

G.O., No.

729 }
730 }

DATED 24 August '99

15/4/99

[Despatch Abstract.]

Billa Kurnu Drain in the Godavari Central
Delta - An estimate of Rs 7,350 for
excavating - sanctioned -

Billa Kurnu Drain in the Godavari Central Delta

~~Under~~ Copy of the proceedings on the —
forwarded to the Govt of India for information

F. L. S.
25.8.99

Copy of the Proceedings on the —, forwarded to the Government of India for information.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers:—

From W. C. DEMORGAN, Esq., M.I.C.E., Superintending Engineer, I Circle, to the Chief Engineer for Irrigation, dated Waltair, 28th June 1899, No. 1371 G.C.

I have the honour to submit herewith, for sanction, an estimate, amounting to Rs. 6,750, for excavating Billakurru drain in the Gódávári Central division, against the open capital account of the Gódávári delta system.

2. The report accompanying the estimate sufficiently explains the necessity for the work.

3. The work is classed as unremunerative and will probably be completed before 31st March 1901.

4. The value of land and trees to be permanently acquired has been obtained from the Sub-Collector.

ENCLOSURES.

REPORT to accompany estimate for excavating Billakurru drain, estimate Rs. 6,750.

1. The proposed drain will drain the $2\frac{1}{2}$ square miles of land bounded by Vadapalem channel, Bank canal, and Billakurru canal (*vide* sketch plan herewith). This area is at present drained in its lower portion by an old codu locally known as "Robinson codu" which is not in the list of Public Works Department drains; while in its upper part the course of the drainage has hitherto been across the fields.

2. Much of the land near the head of the proposed drain is low, and after heavy rains, water often stands there 5 or 6 feet deep.

3. Temporary relief has at times been given by allowing breaches in Billakurru canal right bank; but these are of no use, unless water is first lowered considerably in the second reaches of both the Bank and Amalapur canals.

4. "Robinson codu" is in many places, a shallow depression in the fields and is far too small and quite unsuited for discharging the drainage of $2\frac{1}{2}$ square miles.

5. The new drain will be almost entirely in Billakurru village limits and it is proposed to give it the name "Billakurru drain." It will start at the "Karravaru" brick aqueduct (a private work in connection with field bodhi) near the point of junction of the lands of Palivela, Vanapalli and Billakurru.

6. It will have a bed level of + 18.44 at its head and a bed fall of 6" per mile, so that its bed level at end may be + 17.25, the same as that of Billakurru side drain, of which it will be a branch. The drain has been allowed a surface fall of 0.2' per mile and its depth will be 5' at its junction with Billakurru side drain.

7. The following table gives the hydraulic details of the drain:—

Distance.	Mileage.	Discharge.	Bed width.	Depth.	Fall.	Slope.	Calculated discharge.	Level.	Remarks.
0 To 1	1	80	14	4 $\frac{1}{2}$	6" per mile.	1 $\frac{1}{2}$ to 1.	80	+ 18.44	Joins Billakurru side drain at 2 miles 3 furlongs.
1 To 2	2	127	22	4.70			128	+ 17.94	
2 To 3	2 $\frac{1}{2}$	147	24	4.90			151	+ 17.44	
End 2 miles 3 furlongs.								+ 17.25	

8. The width of land proposed to be acquired is 30 feet on each side of the centre line from head to 1 mile; 50 feet from 1 mile to 1 mile 5 furlongs and 54 feet from 1 mile 5 furlongs to end. Provision has been made in the estimate for demarcating the land. The centre lines of the spoil banks will be parallel to the centre line of the drain; at the distances from it shown on the cross sections.

9. The work can be completed within one year after allotment is given for it; but the final settlement of compensation by the Civil Department will probably take at least two years.

10. This drain has been a longfelt want and its excavation will greatly improve the irrigation under Vadapalem channel and no doubt lead to further extension of irrigation under it.

ESTIMATE Form—Abstract—Classified.

Sub-head.	Names of works.	Amount of estimate for individual work.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.
1	2	3	4	5	6
	CAPITAL EXPENDITURE NOT CHARGED AGAINST REVENUE.	RS.	RS.	RS.	
	49. IRRIGATION.				
	Gódávári Delta System.				
	Central Section.				
	Open Capital Account.				
	4. Drainage and Protective Works.				
	Unremunerative Work.				
	Excavating Billakurru Drain.	4,145	4,145		
2. Land	Compensation for land and trees, etc.	2,400	2,400		
4. Earthwork	Excavating drain	205	205		
5. Miscellaneous.	Demarcation stones				
	Total, I. Works			6,750	
	II. Establishment			599	
	III. Tools and plant			1	
	Total estimate				7,350

(Signed) A. C. LANGSTON,
Ex. Engr., Gódávári Central Divn.

