M.R.O. 1—10,006—28-2-50.

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Referencer_____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No. 892-93	Press
B.P. No.	Mis.
Dated 25-7-C876	195 .

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
25th July 1876. *No.* 1,892.

Read the following papers :—

No. 437. Endorsement of the Chief Engineer for Irrigation, dated Ootacamund, 17th July 1876, No. 102-W.

From Major J. O. HASTED, R.E., Superintending Engineer, Kistna, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, Public Works Department, Fort St. George, dated Masulipatam, 3rd April 1876, No. 1.

I HAVE the honor to forward herewith plans and estimates as per margin for sanction.

1 Plan of Outlet.
1 „ of Sluice.
1 „ of Irrigation Channel.
1 „ of cross section of Commamoor Channel Bund.
1 Estimate of proposed Outlet ... Rs. 2,370
1 „ of Sluice ... ... „ 890
1 „ of Irrigation Channel... „ 2,310

7 Return requested when sanctioned.

2. The Sakecalava drainage which crosses the Commamoor channel about 5 miles below the Nallamudda drains 100 square miles of country, and the only means of passing the drainage water is an under tunnel of two vents 6 feet span, waterway about 35 square feet, and a calingulah of two bays of 10 feet with 6 feet going through 60 square feet of waterway, altogether about 100 square feet waterway. Consequently the bund of the canal breaches yearly, and a large expenditure has to be incurred in closing breaches. Three years ago a great deal of damage was done, the head sluice to the side channel having been washed away and 200 acres of land left uncultivated in consequence, since then the bank has been revetted and an estimate sanctioned for a new head sluice as a minor new work, and when the flood water rose last year to the height shown on the section, the bund was cut at a safe distance above the masonry works.

3. According to instructions contained in your Memorandum, No. 1,286, dated 4th November 1875, an aqueduct of 200 feet waterway and an outlet weir of 880 feet long will be provided for the Sakecalava drainage in the revised estimates for improving the Commamoor channel. It is now proposed to construct a cheap escape 120 yards long similar to standard plan No. 5 received with Circular No. 67* from your office. This will not, in addition to the existing masonry works, give half the waterway ultimately considered necessary, but it will probably save the canal, as the water can be allowed to rise higher now than it would be advisable to allow when the canal is completed.

* Of 1875.

4. The ground surface at the Sakecalava is shown in the original levels at 12·15 to 12·65. By the present levels which assume the floor of the calingulah to be 8·25 ground level is from 11·28 to 11·72, and the body wall of the escape is allowed to be 12·75, or something more than a foot above ground level. It is possible that the revised designs will have to allow the level of the escape to be nearly 2 feet above ground level, in which case the work now provided for could be raised at a very small additional cost.

5. It is proposed, if sanction is given to this estimate, to commence the work immediately and to try to complete it before water comes down the channel. The material has all to be brought by cart from the small hills at some distance from the

canal and consists of stone laminated to such an extent as to be quarried with fairly smooth faces, so that very little dressing will be required for the exposed portion of the work.

6. The drainage water which crosses the canal at present flows principally without obstruction into the Moorkondapad tank, which being unprovided with an escape, breaches yearly. The construction of a calingulah in the tank bank would cost a large sum of money, and it is therefore now proposed to erect a flood bank to keep the Sakecalava water out of the tank, and to construct a sluice to supply the cultivation under the tank. The flood bank will be of use after the completion works are carried out, and the sluice will repay the cost of its construction. The Range Officer estimates the cost of repairing breach in Moorkondapad tank at Rupees 400, and the remission for damage done to crops by the tank breaching at Rupees 1,000 yearly.

7. The line of the flood bank may probably require to be somewhat altered, and, if possible, I should like to carry it outside the present wet cultivation; but Lieutenant Rawson has thought it safer to carry it in a straighter line. This point can be reconsidered when laying out the work, and it need make no difference in the estimate.

8. The importance of these works is so great that I am anxious to carry them out at once, but as the cost must be met from the allotment for Repairs, I fear the flood bank must be postponed for a year, and an attempt must be made to breach the Moorkondapad tank in a favorable place. If the escape is constructed, the drainage water will not come into the tank with the tremendous rush it does when the canal bank is breached, and there will be more time to take measures for the protection of the tank.

No. 437A. From the same Officer, dated Masulipatam, 3rd July 1876, No. 38.

With reference to your Memorandum, No. 12 K.S., dated 13th May 1876, I have the honor to forward revised estimates and plans for the works proposed where the Sakecalava crosses the Commamoor canal.

