

Public Works (1896) Department.

G.O., No. 6149

DATED 28/7/96

[Despatch Abstract.] Estimate for
Drainage inlet —
Constructing a — in the main canal
and for Compensation for land required
for Back Canal, Kistna Western Delta
Sanctions

Govt. of {1896} Madras.
PUBLIC WORKS.

Recd.

Encl.

G.O. No. 614 I., 28th July 1896.

JULY.

Estimates amounting to Rs. 1,750 and Rs. 6,000, respectively, for constructing a drainage — in the Main canal and for compensation for land required for Bank canal, Kistna Western delta, sanctioned.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers :—

From Major W. L. C. BADDELEY, R.E., Superintending Engineer, II Circle,
to the Chief Engineer for Irrigation, dated 14th February 1896, No. 2378 K.S.

I have the honour to forward herewith, for your approval and sanction of Government, estimate amounting to Rs. 1,750 for constructing a drainage inlet in the 4th mile of Main canal, and to request that you will be so good as to sanction the amount from the sum of Rs. 8 lakhs placed at the disposal of Government to meet the outlay on unforeseen works of the Kistna delta system, as per G.O. No. 65 I., dated 18th January 1896.

2. The report which accompanies the estimate explains the necessity for the work.

ENCLOSURE.

REPORT to accompany the estimate for constructing a drainage inlet in the 4th mile of Main canal.

Estimate	RS.
...	1,750

On the right side of Main canal, between Seetanagaram and Vadheswaram, there is a basin of about 2 square miles, bounded on three sides by steep hills, and the drainage from this basin has to be discharged into the Main canal.

For this purpose, a masonry drainage sluice was constructed some years ago at 3 miles 2½ furlongs, with vent 3' x 3'.

2. In this basin there are four small tanks—two belonging to Kolanukonda Agraharam and the other two to Vadheswaram Agraharam. During the rains of October 1892, the two tanks of Kolanukonda and one of the Vadheswaram tanks breached, and the water from these tanks, together with the drainage water from the basin, had to be discharged through the drainage sluice, which was found to be too small for the purpose. Consequently, a breach occurred at Vadheswaram crossing, scouring away the spoil bank and tow-path. Attempts were made to calculate the discharge through the breach, but no reliable data could be obtained.

3. On account of the heavy rain of the 5th September 1895, the tanks breached again and the water from the tanks and from the drainage basin flowed into the Main canal, through the drainage sluice and through the Vadheswaram breach, which was left as a gap without being closed. On this occasion, the data for calculation of discharge through the breach and through the drainage sluice were obtained, and it was found that the discharge through the breach was 372 cubic feet per second, and that through the drainage sluice, 114 cubic feet per second, making the total discharge from the catchment basin 486 cubic feet per second. This gives $C = 307.6$ in the formula $D = CM^{\frac{2}{3}}$.

4. As the rainfall of the 5th September was probably not a maximum, it is considered necessary to provide an inlet to discharge 486 cubic feet per second, apart from the consideration that the existing drainage sluice is capable of discharging 114 cubic feet per second. An inlet 80 feet long with a depth of 1½ feet of water is capable of discharging 496 cubic feet per second; and this 80 feet inlet will be constructed with a roughstone in mortar body wall and roughstone pavement and revetment in order to prevent the scouring away of the canal slope and tow-path. This waterway and discharge of 610 cubic feet per second will give $C = 386$.

The coefficient of discharge of inlet has been taken as .625 as the water has a free discharge into the canal.

(Signed) L. D. VENKATARAMA AIYAR,
Sub-Divisional Officer.

16th October 1895.

(") A. A. G. MALET,
Ex. Engr., Kistna Western Divn.

4th November 1895.

UNDER date the

READ the following

From ^{Print with} ~~Print~~ Supp Engr. T. Birch, No. 2378 K.S. & 14. 2. 96
 From ~~Print~~ do. 2387 K.S. & 17. 2. 96
 From ~~Print~~ do. 867 K.W. & 6. 7. 96
 From ~~Print~~ do. 868 K.W. & 6. 7. 96
 From ~~Print~~ do. No 138 L & 17. 2. 96
 Submitted to Govt

Submitted to Govt

order thereon.

The following

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vision made for item

710 of the statement

printed in July 18

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49. Irrigation

Kista della Fzole

Western Section

I work.

2. Main Canals &

Branch

(True Extract.)

To the Chief Engineer for Irrigation.
 „ Superintending Engineer, II Circle, with two enclosures.
 „ Examiner, Public Works Accounts.

