

1200

*Proceedings of the Madras Government, Public Works Department,
30th April 1875.*

Read the following papers :—

No. 713. From Captain J. PENNYCUICK, R.E., District Engineer, North Arcot, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Camp at Arnee, 16th March 1875, No. 3,645.

I HAVE the honor to forward herewith an estimate, amounting to Rupees 11,630, with plans and sections, for the repair and improvement of the Polur tank in the taluq of the same name.

2 Estimates.
2 Plans.
2 Sections.
1 Sketch.
1 Specification.

2. This tank, which is one of the finest in the district, closes the valley of

the Mangalar stream, and has in addition a supply channel from the Cheyaur river, which is under control at its head. No repairs have been executed to it for many years, and it is now in a very precarious condition; it was in imminent danger of breaching during the late floods, the bund having been topped in several places, and if left without repair would be almost certain to give way on the next heavy fall of rain; the bund, as will be seen from the sections, is in a very bad state, the revetment is almost in ruins, and the escapes are entirely insufficient for the discharge of the surplus.

3. A sketch accompanying the estimates shows the positions of the two calingulahs at A and B. The northern one at A cannot be conveniently extended, so it is proposed to extend that at B. The Range Officer states that he had intended to propose a new escape at C, but found that the surplus could not escape without injury to crops below, and this appears to be the case.

4. The drainage area intercepted is about 36 square miles, which at 600 M. $\frac{2}{3}$ (the ground being hilly) will give a surplus of 6,541 cubic feet per second. The escapes provided (330 feet in all) will discharge this with a depth of a little over 3 feet.

5. The estimate provides for bringing the bund to an uniform height of 6 feet above full tank level, for repacking the revetment, extending the southern escape from 59 to 250 feet, and for constructing a high level sluice to irrigate 208 acres of land.

6. After personal inspection I am satisfied that the work to be done cannot be reduced without due regard to the safety and efficiency of the tank; the rates for earth-work are high owing to the distance from which the earth has to be brought and the great lift. I am not altogether satisfied that these may not be somewhat reduced, and the execution of the work will be carefully watched, but for the present they may be allowed to stand.

7. It is understood that the whole ayacut revenue will pretty certainly be realized if the tank be put into thorough repair (the water-supply being ample), and this will give an increase over the present average revenue of Rupees 830, or about $7\frac{1}{2}$ per cent. on the estimate.

8. The breaching of this tank would do a considerable amount of damage to both tanks and crops below, and as it is essential that it should be made safe before the next rains, I have ordered the work to be put in hand in anticipation of sanction.

9. I request that the plans and estimates may be returned when no longer required.

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30th April 1875.*

No. 362-B.

No. 713A.

Note by the Chief Engineer for Irrigation.

THE following estimate has been submitted for sanction by the District Engineer, North Arcot:—

Repairing and improving the Polur tank	...	...	...	Rupees	11,630
Ayacut area	...	...	...	Acres	1,040
" assessment	...	...	...	Rupees	4,824
Average revenue...	...	...	...	"	3,989

No repairs have been executed for a long period.

The area of the catchment basin is 36 square miles, the estimated flood discharge 6,541 cubic feet a second, and the existing calingulahs measuring together 139 feet being altogether inadequate, it is proposed to lengthen the southern escape 191 feet, so as to make the total length of weir 330 feet, and then the greatest depth of discharge will be a little over 3 feet.

2. The earthwork rates are, as the District Engineer remarks, high, but he has inspected the tank and satisfied himself that they are warranted by the distance from which soil has to be brought and by the height of the bund.

3. The site of the surplus weir which is intended to be lengthened is convenient as regards line of outfall, but it appears from the plan that the ground is very steep, and unless, as is perhaps intended to be represented on the section, there be rock it will probably cost a great deal in the future to maintain this work and prevent its being destroyed by undermining. The estimate shows that there is some rock, but the aprons and retaining wall indicate that it must be in detached rather than continuous masses.

4. Although the estimate, Rupees 4,400, for the surplus weir exceeds considerably the usual limit for Minor New Works, as it will not be safe to spend a large sum on the tank without enlarging its weirs, it will be necessary to treat it as a new work, and to provide for it out of the part of the grant at the disposal of Government. The sluice should be modified as indicated on the plan.

The items chargeable to Capital as new works are:—

Extending south weir	...	...	...	...	...	RS.
Constructing a sluice	...	...	...	...	...	4,400
Raising revetment	...	...	...	...	...	630
						1,470
						6,500

And that to Revenue—

Repairing the tank	...	...	...	...	...	5,130
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FORT ST. GEORGE,
9th April 1875.

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

No. 714.

ORDER THEREON, 30th April 1875, No. 1,200.

IRRIGATION, No. 73.

THE following estimates for the Polur tank, North Arcot District, are sanctioned:—

Repairs	...	...	...	...	...	RS.
New Works	...	...	...	...	...	5,130
						6,500

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and on account of the latter an appropriation of Rupees 4,400 is made from the amount at the disposal of Government under Minor New Works, Agricultural.

2. Attention will be given to the remarks of the Chief Engineer for Irrigation on the circumstances of the south surplus weir.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the District Engineer, North Arcot.