* 1 Plan of Outlet.
1 ,, of Head Sluice.
1 ,, of Supply Channel.
1 ,, of Cross Section of Commamoor Canal Bund.

		Rs.
1	Estimate of Outlet ...	... 6,130
1	,, of Head Sluice	... 1,200
1	,, of Supply Channel	... 2,310
7	Return requested when sanctioned.	

* By Bangby Parcel.

2. The outlet has been estimated for at the full length of 880 feet, the cost will be Rupees 6,130 rather more than was allowed by you, as the earth from the canal bank will have to be carried a long distance. The estimate for the flood bank has not been altered, as it is proposed, when the existing flood bank is repaired, to throw back a portion of it, and thus shorten its length; there will then be ample waterway, and the improvement can be carried out by the time flood-water can be passed through the outlet.

3. The plan of the head sluice has been revised in accordance with your remarks.

4. I am unable to suggest a transfer from this year's allotments for the work at present, but it seems probable that, in consequence of the working season now drawing to a conclusion having been a very bad one, owing to continued outbreaks

of sickness among the work-people, the full allotment for extraordinary works in the Eastern Delta will not be utilized, and later in the year funds may be transferred to these works. Some materials which have already been collected have, meanwhile, been transferred to stock.

5. These works would have been included in the Budget for the current year, had I been in the district when it was prepared. I intended to submit estimates for outlets both in the Commamoor and Ellore canals, but omitted to inform the officer relieving me of my intentions, as I did not anticipate being absent from the district for so many months.

Submitted for the consideration of Government with a recommendation that the early execution of the works, as follows, which are needed to put a stop to yearly recurring damage on the Commamoor canal, owing to the inadequate means at present existing of disposing of the flood drainage of Sakecalava, Kistna Western Delta, may be sanctioned:—

I Works—Capital. Commamoor Canal.

		Rs.
(2.)	Main canals and Branches—	
	H. Escapes. Constructing an outlet 880 feet long ...	6,130
(3.)	Distributaries, Moorkondapad tank channel—	
	B. Land...	300
	C. Works, Head Sluice	1,200
	L. Earthworks	2,010
		3,510

2. The damage sustained annually by the breaching of the Moorkondapad tank is estimated at Rupees 400, and the remission for damage done to crops by the breaching at Rupees 1,000. In addition there is much injury to the canal, and there must be loss lower down from irregularity of water supply until the injuries are repaired.

3. Government have no funds under Ordinary at their disposal for the above works, and it is, moreover, believed that as the Commamoor canal is a part of the Kistna Delta system for which completion estimates have not yet been sanctioned, the sanction of the Government of India will be necessary. The Superintending Engineer states that, owing to sickness having been prevalent during the working season just ending, it is improbable that the grants under Extraordinary will be worked out, but he has not made any specific surrender. As, however, Ryves' canal, Eastern Delta, is the only work for which there is any considerable provision in the Budget, the transfer of Rupees 9,640, if made at all, will have to be taken therefrom.

4. These works will form part of the completion estimate for the Commamoor canal, and it appears to be desirable that they should be sanctioned in anticipation, in order that further waste of money and loss of revenue may be prevented.

(Signed) JOHN MULLINS, Lieut.-Col., R.E,
Chief Engineer for Irrigation.

Proceedings of the Madras Government, Public Works Department, 25th July 1876. No. 1,892.

No. 438. ORDER THEREON, 25th July 1876, No. 1,892.

IRRIGATION, No. 49.
Account.

THE estimates, amounting altogether to Rupees 9,640, for certain improvements to the Commamoor canal, which the Chief Engineer for Irrigation shows to be necessary to prevent recurrence yearly of extensive damage to the canal, the Moorkondapad tank and the cultivation thereunder, will be forwarded for the orders of the Government of India.

(Here enter No. 1,893, dated 25th July 1876.)

(True Extract.)
(Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government.

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, *25th July* 1876.

No. 439.

No. 1,893.

FROM

MAJOR-GENERAL G. W. WALKER, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

IRRIGATION, No. 50.
Account.

G.O., No. 1,892, dated 25th July 1876.

SIR,—I am directed to transmit a copy of the Proceedings of this Government, as per margin, and to state that, should the Government of India consider the early carrying out of the estimates, amounting to Rupees 9,640, for certain improvements to the Commamoor canal, Kistna Delta, to be desirable under the circumstances brought to notice, and in anticipation of the submission and sanction of completion estimates for this canal, the requisite funds under Extraordinary can be provided by transfer from the Budget allotment for Ryves' canal in the eastern section of the Kistna Delta.

