new head.

Total Cycles 1144 1/2 of which

4725	"	Earth work	14	"	393	12
6716 1/2	"	"	19	"	734	10 3

Clearing the old channel.

4794	"	Earth work	10	"	254	14 4
3946 1/2	"	Earth work	1	"	246	10 6

Carried over. 2042 9 7.

Brought over

New Cutting tak No 2. 2042 9 7
 21739 Cys Earth work 1 Cys 1358 7
 New Cutting tak No 3 1624 Ds Earth work 1 Ds 101 8
 New Cutting tak No 4 3045 Ds Earth work 1 Ds 190 5
 New Cutting tak No 5 742 3/2 Ds Earth work 11 Ds 42 8 5
 New Cutting tak No 6 1063 3/4 Ds Earth work 11 Ds 60 15 1
 New Cutting tak No 7, 8, 9 & 10 14331 2/3 Ds Earth work 1 Ds 270 11 8
 New Cutting tak No 11 Total Cys 1018 3/4 of which 988 3/4 Ds Earth work 11 Ds 58 15
 30 Ds 6 Ds 15
 New Cutting tak No 12 15614 Ds Earth work 11 Ds 89 9 8
 New Cutting tak No 13 839 1/2 Ds Earth work 11 Ds 48 16
 New Cutting tak No 14 1414 1/2 Ds Earth work 11 Ds 81 7
 New Cutting tak No 15 Total Cys 1529 1/2 of which 1270 Ds Earth work 12 Ds 72 9 8
 259 1/2 Ds 1 Ds 16 3 6
 New Cutting No 16 tak 1678 1/4 Ds Earth work 1 Ds 78 10 8
 New Cutting tak No 17 Total Cys 1445 5/8 of which 1260 Ds Earth work 1 Ds 85 5
 185 5/8 Ds 11 Ds 10 10 2

Carried over

Brought over Rs. 4627 . 6

New Cutting tak No 18 Total Cys 3289 23/32 of which 1968 3/4 Cys Earth work 1 3 Cys 153 12 2
 450 Ds 1 2 Ds 32 13 .
 871 1/4 Ds 1 Ds 54 7 2
 New Cutting tak No 19 457 25/32 Ds Earth work 10 Ds 23 13 2
 New Cutting tak No 20 Total Cys 1108 1/16 of which 960 Ds Earth work 11 Ds 55
 141 3/8 Ds 10 Ds 7 5 8
 Straightening & clearing from the Arangan Branch channel 18448 3/4 Ds Earth work 1 Ds 153 . 9
 600 Ds Rubble stone work 1 8 Cys 900
 707 4 5
 Sundries & Superintendence 10 Cts 702 11 7 77 10 7
 Improving and Cutting supply channel to Kolatom tank 1 3 Cys 223 8 .
 2861 1/2 Ds Earth work 16 8 . 240 .
 Sundries & Superintendence Cutting a supply channel to Nenamput tank 1 3 Cys 390 10 .
 5000 Ds Earth work 10 Cts 39 6 . 430 .
 Sundries and Superintendence Straightening & Improving the Aruvana thad. Supply channel 1 3 Ds 208 5 4
 2686 5/8 Ds Earth work 10 Cts 21 10 8 230 .
 Sundries & Superintendence Total Amount of Estimate for earth work Rupees 8610 .

Rs Eight thousand six hundred & ten.

Range office No 1
 Buddalore,
 26th January 1870

W. R. Purchas Lieut. R.E.,
 Asst. Engr., 1st Range, Sect.
 Admd Colonel R.E.,
 Superinty. Engineer 5th

5th Division & P. H.

Register of water in the Antungul channel in 1870.

Month and Date Water
in the
channel

		Feet	Inches
1869			
September	4 th		
	6 th		
	12 th		
— Ditto —	24 th		6
October	12 th	2.	6.
—	13 th		
	1.	1.	9.
— Ditto —	16 th		
— Ditto —	18 th	3.	6.
— Ditto —	24 th	3.	6.
— Ditto —	28 th		
	1.	1.	3.
— Ditto —	31 st		
November	1 st		
	1.	2.	
— Ditto —	8 th		
— Ditto —	11 th	1.	6.
— Ditto —	15.	1.	6.

Supply Engineer's office
Villapuzam. 2^d. March 1870

E A Mrd Colonel R.E.,
Superintg. Engineer, 5th Div.

5th Division & P. H.

Antungul Channel

Antungul Channel

Antungul Channel

Antungul Channel

Antungul Channel

Antungul Channel

Antungul Channel

Antungul Channel

Antungul Channel

Antungul Channel

Register of water in
the Shikangal Channel
in 1890. A.

1894
W. G. B. 2/90.
Surg. Andrew L. Day

Enclosure No 1

Enc. letter of 1108/16 to
Sept 1869 from the
Super. Eng. to the
to the Chief Engineer
for Irrigation.

124 702 2.
Surg. April 170 2. Day

Statement showing the
Amount derived in Guadi
1278 and in the present 40
Dues from the villages
depending upon the Allu-
gal Channel and from
the Valavannur Sanki in
the Taluk of Villapuram.
of South Arcot.

into

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1/4

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Statement showing the Revenue derived in Trusli 1278 and in the preceding 10 Truslies from the Villages depend-
ing upon the Mangal Channel and from the Valamuneri Tank in the Taluk of Villapuram.

No.	Names of Villages	Ayan Nanjah			Fasil			Fusli 1268			Total	Remission			Balance			Ayan Nanjah												
		Extent in Cawni			Assessment			Juty				Extract/rent or Water cess			Extent			Assessment												
1	Malavarayanur	53	2	1	250	9	2	9	6	10	12	4	4	261	4	16	4	10	244	15	2	51	5	1	242	14	5			
2	Valavanur	1682	9	3	12654	13	6	302	4	8	348	5	3	13305	7	1201	12	7	12103	10	10	1629	12	1	12152	"	5			
3	Trivadi - Triyollar	79	9	1	591	12	10	23	"	10	40	1	3	654	14	8	"	6	646	14	5	79	13	1	592	"	3			
4	Kavampattam	31	5	2	268	7	9	"	"	"	31	4	"	299	11	11	9	"	788	2	9	31	7	1	269	9	9			
5	Pullur	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
6	Venkitadri Agaram	364	9	2	3097	4	4	284	3	6	83	7	3	3464	15	225	1	10	3299	13	3	366	8	2	3114	14	8			
7	Kolattur	136	4	"	942	15	1	7	9	6	11	"	3	961	8	96	1	7	865	7	3	135	2	1	937	7	7			
8	Anangur	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"			
9	Siruvantadu	168	1	"	1595	15	3	2	2	9	2	6	4	1624	6	"	"	"	1624	6	"	168	1	"	1595	15	3			
		2515	9	1	19401	13	11	628	12	1	541	10	"	20572	4	"	"	"	1558	14	4	19013	5	8	2462	1	3	18905	9	4
1	Valavanur Tank	1243	9	2	9313	14	11	4	6	8	113	12	3	9462	1	10	187	11	8	9244	6	2	1225	"	3	9155	10	7		

Statement showing the Revenue derived in Fusli 1278 and in the preceding 10 Fuslies from the Villages depend-
ing upon the Alluvial Channel and from the Valavani Tank in the Taluk of Villapuram.

