

(1) Number of pages 38(2) Date of repair 31.7.42(3) Initials of the Referencer £

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Irrigation Branch

G.O. No. 368 Irrigation Press
Mis

Dated 3rd October 1877.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

3rd October 1877, No. 368 I.

Irrigation.
Account.

Read the following papers :—

No. 14. From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated Camp at Trivellore, 12th June 1877, No. 866.

I HAVE the honor to forward three estimates for embanking the Cortelliar near Tamarapak.

3 Estimates.
3 Longitudinal sections.
3 Cross sections.
2 Survey plans.
1 Masonry plan.

2. The first, amounting to Rupees 2,550, is for enlarging the bank from Velliur tank to anicut at right bank of river, which has consolidated and sunk in a very extraordinary manner. There appears

no doubt that the original estimate was worked out, but the bank has shrunk in a way that neither Captain Smith nor I can explain; this may be considered repair.

3. The second estimate, Rupees 2,135, is for raising the embankment on the same side of the river slightly and extending it to the left bank of the supply channel to the Cholaveram lake; the line shown in yellow was approved by you, its object is to prevent flood from the river falling into the channel.

4. The third, amounting to Rupees 4,900, is also for raising the old embankment slightly and for extending it to the high ground near Mel Sembedu, which is beyond the levels of all flood.

5. In this estimate is included an item for a short length of bank to protect land under Poothooyeri of Sembedu; it has nothing to do with the Madras Water Works project, but, as I understand that these embankments are not to be charged to that estimate, I have left it, in fact no part of the north flood bank is concerned with the Madras Water Works project. The channel proposed by me from the north end of the anicut completed, will require its protection.

No. 87 CN.

THE undersigned has the honor to request that the Superintending Engineer, Chingleput, will forward a statement showing the estimated quantities and amounts, and quantities paid for and amounts paid on each and all of the estimates for the embankments to the Cortelliar.

- (1.) On the north side above the Tamarapak anicut.
- (2.) On the south side above the anicut.
- (3.) On the south side below the anicut.

FORT ST. GEORGE,
18th July 1877.

(Signed) G. T. WALCH,
Ag. Dy. Chief Engr. for Irrigation,
for Chief Engr. for Irrigation.

From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated St. Thomas' Mount, 24th July 1877, No. 1,558.

IN reference to your memorandum, No. 87 CN, dated 18th instant, I have the honor to enclose a statement showing the estimated quantities and amounts, and the quantities paid for and the amounts paid on the estimates for the Cortelliar embankment works, at the Tamarapak

1 Statement.

anicut. One estimate having been sanctioned for the southern embankment both above and below the anicut, the information could not be divided as required in your memorandum as regards the quantities paid for and the amounts paid which have been taken out from the work register (Form B B I), hence the information has been entered for the whole estimate. In regard to the amount of the estimate, I have to point out that in G.O. No. 1,222 of 7th May 1874 sanctioning the same, it is given by a misprint as Rupees 6,290 for Rupees 6,920; adding to the latter amount Rupees 510 for the alterations at the eastern end proposed by the Chief Engineer, raises the estimate to Rupees 7,430 as entered in the statement enclosed.

Statement showing the estimated quantities and amounts, and quantities paid for and amounts paid on the estimates for the embankments to the Cortelliar.