I have the honor to be,
Sir,
Your most obedient servant,

Colonel,
Offg. Under Secy. to Govt., P.W.D.,
for *Secretary to Government.*

Exd. W. H. French.

Spare Copies

So far as this office can ascertain
there is apparently only one definite
sanction for the Lowmanoor Canal.
The S.P. quoted in pencil in para
2 is enclosed; it is not evident
however if the Chief Engineer refers
to this sanction. W.G. 13/5. Nigel W.
13/5

E. I. Form No. 34.

Urgent

MEMORANDUM.

REQUESTED for reference the under-mentioned papers:—

Chief Engr's Genl No 1245 of 1876 put up with G. O. No 1892 - 25 July 76.

P. Anderson Esq
Under Secy to Govt
PWD

OFFICE OF THE CHIEF ENGINEER
FOR IRRIGATION,
15 - 8 - 1876

Head Clerk.

To

The Registrar of the P. W. Secretariat

FORMER CASES.

R No. 1286 of 1875
" "

ISSUE No. 12 K.S.
Dated 13 May 1876.

LATER CASES.

R No. 37 K.S. of 1876.
" "

Sent to Government with No.
18 W. of

Printed with G. O. No.
dated

REMINDERS ISSUED.

No. 1, dated
" 2, " 187 .
" 3, "
" 4, "
" 5, "
"

KEEP-WITHS.

I. E. Form No. 81.

1876.

Chief Engineer for Irrigation.

RECEIPT No. 15 K.S.
Dated 3rd April 1876.

P. W. 5314-3/76.

Subject:—

Cauvery Canal—Western Delta, Kistna—Requests that Estimate &c. for carrying out certain improvements &c. may be corrected according to the Suggestions contained within, before being Submitted to Govt. for sanction, & calls for explanation as to why the orders were not obeyed in time for the Decision being manifested in the Budget.

ENCLOSURES.

4 Plans.
Estr. & Abstr. dated 3rd April 1876
1 do. do.
1 do. do.

Enclosures by Bangby Parel.
Plan Coloured
do. do. Colours
do. do. Irrigation
do. do. Cross Sections
Cauvery Channel
Estr. & Abstract
Cost of proposed Channel Rs 2370
Cost of alterations
do. of Irrigation Channel Rs 2310
1 Return required when sanctioned

Superintending Engineer

Assistant Engineer

From
Lieut. J. D. Haslett R.E.
Superintending Engineer Kistna District.

To
Lieutenant Colonel John Wallace R.E.
Chief Engineer for Irrigation P.W.D.
Hot Land Trongs.

Sir,

I have the honor to forward herewith plans and estimates as per margin for certain

2. The Sekeeala drainage which crosses the Cauvery Channel about 5 miles below the Cauvery Channel about 5 miles below the Pallamedu drains 100 square miles of country, and the only means of passing the drainage water so as to keep clear of 2 miles of flat low waterway is an underchannel of 2 miles of flat low waterway about 35 square feet, and a Calingulah of a base of 60 square feet with 6 feet long through 60 square feet of waterway, allowing about 100 square feet waterway. Consequently the bund of the Cauvery Channel breaches yearly and a large expenditure has to be incurred in closing breaches. Three years ago a great deal of damage was done, the head sluice to the Cauvery Channel being soon washed away and the area of land left thereby elevated in consequence, since then the breach has been repaired and an estimate for the work and plan of the flood water pose last year is submitted for a new head sluice as a further check on the section the bund to the height above the masonry work of the sluice and waste distance above the masonry work of the sluice and waste distance according to instructions contained in your Memo No. 1286 dated 4th November 1875 an aqueduct of 200 feet waterway and an outlet weir of

of 880 feet long will be provided for the Sakkealava drainage in the revised estimates for improving the Commanoor Channels. It is now proposed to construct a Chunk escape 120 yards long similar to Standard plan No 1 approved with Circular No 67 from your Office. This will not, in addition to the existing midweir works, quite do away with the waterway ultimately considered necessary, but it will probably save this canal, as the water can be allowed to rise higher now than it would be advisable to allow when the canal is completed.

4. The ground surface at the Sakkealava is shown in the original levels at 12·45 to 12·65. By the present levels which assume the floor of the Caliyugalah to be 9·25 ground level is from 11·78 to 11·92 - and the bye wall of the escape is allowed to be 12·75, or something more than a foot above ground level. It is possible that the revised designs will have to allow the level of the escape to be nearly a foot above ground level, in which case the work now proceeded for could be raised at a very small additional cost.

