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# MADRAS RECORD OFFICE.

Government of Madras.

*Public Works* DEPARTMENT.

|                   |               |
|-------------------|---------------|
| G.O. No. 1449 (2) | Press<br>Mis. |
| Dated 27-4-1877.  |               |

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,  
27th April 1877. No. 1,449.*

Read the following:—

No. 658. From the Offg. Supg. Engr., Godavery, dated 24th March 1877, No. 3,743 and enclosures.

GODAVERY DELTA SYSTEM—WESTERN DELTA SECTION, KAZA DRAIN.

CLASS I.—WORKS.

*Comparative Statement showing the Original and Revised Estimates.*

| ORIGINAL ESTIMATE.                 |                 |                        |         |        | REVISED ESTIMATE.                                         |               |         |
|------------------------------------|-----------------|------------------------|---------|--------|-----------------------------------------------------------|---------------|---------|
| Main Head.                         | Sub Heads.      | Items.                 | Amount. | Total. | Item.                                                     | Amount.       | Total.  |
| (4)—Drainage and Protective Works. | B.—Land ..      | ....                   | Rs. ..  | Rs. .. | Compensation for land.                                    | Rs. 200       | Rs. 200 |
|                                    | C.—Works.       | ....                   | ..      | ..     | Outfall sluice .. ..                                      | 6,325         | 6,325   |
|                                    | L.—Earth-works. | Improvements to drain. | 5,760   | 5,760  | Improvements to drain. Channel below outfall sluice .. .. | *3,563<br>500 | 4,063   |
|                                    | B.—Land ..      | ....                   | ..      | ..     | Compensation for land.                                    | ..            | 200     |
|                                    |                 | Grand Total ..         | ..      | 5,760  |                                                           | ..            | 10,588  |

\* Actual cost.

(Signed) A. R. F. DORWARD, Lieut., R.E.,

4th March 1877.

Asst. Engr., Godavery District.

(Signed) J. BEATTY, Major, R.E.,  
Offg. Supg. Eng., Godavery.

No. 189—W.

No. 658-A. *Note by the Chief Engineer for Irrigation.*

In paragraph 56 of his Notes of Inspection printed in Proceedings, Madras Government, 15th July 1874, No. 1,906, the Chief Engineer for Irrigation drew attention to the necessity for an out-fall sluice at the end of the Kaza Drain in the Western Delta of the Godavery District. The Superintending Engineer now forwards plans and estimate for that sluice.

2. For the improvement of this drain a lump sum of Rupees 5,760 for earth-work was included in the original estimates for the "improvement and completion of the system of irrigation in the Western Delta, Godavery District," and it forms part of Item No. 14, Rupees 28,200, of the sanction accorded by the Government of India in their letter, No. 367-I, of 2nd August 1871, printed with G.O., No. 2,925, of 18th November 1871. Of the Rupees 5,760 there have been spent to date Rupees 3,563, and if the out-fall sluice now proposed be built only Rupees 500 more will be required for earth-work, and the saving under that head will be Rupees 1,697. There will, however, be an expenditure, not foreseen when the original estimate was prepared, of Rupees 200 for "compensation for land," leaving a saving of Rupees 1,497.

3. The estimate for the sluice is Rupees 6,325, from which, deducting the saving above noted, there will remain a total estimated excess of Rupees 4,828, or 17.12 per cent. on Item 14 of the Government of India sanction.

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4. The excesses and savings already recorded are as follow :—