Name of Work.	Items of Estimate.	ESTIMATED QUANTITIES AND AMOUNTS.			QUANTITIES PAID FOR AND AMOUNTS.		
		Quantity.	Amount.	Total.	Quantity.	Amount.	Total.
Northern embankment above anicut.	Earthwork, cubic yards ..	52,262½	Rs. 3,272 10 7	5,550	52,787½	Rs. 3,314 7 5	4,788 3 4
	Tamping, do. ..	52,262½	272 11 7		52,197½	271 13 9	
	Trimming, do. ..	35,809½	279 12 2		31,157½	245 12 2	
	Turfing, square yards ..	35,809½	921 5 9		31,857½	795 2 3	
	Compensation for land ..	..	550 0 0		..	..	
	Contingencies ..	..	253 7 11		..	160 15 9	
Southern embankment above and below anicut.	Earthwork, cubic yards ..	51,222½	Rs. 3,922 9 1	6,920	51,221½	Rs. 3,922 7 1	6,226 12 6
	Tamping, do. ..	51,033½	398 11 9		51,037½	398 11 8	
	Trimming, do. ..	47,415	246 15 3		41,071½	213 14 10	
	Turfing, square yards ..	47,416½	1,394 3 0		45,817½	1,416 3 10	
	Compensation for land ..	..	357 8 11		..	275 7 0	
	Contingencies ..	..	600 0 0		..	..	
Alteration at eastern end as per Chief Engineer's memorandum No. 2,340 of 24th March 1874, printed in G.O. No. 1,222 of 7th May 1877.		..	510 0 0	7,430	..	..	6,226 12 6

ST. THOMAS' MOUNT,
24th July 1877.

(Signed) F. J. MOBERLY, Colonel, R.E.,
Supg. Engineer, Chingleput.

No. 94 CN.

MEMORANDUM.

WITH reference to letter No. 1,558, 24th July 1877, from the Superintending Engineer, Chingleput, and its enclosures, the undersigned has the honor to request that the estimated quantities above and below the anicut respectively.

FORT ST. GEORGE,
1st August 1877.

(Signed) G. T. WALCH,
Ag. Dy. Chief Engr. for Irrigation,
for Chief Engineer for Irrigation.

From Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput, to the Chief Engineer for Irrigation, dated St. Thomas' Mount, 12th September 1877, No. 2,215.

In reference to your memorandum No. 94 CN, dated 1st August 1877, I have the honor to inform you that the detailed estimate of Rupees 6,920 for the southern embankment of the Cortelliar is not forthcoming in the records of this or of the range office. As far as I can remember the work done to this embankment in 1874 was all above the anicut.

No. 190 I.

MEMORANDUM.

No. 14-A.

The Superintending Engineer, Chingleput, has submitted three estimates for flood banks in connection with the Cortelliar in the neighbourhood of the anicut which supplies the Madras Water Works. They are—

1. Extending right embankment below anicut to left bank of Cholaveram tank supply channel 2,135
2. Raising right embankment above anicut from Velliyur tank to the head sluice 2,550
3. Raising and extending left embankment above anicut; also a short detached flood bank 4,900

2. The first appertains to the Madras Water Works and provides for bringing an existing bank to proper level (3½ feet above flood level of 1874) and section, and for extending it to the channel bank just above the Katankal out-fall or surplus weir. At present floods can find their way round the end of the embankment and into the channel. The left bank of the channel will below this point be the river flood bank.

3. The second estimate requires special notice. In G.O., No. 2,011, dated 15th July 1875, paragraph 6, it was remarked that the want of conformity of the Cortelliar embankments with the sanctioned arrangements has to be explained, and the proper time for submitting explanations should at latest have been when the supplementary estimates for this and the left bank were forwarded for sanction. The circumstance to be explained was the considerable difference between the levels of the banks as designed and provided for in the estimates and indeed paid for and the actual levels. It appears to the undersigned that it was the duty of the Superintending Engineer to go into this matter thoroughly, and to ascertain exactly how the measurements were made, by whom, and by whom they were checked. The Superintending Engineer's explanation, such as it is, will be seen in his letter No. 866 of the 12th June last. He says, this right bank "has consolidated and sunk in a very extraordinary manner. There appears no doubt that the original estimate was worked out, but the bank has shrunk in a way that neither Captain Smith nor I can explain." This statement is not borne out by the information given with the Superintending Engineer's No. 1,558 of the 24th July last, for it is there shown that by no means inconsiderable balances of the estimates remain unexpended.

