

Public Works (1897) Department.

G.O., No. 5929

DATED 29 June 1897

[Despatch Abstract.]

Kunnimokula Yerra Cheruvu Tank: Estimate
of Rs. 6780 for improving the — with its supply
channel and head work, Bellary Division,
Sanctioned.

1897-98
1897-98

Indexed.

BACK PAPERS.

FURTHER PAPERS.

IRRIGATION.
ACCOUNT.

Government { 1897 } of Madras.
PUBLIC WORKS.

Recd.

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1897.

Regd.

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G.O., No. 592 I., 29th June 1897.

JUNE.

Kunnimokula Yerracheruvu Tank

Estimate of Rs. 6,780 for improving the — with its supply-channel and head-work, Bellary division, sanctioned.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following paper:—

From W. B. DEWINTON, Esq., Superintending Engineer, III Circle, to the Chief Engineer for Irrigation, dated Bellary, 8th June 1897, No. 1521 I.

I have the honour to submit, herewith, plans and estimate amounting to Rs. 6,780 for improving Kunnimokula Yerracheruvu tank with its supply-channel and headwork, Dharmavaram taluk, Anantapur district, and request that you will be good enough to obtain the sanction of Government under Original work, as the estimate amount exceeds five years' revenue.

2. The report that accompanies the estimate fully explains the necessity for the improvement now proposed.

ENCLOSURE.

REPORT to accompany Estimate for repairing Anicut, Supply-channel and Tank-bund, &c., of Kunnimokula Yerracheruvu tank (No. 29).

			Repairs to anicut	RS.
			" to supply-channel	4,290
Latitude	..	.. 14° 18'	" to tank-bund	1,900
Longitude	..	.. 77° 47'	" to sluices	200
			" to escape	80
				310
			Total	6,780

The anicut is across the Vankaparu stream and the channel supplying the Kunnimokula Yerra tank takes off from its left bank.

2. The body wall at left end for a length of 259 feet is in good order, but requires pointing. From C.S. No. 3 to 5 the dam which is of stone pitching is entirely washed away; and from C.S. No. 5 to 9 only the crest portion is scoured out. From C.S. No. 9 to the right bank, the dam is in good order, but requires repacking of apron here and there.

3. The accompanying estimate provides for constructing a masonry body wall with rear retaining wall and apron, and from C.S. No. 5 to 9 body wall and apron as shown in the accompanying plan.

4. Provision is also made for baling water, &c., and repairing the displaced stones of the apron between C.S. No. 9 and the right bank.

Supply channel.—The channel takes off from the left bank of the Vankaparu river and supplies the Kunnimokula Yerra tank, and the channel is silted up and is not receiving sufficient water except during unusual floods. The estimate now provides for cutting the channel to 6 feet bottom, with side slopes of 1½ to 1 and depth of water 2 feet fall; is 6 feet per mile. Hence discharge will be 38 cubic feet per second as the velocity in channel is $(1.48 R \sqrt{F})$

$= (1.48 \times 1.36 \times 1.05) = 2.12$ cubic feet per second, and the area 18 square feet and H M D or R = 1.36.

Ayaut of Yerracheruvu.—The Kunnimokula Yerracheruvu has an ayaut area of 149 acres; Government assessed at Rs. 1,015; and inam 26 acres, assessed at Rs. 24, or a total of 175-18-15 assessed at Rs. 1,039-8-0.

Bund.—The bund of the Kunnimokula tank is 2,300 feet in length of a fairly strong section for its size and for some parts of its length is revetted on both sides up to the top; the top is uneven, provision is made in the estimate to bring it to a uniform level of 45.75.

Sluices.—There are two sluices in the bund, one at each end. The front cistern walls of the left sluice require a little plastering, otherwise the sluice is said to be in good order. The front cistern of the right sluice requires to be rebuilt, and the barrel between the revetment and head where it is said to leak badly, must be opened out and repaired.