Exd. T. K. Narayana Aiyangar.
Spare Copies

Main Canal -

6. Other Cross drainage Works.

1. Constructing a drainage inlet in the 4th mile. As estimate ... 1750

Bank Canal -

2. Land.

2. Compensation for land. Estimate ... 6000

2. This sanction is registered as U. 903 of 1896-97.

HL
14/7/96

Queds.
17/2
20

DESPATCHED

12 AUG 96

To

The Chief Engineer.

Supp Engr Denial with 2 encls.

S. S. W.

1000

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HL

Main Canal -
1. Constructing a drainage inlet in the 4th mile. As estimate ... 1750

Bank Canal -
2. Land.
2. Compensation for land. Estimate ... 6000

This sanction is registered as U. 903 of 1896-97.

HL
14/7/96

Queds.
17/2
20

DESPATCHED
12 AUG 96

To
The Chief Engineer.
Supp Engr Denial with 2 encls.
S. S. W.

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28573 11.10.93

P. W. CURRENT No. 673/
Estimates for construction
a drainage inlet in the
main canal & for com-
pensation for land re-
quired for Bank Canal,
Kistna Western Delta
— Encls 7
Dated: 27.7.96

Issue
Recd
J

7.5.9.
28/7
10/8
28/7

Regd
29/7

248B

Superintending Engineer's Office.

No. 2378 NS

II CIRCLE,
Dated 14 February 1896.

From,
Major W. C. B. Addeley Esquire, *W.C.B.*
Superintending Engineer,
II Circle.

To,
The Chief Engineer
For Irrigation,
Madras.

2 Enclosures
1st. Estimate
1 Report
2

Sir,
I have the honor to forward
herewith for your approval and
sanction of Government estimate
amounting to Rs 1700 for constructing
a drainage inlet in the 4th mile of
Main Canal and to request that
you will be so good as to sanction
the amount from the sum of Rupees
Eight lacs placed at the disposal of
Government to meet the outlay on un-
foreseen works of the Kistna Delta
System as per G.O. No 58 of 18th Jan 96.
2. The report which accompanies
the estimate explains the necessity
for the work. I have the honor to be,
Your most obedient servant,
W. C. B. Addeley
Major W. C. B. Addeley
Superintending Engineer, II Circle.



From

The Supg. Engineer
Second Circle

From,

The Superintending Engineer,
II Circle.

To,

The

To
The Chief Engineer
For Irrigation

Dated

Received

18

Dated 14 February 1896

Enclosure 2

No 2378 MS

Enclosures.

NO.

SUBJECT.

Drainage inlet in the
4th mile of Western Delta
Main Canal —

Forwards for approval
and sanction an Estimate
of Rs. 1750 for Constructing

Report to accompany the Estimate for
constructing a Drainage Inlet in the 4th
mile of Main Canal.

Estimate Rupees 1750.

On the Right side of Main Canal,
between Sertanagaram and Vadheswaram,
there is a basin of about 2 sq miles,
bounded on three sides by steep hills, and
the drainage from this basin has to be
discharged into the Main Canal.

For this purpose, a masonry Drainage
Sluice was constructed some years ago,
at 3 miles $2\frac{1}{2}$ furlongs, with vent 3'-0" x 3'-0".

2. In this basin there are four small
tanks, two belonging to Kolanukonda Agraha-
ram and the other two to Vadheswaram
Agraharam. During the rains of October
1892, the two tanks of Kolanukonda and
one of the Vadheswaram tanks breached, and
the water from these tanks together with the
Drainage water from the basin, had to be
discharged through the Drainage Sluice,
which was found to be too small for
the purpose. Consequently, a breach
occurred at Vadheswaram crossing, scouring
away the spoil bank and topsoil.

Attempts were made to calculate the
discharge through the breach, but no
reliable data could be obtained.

3. On account of the heavy rain of the 5th September 1895, the Tanks breached again, and the water from the Tanks and from the Drainage basin, flowed into the main canal, through the Drainage sluice and through the Vadduswaram breach, which was left as a gap without being closed. On this occasion, the data for calculation of discharge through the breach and through the Drainage sluice, were obtained, and it was found that the discharge through the breach was 372 cft. per second and that through the Drainage sluice, 114 cft per second, making the total discharge from the catchment basin 486 cft per second. This gives $C = 307.6$ in the formula $D = C M^{\frac{2}{3}}$.