An endeavour has been made to arrive at the quantity of earthwork required to form one of the embankments to its intended level, and to compare this with the quantities paid for, but the requisite information has not been obtainable from the Superintending Engineer. There was on the right bank a small flood bank, the end of which was not at, but to the east of, the Velliyur tank bund. This was breached and then an embankment with reference to the flood of 1872 was designed. This also though not topped was breached, and lastly a modification both of level and surface fall with reference to the flood of 1874 was found necessary. The reason that the embankments were found out of level as recorded in Proceedings, Madras Government, of the 15th July 1875, No. 2,011, is probably this. The pits were small and irregular, and the measurements were, it is most likely, made on the bank and not in the pits. Possibly, too, seeing that the bank appeared to be in good section, the levels were not tested, and it was assumed that its height was correct. The Superintending Engineer has had an opportunity of examining into the matter and he has failed to do so. The Executive Engineer, Captain Smith, was still more closely concerned in the matter, and he has not shown how far he checked the work and in what manner. Whichever way the measurements were made, the first duty was to see that the bank was of the proper height and section, and if bank measurements were adopted they ought to have been reduced to solid measure. Captain Smith appears to the undersigned to have failed in one of the most important duties of an Executive Engineer; as has Colonel F. Moberly in ignoring the essential points into which it was his duty to inquire.

4. The third estimate provides for extending the left flood bank of the river up stream until a proper abutment is found for it at high ground a little more than a mile distant. Also for a small detached piece of bank to save the Sambedu Poothooyeri from extensive inundation.

5. The estimates may be sanctioned as follows:—

ORDINARY AGRICULTURAL.

IRRIGATION.

Madras Water Works.

1. Connecting right wing of Tamarapak anicut with left bank of Cholaveram tank supply channel by a flood bank ... ^{RS.} 2,135

River Embankments.

2. Improving Cortelliar right flood bank above Tamarapak anicut ... 2,550
3. Improving and extending Cortelliar left flood bank above Tamarapak anicut ... 4,900

All balances of former sanctions should be cancelled and the accounts closed.

FORT ST. GEORGE,
21st September 1877.

(Signed)

JOHN MULLINS, Colonel, R.E.,
Chief Engineer for Irrigation.

To the Joint Secretary to Government, Public Works Department, Irrigation Branch.

No. 15.

ORDER THEREON, 3rd October 1877, No. 368 I.

The following estimates are sanctioned under Ordinary Agricultural:—

	Main-head.	Name of Work.	Amount.
R. No. 219 I ...	Irrigation ...	Madras Water Works. Flood bank from anicut to supply channel.	^{RS.} 2,135
R. No. 220 I ...	River embankments ...	Improving Cortelliar right flood bank above Tamarapak anicut.	2,550
R. No. 221 I ...	Do. ...	Improving and extending Cortelliar left flood bank above Tamarapak anicut.	4,900

These sanctions have been registered as shown.

2. The absence of definite and detailed information as to the way in which the measurements of the flood banks were taken and by whom checked, is at once condemnatory of Captain A. C. Smith's work as an Executive Engineer, and the omission of the Superintending Engineer to ascertain exactly how the transactions in connection with these embankments were conducted and to make a full report on the subject calls for censure.

3. From the first, as appears from the papers, these embankments have been mismanaged and several mistakes of design committed. To these are now added grave errors in execution without even any serious attempt on the part of the Superintending Engineer to ascertain how they occurred and promptly to apply a remedy.

4. The balances of former sanctions will be considered cancelled.

(True Extract.)

Major, R.E.,
Acting Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, Chingleput.
" Collector of Chingleput.
" Chief Engineer for Irrigation.
" Examiner of Public Works Accounts.
" Revenue Department.

Esd. E. C. Shunker.
Spare Copies

IRRIGATION.
ACCOUNT.

Gobt. of Madras.
PUBLIC WORKS.

