

(1) Number of pages _____

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(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	1281-82 (2)	Press
B.P. No.		Mis.
Dated	22.5	1876

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
22nd May 1876.*

Read the following paper :—

No. 62 W.

Note by Chief Engineer for Irrigation.

No. 391.

In a letter No. 1,607, of the 16th August 1875, the District Engineer, Godavery, Eastern Delta, Godavery, Mundapett Canal. transmitted estimates for certain distributaries for the irrigation of lands under the Mundapett canal, and to place the heads of the channels in the Cocanada canal and charge the cost to the latter. Objection was taken to this arrangement as being

No. 1,057 of the 16th September 1875.

incorrect in principle, as it would involve the transfer of the connected irrigation from the Mundapett to the Cocanada canal and thus complicate the accounts, and as it would interfere with the water distribution as arranged for in the general project for the delta. The District Engineer was therefore requested to reconsider his proposals, and accordingly he submitted* an estimate of Rupees 2,600 for a channel on the left bank of the Mundapett canal which was approved,† and the proposals for the right

* No. 3,062, 17th January 1876.

† No. 125, 31st January 1876.

bank channel were postponed pending further investigation of the circumstances.

2. In a letter No. 3,383, of the 18th February 1876, the District Engineer reported a saving of Rupees 4,000 on the Thapeswaram new lock on this canal, and asked permission to transfer this amount to distribution, and he was, in reply, informed that before any such proposal could be submitted for the consideration of Govern-

No. 3 G.D., of 8th March 1876.

ment it would be necessary to prepare a revised abstract estimate for the canal, and it was noticed that the advanced state of the works provided for in the sanctioned estimate would readily enable this to be done. With regard to distributaries, he was asked to show what works were contemplated to be carried out from the lump sum provision of Rupees 11,000 on this account, and the acreage connected with them; secondly, what works had been carried out or were in course of execution with particulars of their estimated cost and of the acreage which they will supply; thirdly, the works still considered necessary with their probable cost and the acreage to be irrigated.

3. The District Engineer has now furnished the information required. He shows that the total cost of distribution under the canal will be Rupees 11,870, or Rupees 870 in excess of the amount provided in the canal estimate; secondly, that the works originally contemplated were 10 miles of channels and fifteen head sluices

No. 210, dated 21st April 1876,
and list, dated 1st " "
Proceedings of Madras Government, dated 28th
September 1870, No. 2,335, Note para-
graph 9.

and dividing dams, but he has erroneously entered the whole irrigation of the canal, 32,155 acres, as the acreage connected with the lump sum grant of Rupees 11,000, instead of the extension of area, 7,071 acres, shown in the statement of water distribution, Eastern Delta, dated 14th May 1870, which was an accompaniment of the completion estimates. The average

First reach		Acres 6,389
Second reach		7,071

Proceedings of the Madras Government, Public Works Department,
22nd May 1876.

cost of minor distribution was, therefore, expected to be 1.55 Rupees an acre; thirdly, that the works completed or under execution will cost Rupees 8,600, and are connected with acres 14,431; fourthly, that other works estimated to cost Rupees 3,180 and connected with 2,395 additional acres are needed. Altogether, then, the acreage to be benefited by the improved distribution arrangements will be acres 16,826, and the average cost of the works will be per acre Rupees 0.706. It has not been explained how so much larger an acreage than the additional area to be irrigated under the canal has had to be dealt with, but seeing that the original arrangements were never definitely worked out, and that in providing for the irrigation of new lands interspersed among old, it is impracticable to avoid modifying the old works in addition to providing new ones, the absence of such explanation appears to be immaterial. It has not been, moreover, shown what the additional acreage is now expected to be, and information on this point would have been acceptable. There is, however, no necessity apparently to take any exception to the revised estimate of cost of distribution works, which will exceed by only Rupees 870 the amount originally provided.

4. The revised abstract estimate for the canal has been furnished in the form of a comparative statement, and striking out the last item, which has been included under instructions* issued from this office by mistake, the reconstruction of the surplus weir being chargeable to Revenue, the only excess is on distribution works Rupees 870,† while the savings amount to Rupees 28,650 as shown, and the net savings to Rupees 27,780.