Fusli 1269.													Fusli 1270.													u ³					
No.	Names of Vill.	Fasil Juty			Extra Assess- ment or Water cess			Total			Remission			Balance			Ayen Kunjah		Fasil Juty	Extra assess- ment or water cess			Total.								
															Extent	Assessment															
1	Malavayogamir	15	5	8	"	"	"	258	4	1	"	"	"	258	4	1	53	8	2	252	9	10	10	7	4	3	8	3	266	9	5
2	Valavani	325	13	9	557	"	4	13034	14	6	21	15	10	13012	14	8	1242	9	2	12211	"	4	132	7	3	306	1	6	12649	9	1
3	Trivadi - Triyakku	36	8	6	57	9	3	686	13	"	"	"	"	686	13	"	80	3	2	596	10	6	36	8	6	31	12	9	664	15	9
4	Kavampakkam	"	"	"	31	4	"	300	13	9	31	6	7	269	7	2	31	8	1	269	13	9	"	"	"	27	5	"	297	2	9
5	Pullir	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
6	Venkitadu Agara	215	1	"	137	14	7	3467	14	3	"	"	"	3467	14	3	366	8	2	3114	14	8	225	7	2	125	3	8	3465	9	6
7	Kolattir	13	7	2	8	10	9	959	9	6	"	"	"	955	11	8	137	12	2	951	6	8	13	7	2	5	"	"	969	13	10
8	Anangur	"	"	"	"	"	"	"	"	"	3	13	10	955	11	8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
9	Siruvantadu	2	2	9	21	4	"	1619	6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	31	4	"	1629	6	"
		608	6	10	813	10	11	20327	11	11	"	"	"	1619	6	"	168	1	"	1595	15	3	2	2	9	"	"	"	19943	2	4
											57	4	3	20270	6	10	2480	3	3	18992	7	"	420	8	2	530	3	2			
1	Valavani Tank	"	"	"	179	3	4	9334	13	11	20	8	2	9314	5	9	1298	10	1	8870	12	5	"	"	"	106	1	6	8976	13	11

Statement showing the Revenue derived in Fusli 1278 and in the preceding 10 Fuslies from the Villages depend-
ing upon the Aluvai Channel and from the Valavanur Tank in the Taluk of Villapuram.

No.	Names of Villages	Revenue			Balance			Fusli 1271 Ayen Kunjah			Fusli party			Extra Assess- ment - watercess			Total			Revenue			Balance			Fusli party			Ayen- Extent		
1	Malavoyanur	"	"	"	266	9	5	53	10	1	253	10	8	"	"	"	"	"	"	"	"	"	268	9	"	53	10	1	"	"	"
2	Valavanur	807	9	8	11,841	15	5	1,647	11	1	12,226	14	1	12	3	10	2	10	6	268	9	"	"	"	"	"	"	"	"	"	"
3	Trivadi Arizol	7	7	3	657	8	6	82	1	2 1/2	615	7	8	230	12	3	428	"	5	12,885	10	9	28	2	7	12,857	8	2	1734	1	1
4	Kavampakam	"	"	"	297	2	9	35	4	3	302	11	7	32	10	10	53	9	6	701	12	"	"	"	"	701	12	"	81	1	2 1/2
5	Pullur	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	31	7	5	334	3	"	"	"	"	334	3	"	44	7	3
6	Venkitadi Agara	"	"	"	3,465	9	6	367	11	2	3,127	2	5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
7	Kolattur	38	1	3	931	12	7	134	1	2	928	8	2	215	7	1	125	3	8	3,467	13	2	"	"	"	3,467	13	2	370	"	1
8	Anangur	"	"	"	"	"	"	"	"	"	"	"	"	0	0	0	16	6	6	944	14	8	103	15	9	840	14	11	132	15	2
9	Siruvantadu	29	1	"	1,600	5	"	172	15	"	1,656	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
		882	3	2	19,060	15	2	2,493	8	2 1/2	19,111	9	5	8	5	2	61	9	7	1726	8	2	"	"	"	1,726	8	2	173	"	1
														499	7	2	718	15	7	20,329	6	9	132	2	4	20,197	4	5	2590	4	3 1/2
1	Valavanur Tank	767	3	5	8,209	10	6	1,266	5	1	9,404	"	9	"	"	"	201	6	6	9,605	7	3	24	3	9	9,581	3	6	1,357	6	3

Statement showing the Revenue derived in Fusli 1278 and in the preceding 10 Fushies from the Villages depend-
ing upon the Alayut Channel and from the Valavanur Tank in the Taluk of Villapuri.

		Fusli 1272										
No.	Names of Villages	Kinjah Assessment	Fasil Jasty	Extra assessment or water cess	Total	Remission						
1	Malavayoganur—	258 10 8	22 1 7	2 3 "	277 15 3	"	"	"				
2	Valavanur—	12,844 14 10	231 " 6	486 8 9	13,562 8 1	"	"	"				
3	Trivadi Ariyalur—	615 9 8	23 3 10	28 9 6	667 7 "	"	"	"				
4	Kanampanam—	351 12 1	4 4 3	31 4 "	387 4 4	"	"	"				
5	Pullur—	" " "	" " "	" " "	" " "	"	"	"				
6	Venkitadri Agara—	3,154 2 5	101 15 6	112 8 "	3,368 9 11	235	7	8				
7	Kolattur—	920 12 "	12 5 9	4 6 "	937 7 9	"	"	"				
8	Anangur—	" " "	" " "	" " "	" " "	"	"	"				
9	Siruvantadu—	1,654 2 11	9 10 3	90 3 1	1,754 " 3	"	"	"				
		19,795 " 7	404 9 8	755 10 4	20,955 4 7	235	7	8				
1	Valavanur Tank—	10013 " 3	" " "	211 6 3	10,224 6 6	"	"	"				