21st June 1899.

No. 151 I.

Note by the Chief Engineer for Irrigation.

The accompanying estimate of Rs. 6,750 submitted by the Superintending Engineer, I Circle, provides for excavating a drain in the Gódávári Central delta, for the drainage of $2\frac{1}{2}$ square miles of land now partly drained by an old codu which is far too small and quite unsuited for the purpose.

The estimate may be sanctioned.

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

31st July 1899.

ORDER—No. 729 I., dated 24th August 1899.

The estimate of Rs. 6,750, or Rs. 7,350 including establishment and tools and plant, for excavating Billakurru drain in the Gódávári Central delta, is sanctioned.

2. This sanction is registered as No. 53 I. of 1899–1900, and will expire on the 31st March 1901.

A
Public Works (1899) Department.

CURRENT No. 6596

From

The Chief Engineer
for Irrigation

No. 151.2

Dated 31. 7. 99

Received

Registered

Enclosures

Spare copies.

SUBJECT.

Excavating Bellakurna Drain
in the Godavari Central
Delta - Estimate of Rs 750
for - Recommending
for sanction the -

CS

4

No. 729 I., 24TH AUGUST 1899.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. 730 I., dated 24th August 1899.]

(True Extract.)

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

To the Chief Engineer for Irrigation.
" Superintending Engineer, I Circle, with ten enclosures.
" Examiner of Public Works Accounts.

ENDORSEMENT—No. 730 I., dated 24th August 1899.

Forwarded.

(By order.)

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

BACK PAPERS.

FURTHER PAPERS.

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following

From the Supg: Engineer 1st circle - No 1371 G. C. d 28th

June 1899

Classified abstract estimate amounting to Rs 7350

No 1511 d 31-7-99

1st circle
Note by the Chief Engineer
for Irrigation

5-P

Issue

8.8.99.

W.H.

1

F.E.D.

The accompanying estimate of Rs 6750 submitted by the Superintending Engineer, 1st circle, provides for excavating ~~Billakurru~~ drain in the Godavari Central delta, for the drainage of 2½ sq: miles of land now partly drained by an old codu which is far too small and quite unsuited for the purpose.

The estimate may be sanctioned.

Order thereon. 729 L d 24.8.99

The estimate of Rs 6750, or Rs 7350, including establishment

and tools and plant, for
excavating Billakurru drain
in the Godavari Central delta,
is sanctioned.

2. This sanction is registered
as N^o 532 of 1899-1900, and
will expire on the 31st March 1901.

3. Ordered that a copy of
these Proceedings be forward-
ed to the Government of
India for information.

Endorsement. No: 730 L of 24.8.99.

Forwarded.

27/7
SS.

mt
31.7.99

To,
The Chief Engineer for Irrigation
" Supg: — do — 1st Circle
Examiner of P.W. accounts.

(10)

Public Works (1899) Department.

CURRENT No. 88 G.D.

From The Supg. Engineer
A. V. S. C. S.

Order It may be sanctioned
after check

SS
5/7/99

No. 137130.

Sanction
8/7/99 L.H.

Dated 28.6.99.
Received 3.7.99.
Registered

Enclosures 12 ✓ of which 10 for
Spare copies 6 Registered P. Work

SUBJECT.

Excavating Billakurru drain
in the Godavari Central Delta
— submits an Estimate Rs
6740 for sanction against the
open capital account of
Godavari Delta System.

D.S.

100
3/7/99

100
3/7/99

BACK PAPERS.

FURTHER PAPERS.

258

~~13719c~~

Pw 12


 UNIVERSITY OF TORONTO LIBRARIES
 SUPERIOR
 No. 1332/6
 23 JUN. 1899

Permit

Report to accompany Estimate for
Excavating Bima Kurru Drain; Est-Res 67⁵⁰

1. The proposed drain will drain the $2\frac{1}{2}$ sq. miles of land bounded by Vadapalem channel, Bank canal, and Billakurru canal (vide sketch plan herewith). This area is at present drained in its lower portion by an old Code locally known as "Robinson Code" which is not in the list of D.P.W. drains; while in its upper part the course of the drainage has hitherto been across the fields.
2. Much of the land near the head of the proposed drain is low, and after heavy rains water often stands there 5 or 6 feet deep.
3. Temporary relief has at times been given by allowing breaches in Billakurru canal right bank; but these are of no use unless water is first lowered considerably in the 2nd reaches of both the Bank and Amalapur Canals.
4. "Robinson Code" is in many places a shallow depression in the fields and is far too small and quite unsuited for discharging the drainage of $2\frac{1}{2}$ sq. miles.

