Public Works (1897) Department.

G.O., No. 564W

DATED 17. June 1897

18/6/97

17/6

90 copies
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80 do
38 copies with [illegible] at the back

[Despatch Abstract.]

Upper Odai dam: Estimate of Rs. 6000 for constructing a retaining wall and Apron in front of the — ~~Sanctioned~~ Srivaikuntam Anicut System, sanctioned, and a copy of the Pros: ordered to be forwarded to the Govt. of India.

Upper Odai dam: Forwarding copy of Pros: sanctioning an estimate of Rs. 6000 for constructing a retaining wall and Apron in front of the — Srivaikuntam Anicut System.

P.W. 26

Dc 17/6/97

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNT.

Government {1897} of Madras.

PUBLIC WORKS.

Recd. *Regd.*	1897.	*Enclosures* *Spare copies*

G.O., Nos. 564, 565 I., 17th June 1897.

JUNE.

Uppar Odai dam

Forwarding copy of Proceedings sanctioning an estimate of Rs. 6,000 for constructing a retaining wall and apron in front of the —, Srivaikuntam anicut system.

2. This sanction is registered as No. 41 I. of 1897-98, and will expire on the 31st March 1899.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. 565 I., dated 17th June 1897.]

(True Extract.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, VI Circle, with three enclosures.
" Examiner, Public Works Accounts.

Endorsement—No. 565 I., dated 17th June 1897.

Forwarded.

(By order.)

Joint Secretary to Government,
Irrigation Branch.

Exd. T. K. Narayana Aiyangar.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

Read—the following papers :—

From Lieutenant-Colonel O. V. BODDY, R.E., Superintending Engineer, VI Circle, to the Chief Engineer for Irrigation, dated Trichinopoly, 22nd May 1897, No. 446 T.N.

With reference to the correspondence ending with your memo., No. VI/17 T.N., dated 15th March 1897, I have the honour to forward, for your approval and sanction, an estimate amounting to Rs. 4,800 for constructing an apron, 15 feet wide, of concrete in surki mortar, protected by a retaining wall of rough stone in surki mortar in front of the Uppar Odai dam in Korampallam tank. I also forward another estimate amounting to Rs. 4,700, together with a detailed report and plan for the restoration of the damaged vents, 19 to 27, in the same dam, to their original state. This estimate was not called for, but it is submitted as any improved method of closing the vents referred to in the concluding paragraph of your memo., No. VI/17 T.N., dated 15th March 1897, will not probably materially affect the amount of the estimate.

2. The Collector has countersigned the estimate.

Enclosure.

Report to accompany the estimate of Rs. 4,800 and 4,700 for improving and restoring Uppar Odai dam in Korampallam tank, Srívaikuntam Anicut System, Thambraparni River.

	RS.
Improvements—Providing concrete apron in front	4,800
Restoration	4,700

The dam has 48 vents regulated by falling shutters. Two of the vents on the left and five on the right end have their floors 6 feet below F.T.L., and all the others 8 feet. There was a heavy cyclone on the 14th of November last, preceded by rain for two or three days. There was a fresh down the odai which has a drainage basin of 170 square miles. Water in front of the dam on the 12th morning was 4·30 (the F.T.L. being 8·00) and it began to rise gradually. As the state of the weather was suspicious, two of the low level vents were opened. The water rose gradually to 5·20 on the 13th afternoon when 6 of the high level vents, one more of the low level vents were opened; on the 14th morning it had risen to 6 when the remaining one high level vent and 23 more of the low level vents were opened. At 1 P.M. the water was 6·50 when all the remaining low level vents were also opened. Even after all the vents were open, water in the tank was rising rapidly, it being 7·70 at 3 P.M. and 7·80 at 6 P.M. At about 4 P.M. the sluices just opposite the odai were observed to sink, and they all collapsed within a short time. Sluices 20 to 27 from left end have completely fallen down and one or two on either side injured. On the 15th morning water in the tank had fallen to 5·50 and it went down rapidly to 2·00 on the 16th evening. Sufficient water was, however, retained in the tank by means of cross bunds for the supply of irrigation and of Tuticorin town till a temporary dam was made across the sluices that had collapsed and river water supplied.