Fusli 1273																
Balanced			Ayen Kurjale			Fasit Jasty			Extra Assessment for water cess			Total				
			Extent			Assessment										
277	15	3	53	10	1	253	10	8	17	8	8	3	15	9	275	29
13562	8	1	1771	7	3	13176	12	"	275	9	"	570	14	3	14023	33
667	7	"	82	1	2 1/2	615	9	8	36	14	1	27	1	9	679	96
387	4	4	44	7	3	357	12	1	4	4	3	31	4	"	387	44
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
3133	2	3	375	5	1	3210	3	7	146	11	2	130	6	7	3487	54
937	7	9	120	13	2	854	10	1	8	8	5	2	8	"	865	106
"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
1754	"	3	173	"	1	1654	2	1	26	14	3	101	9	10	1782	102
20779	12	11	2620	14	1 1/2	20116	13	"	516	5	6	867	11	4	21500	1310
10224	6	6	1384	5	2	10304	"	2	"	"	"	217	1	9	10521	111

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12-10-1964

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Statement showing the Revenue derived in Fush 1278 and in the preceding 10 Fushies from the Villages depend-
ing upon the ~~Aluvayal~~ ^{Aluvayal} channel and from the Valavanur Tank in the Talug of Villapuram.

No.	Names of Villages	Remission			Balance			Ager Nungah			Fush 1274			Extra Assess-ment for water cess			Total			Remission			Balance			Ager Nungah			47		
								Extent	Assess-ment	Fasly	fasty	Extent	Assess-ment	water cess	Extent	Remission	Balance	Extent	Assess-ment	water cess											
1	Malavarayanur	"	"	"	275	2	9	53	11	1	253	15	11	29	15	2	6	10	3	290	9	4	4	5	"	286	14	4	52	11	1
2	Valavanur	747	"	2	13276	3	1	1652	5	"	12256	9	7	179	"	7	406	7	"	12842	1	2	531	1	11	12310	15	3	1607	5	2
3	Trivadi & Trigo	"	"	"	679	9	6	82	1	2 1/2	615	9	8	32	10	10	13	7	"	661	11	6	4	8	2	657	3	4	82	1	2 1/2
4	Kavampakam	40	"	6	347	3	10	32	"	3	269	10	6	"	"	"	26	4	6	295	15	"	"	"	"	295	15	"	42	15	1
5	Pullur	"	"	"	"	"	"	170	4	1/2	1513	10	9	99	8	7	67	15	"	1681	2	4	"	"	"	1681	2	4	170	4	1/2
6	Venkitadri Agara	52	5	7	3434	15	9	325	14	2	3217	3	"	168	7	10	65	6	8	3451	1	6	191	14	4	3259	3	2	375	1	2
7	Kolattur	65	2	"	804	8	6	101	15	3	752	2	9	"	"	"	2	13	"	754	15	9	36	15	11	717	15	10	111	2	2
8	Anangur	"	"	"	"	"	"	706	10	3	4944	8	3	88	1	10	158	14	"	5191	8	1	620	11	8	4570	12	5	683	4	2
9	Siruvantadu	"	"	"	1782	10	2	173	"	1	1654	2	11	22	7	11	307	11	9	1984	6	7	"	"	"	1984	6	7	173	"	1
		904	8	3	20600	5	7	3348	"	1	25477	9	4	620	4	9	1055	9	2	27153	7	3	1389	9	"	25763	14	3	3297	14	2
1	Valavanur Tank	701	4	7	9819	13	4	1283	10	"	9530	15	5	"	"	"	197	8	"	9728	7	5	415	9	3	9312	14	2	1225	15	2

1589 1/4

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2178 1/4

80 3/4

Statement showing the Revenue derived in Fushie 1278 and in the preceding 10 Fushies from the Villages depend-
ing upon the Main Canal Channel and from the Valavanur Tank in the Taluk of Villapuram.

No	Names of Vill	Fusli 1275												Fusli 1276-49																	
		Assessment			Tail Jatty			Extra Assessment or water cess			Totals			Remission			Balance	Agon Ninjah		Tail Jatty	Extra Assessment or water cess										
		Extent	Assessment		Tail Jatty		Extra Assessment or water cess		Totals		Remission				Extent	Assessment															
1	Malavarogamur	248	3	10	21	7	11	11	9	"	281	4	9	13	6	8	267	14	1	52	11	1	244	9	9	28	12	6	7	8	"
2	Valavanur	11,855	6	1	200	14	10	222	3	9	12,278	8	8	7,052	7	1	5,226	1	7	1,666	11	"	12,210	2	9	110	13	10	331	12	2
3	Trivadi & Triyale	615	1	"	32	10	10	13	2	"	660	13	10	94	2	9	5,226	1	7	1,666	11	"	12,210	2	9	110	13	10	331	12	2
4	Kavampakum	339	1	4	"	"	"	34	13	10	373	15	2	62	1	4	566	11	1	82	4	1/2	661	4	"	"	"	"	27	13	"
5	Pullur	1,513	10	9	121	14	8	165	3	7	1,700	13	"	"	"	"	311	13	10	44	11	3	357	12	3	"	"	"	50	"	8
6	Venkitadri Agam	3,999	15	11	130	10	9	98	2	3	3,428	12	11	1,190	6	3	1,700	13	"	170	4	1/2	1,503	10	9	100	9	1	67	1	3
7	Kolattur	786	10	9	13	7	1	12	6	9	812	8	7	369	14	2	2,238	6	8	377	"	1	3,196	9	2	82	7	9	100	"	"
8	Anangur	4,742	12	5	186	5	7	288	15	9	5,218	1	9	354	4	10	4,42	10	5	138	5	2	933	7	6	"	"	"	23	14	6
9	Siruvantadu	1,650	8	2	5	2	2	203	3	"	1,858	13	4	560	13	1	4,863	12	11	729	1	1/2	5,080	14	3	138	1	5	385	15	3
		24,946	6	3	712	9	10	949	11	11	26,613	12	"	9,697	8	2	1,298	"	3	173	"	1	1,639	12	10	14	6	"	85	11	3
																	16,916	3	10	3,434	1	1/2	25,772	3	3	475	2	7	1,079	12	1
1	Valavanur Tank	9,024	8	9	11	5	9	38	2	"	9,074	"	6	5082	4	10	3,991	11	8	1,273	3	2	9,460	8	6	21	7	2	257	3	5

$$\begin{array}{r} 1589\frac{1}{4} \\ - 180 \\ \hline 10 \\ \hline 216 \\ - 132 \\ \hline 84 \\ 2214\frac{1}{4} \\ - 36 \\ \hline 2178\frac{1}{4} \\ - 80\frac{2}{3} \\ \hline \end{array}$$

Statement showing the Revenue derived in Fush 1278 and in the preceding 10 Fushies from the Villages depend-
ing upon the Aluvayal Channel and from the Valavanur Tank in the Talug of Villapuram.