To
THE SUPERINTENDING ENGINEER,
CHINGLEPUT,
&c., &c., &c.

Dated October 3rd.

Issued

Recd.

Encl.

G. O., 3rd October 1877, No. 395 L.

OCTOBER.

Nos. 14-15.

Catchment in the neighbourhood of the Aricut
which supplies the Madras Water Works, Chin-
gleput District.—Sanctions with remarks
three estimates for flood banks in connection
with the —.

Ch 9368

Please mark papers
to be printed.

J.P.

The 8 papers initiated
with blue pencil to
be printed =

5-10-77.

Ph

8/10/77

Irrigation.

No. 866

Chingleput Superintending Engineer's Office,
Saint Thomas Mount, 12 June 1877

From

THE SUPERINTENDING ENGINEER,

Chingleput.

To

The Chief Engineer
for Irrigation.

Encs. 12

3 Estimates

3 Long Sections

3 Cross Sections^{Sir,}

1 Survey Plans

1 Massing Plan

I have the honor to forward 3 estimates for embanking the Cortetian near Sinnerapalle.

1. The first amounting to Rs. 2550 is for enlarging the bank from Vellipen to Aricut at right bank of river - which has consolidated and sunk in a very extraordinary manner. There appears no doubt that the original estimate was worked out but the bank has shrunk in a way that neither Captain Smith nor I can explain - this may be considered repairs.

2. The second estimate Rs. 2135 is for raising the embankment on the same side of the river, slightly and extending it to the left bank of the supply channel to the Chelavaram Lake.

the line shown in yellow was approved by you - its object is to prevent flood from the river falling into the Channel.

3. The third amounting to Rs 4900 is also for raising the old embankment slightly and for extending it to the high ground near Kalsembedra which is beyond the levels of all floods.

4. In this estimate is included an item for a short length of bank to protect land under the jurisdiction of Smbhedra; it has nothing to do with the Madras Water Works project but as I understand that these embankments are not to be charged to the estimate I have left it in fact no part of the North flood bank is concerned with the Madras Water Works project. ~~and~~ The Channel proposed by me from the North end of the Aicut if completed, will require its protection.

I have the honor to be
your most ^{kind} obed^t &c

J. M. Roberts

Col R.
Superintendent, Chingleput.

Pl
Immigration.

From the Sup^r Engineer
Chingapat Dt.

No. 866

Dated 12th } June 1877
Rec^d

No. of Enclosures 12

Cortalar near Thama-
rapak - Forwards
estimates &c. for im-
banking the.

97 C.N.
18
No 87 C.N.

The undersigned
has the honor to
reply that the
Sup^r En^r Chingapat
will forward a
Statement showing
the estimated
quantities & amounts
and quantities
paid for & amounts
paid, on each
& all of the
Estimates for the
Banking to be
the (or better,
"on the North Bank
above the Samapah
Ancient
(2) On the South side
above the Ancient
(3) On the South side
below the Ancient

For the
18 July 1877

17/7/77
J. C. N.
18 July 1877

Irrigation.

No. 1558

Chingleput Superintending Engineer's Office,
Saint Thomas' Mount, 21st July 1877

From

THE SUPERINTENDING ENGINEER,

Chingleput

To

The Chief Engineer
for Irrigation

Sir,

In reference to your Memorandum
- deum No. 87 C.N. dated 18th Instant.
Enclosure
Statement. I have the honor to enclose a Statement
showing the estimated quantities and
amounts, and the quantities paid for
and the amounts paid, on the estimates
for the Fort St. George Embankment Works,
at the Samarapakkam Arieent. The
Estimate having been sanctioned for
the Southern Embankment both above
and below the Arieent, the information
could not be divided as required
in your Memo, as regards the quantities
paid for and the amounts paid
which have been taken out from the
Works Register (Form B.B.I) hence the

Papers:

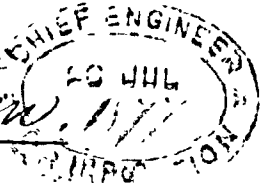
R 47 C.N. 1/77
No. 1222 - 7 May 1874.
No. 2011 - 15 July 1875.
No. 256 - 25 April 1873.
No. 934 B - 27 Dec 1873.
R 556 - 11.3.74
No. 59 C.N. 11.6.77.
No. 69 C.N. 11.14.77.
No. 89 C.N. 11.15.76.
R 591. N/76 (20.2785 11.7.76)
No. 3374 - 1.12.74.
No. 2428 - 25.8.75.
No. 281 - 11.3.75.
R 92 C.N. - 9/6/77.
R 415 11.26.2.75.
R 1055 11.31.5.75.
No. 634 11.12.6.75.
R 1458 11.25.7.75.

Plan No. 21 { R 556/74 }
Plan No. 22
Plan No. 51 { R 1055/7 }
Plan No. 52

information has been entered for
the whole estimate. In regard
to the amount of the estimate, I have to
point out that in Lj. O No 1222 of
7th May 1874, sanctioning the same,
it is given by a misprint as Rs 6290
for Rs 6920 - adding to the latter amount,
Rs 570 for the alterations at the Canton
and proposed by the Chief Engineer,
raises the Estimate to Rs 7430, as
entered in the Statement enclosed.

I have the honor to be
Sir
your most obed^t & c^t
Y^{rs} truly
Coll R B.
Superintendent Engineer

Irrigation



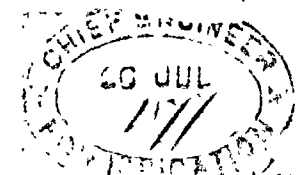
1129 C. 1
From the Supz Engineer
Chungking District

No. 1558

Dated 24th July 1877
Rec^d

No. of Enclosure 1

Costs of embankment
works — Forwards a
statement showing the
estimated quantities
and amount and the
quantities paid for
and the amounts paid
on the estimates for the.



1129 C. 1

23

Statement showing the estimated quantities and amounts; and quantities paid for and amounts paid on ~~this~~ ^{the} estimated for the enhancement of the Corolline.

Name of work	Items of estimate	Quantity	Amount	Total Quantity	Amount Total	Remarks
Northern and Southern workmen's compensation for house raised	Earth work Cys 52362 5	3272 10 7				
	Lamping — 52362 5	272 11 7				
	Friming — 52362 5	279 12 2				
	Turfing — 52362 5	921 5 9				
	Compensation for house raised	550 . . .				
	Contingencies	253 7 11				
			5550		4788 3 4	
Southern workmen's compensation for house raised	Earth work Cys 51222 3	3922 9 7				
	Lamping — 51222 3	398 11 9				
	Friming — 51222 3	246 15 3				
	Turfing — 51222 3	1394 3 .				
	Compensation for house raised	600 . . .				
	Contingencies	357 8 11				
			600 . . .		275 7 .	
			6920		4788 3 4	
Alterations at Eastern end as per Chief Engineer's Memo No 2360 of 24th March 1874 & 510 . . . Printed in G.O. No. 1222 of 7th May 1877.						

Superior's Office Chicago Sept.
21st Nov. 12th - July 1877 }

H. A. Woodbury Colonel R.R.
Superintendent Chicago Depots
of

R 124 CN 177
No 94-CN.

Memor.

With reference to
letter No 1558
24 July 1877 from
the Sup^r Police
Chin's Dept, to
its enclosure the
undersigned has
the honor to
reply to that
the Estimated
Quantities & Amounts
for the South Bank
Cartage may be
separated into
the portions due
to the work
above & below
the Ancient
respectively.

Paper
R 124 CN 177.
J. 47 CN 177
see 99 CN 177.

For 82 pages }
1 August 1877 }
18/77 }
J. 47

Pl

B2245

Super Engineer's Office China Dept
Lamb House Mount 12th Sept 1877.

