M.R.O. 1—77,606—8-6-37.

(1) Number of pages 16

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 3145 Press ~~Mis.~~

75-76

Dated 3—10— 1866.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 3rd October 1866.

No. 75. Read the following letter from the Consulting Engineer for Irrigation and Canal Company, to the Secretary to Government, Public Works Department, dated Camp, Puggydial, 13th September 1866, No. 62:—

1 Original letter from Agent, General No. 354.
2 Estimates.
Proceedings Madras Government, No. 2,684, 21th August 1866.

1. With my endorsement No. 51, of the 11th ultimo, was transmitted a report of two breaches in the embankment of the main canal, one in the 25th, and the other in the 27th mile, and I have now the honor to submit a letter from the Agent and Manager, Madras Irrigation and Canal Company, forwarding estimates for the repair of those breaches, and to recommend their sanction; that of the 25th mile amounts to Rupees 2,300, and of the 27th mile to Rupees 2,409.

2. The closing of the breaches has been nearly finished, and the work has been well done. A puddle core has, as explained in the Chief Engineer's letter attached to that from the Agent, been placed in the new banks, and in the former mile the water has been re-admitted, and had risen a few inches* above bed level on the 10th instant.

* Equal to a depth of about eighteen or twenty feet against the bank.

3. The failure of the banks was due to the way in which they were constructed. The material in the 25th mile was very bad, lime-stone, shale, gravel, and kunkur with a little clay intermixed; but a sufficiency of good soil for a water-tight core could have been obtained within a moderate distance in the first instance, just as has been done for the repairs. In the 27th mile there is an abundance of good soil, but the surface is, for the most part, gravelly, and the bank having been found of good and bad indifferently, and in layers, instead of placing the good inside as a core and the gravel outside, the gravel no doubt gave passage to the water, which washed out the non-porous soil, and occasioned the breach.

4. Unfortunately there are many parts of the banks similarly circumstanced. They are being carefully watched and attended to, and it is hoped that further accidents may be averted, but it will be necessary, after the current season, to insert puddle, or other water-tight material, all along those banks, where the leakage is found to be excessive. A fuller account of the state of the banks of the second section will be given in my report on the canal, which will shortly be submitted.

From the Agent and Manager Madras Irrigation and Canal Company, to the Consulting Engineer for Irrigation and Canal Company, dated Madras, 6th September 1866, No. 216.

* In duplicate.

I have the honor to transmit, for the sanction of Government, two estimates* for the repairs of the breaches in the 25th and 27th miles, with copy of the Provisional Chief Engineer's letter, No. 410 of 1st September 1866.

From the Provisional Chief Engineer, to the Agent and Manager, dated Kurnool, 1st September 1866, No. 410.

I have the honor to forward to you two estimates, for the repairs of the breaches in miles 25th and 27th, of the respective amounts of—

Rupees 2,300 and
,, 2,409

Proceedings of the Madras Government, Public Works Department, 3rd October 1866.

You will observe that the principle employed in constructing the banks to close these breaches is that of a bund made of such soil as is obtainable readily (which is gravelly), with a centre core of puddle well trodden, twelve feet wide, and carried down two feet into the solid ground. The bank is revetted as usual with dry packed rubble on the inside; and, in the case of mile 25th has a small dry rubble wall at the outer toe, to nullify any tendency the open gravelly sub-soil may have to slip.

No. 76. ORDER THEREON, 3rd October 1866, No. 3,145.

CIVIL WORKS, No. 20.

1. The Governor in Council sanctions the estimates submitted with this letter, amounting in the aggregate to Rupees 4,709, for the repair of the breaches which recently occurred in the embankments of the Madras Irrigation and Canal Company's Main Canal at the 25th and 27th miles.

2. The attention of the Company's Chief Engineer should be called to the remarks in the concluding paragraph of the Consulting Engineer's letter.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Consulting Engineer for Irrigation and Canal Company, with two Estimates.
,, Manager for do. ,,

Exd. S. T. Augustin.

No. 410

Madras Irrigation & C°. Co.
Chief Engineer's Office
Ennore Pt. 7th Sept. 1866.

To
F. W. Huxham Esqr.
Agent and Manager
Madras.