No.	Names of Villages	Total			Remission			Balance			Ayer's Extent		Muzjah Assessment		Fush 1277										51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

Statement showing the Revenue derived in Fushli 1278 and in the preceding 10 Fushlies from the Villages depend-
ing upon the Allangal Channel and from the Valavanur Tank in the Taluk of Villapuram.

No.	Names of Villages	Ayeru Kunjah		Fushli 1278.				Highest Revenue when the Allangal Channel				
		Extent	Assessment	Fasil Jaty	Extract fees ment for watercess	Total	Remission	Balance	Extent	Assessment		
1	Malavarayanur	52 13 1	244 9 5	7 12 "	5 10 "	257	15 5	30 7 7	227 7 10	Fushli 74	53 11 1	290 9 4
2	Valavanur	1766 9 3	13058 4 4	62 " 2	67 11 9	13188	" 9	11027 2 5	2160 14 4	Fushli 72	1734 1 1	12844 14 10
3	Trivadi Ariga	82 4 1/2	611 4 "	36 3 4	19 7 3	666	14 7	100 10 1	566 4 6	Fushli 71	82 1 2 1/2	615 7 8
4	Kavanipakam	47 11 3	368 12 3	" " "	76 5 3	445	1 6	245 3 6	199 14 "	Fushli 72	44 7 3	357 12 1
5	Pullur	170 4 1/2	1503 10 9	153 3 6	75 10 "	1732	8 3	701 " 5	1031 7 10	Fushli 75	170 4 1/2	1513 10 9
6	Venkitadi Agara	377 3 1	3198 9 1	92 4 3	99 4 9	3390	2 1	1390 9 9	1999 8 4	Fushli 73	375 5 1	3210 3 7
7	Kolattur	142 4 1	956 10 10	9 8 6	17 6 9	983	14 1	88 7 1	895 3 "	Fushli 76	138 5 2	933 7 6
8	Anangur	742 13 2	5174 7 11	206 1 10	321 " 6	5701	10 3	3218 1 2	2423 9 1	Fushli 76	729 1 1/2	5080 14 3
9	Sirumantadu	173 " 1	1639 12 10	12 8 1	77 15 6	1730	4 5	516 3 4	1214 1 1	Fushli 73	173 " 1	1251 2 11
		3555 " 1	26756 1 5	579 10 2	760 7 9	28096	3 4	17377 13 4	10718 6 "		3500 6 1/2	26495 2 11
1	Valavanur Tank	1374 11 2	9682 8 4	51 " 2	46 10 3	9780	2 9	7482 9 8	2297 9 1	Fushli 72	1351 6 3	10013 " 3

1589 1/4
180
10
216
132
13
84
22 14 1/4
36
2178 1/4
80 3/4

Statement showing the Revenue derived in Fush 1278 and in the preceding 10 Fushies from the Villages depend-
ing upon the Alangal Channel and from the Valavanur Tank in the Taluk of Villapuram.

was in good order.

No.	Names of Villages	Fasil Jaty			Extra Assess- ment of watercess			Total			Remission			Balance		
1	Malavarayanur	29	15	2	6	10	3	290	9	4	4	5	"	286	4	4
2	Valavanur	231	"	6	486	8	9	13,562	8	1	"	"	"	13,562	8	1
3	Trivadi & Triyur	32	10	10	53	9	6	701	12	"	"	"	"	701	12	"
4	Kavanpakam	4	4	3	31	4	"	387	4	4	"	"	"	387	4	4
5	Pullur	121	14	8	65	3	7	1,700	13	"	"	"	"	1,700	13	"
6	Venkitadi Agara	146	11	2	130	6	7	3,487	5	4	52	5	7	3,434	15	9
7	Kolattur	"	"	"	23	14	6	957	6	"	"	"	"	957	6	"
8	Anangur	138	1	5	385	15	3	5,604	14	11	26	11	2	5,578	3	9
9	Sirumantadu	26	14	3	101	9	"	1,782	10	2	"	"	"	1,782	10	2
		731	8	3	1,285	1	5	28,475	3	2	83	5	9	28,391	13	5
1	Valavanur Tank	"	"	"	211	6	3	10,224	6	6	"	"	"	10,224	6	6

30th July 1869

(True Translation)

Edmond Coll. R. E.
Supg Engineer 5th Div.

It is reported by the present Kurnum that the accounts of this village from Fush 1268 to 1273 were destroyed when the house of the late Kurnum had taken fire.

The present Kurnum states that the desmissed Kurnum made over to him only the accounts from Fush 1274 and not of the preceding years.

It is understood that, even when the Alangal Channel was in good order, no larger sums were realized than the highest years revenue specified in this statement.

S. P. Chakravarthy
Shraddhar

Agricultural. Fifth Division D. P. W. New Work
South Arcot District No. 1 Range Villapuram Taluq.

Main Canal and Branches:

Detailed Estimate of 1869.70

Work, Constructing Dam and divisional Sluices at the heads of
Branch Channels from the Allungah main channel.