5. It is proposed, if sanction is given to this estimate to commence the work immediately and to try to complete it before water comes down the channel. The material has all to be brought lightly cart from the small hills at some distance from the canal and consists of close laminated stone such an extent as to be procured with fairly smooth faces, so that very little dressing will be required for the exposed portion of the work.

6. The drainage water which crosses the canal at present flows principally without obstruction into the Alumkondapaud tank, which being unprovided

unprovided with an escape, breaches yearly. The construction of a Caliyugalah in the tank bank would cost a large sum of money, and it is therefore now proposed to erect a flood bank to keep the Sakkealava water out of the tank, and to construct a sluice to supply the cultivation under the tank. The flood bank will be of use after the completion works are carried out, and the old one will pay for the cost of its construction.

No. 7. The Charge Officer estimates the cost of repairing breach in Alumkondapaud Tank at 4000 Rupees, and the permanent protection from damage done to crops by the tank breaching at 1000 Rupees yearly.

8. The line of the flood bank may probably require to be considerably altered, and if possible I should like to carry it round the present wet cultivation, but Lieutenant Dawson has thought it safer to carry it in a straighter line. This point can be reconsidered when laying out the work and it need make no difference in the estimate.

9. The importance of these works is so great that I am anxious to carry them out at once, but as the cost must be met from the allotment for Repairs, for the flood bank must be postponed for a year, and an attempt must be made to breach the Alumkondapaud tank in a favorable place. If the escape is constructed the drainage water will not come into the tank with the tremendous push it does when the canal bank is breached, and there will be more time to take measures for the protection of the tank.

I have the honor to be
Sir
Your most obedt Servant
Inspector
Irrigation & Kistna
Supt Engineer

CHIEF ENGINEER
1878
FOR IRRIGATION

No. 38 Supdg. Engrs. Office Kot. }
Date of signature }
3rd July 1876. }

From
Capt. J. C. Sholto R.E.
Superintending Engineer,
Kistnah

To
Lieutenant Colonel J. Mullins R.E.
Chief Engineer for Irrigation.

Sir,

With reference to your Memo. No. 12 K.S. dated 13th May 1876, I have the honor to forward revised estimates and plans for the works proposed where the Sabi Calva crosses the Commamoor Canal.

2. The outlet has been estimated for at the full length of 880 feet. The cost will be Rs. 6130 rather more than was allowed by you, as the earth from the canal bank will have to be carried a long distance. The estimate for the flood bank has not been altered, as it is proposed when the existing flood bank is repaired to throw back the portion of it and thus shorten its length, there will then be ample waterway & the improvement can be carried out by the time flood water can be passed through the outlet.

3. The plan of the Head Sluice has been revised in accordance with your remarks

Enclosures
Plan & Cutlet
do of Head Sluice
do of Escapades
of Commamoor
Canal bank
Abstract of Outlet Rs. 6130
do of Head Sluice
do of Supply Rs. 1200
Rs. 2310

Total returned
enclosed when
sanctioned.
By Bangly parcel

E. No. 1878.

C. No. 5343/76

From
The Chief Engineer
for Irrigation

To
The Collector
Kistnah District

Dated 3rd July 1876
Received
Registered

Memo.

Forwarding for sanction
Estimates & Plans for
Escapades
Head Sluice
Outlet
Commamoor Canal

Forwarded for sanction
Estimates & Plans for
Escapades
Head Sluice
Outlet
Commamoor Canal

Executive Engineer

4. I am unable to suggest a transfer from this year's allotments for the work, at present, but it seems probable that, in consequence of the working season now drawing to a conclusion having been a very bad one, owing to continued outbreaks of sickness among the workpeople, the full allotment for extraordinary works in the Eastern Delta will not be utilized; and later in the year funds may be transferred to these works. Some materials which have already been collected, have meanwhile been transferred to Stocks.

5- These works would have been included in the Budget for the current year, had I been the Dist. District when it was prepared. I intended to submit estimates for outlets both in the Commamoor and Khoreh Canals, but omitted to inform the Officer relieving me of my intentions as I did not anticipate being absent from the District for so many months.

I have the honor to be,
Sir,
Your most obedient Servant

Jn. Stut. Capt. R.E.
Superintending Engineer, Kishnah

B.E.

CHIEF ENGINEER
13 JUL
1876
IRRIGATION

No 38

From The Secy to Govt
Madras

To The Chief Engineer
for Irrigation

Dated 3rd July 1876

Sir,

I am directed by the Commissioner of Canals to forward the accompanied plans & estimates for the works proposed to be executed in the Kistna District for sanction

S. No. 531-3/76
5

No 437a

Cir. 21-7-76 Desp 25-7-76
P.L. Short 5th July

No 102-W.