* No. 3 G.D., 8th March 1876, paragraph 3.
Destruction of old weir recorded in Proceedings of Madras Government, 24th February 1875, No. 521.

† More properly Distributaries ...
Drainage and Public Works ...

5. It is recommended that the revised estimate be sanctioned, and that further the estimate of Rupees 1,670, under distribution for a channel on right bank at 8 $\frac{3}{4}$ miles, be approved for execution.

6. The District Engineer should have prepared the comparative statement in accordance with the classification laid down in Proceedings of the Madras Government of the 10th July 1875, No. 1,968. This has now been done, and the item for land compensation, Rupees 3,273, which had been omitted, has been brought forward, and has been shown under Distributaries, as it is believed no new land was required for the canal. The small drainage work has also been placed under the proper main head.

Ootacamund,
18th May 1876.

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

To the Secretary to Government, Public Works Department.

Proceedings of the Madras Government, Public Works Department,
22nd May 1876.

EASTERN DELTA—GODAVERY—MUNDAPET CANAL—CLASS I. WORKS.
Comparative Statement showing the Original and Revised Estimates.

EASTERN DISTRICT

Comparative Statement showing the Original and Revised Estimates.

ORIGINAL ESTIMATE.				REVISED ESTIMATE.				Remarks.
Main-head.	Sub-head.	Items.	Amount.	Total.		Amount.	Total.	
(2) Main Canals and branches.	I.—Navigation Works.	Lock.—Thapsawaram	Rs. 22,370	Rs. 50,400	Lock.—Thapsawaram	Rs. 18,370	Rs. 21,750	Reduced cost due to alteration of size of lock to the dimensions fixed for 2nd-class locks generally. Old lock retained, vide Chief Engineer's for Irrigation memorandum, paragraph 22, in P.M.G. No. 1,977, 18th April 1871. Old weir retained and improved at cost above. N.B.—The provision for land was probably for distribution works, and has been entered under that head.
		Do. weir.—Do.	3,070	12,700	Do. weir.—Do.	2,850	12,700	
		Do.—Pasalapooty.	21,960	63,100	Do. weir.—Do.	...	...	
		Do. weir.—Do.	3,000	12,700	Lock weir.—Pasalapooty	630	21,750	
		Earthworks	12,700	9,000	Earthworks	12,700	12,700	
(3) Distributaries.	L.—Earthwork	Total, M. C. and B.	3,273	9,000	Compensation	3,273	34,450	N.B.—The provision for land was probably for distribution works, and has been entered under that head.
		Compensation	3,273	9,000	Tunnel under Nadoorabada Channel	300	8,273	
		15 Head sluices and dividing dams.	...	...	Regulating Dam, Mundapet Channel	320	...	
		Do. to Channel left bank, Canal at 6½ miles.	...	...	Head Sluice, Chodaram Channel, moiety of cost of.	450	...	
		Do. to Channel right bank, Canal at 8½ miles.	...	...	Head Sluice, Macharam Channel	87	...	
(4) Drainage and Protective Works.	L.—Earthwork	Do. to Ramachendrapoor Channel, left bank 18 miles.	...	...	Do. to Channel left bank, Canal at 6½ miles.	530	...	Vide G.O., No. 2,812, dated 3rd October 1874.
		Do. to Chellloor and Mochumilly Channel, right bank.	...	...	Do. to Channel right bank, Canal at 8½ miles.	600	...	
		Side Channel, left bank canal	...	...	Do. do. left bank 11 miles.	620	...	
		Channel left bank 6½ miles	2,000	2,000	Do. to Ramachendrapoor Channel, left bank 18 miles.	910	...	
		Do. right bank 8½ miles	...	...	Do. to Chellloor and Mochumilly Channel, right bank.	600	4,467	
(4) Drainage and Protective Works.	L.—Earthwork	Do. Macharam	...	...	Side Channel, left bank canal	1,466	...	Vide G.O., No. 2,812, dated 3rd October 1874.
		Do. Chodaram	...	...	Channel left bank 6½ miles	2,600	...	
		Do. Chodaram	...	...	Channel right bank 8½ miles	1,670	...	
		Do. Chodaram	...	...	Do. right bank 8½ miles	1,351	...	
		Do. Chodaram	...	...	Do. Macharam	157	7,214	
(4) Drainage and Protective Works.	Do.	Total Distributaries	...	14,273	Channel to drain Somaswaram lands	...	14,934	Vide G.O., No. 2,812, dated 3rd October 1874.
		...	...	...	...	159	159	
		Grand Total	...	77,373	...	...	49,593	
		...	...	...	...	...	...	
		...	...	...	...	...	...	