Particulars of Work	Number	Length		Breadth	Depth	Contents
		Length	Total			
Constructing a Dam and divisional Sluice at the head of Holatow Branch Channel as per Plan No 10.						
Foundation,						
Dam	1	98 $\frac{1}{4}$	98 $\frac{1}{4}$			
Wing walls (North)	2	6	12			
do (South)	2	6	12	122 $\frac{1}{4}$	3 $\frac{1}{4}$	4
Divisional wall between channel	1	12	12	12	3 $\frac{3}{4}$	4
Cutwater	1	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	4
Superstructure						
Wing walls (North)	2	6	12			
do (South)	1	15	15	27	2	4
Divisional wall between channel	1	12	12	12	2 $\frac{3}{4}$	4
Cutwater	1	2 $\frac{1}{4}$	2 $\frac{1}{4}$	2 $\frac{1}{4}$	1	1 $\frac{1}{3}$
Body of Sluice	1	7	7	7	3	4
Deduct						
For non rectangular portion	1	3	3	3	3	4
Total Cubft of Brick in channel						
or Cub yds						

<u>Concrete work under foundation</u>							
Under the sluices	1	25 $\frac{1}{4}$	25 $\frac{1}{4}$	25 $\frac{1}{4}$	12 $\frac{1}{2}$	1 $\frac{1}{2}$	473 $\frac{7}{16}$
Between Abutments and Piers	4	5 $\frac{1}{4}$	21	21	1 $\frac{1}{2}$	4 $\frac{1}{2}$	141 $\frac{3}{4}$
Under the dam	1	21 $\frac{1}{4}$	21 $\frac{1}{4}$	21 $\frac{1}{4}$	8 $\frac{1}{2}$	1 $\frac{1}{2}$	270 $\frac{15}{16}$
Between side walls	1	22	22	22	2	4	176
Under the small sluices	1	14 $\frac{1}{2}$	14 $\frac{1}{2}$	14 $\frac{1}{2}$	8 $\frac{3}{4}$	1 $\frac{1}{2}$	190 $\frac{5}{16}$
do divisional wall	1	10	10	10	6 $\frac{3}{4}$	1 $\frac{1}{2}$	101 $\frac{1}{4}$
do do Channels	1	10	10	10	7 $\frac{1}{2}$	1 $\frac{1}{2}$	112 $\frac{1}{2}$
do Wing walls in front	2	7 $\frac{1}{2}$	15				
do do in rear	1	11	11	26	4	1 $\frac{1}{2}$	156
do do do	4	21 $\frac{1}{2}$	86	86	4	1 $\frac{1}{2}$	516
Spandrel spaces of Arch	1	19 $\frac{1}{2}$	19 $\frac{1}{2}$	19 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	65 $\frac{13}{16}$
Deduct for Arches and Vents							2204
Total Cubft of Concrete work	4	8	32	32	1	1 $\frac{1}{2}$	48
or Cub yds							2156
Foundation,							<u>79 $\frac{25}{27}$</u>
Abutments	2	4 $\frac{1}{2}$	9	9	4 $\frac{1}{4}$	6	229 $\frac{1}{2}$
do	1	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{4}$	6	87 $\frac{3}{4}$
Pier	2	4 $\frac{1}{2}$	9	9	2 $\frac{3}{4}$	6	148 $\frac{1}{2}$
Retaining walls	2	24 $\frac{1}{2}$	48 $\frac{1}{2}$	48 $\frac{1}{2}$	2 $\frac{1}{4}$	4 $\frac{1}{2}$	491 $\frac{1}{16}$
Front wall to dam	1	22	22	22	2 $\frac{1}{2}$	4 $\frac{1}{2}$	247 $\frac{9}{2}$
Rear do	1	22	22	22	2 $\frac{3}{4}$	3	181 $\frac{1}{2}$
Small Sluice and wing walls	1	13	13	13	7 $\frac{1}{2}$	6	585
Divisional wall	1	10	10	10	6 $\frac{1}{4}$	6	315
do between channel	1	10	10	10	6	6	360
Wing walls in front	2	7 $\frac{1}{2}$	15				
do in rear	1	11	11				
do do	4	21 $\frac{1}{2}$	86	112	2 $\frac{3}{4}$	6	1848
Triangular portion of division wall	1	4	4	4	$\frac{1}{4}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
Carried forward							4507

Brought forward							4507
Superstructure							
Abutments including Cutwaters	2	4 $\frac{3}{4}$	9 $\frac{1}{2}$	9 $\frac{1}{2}$	3	1 $\frac{1}{2}$	42 $\frac{3}{4}$
do do	1	3	3	3	2	1 $\frac{1}{2}$	9
do do	1	3	3	3	2 $\frac{1}{4}$	3	20 $\frac{1}{4}$
do do	1	3	3	3	2	$\frac{1}{2}$	3
do do	2	4 $\frac{1}{4}$	8 $\frac{1}{2}$	8 $\frac{1}{2}$	1 $\frac{1}{4}$	3	15 $\frac{5}{16}$
do do	2	4 $\frac{1}{4}$	8 $\frac{1}{2}$	8 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	19 $\frac{9}{8}$
Pier including Cutwaters	1	14	14	14	3 $\frac{1}{4}$	$\frac{5}{6}$	3 $\frac{3}{8}$
Half Cutwaters	2	19	38	38	$\frac{3}{4}$	2 $\frac{1}{4}$	64
Face wall	1	19	19	19	3	$\frac{3}{4}$	42 $\frac{3}{4}$
flooring over Siches	2	1 $\frac{1}{2}$	3	3	2 $\frac{1}{2}$	$\frac{5}{6}$	6 $\frac{1}{4}$
Caps to Cutwaters large	4 $\frac{1}{2}$	$\frac{3}{4}$	3 $\frac{3}{8}$	3 $\frac{3}{8}$	1 $\frac{1}{2}$	5 $\frac{1}{2}$	2 $\frac{1}{2}$
do do small	1	5	5	5	3	4 $\frac{1}{2}$	67 $\frac{1}{2}$
Body of small Sluice							
Wing walls on the North and South							
Sides of channels in front and	1	28	28				
Rear of Sluice	2	14	28				
Wing wall over divisional wall	2	14	28				
do between Sluice & channel	2	20	40				
do over division wall between	2	20	40				
Sluice	2	20	40				
do between Sluice & main channel	1	28 $\frac{3}{4}$	28 $\frac{3}{4}$	192 $\frac{3}{4}$	1 $\frac{1}{2}$	4 $\frac{1}{2}$	1301 $\frac{1}{16}$
do in rear of small Sluice							6095 $\frac{1}{16}$
Deduct:							
Arches and vents in face walls	4					1 $\frac{1}{2}$	48
Half Cutwaters to Abutments	1	2	2	2	2	3 $\frac{1}{4}$	9
Triangular part of small Sluice	2	3	6				
Slab Stones in small Sluice	2	2	4	10	3	$\frac{1}{2}$	15
do do	1	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	3	2	9
Vents							86