Hydraulic particulars.—There is a natural escape 75 feet long at the right end, and another 90 feet long at the left end. There is a low bund to the right of the right escape, which will be removed for a length of 110 feet to make the total length of this escape up to 185 feet, thus giving the tank a total length of 275 feet to pass the surplus with a head of 1 foot. The tank has a catchment area of 1.45 square mile with no up-tanks; the maximum flood discharge from this, using a coefficient of 450, will be 576 cubic feet per second; to this must be added 38 cubic feet per second, the supply received from the channel. The length of outlet required to pass this with a head of 1 foot on natural escape, using a coefficient of .419, will be 275 feet, which can easily be obtained by removing the low bank referred to above.

The tank is not isolated as described in printed list, being one of the Dharmavaram tank group. The ayaut of 222 acres shown in printed list is incorrect, and has been corrected to 175 acres as given by Revenue Department.

be 275 feet, which can easily be obtained by removing the low bank referred to above.

(Signed) J. F. SOMERS-EVE,
Executive Engineer.

14th December 1896.

ORDER—No. 592 I., dated 29th June 1897.

The following estimate is sanctioned:—

Irrigation.
43. Minor Works and Navigation.
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.
Original Works.
Bellary Division.
Kunnimokula Yerracheruvu Tank.
No. 29 of list of works in the Anantapur District, appended to G.O., No. 407 I., dated 6th July 1887.
Improving the tank with its supply-channel and headwork.

Estimate RS.
6,780

2. This sanction is registered as No. 50 I. of 1897-98.

(True Extract.)

Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
Superintending Engineer, III Circle, with twenty enclosures.
Examiner, Public Works Accounts.

Ed. T. E. Narayana Aiyangar.

His Excellency the Governor

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

*Estimate for improving the Kunnimokula
Tank - in Channarayana St.*

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

READ the following

Letter from the Supp. Engineer, Third Circle. (H.E. N. 1524 - I of 8 June 1897).

No. 592 of 29.6.97

The following estimate is
sanctioned: -

Irrigation.

42, Minor Works & Navigation.

Minor Works for which neither Capital
nor Revenue Accounts are kept. P.W.

Original Works.

Bellary division.

Kunnimokula Yerra Chernon tank
in the Channarayana District,
N. 29 of list of works appended to
G.O. N. 407-I, dated 6 July 1887.

Improving the tank with its supply,
Channel and head work.

Estimate. — Rupees 6,780.

2. This sanction is registered as
No. 501 of 1897-98.

*To The Chief Eng. for Irrig. ✓
" Supp. Eng., Third Circle with 20 Rupees
" Examines, P.W. Accts.*

17/6/97

*W.H.
19.6.97*

Public Works (1897) Department.

CURRENT No. ⁶²⁹²
~~9.24.11~~

Order

From *The Super Engineer
13th file*

No. 1821.1.

Dated 8th June 1897

Received 9-6-97
Regd. 28.6.97
Enclosures 21 (+8 plans)

Spare copies.

SUBJECT.

*Kenninokula Yerrapharasa
Tank - Submits for
sanction Estimate of
Rs 6780 for improving
the —*

Latitude $14^{\circ}-18^{\circ}$
Longitude $77^{\circ}-47^{\circ}$

Repairs to Buick	-	Rs 4448	4290 ✓
do. Supply Channel	-	1856	1900 ✓
do. Tank bund	-	~~202~~	200 ✓
do. Sluices	—	81	80 ✓
do. Escape	—	322	310 ✓
Buick in	-	<u>6940</u>	6780 ✓

- (1) The Aqueduct is across the Vanka Paim stream and the Channel supplying the Hunnymakala yerra Tank takes off from its left bank.
- (2) The body wall at left end for a length of 259 feet is in good order, but requires painting. From C. S. No 3 to 5 the dam which is of stone pitching is entirely washed away; and from C. S. No 5 to 9 only the crest portion is scoured out. ^{From} Below C. S. No 9 to the right bank, the dam is in good order but requires repacking of apron here and there.
- (3) The accompanying estimate.

provides for Constructing a masonry body wall with rear retaining wall and apron from C. S No 5 to 9 ^{body wall and apron} as shown in the accompanying plan.