| No. of Item. | Name of Work.                                               | Original Estimate.             | Revised Arrangements. | Excess. | Saving.   | G.O. sanctioning.                     |
|--------------|-------------------------------------------------------------|--------------------------------|-----------------------|---------|-----------|---------------------------------------|
| 10           | Gostanadi and Velpur Canal (Part only.)                     | RS. 90,960<br>Part of 1,41,060 | RS. 81,680            | RS. ..  | RS. 9,280 | No. 1,388, 15th May 1875.             |
| 1            | Head sluice, Main Canal                                     | 19,500                         | 53,650                | ..      | 14,850    | No. 2,929, 2nd Nov. 1871.             |
| 2            | Main Canal                                                  | 42,000                         | ..                    | ..      | ..        |                                       |
| 6            | Venkiah and Veyeru                                          | 11,960                         | 15,964                | 4,004   | ..        |                                       |
| 7            | Restoring Navigation with Veyeru (Junctional Canal)         | *69,610                        | *78,218               | ..      | 5,392     |                                       |
| 17           | Additional Surplus weir near head of Ellore Canal, Nundamur | 14,000                         | ..                    | ..      | ..        | Proposed } G.O. not yet out.<br>Do. } |
| 18           | Rest-houses                                                 | 23,200                         | 22,997                | ..      | 203       |                                       |
| 5            | Bank Canal                                                  | 1,07,900                       | 1,14,340              | 6,440   | ..        |                                       |
| 16           | Ellore Canal                                                | †2,49,590                      | †2,76,604             | 30,014  | ..        |                                       |
|              |                                                             | 6,32,720                       | 6,43,453              | 40,453  | 29,725    |                                       |
|              |                                                             | ..                             | 6,32,720              | 29,725  | ..        |                                       |
|              | Total Excesses ..                                           | ..                             | 10,733                | 10,733  | ..        |                                       |

\* Exclusive of Rupees 2,890 for Mid and Low Level Channel head sluices originally included in Junction Canal Estimate, now transferred to Ellore Canal.  
† Inclusive of Rupees 2,890 as above.

5. The total recorded excess to date is thus Rupees 10,733 on an original estimated amount of Rupees 6,32,720.  
‡ Rupees 4,828.

RS.  
§ 6,32,720 See table above.  
23,200 Original sanction, Item 14.  
Total ... 6,60,920

like result, this estimate would have been within the competence of Government to sanction, but possibly as the case stands the sanction of the Government of India may be necessary.

7. With regard to details of design it is considered that retaining the springing at the proposed level the rise of the arches may with advantage be reduced to 2 feet, and there will then be no space above the sliding-shutters to admit flood water from the river. It may also be desirable to raise the gear beams  $1\frac{1}{4}$  feet, and in that case a different description of gear will be better.

8. The sluice will discharge from one-fourth to one-third of the maximum drainage|| from the area of 24 square miles to be drained, when the state of the river may admit of a free outflow. This proportion will probably suffice: the problem is not capable of accurate determination.

FORT ST. GEORGE,  
12th April 1877.

To the Secretary to Government, Public Works Department.

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

*Proceedings of the Madras Government, Public Works Department,  
27th April 1877. No. 1,449.*

No. 659.

ORDER THEREON, 27th April 1877, No. 1,449.

IRRIGATION, No. 66-A.

Account.

THE revised estimate, amounting to Rupees 10,588, for the Kaza Drain, Godavery Western Delta, is approved, and will be forwarded for the sanction of the Government of India with a copy of these Proceedings.

(Here enter No. 1,450, dated 27th April 1877.)

(True Extract.)

Lieut.-Col., R.E.,  
Joint Secy. to Govt., P.W.D.,  
Irrigation Branch.

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

Exd. T. D. Ryan.  
Spare Copies

No. 660.

No. 1,450.

FROM

THE JOINT SECRETARY TO THE GOVERNMENT OF MADRAS,

Public Works Department, Irrigation Branch,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

Public Works Department.

IRRIGATION, No. 66-A.

Account.

SIR,—I am directed to forward, for the sanction of the Government of India, a revised estimate, amounting to Rs. 10,588, for the Kaza Drain in the Western Delta of the Godavery.

2. Full information regarding this work will be found in the Note by the Chief Engineer for Irrigation recorded in the marginal Proceedings, of which a copy is herewith forwarded.
- G.O., No. 1,419, dated 27th April 1877.

I have the honor to be,

Sir,

Your most obedient servant,

Lieut.-Col., R.E.,

Joint Secy. to Govt., P.W.D.,

Irrigation Branch.

Exd. T. D. Ryan.