Total Cubft of Brick in chunam
or Cub yds 6009

Arch work 4 6 24 24 3 3/4 54

Total Cubft of Brick in chunam
or Cub yds 54

Stone work roughly dressed,
Between arches 4 3 12 12 2 1/2 1 1/2 45

do Cutwaters & front apron 1 21 1/2 21 1/2 21 1/2 3 1 1/2 96 1/4

do do & rear do 1 14 1/2 14 1/2 14 1/2 4 1 1/2 87

Dam 1 23 1/2 23 1/2 23 1/2 6 1/2 1 1/2 229 1/8

Triangular part of small sluice 1 2 2 2 3/4 1 1/2 2 1/4

Slab Stones in small sluice 2 3 6

do do 2 2 4 10 3 3/4 22 1/2

Deduction, Half Cutwaters large 2 1 1/2 3 3 3 1 1/2 13 1/2

do Small 4 1/2 1 4 1/2 4 1/2 1 1/2 1 1/2 18 1/8

Total Cubft of Rough Stone work 23 5/8

or Cub yds 459

Plastering, Sides of Abutments & Piers 8 3 24 24 1 1/2 36

Cutwaters including Caps large 2 6 12 12 2 3/8 33

do Small 4 1/2 2 1/4 17 17 2 1/4 38 1/4

Face walls 1 36 1/2 36 1/2 2 1/4 38 1/4

Top of Sluices & side next to dam 1 28 1/2 28 1/2 64 1/4 3 144 1/4

Face & side walls of small sluice 1 7 7 7 4 1/2 31 1/2

Top do do 1 5 5 5 3 15

Wing walls in front of dam & sluice 2 9 18

do in rear of Panampud do 1 28 1/2 28 1/2

do do do 1 15 15

do do Amangoor do 3 35 105 165

Carried forward 6 1080 1/2

Brought forward 1348 1/2

Deduct, Vents Circular portion 4 3 1/2 14 14 1 14

do Rectangular do 1 3 3 3 2 6

Caps against face wall large 2 1 1/2 3 3 2 1/4 6 3/4

do small 4 1/2 1 1/2 3 3/8 3 3/8 1 1/4 4 1/4

Triangular portion on top of small sluice 1 2 2 2 3/4 1 1/2

do 32 1/2

Total Squarfeet of plastering with 2 coats of chm 1316

or Squares 13 16/100

Constructing a Dam and Sluice at the head of Supplying Channel to Siroventhand Tank as per

Plan No. 13.

Foundation, 1 28 28 28 3 1/2 4 1/2 441

Dam 2 7 1/2 15

Wing walls in front 1 7 1/2 7 1/2

do in rear 1 21 1/2 21 1/2

Side walls of Cistern 1 11 1/2 11 1/2 55 1/2 2 1/2 4 1/2 624 3/4

do of do 1 4 1/2 4 1/2 4 1/2 4 1/2 1 1/2 30 1/4

Flooring for do 1 1096

Superstructures, Body of Sluice 1 8 8 8 3 4 1/2 108

Wing walls in front 2 7 1/2 15

do in rear 1 7 1/2 7 1/2

do 1 21 1/2 21 1/2

Side walls of Cistern 1 11 1/2 11 1/2 55 1/2 1 1/2 4 1/2 374 7/8

do of do 1 1578 3/4

1578 3/4

Brought forward— 1578 3/8

Deductions,
For ment Rectangular portion— 1 4 4 4 3 2 .24
do including Slab Stones— 1 3 1/2 3 1/2
do do— 1 2 1/2 2 1/2 6 1 1/2 2 18

Semicircular portion— 1 4 1/2 4 1/2 4 1/2 3 13 1/2

Total Cubft of Brick in Chumam— 55 1/2
or Cub yds— 1522 7/8

Arch work— 56 4/9
Total Cubft of Arch work— 1 6 6 6 3 1/4 13 1/2
or Cub yds— 13 1/2

Rough Stone work,
Stone Slabs to large vents in Cistern 2 4 8
do do— 2 2 4
do Small— 2 3 6
do do— 2 2 4 22 1 1/2 2 18 1/2

Total Cubft of Rough Stone work— 18 1/2
Plastering,
Top of dam and sluice— 1 26 26 26 3 78
Wing walls (North)— 1 18 18
do (South)— 1 30 1/2 30 1/2

Outside of Cistern walls— 1 13 13 6 1/2 6 369
Inside of do— 1 25 25 25 4 1/2 112 1/2
Flooring— 1 5 5 5 5 25
Deduction,
For ment of Rectangular portion— 2 2 4
do of do— 2 3 1/2 7
do of do— 2 2 1/2 5 16 2 32
do of Circular portion— 2 2 2 2 3 6
Total Sqft of Plastering with 2 Coats— 38
or Squares— 546 1/2
546 1/2

Improving the present Surplus Weir
of Valarancor Tank.

Extending the front & rear retaining wall
of the present body— 2 18 36 36 3 1/2 6 1/2 819
do the apron between retaining walls— 1 18 18 18 3 1/2 1 1/2 94 1/2

Raising the body wall— 1 100 100 100 2 1 1/2 300
Extending the rear retaining wall— 1 18 18 18 3 5 270

Foundation for extending the East wing
wall— 1 10 1/4 10 1/4 10 1/4 3 1/2 5 179 3/4
do do— 1 10 1/4 10 1/4 10 1/4 2 7/8 5 1/4 154 1/2

Above to do— 1 63 63 63 3 1/2 5 1102 1/2
Foundation for a New West wing wall— 1 63 63 63 2 1/2 5 1/4 950 1/2

Above to do— 1 63 63 63 2 1/2 5 1/4 950 1/2
Total Cubft of Brick in Chumam work— 142 3/8
or Cub yds— 100 100 100 9 3 2700

Rebuilding & extending the apron— 1 100 100 100 15 1 1500
do do do— 1 100 100 100 15 1 1500

Total Cft of 1/2 of old & 1/2 of new Rough
Stone work provided with Chumam— 4200
or Cub yds— 155 7/9
1650

Body— 1 100 100 100 5 500
Rear retaining wall— 2 73 146 146 9 1314
Wing walls— 3464

Total Sqft of plastering with 2 Coats— 34 7/8
or Squares— 1 54 54 54 3 7 1134

Demolishing the West wing wall— 1134
Total Cft of demolishing the old work— 42
or Cub yards— 42

Superintending Engineer's Office
Villafraanca, 2nd March 1870

Mr Mnd Colonel Rb
Superintending Engineer 5th Bn

North Division D.P.W.
South West District
Masonry Works.
Main Canal & Branches
Detailed Estimate for con-
structing Dam and Divi-
sional Works at the head
of Branch Channels from
the Allungul main Canal,

11/10/70
 J. P. W.