From

The Superintending Engineer
China Dept

To The Chief Engineer
for Irrigation.

Sir;

In reference to your Memo B94
dated 1st August 1877, I have
the honor to inform you that the
detailed estimate of Rs 6920 for
the Southern embankment of the
Corahar is not forthcoming in the
records of this or of the Range Office.
As far as I can remember, the
work done to this embankment
in 1874 was all alone the amount.

I have the honor to be
Sir

Your most obedient servant

Herobly. Colonel Mc
Super Engineer China Dept

Ph

Enclosures

In force of his inability
in tracing out the estimate
for the — & states
that the work done in
1874 was all above the
amount —

Irrigation

Memorandum

Ms. 866-12
June 1877.
Eusebio, 15

The Superintending Engineer, Chingleput has submitted 3 estimates for flood banks in connection with the Cortiliar in the neighbourhood of the Aricent which supplies the Madras Water works. They are

1. Extending right embankment below Anicut to left bank of Cholaveram Tank supply channel ————— Rupees... 2135
2. Raising right embankment above Anicut from Velliur Tank to the head sluice — " — 2550
3. Raising and extending left embankment above Anicut also a short detached flood bank. ————— } — " — 4900

2 The first appertains to the Madras Water works and provides for bringing an existing bank to proper level ($3\frac{1}{2}$ feet above flood level of 1874) and section,

and for extending it to the channel bank just above the Katankal out-fall or surplus weir. At present floods can find their way round the end of the embankment and into the channel. The left bank of the channel will below this point be the river flood bank.

3 The second estimate requires special notice. In G. O. No. 1011 dated 15th July 1875 para 6 it was remarked that the want of conformity of the Cortilian embankments with the sanctioned arrangements has to be explained, and the proper time for submitting explanations should at latest have been when the supplementary estimates for this and the left bank were forwarded for sanction. The circumstance to be explained was the considerable difference between the levels of the banks as designed and provided for in the estimates and indeed paid for, and the

the actual levels. It appears to the undersigned that it was the duty of the Superintending Engineer to go into this matter thoroughly, and to ascertain exactly how the measurements were made, by whom, and by whom they were checked. This Superintending Engineer's explanation, such as it is, will be seen in his letter No. 866 of the 12th June last. He says this right bank has consolidated and sunk in a very extraordinary manner. There appears no doubt that the original estimate was worked out, but the bank has shrunk in a way that neither Captain Smith nor I can explain. This statement is not borne out by the information given with the Superintending Engineer's

N^o 1558 of the 24th July last, for it is there shown that by no means inconsiderable balances of the estimates remain unexpended.

An endeavour has been made to arrive at the quantity of earth work required to form one of the embankments to its intended level and to compare this with the quantities paid for, but the requisite information has not been obtainable from the Superintending Engineer. There was on the right bank a small flood bank the end of which was not at, but to the east of, the Velisur Tank bund. This was breached and then an embankment with reference to the flood of 1872 was designed. This also though not topped was breached, and lastly a modification both of level and surface fall with reference to the flood of 1874 was found necessary.

4 25
The reason that the embankments were found out of level as recorded in P.M.G. of the 15th July 1875 to 1876 is probably this. The pits were small and irregular and the measurements were, it is most likely, made on the bank and not in the pits. Possibly too seeing that the bank appeared to be in good section, the levels were not tested and it was assumed that its height was correct. The Superintending Engineer has had an opportunity of examining into the matter, and he has failed to do so. The Executive Engineer Captain Smith was still more closely concerned in the matter and he has not shown how far he checked the work and in what manner. Whichever way the measurements were made the first duty

was to see that the bank was of the proper height and section, and if bank measurements were adopted they ought to have been reduced to solid measure.

Captain Smith appears to the undersigned to have failed in one of the most important duties of an Executive Engineer, as has Colonel F. Moberly in ignoring the essential points into which it was his duty to enquire.