Sir,

I have the honor to forward herewith Two Estimates, for the repairs of the breaches in miles 25, 27 of the respective Amounts of

Rs. 2307 — — "
& Rs. 2409 — — "

You will observe that the principle employed in constructing the banks to close these breaches is that of a bund made of such soil as is obtainable readily, which is gravelly, with a centre core of puddle well trodden twelve feet wide, & carried down two feet into the solid ground. The bank is revetted as usual with dry packed rubble on the inside; and, in the case of mile 25 has a small dry rubble wall at the outer toe to nullify any

No: 216 Madras Irrigation & C. Co.
Madras 6th September 66

From,

The Agent and Manager
Madras Irr. & C. Co.

To,

The Consulting Engineer
Irrigation &c. &c.

Sir,

I have the honor to transmit for the sanction of Government two Estimates for the repairs of the breaches in the 25th & 27th Miles left Coss of the Provl Chief Engineers letter No 416 dated 1st September 1866.—

I have the honor to be
Sir,
Your most obt Servant
Dr: Natl Kellsall
Agent and Manager

Received

Consulting Engineer's Office
Irrigation and Canal Co.
Camp Puggydial 13th September 66

No 62.

From

Captain John Mullins R.E.
Consulting Engineer Sand C. Co.

To

Colonel C. A. Orr R.E.
Secretary to Government P.W.D.

Sir

P.W.D. No 2684 / 24 August 1866. 1 With my endorsement No 51 of the 11th instant, was transmitted a report of 2 breaches in the embankment of the Main Canal, one in the 25th, and the other in the 27th mile, and I have now the honor to submit a letter from the agent and manager, Madras Irrigation and Canal Company, forwarding estimates for the repair of those breaches, and to recommend their sanction; that of the 25th mile amounts to Rupees 2300, and of the 27th mile to Rupees 2409.

2 The closing of the breaches has been nearly finished, and the work has been well done. A puddle core has, as explained in the Chief Engineer's letter, attached to that from the Agent, been placed in the new banks, and in the former mile the water has been readmitted, and had risen a few inches above bed level on the 10th instant.

* equal to a depth of about 18 or 20 feet against the bank.

3 The failure of the banks was due to the

the way in which they were constructed. The material in the 25th mile was very bad — limestone shale, gravel, and lumber with a little clay intermixed, but a sufficiency of good soil for a watertight core could have been obtained within a moderate distance in the first instance, just as has been done for the repairs - In the 27th mile there is an abundance of good soil, but the surface is for the most part gravelly and the bank having been found of good and bad indifferently, and in layers, instead of placing the good inside as a core and the gravel outside, the gravel no doubt gave passage to the water, which washed out the nonporous soil and occasioned the breach.

4 Unfortunately there are many parts of the banks similarly circumstanced. They are being carefully watched and attended to, and it is hoped that further accidents may be averted, but it will be necessary, after the present season, to invest puddle, or other watertight material, all along these banks, where the leakage is found to be excessive. A fuller account of the state of the banks of the 2 Section will be given in my report on the Canal which will shortly be submitted.

I have the honor to be
Sir
Your most obedient servant
Colin Mullins Captain R.E.
Consulting Engineer M.C.C.

Cuddalore

Public Works Department.

No 3145

PROCEEDINGS of the MADRAS GOVERNMENT

Under date the 3rd October 1866.

Read the following

From The Consulting Engineer for Irrigation & Canal Company

(Here enter No. 62 dated 13th Septr 1866)

To The Governor in Council sanctions the estimates submitted with this letter, amounting in the aggregate to Rs 1,709 - for the repair of the breaches which recently occurred in the embankments of the Madras Irrigation and Canal Company's Main Canal at the 25m and 27th miles -

2. The attention of the Company's Chief Engineer should be called to the remarks in the concluding paras of the Engrs Letter

Do Exec & Con Engs Rs 1,000 with the Letter

Manager — Rs 1 —

Despd 4th Octr

To

The Secretary to Govt

P.W.D.

Madras

Despatched 5th October 1866

No 62.

Enclosures 4

Enclosure 1 a letter from the Assistant Engr Cuddalore forwarding Estimate for Re-opening of the breaches in the 25th & 27th Miles of the Main Canal and recommending their execution

No 3145 3rd Octr 1866

C. 2145 Lotts 1866 - Rs 1709

P. W. 1866. Department.

No. 3148

PROCEEDINGS OF GOVERNMENT. Madras

Dated 27th Sept. 1866.

7.

Estimates for erecting
a Presidency Jail at Madras
and for the Penitentiary
at the Cuddalore Convict
Station Central Prison.