Agricultural. 5th Division
South West District 1st Range New Work
Earthwork Tillapurem Talug.

Main Canal & Branches.
Detailed Estimate of 1869-70.
Work. Straightening and Improving the Allungul channel
 from the Ponnar river for the better supply of several tanks depending
 upon it & cutting & improving branch channels from the main
 channel.

Particulars of Work.
in Allungul Channel.

Raising the river bank at the new head

Number.	Measurement			Contents
	Length Each	Breadth Total	Depth Each	
	yds	yds	yds	
	46	4	1 1/2	276
	50	3	1 1/2	262 1/2
	60	3 1/4	1 1/8	365 5/8
	88	4 1/2	2 1/4	891
	94	5	2 5/8	1233 3/4
	34	4 1/4	2 3/8	334 5/32
	28	2 1/2	1 1/4	122 1/2
	86	2 3/4	2 3/4	650 3/8
	6	2 3/8	2 3/8	33 27/32
	10	10	2	200.
	13	4	2	104.
	11	11	1 1/4	211 3/4.
				<u>4,685 1/2</u>

Total Cubic yards.
Cutting new Head, Sandy soil.
Do do Hard soil.

200	13 1/2	1 1/4	4725
7	9 1/2	2	133
10	5	2	100
152	16 1/4	2 5/8	6483 1/4.
			<u>11,441 1/2</u>

Total Cubic yards.
Clearing the old channel.
Carried forward

23	9	1/2	103 1/2
35	9	1/2	157 1/2
63	9 1/2	3/8	224 1/16
			<u>485 7/16</u>

Brought forward.

485 $\frac{7}{10}$

Clearing the old channel

27	9	$\frac{1}{2}$	121 $\frac{1}{2}$
22	9	$\frac{1}{2}$	99
10	9	$\frac{1}{2}$	45
13	9	$\frac{1}{2}$	55 $\frac{1}{2}$
4 $\frac{1}{2}$	9	$\frac{1}{2}$	20 $\frac{1}{4}$
6	9	$\frac{1}{2}$	27
20	9 $\frac{1}{2}$	$\frac{1}{2}$	95
3	8	$\frac{1}{2}$	12
6	3	$\frac{1}{2}$	9
12	4 $\frac{1}{2}$	$\frac{1}{2}$	27
4 $\frac{1}{2}$	3	$\frac{1}{2}$	6 $\frac{3}{4}$
13 $\frac{1}{2}$	9 $\frac{1}{2}$	$\frac{1}{2}$	64 $\frac{1}{4}$
4	3	$\frac{1}{2}$	6
200	11 $\frac{1}{4}$	$\frac{5}{8}$	1875
133	11	$\frac{2}{3}$	975 $\frac{1}{3}$
180	10 $\frac{3}{4}$	$\frac{1}{2}$	961 $\frac{1}{2}$

Total Cubic yards.

4794 $\frac{9}{48}$

New Cuttings

Take No 1.

36	9 $\frac{1}{2}$	$\frac{1}{2}$	513
90	18	$\frac{13}{14}$	2935
36	9 $\frac{1}{2}$	$\frac{13}{14}$	598 $\frac{1}{2}$

Total Cubic yards.

3946 $\frac{1}{2}$

Take No 2

Take No 3

Take No 4

66 $\frac{1}{2}$	21 $\frac{3}{4}$	$\frac{1}{2}$	2179 $\frac{1}{8}$
112	14 $\frac{1}{2}$	1	1624
210	14 $\frac{1}{2}$	1	3045

Take No 5

26	5 $\frac{3}{4}$	$\frac{1}{16}$	67 $\frac{5}{32}$
16	4 $\frac{1}{2}$	1	68
4 $\frac{1}{2}$	11 $\frac{1}{2}$	1	477 $\frac{1}{4}$
20	6 $\frac{1}{2}$	1	130

Total Cubic yards.

742 $\frac{2}{32}$

Take No 6

70	11 $\frac{1}{2}$	1	805
15	11 $\frac{1}{2}$	$\frac{1}{2}$	288 $\frac{3}{4}$

Total Cubic yards.

1093 $\frac{3}{4}$

Take No 7, 8, 9 and 10.

37 $\frac{1}{2}$	11 $\frac{1}{2}$	1	4331 $\frac{2}{3}$
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Take No 11

18	3	1	54
45	11 $\frac{1}{2}$	1	517 $\frac{1}{2}$
29	11 $\frac{1}{2}$	$\frac{1}{4}$	416 $\frac{1}{8}$
10	6	$\frac{1}{2}$	30

Total Cubic yards.

1018 $\frac{2}{8}$

Take No 12

Take No 13

Take No 14

Take No 15

136	11 $\frac{1}{2}$	1	1564
73	11 $\frac{1}{2}$	1	839 $\frac{1}{2}$
123	11 $\frac{1}{2}$	1	1414 $\frac{1}{2}$
133	11 $\frac{1}{2}$	1	1529 $\frac{1}{2}$

Take No 16

19	5 $\frac{1}{2}$	1	104 $\frac{1}{2}$
16	7 $\frac{3}{4}$	1	124
33	11 $\frac{3}{4}$	1	156 $\frac{3}{4}$
56	11 $\frac{1}{2}$	1	644
20	10 $\frac{3}{4}$	1	215
16	4 $\frac{1}{2}$	$\frac{3}{4}$	54
76	10	$\frac{2}{2}$	380

Total Cubic yards.

1678 $\frac{1}{4}$

Take No 17

12	11 $\frac{1}{8}$	$\frac{3}{4}$	100 $\frac{5}{8}$
117	11 $\frac{1}{2}$	1	1345 $\frac{1}{2}$

Total Cubic yards.

1445 $\frac{5}{8}$

Take No 18

8	11 $\frac{5}{16}$	$\frac{1}{8}$	79 $\frac{5}{16}$
50	11 $\frac{1}{2}$	1	575
23	8 $\frac{1}{16}$	$\frac{3}{4}$	151 $\frac{11}{64}$
216	11 $\frac{1}{2}$	1	2,484

Total Cubic yards.