4. The third estimate provides for extending the left flood bank of the river up stream until a proper abutment is found for it at high ground a little more than a mile distant.

Also for a small detached piece of bank to save the Sambeder

31
Poothoo Yere from extensive inundation -

5. The estimates may be sanctioned as follows.

Ordinary Agricultural Irrigation

1. Marras Water Works
Connecting right wing of Thamarapak anicut with left bank of Cholararam Tank supply channel by a flood bank - - - - - Rs. 2,135

River Embankments

2. Improving Cortiliar right flood bank above Thamarapak anicut. - - - - - Rs 2,550
3. Improving and extending Cortiliar left flood bank above Thamarapak anicut. " 4900.

All balances of former sections should be cancelled & the accounts closed.

Lot. Lt. George
21 Sept. 1877

J.

The Joint Secy to Govt.
D. W. Secy.
Sriyam Branch

W. H. Williams C. E.
Chief Engineer for Irrigation
Sd/-

907-5-74 Rs 1222.
 1-12-74 - 3374.
 15-7-75 - 2011
 25-8-75 - 2628.
 17-10-76 - 2785
 23-5-77 - 381.

877 24
 from
 The Chief Eng^r for Irrigⁿ

dated 21 Sept. 1877
 Recd^d. 24 - do -

Encl^d. 12

N^o 190 I

Flood banks in connection with
 the Corbiers in the neighbourhood
 of the Ancient - Madras Water Works -
 Chingleput District. - Memo.
 Submitting for sanction, with
 remarks, 3 estimates of Rs 2135
 2550 + 4900 for -

E. I. From No. 22.

907/24
 No 368.

Public Works Department. 33

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 3^d Dec 1877.
 Read the following :-

Memo. by the Chief Eng^r } N^o 190 I of 21 Sep. 1877.
 for Irrigation
 The following estimate
 are sanctioned under
 Ordinary Agricultural



R^o 219 I

Main head - Name of work. Amount
 Irrigation - Madras water
 works - Flood
 bank from
 ancient to supply
 channel - - 2135

R^o 220 I

River
 Embank-
 ments - Improving Corbier
 right flood bank
 above Thamarapah
 ancient - - 2550

R^o 221 I - do -

Improving & extending
 Corbier left flood
 bank

main head - Name of work. amount

bank above

Thamarapak

ancient - - 4900

These sanctions have been registered
as shown.

2. The absence of definite
and detailed informa-
tion as to the way in
which the measure-
ments of the flood
banks were taken and
by whom checked,
is at once condemnatory
of Captain A. C. Smith's
work as an Executive
Engineer, and the omis-
sion of the Superintend-
ing Engineer to ascertain
exactly how the transac-
tions in connection
with these embank-
ments were conducted

J. L. Ching Chut
Collector do
Ch. E. for 1000
L. W. R.
Rec. Dep. S.
Dec 13-10-77.

35
and to make a full
report on the subject
calls for censure.

3. From the first
as appears from the
papers these embank-
ments have been
mismanaged and
several mistakes of
design committed.
To these are now added
grave errors in execu-
tion without even
any serious attempt
on the part of the
Supg. Engineer to ascertain
how they occurred and
promptly to apply a
remedy.

4. The balances of former sanctions
will be considered cancelled
by 23/4

24

Issue

May 1/60

Revised (see page 10)

17/4

3/10

1-7-29 B III

 Ch. 10/10/97
Govt. of Madras
PUBLIC WORKS.

To _____
Dated *24/10/97*
Issued *Chingapur*
Recd. _____ Encl. _____
G. O., *8 Oct* 1877, No. *5688*

Nos. 146-15

Corkhar in the neighbour-
hood of the Ament which
supplies the Madras water
works. Chingapur Or
Sanction with ~~under~~
3 estimates for flood
banks in connection with
the —

*Intd. in Reg.
15-10-97*