5.

1/88 G.D.

5. The new drain will be almost entirely in Billakurru village limits and it is proposed to give it the name "Billakurru Drain". It will start at the "Karravarri" brick aqueduct (a private work in connection with field bodhi) near the point of junction of the lands of Balivela, Vanapalli and Billakurru.

6. It will have a bed level of +18.44 at its head and a bed fall of 6" per mile so that its bed level at end may be +17.25. the same as that of Billakurru side drain of which it will be a branch. The drain has been allowed a surface fall of 0.2" per mile and its depth will be 5' at its junction with Billakurru side drain. affluent.

7. The following table gives the hydraulic details of the drain.

Distance	Mileage	Discharge	Bed width	Depth	Fall	Slope	Calculated Discharge	Level	Remarks
0									
To	1	80	14	4 $\frac{1}{2}$	Bed 6" per mile Surface 0.2" — 80 —	↑	80	+18.44	
1						1			
To	2	127	22	4.70		to	128	+17.94	
2						$\frac{1}{2}$			
To	2 $\frac{1}{2}$	147	24	4.90		↓	151	+17.44	
End 2 nd — 3 rd fur								+17.25	Join Billakurru side drain at 2 nd — 3 rd fur

8. The width of land proposed to be acquired is 30' on each side of the centre line from head to 1 mile; 50' from 1 mile to 1st 5th fur and 54' from 1st 5th fur to end. Provision has been made in the Estimate for demarcating the land. The centre lines of the spoil banks will be parallel to the centre line of the drain, at the distances from it shown on the cross sections.

9. The work can be completed within one year after allotment is given for it; but the final settlement of compensation by the Civil Department will probably take at least 2 years.

10. This drain has been a long felt want and its excavation will greatly improve the irrigation under Vadapelem channel and no doubt lead to further extension of irrigation under it.

W. D. H. G. S.
Superintending Engineer
First Circle.

A. S. S. S.
21.6.99
Executive Engineer
Godavari Central Dist.

W. S.
20.6.99

W. S.
21/6/99

ESTIMATE FORM-Abstract-Classified.

Sub-head.	Names of Works.	Amount of Estimate for individual Works.	Total of Sub-heads.	Total for each Canal or Distributary.	Total of each Main head.	REMARKS.
1	2	3	4	5	6	7
4 Bm	Capital Expenditure not charged against Revenue	899				
	49 Irrigation Godavari Delta System Central Section of open Capital account.	899				
	4 Drainage & Protective works.					
	~~works not directly remunerative work.~~					
	Excavating Binakurru Drain					
	~~for work.~~					
2 land	Compensation for land and trees etc	4145	✓			
5	Earthwork. Excavating Drain	2400	✓			
			2400			
5 Miscellaneous	Demarcation stones	205	✓			
		195	✓			
			205			
			195			
	Total - I works			6750		
	II. Establishment			599		
	III. Tools & plant			1		
	Total Estimate			7350		

15/7

M. M. S. 28/6
Superintending Engineer
First Circle.

STATION Donkaihu
Dated 17 June 1997
2,000-15-5-95.

6188 G.D.

Alkangston
Executive Engineer.
Godavari central

No. 13719C

Print

FROM

W. C. DeMorgan Esq. M.D.C.E.,
THE SUPERINTENDING ENGINEER
FIRST CIRCLE,

TO

THE CHIEF ENGINEER

FOR IRRIGATION

WALTAIR, dated 28. 6 1899.
Camp.

Enclosures.

SIR,

I have the honour to submit herewith, for sanction, an estimate amounting to Rs 6,740, for excavating Billakurru drain in the Godavari Central Division, against the open capital account of the Godavari Delta system.

2. The report accompanying the estimate sufficiently explains the necessity for the work.

3. The work is classed as unremunerative and will probably be completed before 31. 3. 1901

4. The value of land and trees to be permanently acquired has been obtained from the Sub-collector.

I have the honour to be,

Sir
your most obedient servant
W. C. DeMorgan
28.6

Superintending Engineer I Circle

CHIEF ENGINEER
FOR IRRIGATION.
3-JUL. 1899
88 G.D.

1 Report.

1 Cal. Sheet

3 Estimates

1 Classification

4 Tracings of Plans

2 Energy Tracings

1 Sheet for
Registers P. Post.

13227 (E. No. 132.)
23 JUN. 1899
FIRST CIRCLE.

DIVISION— Central

DISTRICT— Godavari

ESTIMATE FORM—Abstract—Classified.

To accompany the Detailed Estimate No.
of 189 -9 for

Excavating
Billakurru Drain

* Here enter the Name and Description of work in full.

6/13719C

Pr 27
6596/99

W.C.
28.6.99