3289 $\frac{23}{64}$

Take No 19

10	10 $\frac{15}{16}$	$\frac{7}{8}$	68 $\frac{23}{64}$
38	11 $\frac{5}{16}$	$\frac{1}{8}$	376 $\frac{3}{8}$
2	18 $\frac{3}{16}$	$\frac{7}{8}$	42 $\frac{5}{64}$

Total Cubic yards.

487 $\frac{23}{64}$

Take No 20

93	11 $\frac{1}{2}$	1	1069 $\frac{1}{2}$
4	10 $\frac{3}{16}$	$\frac{3}{4}$	31 $\frac{1}{16}$

Total Cubic yards.

1101 $\frac{3}{16}$

Straightening the present channel
(new cutting slope $\frac{1}{2}$ to 1).
Brought forward

860

860

Brought forward		860.
Straightening the present channel new cutting (Slope 1 1/2 to 1)		
do	do	200 100 22 1/2 2 715.50
do	do	400 400 21 3/8 2 1/4 19237 1/2
do	do	200 200 21 3/8 2 1/4 9618 3/4
do	do	300 300 23 1/4 3 1/2 24412 1/2
do	do	800 800 18 3/8 1 1/2 5675
do	do	1660
do	do	120 1730 22 1/2 3 120150
do	do	260.
do	do	100 300 21 3/4 2 13000
do	do	400 400 21 2 16800
do	do	1100 1100 18 3/4 1/2 10312 1/2
do	do	320 320 20 5/8 1 1/2 11550.
do	do	1120 1120 18 3/8 1 1/2 5144.
do	do	500 500 20 3/8 2 1/8 21382 13/16
do	do	340 340 21 2 14280
do	do	1000 1000 21 3/4 2 1/2 54375.
do	do	250
do	do	250
do	do	270
do	do	200 970 22 3/8 2 3/4 59018 1/8
do	do	1320 1320 18 3/4 1/2 12375
do	do	200
do	do	150.
do	do	140
Total Cft of Earth work or Cyds.		1140 630 16 1/2 3. 31185
Revetment.		498114
Revetting the both sides of the new head of the channel		18248 1/4
Cutting & improving the supply channel to Kollathumank.		1300 1300 6 1 1/2 16200
Embankment - side slope 1 to 1		600.
Cutting through ridge slope 1 1/2 to 1		
do	do	1300 1300 27 1/10 1 1/5 4212
do	do	1700 1700 3 1/2 2 11900
do	do	1500 1500 3 1 1/2 6750
do	do	1400 1400 5 1/16 1 7087 1/2
do	do	400 400 5 1/16 3 1/2 6834 3/8
do	do	500 500 9 4 18000
do	do	1 820 820 5 5/8 1 1/2 8717
Carried forward		

Brought forward		62854
Embankment at the head of channel.		1 180 180 20 4 11400.
Total Cft of earth work or Cubic yards.		77254
Cutting a supplying channel to Panampul Tank		2861 1/3
Cutting side slopes 1 1/2 to 1		1 3000 3000 15 3 135000
Total Cft of earth work or Cubic yards		135000
Straightening & improving the Sevanthad supply channel.		5000.
Strengthening & improving		1 2000 2000 12 3 72000.
Total Cft of earth work or cubic yards.		72000
		2666 2/3.

Range Officer
 Gaddalve.
 26th January 1870

W. R. Purchas, Lieut., R.E.,
 Asst. Engineer, P. 1 Range, S. District

Edmond Colonel R.E.,
 Superinty. Engineer. S. District

Cost of land—No. 960
Masonry works—5,480
Earths—do—8,610
Total—15,050

Distributing Chas. Drainage Supply of		Navigation		Total												
Excavation	Embankment	In surface drainage	Embankment for rivers	Chambers of escape of supply	Navigation channels	Stills & Navigation	Chambers	Boats	How or other placed	Structure for boats	Temporary works	Cost of land	Masonry works	Earth works	Navigation plant	Machinery for
900	"	"	"	"	"	"	"	"	"	"	"	960	5480	8610	"	"

ER und Colonel Pitt
Superventendenz Engenwerth

Sections of Irrigation System

Straightening and Improving the Allungat Channel
from the Pournia River for the better supply of several
tanks depending upon it and cutting and improving
branch channels from the main channel.

Superintending Engineer's Office
Villaputuram, 2^d March 1890

to notice, the proceeding

P. H. Department.

998

Proceedings of the

Madras Government.

Under date the 9th April 1900

Read the following.

From the Dy. Chief Eng.
for Irrigation

(L. E. No. 5 of 1900 March 1900)

In July last the Dy. Chief Engineer, S. Srinivasan reported that settlements had been completed for the improvement of the Bellary Channel in the South Arcot District and that he had authorized the commencement of the work in anticipation of the sanction of Government. As the need of improvement had been several times brought to notice, the proceedings of the Dy. Engineer were approved in G. O. No. 2516 of the 3rd August 1899.


A. A.
S. O. S.

The

2. The estimates were forwarded to the Ag. Chief Engr. for Irrigation in September, but as the information furnished with them was incomplete and insufficient, a further report was called for. It now appears that reliable data regarding the water supply in the Pomeroon are not available, but that Col. Ford has satisfied himself that the work provided for in the revised estimates, which amount to Rs 12,620, will have a very beneficial effect upon the cultivation under the tanks which are supplied by the

the channel; and, as nearly half the earth works are reported to have been executed, the Govt. sanction the estimate. The attention however of the Superintend. will be called to the remarks of the Ag. Chief Engineer for Irrigation, and Col. Ford will be careful in future to make timely provision for obtaining all such information as may be necessary to show clearly the probable effect of the works which he may propose to submit for sanction. A further ^{report} should be made as to the effect of raising the waste weir of the Valasami tank on the amount of surplus, which is, it is stated,

utilized

utilized in French territory.

W. 10/3/20

(8)

Further Pro. 1815 2/21 2-4

30

- 1 To Prof. Eng. 5 Dec.
- 1 Controller, V. H. Acct.
- 3 " Acct. Eng.
- 3 " Ch. Eng. for Irrig.

Desp. 12/4/20

C. 12 March 1870 Q. 25

Co 962
Gt. of 1870 311313.

PUBLIC WORKS.

To
The Superintendent Eng.
5th Division

Dated

Recd

H. L.

17

781

6 0 9 April 1870 311313

Nos. 157-158

Allingal channel Papering order
on the hole by the Chief Engineer
I am relative to the improvement
of the Allingal channel in the
S. Arcot St.

-6...