(Signed)

JOHN MULLINS, Lieut.-Colonel, R.E.,
Director of Irrigation

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

Ootacamund,
18th May 1876.

Proceedings of the Madras Government, Public Works Department,
22nd May 1876.

No. 392. ORDER THEREON, 22nd May 1876, No. 1,281.

IRRIGATION, No. 39.

Account.

Delta, Godavery, which were reviewed in G.O., No. 2,335, of the 23rd September 1870, and which to the amount of Rs. 9,45,400* were sanctioned by the Government of India in letter No. 181 L., dated 10th May 1871, was for—

* Rs. 10,80,800
Deduct—Samulcottiah Canal ... 1,55,100

I—Works ... { Works	...	...	...	...	...	...	Rs. 74,100
Land ...	...	...	...	...	...	...	3,273
Total ..							77,373

CAPITAL—EXTRAORDINARY.
1.—Works.
(2.)—Main Canal and Branches.
1.—Navigation Works.
Mundapett Canal.

Lock Thapsawaram ...	...	...	...	...	...	...	Rs. 18,370
" Weir ...	...	...	...	...	...	...	2,850
" Pasalapoody ...	...	...	...	...	...	...	530
Earth-work, Mundapett Canal ...	...	...	...	...	...	...	12,700
Compensation ...	...	...	...	...	...	...	3,273
Tunnel under Nadoorubada Channel ...	...	...	...	...	...	...	300
Regulating dam, Mundapett Channel ...	...	...	...	...	...	...	320
Head sluice, Chodaram Channel, moiety of cost of ...	...	...	...	...	...	...	470
Do. Macharam Channel ...	...	...	...	...	...	...	67
Do. to Channel left bank canal at 6 1/2 miles ...	...	...	...	...	...	...	580
Do. to Channel right bank, canal at 8 1/2 miles ...	...	...	...	...	...	...	609
Do. to left bank 11 miles ...	...	...	...	...	...	...	620
Do. to Ramachendrapoor Channel, left bank 18 miles ...	...	...	...	...	...	...	910
Do. to Chelloor and Mochu-milly Channel, right bank ...	...	...	...	...	...	...	6.0
Side Channel, left bank canal ...	...	...	...	...	...	...	1,466
Channel left bank 6 1/2 miles ...	...	...	...	...	...	...	2,800
Do. right bank 8 1/2 miles ...	...	...	...	...	...	...	1,670
Do. Macharam ...	...	...	...	...	...	...	1,351
Do. Chodaram ...	...	...	...	...	...	...	157
(4)—Drainage and Protective Works.	...	...	...	...	...	...	159
Channel to Drain Somasawaram lands.	...	...	...	...	...	...	49,523
Irrigation Register No. 35 I of 1876-77.	...	...	...	...	...	...	

and owing to its having been decided to retain the old Pasalapoody lock and lock weir instead of constructing new works a large saving has resulted, while on the other hand, under Distributaries and Drainage, a small excess has been rendered necessary, the net result being a reduction in the estimate to the extent of Rupees 27,780.

2. The revised estimate, of which the particulars have been given in the revised and classified comparative statement prepared by the Chief Engineer for Irrigation, amounts to Rupees 42,593, and is approved. A copy of these Proceedings will be forwarded for the information of the Government of India.

3. This estimate has been registered as shown in the margin.

(True Extract.)

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

No. 393.

(DOCKET, No. 1,282, dated 22nd May 1876.)
COPY of the above forwarded for the information of the Government of India.
(True Extract.)

Colonel,

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

Exd. S. T. Austin,
Spare Copies

Note by Chief Engineer for Irrigation.

Encls. 7

Eastern Delta.
Godavery.
Mundapett
Canal.