„ Controller of Public Works Accounts.

„ Chief Engineer for Irrigation.

Exd. W. J. Lewis.

Spare Copies

No.

3645

North Arcot,
DISTRICT ENGINEER'S OFFICE,
16th March 1875.
Camp Arnee.

From

The DISTRICT ENGINEER,
NORTH ARCOT.

To

The Chief Engineer,
For Irrigation
Madras.

Sir,

Encloses 8.

Estimates

and

plans

for

the

improvement

I have the honour to forward
herewith an estimate amounting to Rupees
11630 with plans and sections, for the
repair and improvement of the Polur
tank in the taluk of the same name.

2. This tank, which is one of the
finest in the District, closes the valley
of the Mangalar stream, and has in addi-
tion a supply channel from the Cheyar
river, which is under control at its head.
No repairs have been executed to it
for many years and it is now in a very
precarious condition; it was in imminent
danger of breaching during the late flood
the bund having been topped in se-
veral places, and if left without
repair would be almost certain to
give.

I have the honour to be,
Sir,
Your Most Obedt. Servant.
Bridgman Captain R.E.
District Engineer
North Arcot.

10/10/1875 No. 362 B-2944

From
C. E. No. 5223
10/10

The District Engineer,
North Arcot.

To
The Chief Engineer
for Irrigation
Madras.

Dated 16th March 1875.
Received 19th " "

Enclosure 8.
Subject.

No. 3645.

Submits plans and

estimates for Rs. 11630

for repairing and

improving the

tank in the taluk

of the same name.

20/3/75

(D. 2561/75)

No. 713

No. 362 B

Note by the Chief Engineer for Irrigation

Enclosure 2.

The following estimate has been
submitted for sanction by the District
Engineer, North Arcot.

Repairing and improving the
Polder tank. Rupees 11,630.

Approx. area ——— Acres 1040

— Assessment — Rupees 4,824

Average revenue ——— " — 3,989

No repairs have been executed for a long
period.

The area of the catchment basin is
36 square miles, the estimated flood
discharge 6541 cfs. a second and the
existing calingulabs measuring together
139 feet being altogether inadequate, it is
proposed to lengthen the southern escape 191
feet so as to make the total length of weir
330 feet, and then the greatest depth of dis-
charge will be a little over 3 feet.

The earthwork rates are, as the
District Engineer remarks, high, but he

has

has inspected the tank, and satisfied himself that they are warranted by the distance from which soil has to be brought and by the height of the land.

The site of the surplus weir which is intended to be lengthened is convenient as regards line of outfall, but it appears from the plan that the ground is very steep and unless, as is perhaps intended to be represented on the section, there be rock it will probably cost a great deal in the future to maintain this work and prevent its being destroyed by under-mining. The estimate shows that there is some rock, but the aprons and retaining wall indicate that it must be in detached rather than continuous masses.

Although the estimate No 4400 for the surplus weir exceeds considerably the usual limit for minor new works, as it will not be safe to spend a large sum on the tank without enlarging its weirs, it will be necessary to treat it

as a new work and to provide for it out of the part of the grant at the disposal of Govt. The price should be modified as indicated on the plan.

The items chargeable to Capital as new works are

Extending South weir	Rs 4,400
Constructing a sluice	630
Raising revetment	1,470
	<u>6,500</u>

and that to Revenue

Repairing the tank	5130
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Fort Saint George
9th April 1875

Colonel Sir C. Col. H. R.
Chief Engineer for Irrigation

To
The Secretary to Government
P. W. D.

P. H. B.

Proc of the Madras Govt
 Read the following
 From the Chief Engr for
 Irrigation { H.E. No 362 B of 9 April 1875
 G.O. No: 1200 of 30 April 1875-

The following
 estimates for the Blue tank,
 North Arcot District, are
 sanctioned.

Repairs — Rupees 5,130
 New Works — — 6,500

and on account of the
 latter, an appropriation of
 Rupees 4,400 is made from
 the amount at the dis-
 -posal of Govt. under minor
 new works, agricultural.

2. Attention will be
 given to the remarks
 of

(H.E. 1875: 2241)
 H.E. 362 B
 1875

From
 The Chief Engineer
 for Irrigation
 to The Secretary to
 Government
 P.M.D.
 3rd 9
 Dated 9 April
 Referred 208 April
 1875.

Enclosures 9.

Note on the Estimate
 Rs 11,630 for repairs &
 improvement to the
 Blue tank, North
 Arcot District.
 H.E. No: 1200. 30/4/75.

of the Chief Engineer for
Irrigation on the circum-
stances of the South
surplus weir.

2561

Govt. of 1875 Madras.
PUBLIC WORKS.

G.M.

²⁰
The Dy. Engr.
D. Anant.

Date

Recd.

30 April 1900

Nos. 713 714

Polar Tank, N. Arcot -
Sanctioning the estimate
of Rs 11,630 for repairs and
improvements to the —
and providing the necessary
funds.

40

4

N 713-714

6 To Dist Engr. North Arcot
5 To Comd. M. A. C.
5 To Chief Engr. for S. Arcot
8 Encl.
Recd. 10-5-75
1020-11-75