Spare Copies

E. L. Form No. 18.

OFFICE OF CHIEF ENGINEER FOR IRRIGATION,

No. 1890.

Fort St. George, 12 April 1877.

Note by the Chief Engineer for Irrigation.

Enclosures

Eleven

In para 56 of his notes of inspection printed in Govt. Madras Govt. 15 July 1874 No 1906 the Chief Engineer for Irrigation drew attention to the necessity for an out-fall sluice at the end of the Kaza Drain in the Western Delta of the Godavery District. The Superintending Engineer now forwards plans and estimate for that sluice.

2 For the improvement of this drain a lump sum of Rupees 5760 for earth work was included in the original estimates for the improvement and completion of the system of irrigation in the Western Delta Godavery District and it forms part of item No 14, Rupees 28200 of the sanction accorded by the Government of India in their letter No 367-I of 27 August 1871 printed

to admit flood water from the river.

It may also be desirable to raise the gear beam  $\frac{1}{4}$  feet and in that case a different description of gear will be bettered.

The sluice will discharge from one fourth to one third of the main

main drainage from the area of  $\frac{3744}{450} \sqrt{(24)^2}$

24 square miles to be drained when the state of the river may admit

of a free out flow. This proportion will probably suffice the problem

is not capable of accurate determination.

*Swales*

Actg. Deputy Chief Engr for Irrigation  
for Chief Engr for Irrigation.

The Secretary to Government

P. W. D.

*Sh*

16<sup>th</sup> March 1871. No 788  
15 July 1874 - 1906.

M. I. Form No. 14

165335

From

The Chief Engineer for Irrigation,

To

The Secretary to Government,

Public Works Department.

Dated 12<sup>th</sup> April 1877.  
Despatched 14<sup>th</sup> April 1877.  
Received

ENCLOSURES 11

No. 189-11.

Subject.

Kaza Drain Godavari Western  
Delta - Godavari District - Note  
recommending for sanction, with  
remarks, revised estimate for  
Rs. 10,588 for improvements to  
the — & for an out fall sluice.

140-27 April 1877 No 1584

No 1449

Public Works Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

UNDER date the

Read the following:—

From the Off Supr. Secy.  
Godavery

Note by the Chief  
Engr for Irrigation

13A  
No 3743 of 24 Mar/77

(H.E. No 18920-12 April 1877)

The revised estimate  
amounting to Rupees 10,888<sup>5</sup>  
for the Kaza drain  
Godavery Western Delta  
is approved, and will  
be forwarded for the  
sanction of the Government  
of India with a copy of  
these Proceedings.

(H.E. No 18920-12 April 1877)

14/4

Collected by Secy. ✓  
Chf. Engr. & Mr. H. B. S. ✓  
H. B. S. ✓  
Secy. Dept. ✓  
16.5.77

No. 1450

GOVERNMENT OF MADRAS,

PUBLIC WORKS DEPARTMENT.

To

The Secretary to the Government  
of India.

Fort St. George, 27 April 1877.

SIR,

I am directed to for-

ward for the sanction of the  
Government of India a plan  
revised  
and estimate amounting to  
Rs. 10,888 for constructing an est-  
-ablishment at the end of the  
Kaza Drain in the Western Del-  
-ta of the Godavery.

2. Full information regard-  
-ing this work will be found  
in the note by the Chief En-  
-gineer for Irrigation re-  
-corded in the Proceedings,  
Marginal

G.O. No 1449d/27 April/77

A.P.

Govt. of 1877 Madras  
PUBLIC WORKS.

To The S. E. Godavery

Dated  
Issued  
Recd. Encl.

G. O. 27 April 1877, No. 1449757

Nos. 558-559-660

Kaza drain, Godavery  
Western Delta. The revised  
estimate amounting to Rs.  
10,500 for the — approved  
& forwarded for the sanction  
of the Govt. of India.

Forwarding for sanction  
a revised estimate amount-  
ing to Rs. 10,500 for the Kaza  
Drain in the Western Delta  
of the Godavery

Enty in Office

15-5-11