4) Provision is also made for Bailing water & and repairing the displaced stones of the apron between C. S No 9 & the Right bank.

The Channel takes off from the left bank of the Tankaparu River and supplies the Kunnyamakala yerra tank, and the channel is silted up and is not receiving sufficient water except during unusual floods.

The Estimate now provides for cutting the Channel 6 ft at bottom with sides slopes of $1\frac{1}{2}$ to 1 and depth of water 2 ft, if all is 6 ft per mile, Hence discharge will be 38 cfs per sec. as the velocity in channel is $(1.48 \frac{R \sqrt{S}}{R+4})$ $= (1.48 \times 1.36 \times 1.05) = 2.12$ cfs per sec. $\therefore$ the area 18 sq ft & H.M.D or $R = 1.36$

The Kunnyamakala yerra Churao has an ayacut area of 149 acres Government assessed at Rs 1015, and Inam 26 acres assessed at Rs 24, or a total of 175-18-15

assessed at Rs 1039-8-0

Bund.

The bund of the Kunnyamakala tank is 2300 ft in length of a fairly strong section for its size and for some parts of its length is rivetted on both sides up to the top, the top is uneven, provision is made in the Estimate to bring it to a uniform level of 45.75.

Sluices

There are two sluices in the bund, one at each end, the front Cistern walls of the left sluice require a little plastering, otherwise the sluice is said to be in good order. The front Cistern of the right sluice requires to be rebuilt, and the barrel between the rivetment & head where it is said to leak badly, must be opened out and repaired.

Hydraulic particulars

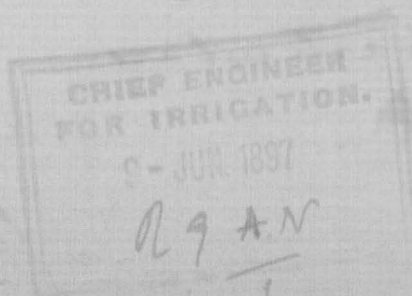
There is a natural escape 75 ft long at the right end, and another 90 ft long at the left end. There is a low bund to the right of the right Escape, which will be

removed for a length of 110 ft. to make the total length of this escape up to 185 ft; Thus giving the tank a total length of 275 ft. to pass the surplus with a head of 1 foot.

The tank has a catchment area of 1.45 sq miles with no up tanks; The maximum flood discharge from this using a coefficient of 450 will be 576.5 cft per sec: to this must be added 38 cft per sec: the supply received from the channel. The length of outlet required to pass this with a head of 1 foot on natural escape, using a coefficient of .419 will be 275 ft. which can easily be obtained, by removing the lower bank referred to above.

The tank is not isolated as described in printed list being one of the Pharamaswar tank group. The layout of 222 acres shown in printed list is incorrect and has been corrected to 195 acres as given by Rev Department.

F. Somerby
14/12/96.



No. 1521 J

Superintending Engineer's Office,

3RD CIRCLE.

Bellary 8th June 1897.

FROM

W. B. de Winton Esq.,

SUPERINTENDING ENGINEER,

IIIRD CIRCLE,

BELLARY.

TO

THE Chief Engineer,
for Irrigation,

Madras

Sir,

Enclosures.

1 File of estimate with report, tabular statement, sketch map, and account statement complete. 7 Drawings.

I have the honour to submit herewith plans and estimate amounting to Rs 6,780/- for improving Thumimukula yerra Chennu tank with its supply channel and head work, Pharamaswar Taluq, Anantapur district and request that you will be good enough to obtain the sanction of Government under original work as the estimate amount exceeds 5 years revenue.

2. The report that accompanies the estimate fully explains the necessity for the improvement now proposed.

I have the honour to be,
Sir,

Yr most obedient servant,

W. B. de Winton

3/6/97

For Supd^y Engr^y Circle

P.W. 6292/97

CHIEF ENGINEER
FOR IRRIGATION
5-JUL-1897
No. 129AN

From
The Superinte.

Engineer,
Circle,
Cellary.

To
The _____

Dated _____
Received _____ } 1897

Enclosures.

No.

Subject.

10-26-97