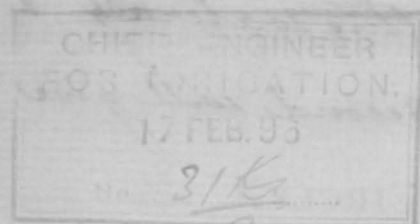
4. As the Rain fall of the 5th September was probably not a maximum, it is considered necessary to provide an inlet to discharge 486 cft per second, apart from the consideration that the existing Drainage sluice is capable of discharging 114 c. ft per sec. An inlet 80 ft long with a depth of $1\frac{1}{2}$ feet of water is capable of discharging 496 cft per sec; and this 80 ft inlet will be constructed with a Roughstone in mortar bedded wall & Rough stone pavement and revetment in order to

prevent the scouring away of the canal slope and low-path. This waterway & discharge of 610 cft per second will give $C = 386$.

The coefficient of discharge of inlet has been taken as .625 as the water has a free discharge into the canal.

(Signed) L. D. Venkataraman
16.10.95
Sub-Divisional officer.

Attested by
Executive Engineer.
Kistna Western Division.



Superintending Engineer's Office,

No. 2387 MS

II CIRCLE,

Dated 17 February 1896.

From,

Major W. L. W. B. Esquire, P.E.

Superintending Engineer,

II Circle.

To,

The Chief Engineer,
For Irrigation,
Madras.

Enclosure
Estimate

Sir,

With reference to your memo
No. 142 MS dated 3rd September, 1895,
I have the honor to resubmit herewith
the estimate, amounting to Rs 6000.
for compensation for land required
for the Bank Canal, Thiruvananthapuram
- Division, and to request that
you will be so good as to obtain the
sanction of Government to the esti-
- mate being sanctioned from the
balance available for unforeseen
works of the Thiruvananthapuram System.

I have the honor to be,

Yours faithfully,
W. L. W. B. Esquire, P.E.

for Superintendent

CHIEF ENGINEER
FOR IRRIGATION.
20 FEB 96
No. 2387

Low

The Deputy Eng.
The Chief Eng.
For Irrigation.

No. 2387 MS
of 17th February 1896

623/196

Encls: 1

Compensation for
the land required for
Bank Canal - Estimate
for - Resubmits the -
for obtaining sanction
of Govt.

From,
The Superintending Engineer,
II Circle.

To,
The

Dated
Received

18

Enclosures.

NO.

SUBJECT.

Superintending Engineer's Office.

No. 867 NW

II CIRCLE,

Dated 6 July 1896.

From,

Major W. L. C. Baddeley Esquire, R.E.
Superintending Engineer,

II Circle.

To,

The Chief Engineer,
For Irrigation,
Madras.

Sir,

With reference to this Office
+ vide R 39/10/96. No 2387 MS. of 17.2.96 forwarding an
estimate, amounting to Rs 6000 for
sanction on account of compensation
for land required for the Bank
Canal, I have the honour to request
that you will be so good as to sanction
the estimate from the balance of the
provision as per item no 710 of the State
ment printed with G. O. No 857 S. 11.10.93.

I have the honour to be,
Sir,
Yours most faithfully,
W. L. C. Baddeley
Superintending Engineer,
II Circle.

IEF C. CHIT-ER
FOR IRRIGATION.
3- JUL. 96
No. 202K

From

The Sub Engineer
Ludhiana

From,

The Superintending Engineer,
II Circle.

To,

The Chief Engineer
For Irrigation
Madras.

The

Dated

Received

no 867KW

18

Enclosures.

NO.

SUBJECT.

Dated 6th July 96.

0052
Bank Canal. Western
Delta K... Requests
to return the estimate for
land compensation for
the - only sanctioned
from the same noted
within.

Superintending Engineer's Office.

No. 868KW

II CIRCLE,

Dated 6 July 1896.

From,

Major W. L. C. Baddley Esquire, R.E.
Superintending Engineer,

II Circle.

To,

The Chief Engineer
For Irrigation,
Madras.

Sir,

With reference to this Office
no 378 K.S. dt 14.2.96. forwarding an
estimate amounting to Rs 1750 for a
drainage Inlet in the 4th mile of Western
Delta Main Canal. I have the honour
to request that you will be good
as to sanction the estimate from
the balance of the provision as per
item no 710 of the statement printed
with S.O. no 857 of 11.10.93.

I am the honourable,
Sir
Yours most obedt. Servt.
Wm. L. C. Baddley
Superintending Engineer
For Sub Engineer II Circle.

From

From,

The Superintending Engineer,

H Circle.

To,

The

Dated

Received

} 18

Enclosures.

NO.

SUBJECT.

614

The Sub Engineer

Dist. Lucila

The Chief Engineer
for Highways
Madras.

No 868 KM

Dated 6 July 1896.

623/1896
Drainage Inlet. 1 m of
Western Delta M. C.
Requests the sanction of
the Estimate for — dig
Sanctions as required
within.