In a letter No. 1607 of the 16th August 1875 the District Engineer, Godavery, transmitted estimates for certain distributaries for the irrigation of lands under the Mundapett Canal and to place the heads of the channels in the Cocanada Canal and charge the cost to the latter. Objection was made to this arrangement as being incorrect in principle, as it would involve the transfer of the connected irrigation from the Mundapett to the Cocanada Canal and thus complicate the accounts, and as it would interfere with the water distribution as arranged for in the general project for the

Delta. The District Engineer
was therefore requested to re-
consider his proposals, and
accordingly he submitted an estimate of Rupees 2600 for
a channel on the left bank
of the Chundapett Canal which
was approved, and the pro-
posals for the right bank
channel were postponed
pending further investigation
of the circumstances.

2. In a letter No 3383 of the
18th February 1876, the District
Engineer reported a saving of
Rupees 4,000 on the Thapeerwarum
new lock on this Canal, and
asked permission to transfer
this amount to Distribution, and
he was in reply informed that
before any such proposal
could be submitted for the
consideration of Government

No 3062-17th Aug 1876

No 125-31st Jan 1876

No 3602 of 1876

27
it would be necessary to prepare
a revised abstract estimate
for the Canal, and it was
noticed that the advanced state
of the works provided for
in the sanctioned estimate
would readily enable this to
be done. With regard to
distributaries, he was asked
to show what works were
contemplated to be carried
out from the lump sum
provision of Rupees 11,000 on
this account, and the acreage
connected with them; 2^{ndly}
what works had been carried
out or were in course of
execution with particulars
of their estimated cost and
of the acreage which they
will supply; 3^{rdly} the works
still considered necessary with
their probable cost and the

acreage to be irrigated.

3. The District Engineer has now furnished the information required. He shows that the total cost of distribution under the canal will be Pesos 11,870 or Pesos 870 in excess of the amount provided in the canal estimate, 2^{ndly} that the works originally contemplated were 10 miles of channels and 15 head sluices and dividing dams, but he has erroneously entered the whole irrigation of the canal 32,155 acres, as the acreage connected with the lump sum grant of Pesos 11,000, instead of the extension of area 7,071 acres shown in the Statement of Water distribution, Eastern Delta, dated 14th May 1870, which was an accompaniment of

list dated 1st April/76

P.M. 28 Sept. 1870
No 2335. Note
para 9.

1st reach acres 6389
2nd - do - - 682
7071

the completion estimate. The average cost of minor distribution was therefore expected to be 1.55 Pesos per acre, 2^{ndly} that the works completed or under execution will cost Pesos 8,692 and are connected with acres 14,421, 14th that the new works estimated to cost Pesos 3,178 and connected with 2,395 additional acres are needed altogether, there is an acreage to be benefited by the improved distribution arrangements will be acres 16,826, and the average cost of the works will be per acre Pesos 0.706. It has not been explained how much larger an acreage than the additional area to be irrigated under the canal has had to be dealt with, but seeing that the original arrangements were never

definitely worked out, and that in providing for the irrigation of new lands interspersed among old it is impracticable to avoid modifying the old works in addition to providing new ones; the absence of such explanation appeared to be immaterial. It has not been moreover shown whether the additional acreage is expected to be, and information on this point would have been acceptable. There is, however, no necessity apparently to take any exception to the revised estimate of cost of distribution works, which will exceed by only Rs 870 the amount originally provided. The revised abstract estimate for the Canal has been furnished in the form

* 30 A.D. 8 March 1876, para. destination of reconstruction of the surplus old weir recorded in P.M. 9.24 Feb. 1876, no 521.

* more properly Distributaries - 711 Drainage & P. Works - 159

of a Comparative Statement and striking out the last item which has been included under instructions issued from this office by mistake, the being chargeable to Rs 870. The only excess is now distribution works Rs 870 while the saving amount to Rs 28,650. and the net savings to Rs 27,780. This is recommended that the revised estimate be sanctioned, and that further the estimate of Rs 1670 under distribution for a channel on right bank at 8 3/4 miles be approved for execution. b. The District Engineer should have prepared the Comparative statement in accordance with the classification laid down

870

FORMER CASES.

Current No. of 187

"
"
"
"

P. H. 1876 Department
M. WORKS FORM No. 3.

Current No. 3771

From

The Chief Eng^r for Irrigⁿ

No. 1281

Dated 18th

Recd. 25th

May 1876

Subject:—

Note on letter from
the District Eng^r Godavery,
forwarding an estimate for exca-
vating an Irrigation Channel on
the South side of the Mundapetta
Canal.