From Supty. Engr. Kistna No 1 — 3d April 76
To — do — 12 K.S. — 13 May
From — do — 38 — 3d July

Encls 6

Submitted for the consideration of Government with a recommendation that the early execution of the works as follows, which are needed to put a stop to yearly recurring damage on the Commamoor Canal, owing to the inadequate means at present existing of disposing of the flood drainage of the Pakicalva, Kistna-Western delta, may be sanctioned.

I Works. Capital. Commamoor Canal.

(2) Main Canals and branches

H Escapes. Constructing an outlet 880 feet long Rs. 6130

(3) Distributaries. Moorkondapad Tank Channel.

B. Land ——— Rupees 300
C. Works. Head Sluice — " — 1,200
I. Earthworks ——— " — 2,010
3,570

2. The damage sustained annually

by the breaching of the Moortondapad tank is estimated at Rupees 400 and the remission for damage done to crops by the breaching at Rupees 1000. In addition there is much injury to the canal and there must be loss lower down from irregularity of water supply until the injuries are repaired.

3. Government have no funds under Ordinary at their disposal for the above works, and it is, moreover, believed that as the Commamoor Canal is a part of the Kistna Delta system for which completion estimates have not yet been sanctioned, the sanction of the Government of India will be necessary. The Superintending Engineer states that, owing to sickness having been prevalent during the working season just ending, it is improbable that the grants

under Extraordinary will be worked out; but he has not made any specific surrender. As, however, Rupees Canal, Eastern Delta, is the only work for which there is any considerable provision in the Budget, the transfer of Rupees 9,640, if made at all, will have to be taken therefrom.

4. These works will form part of the completion estimate for the Commamoor Canal, and it appears to be desirable that they should be sanctioned in anticipation, in order that further waste of money and loss of revenue may be prevented.

I have the honor to be
Sir
Your most obedient Servant
(Signed) J. Lindsay Lt. Colonel R.E.
Chief Engineer for Irrigation

Vacamund
7th July 1876

To
The Secretary to Govt P.W.D.

8. W. 1876 Department

N° 102 W

From — No 5343

The Chief Engineer for Irrgn

To The Secy to Govt PWD

Dated 17 July 1876

Received 24 — 7 —

Encls 6. and 4 Plans

Commanoor Canal — Kistna District, — Submits Estimate for Rs 9640 for certain improvements to the — with recommendation that they be sanctioned.

N° 437-

Cir - 21.7.76 Rtd 26-7-76

Pl. Sheet 38 July

E. I. Form No. 32.

No 1892

Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the 25 July 76.

Read the following:—

12

Endorsement of the Chief Engineer for Irrigation

No. 102-W, dated 17th July 1876.

The estimates amounting altogether to Rupees 9,640 for certain improvements to the Commanoor Canal, which the Chief Engineer for Irrigation shows to be necessary to prevent recurrence yearly of extensive damage to the Canal, the Moorkondapad Tank and the cultivation thereunder, will be forwarded for the orders of the Government of India.

S. E. Nichols
C. E. for I.

Date 9-8-76

No. 1893 dt 25 July/76.

To

The Secretary to the
Government of India.

Sir,

I am directed to transmit a copy of the Proceedings of this Government, as per margin, and to state that, should the Government of India consider the early carrying out of the estimates, amounting to Rupees 9,640, for certain improvements to the Commamoor Canal, Kistna Delta, to be desirable under the circumstances brought to notice, and in anticipation of the submission and sanction of completion estimates for this Canal, the requisite funds under Extraordinary can be provided by transfer from the Budget allotment for Ryves' Canal in the Eastern section of the Kistna Delta.

G.O. No. 1892 dt 25th July 1876.

Draft, with 12 Copies of G.O. No. 1892/76. & with 3 Estimates & 4 Plans, on the 9th August 1876.

5343 C4

Govt. of 18876 Madras.

PUBLIC WORKS.

To

The M. E. Kistna

Dated

Issued

Read Date

G. O., 25th July 1876, No. 1892-1893

Nos. 437 439

Commamoor Canal

Kistna Dt. The Es-
timates amounting altogether
to Rs. 9640 for certain
improvements to the
forwarded for the orders
of the Government of India

Forwarding Estimates for improvements to the Commamoor Canal in the Kistna Dt. & stating that should it be considered desirable under the circumstances stated to carry out the work, the requisite funds under Extraordinary can be provided by transfer —