ENCLOSURES. 7.

From

to

"

"

"

"

"

"

Orders and Proceedings in file.

Depart- ment.	No.	Date.	ENDORSEMENTS.		
			Depart- ment.	No.	Dated.

N^o 391

E. I. Form No. 22.

No. 1281

Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the 22nd May 76

READ the following:—

From the Chief Eng^r for
Irrigation { H. E. Roberts 7th 18th May 76 }

From the fore-
going papers it
appears that the
sanctioned estimate
for the Mundapetta
Canal, included in
the completion estimate
for the Eastern Delta
Godavery, which
were reviewed in
G. O. No 2335 of the
28th September 1870,
and which to the
amount of Rupees
9,45,400 were sanctioned.

dy. Superintendent
Canals

* Rs 10,80,000
1,35,400

by the Government
of India in letter
No 181-I dated 20 May 1871.
was for

I Works. { Works Rs 74,100
Land - " - 3,273
Total - - 77,373

and owing to its
having been decided
to retain the old
Pasalapooddy lock
and lock weir instead
of constructing new
works a large saving
has resulted, while
on the other hand
under Distributaries
and Drainage a
small excess has
been rendered necessary.
The net result being
a reduction in the
estimate to the extent

of Rupees 27,780. 17

2. The revised estimate, of which the particulars have been given in the revised and classified Comparative Statement prepared by the Chief Engineer for Irrigation, amounts to Rupees 49,593 and is approved. A

copy of these Proceedings will be forwarded for the information of the Government of India.

This Estimate has been registered as shown in the margin.

Docket No 1282 of 22 May/76
Copy of the above forwarded for the information of the Govt of India.

Capital - Extraordinary.

1. Works.

(2) Main Canal & branches.

I. Navigation Works.

Mandapett Canal.

Lock Thapooram - Rs 357 of 1876-77 Rs 18370

" - " - do 35 I " " 2850

Lock weir - Pasalapooddy 35 I " " 530

Earth Works - Mandapett Canal 35 I " " 12,700

(3) Distributaries.

B. Land.

Comproaching - 35 I " " 3,273

Immuniser - Mandapett Canal 35 I " " 300

Regulating dam, Mandapett 35 I " " 320

Head sluice, Chodaram Canal 35 I " " 450

Head sluice, Pasalapooddy Canal 35 I " " 87

Head sluice, Pasalapooddy Canal 35 I " " 500

Head sluice, Pasalapooddy Canal 35 I " " 600

Head sluice, Pasalapooddy Canal 35 I " " 620

Head sluice, Pasalapooddy Canal 35 I " " 910

Head sluice, Pasalapooddy Canal 35 I " " 600

Head sluice, Pasalapooddy Canal 35 I " " 1466

Head sluice, Pasalapooddy Canal 35 I " " 2600

Head sluice, Pasalapooddy Canal 35 I " " 1670

Head sluice, Pasalapooddy Canal 35 I " " 1357

Head sluice, Pasalapooddy Canal 35 I " " 157

(4) Drainage & Protection Works.

T. Earth Works

Channel to drain Pasalapooddy 35 I " " 159

Land - " - 20 " " 159

Total 49,593

Irrigation Register No 35 I of 1876-77

S.E. Gadamay ✓

Collector - do ✓

C. E. for J. with 7 Encl ✓

Ex. P. W. O. ✓

Ken. S. P. ✓

Despd 2/6/76

377/10

Govt. of 1870: India
PUBLIC WORKS.

To
The B. & G. Godavery

6 books in the
Library.

26/5/92

Dated

Issued

No. 2

Encl.

G. O., 22nd May 1870, No. 1281

No. 1

1281
7-8-96

Forwarding a
Proceeding
sanctioning a
vised Estimate
for excavating
irrigation channel
on the south side of
the Munda petta
Canal in the God
Dr. —

Forwarding copy of
Note passed on note
by the Chief Engineer
Irrigation in connection
with the Munda petta
Canal, Godavery River.

Munda petta Canal
Godavery, Dr. Revised
Estimate of
for excavating an
irrigation channel
on the south side of the
— — — — —