2. An examination of the collapsed portion of the work showed that its destruction was due to the scour of its foundation immediately in front. The bed of the tank here was loose black cotton soil and the foundation of the work was not protected by an apron. The difference of water level in front and rear of the work when all the sluices were open was about 4 feet, and therefore the mean velocity through the sluices should have been not less than 12 feet per 1." The rear portion of the work is protected with a masonry apron about 30 feet broad and a loose

stone apron beyond and these have remained uninjured. But there having been no apron in front, the black cotton soil immediately in front of body wall was scoured out to bottom of foundation and the front parts of the piers and floor have fallen forwards. It has therefore been decided that, in restoring the work, it must be protected in front by the formation of a floor of surki concrete with a retaining wall, 15 feet broad. This estimate accordingly provides for it, as well as for restoring the work to its original state with a deeper foundation under the body wall. The Chief Engineer for Irrigation has communicated in his memo., No. VI/17 T.N., dated 15th March 1897, that he will design an improved method of closing the vents. It is not known if this will involve any alteration in the design of the masonry part of the work and if so, the necessary alteration may be made in his office.

3. The works proposed are unremunerative. The restoration of the dam is absolutely necessary for the supply of existing irrigation under the tank about 1,080 acres and of the Tuticorin town. The formation of front apron is necessary to protect the dam from destruction in future.

8th April 1897. (Signed) S. GOPALA KRISHNA AIYAR,
Executive Engineer.

No. 117 I.

Note by the Chief Engineer for Irrigation.

The escape of the Korampallem tank was originally built as a solid weir, but subsequently altered to a surplus sluice of 7 vents 10′ × 6′ and 41 vents of 10′ × 8′ with shutters hinged at the bottom and when up held in position by chains. There was no flooring in front of the cutwaters, nor was the danger of the omission recognised as no serious scour had been brought to notice and the work had lasted without injury for eight or nine years during which there had been several heavy floods. In November last a cyclone occurred, the water level rose rapidly and as it rose the shutters were dropped. When the flood reached nearly its highest level; it was noticed that some of the piers near the centre of the work were subsiding. Nothing, however, could be done and seven bays were rapidly destroyed and two injured. The present estimate provides for putting down a concrete apron in front of the work for the whole length. The injured part of this work is being restored on a repair estimate sanctioned by the Superintending Engineer.

2. The odai rises in flood with extreme rapidity, and it was for this reason that it was decided to fit the sluice with shutters which could be opened in a few minutes, but the design has this grave defect that it takes a long time to close the vents again, and while they are being closed it sometimes happens that half the contents of the tank escapes. An improvement in the method of closing the vents is under consideration.

OOTACAMUND,
31st May 1897.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

ORDER—No. 564 I., dated 17th June 1897.

The following estimate is sanctioned:—

Capital expenditure not charged to Revenue.
49. Irrigation.
Srivaikuntam Anicut System.
Open Capital Account.
2. Main Canals and Branches.
14. Tanks and Reservoirs.
Unremunerative Work.
Constructing a retaining wall and apron in front of the Uppar Odai dam.

	RS.
I. Works	4,800
II. Establishment	1,104
III. Tools and Plant	96
Total, Estimate	6,000

H.E

Estimate for constructing an Apron in front of the Uppar Odai Dam - Tinnevelly Dt

PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

READ the following

From Supg Engr, VI Circle, No. 446 TN, dd 22.5.97
Note by the Chief Engr for Irrign No. 117 I dd 31.5.97

No: 564 I dd 17.6.97

Issue
W.H.
14.6.97
12/6/97
12/6/97

The following estimate is sanctioned:—
Capital Expenditure not charged to Rev.
49. Irrigation
Srivaikuntam Anicut System.
Open Capital Account.
2. Main Canals & Branches
14. Tanks & reservoirs.
Unremunerative Work—
Constructing a retaining wall & apron in front of the Uppar Odai dam.

	Rs
I Works ..	4800
II Establishment	1104
III Tools & Plant	96
Total Estimate	6000

17/6/97
Regd 17/6/97

2. This sanction is registered as No. 41 I of 1897-98 & will expire on the 31st March 99.

3. Ordered that a copy of these Procs: be forwarded to the Govt of India for information.

Endorsement. No: 565 Ig 17.6.97

Forwarded.

5/6/97.

WH. 5.6.97

I

AAH 11.6.97

To
The Chief Engr for I.
Supg Engr VI with 3 enclosures
Ex. T.W.R.

3/6/97

2/7/97

E. I. Form No. 1—1,000—2-2-97.

Public Works (1897) Department.

CURRENT No. 5878

5649/5859

Order

From

The Chief Engineer for Irrigation

No. 117-I.

Dated 31-5-97
Received 16.6.97
Enclosures ~~4~~ 5 (1 Plan)
Spare copies

SUBJECT.

Coppar odai Dam. Estimate for constructing a retaining wall & apron in front of the Noli submitting with remarks.

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

5P.

Ro 117. J

Note by the Chief Engr for Irrigation

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2 The oday rises in flood with extreme rapidity and it was for this reason that it was decided to fit the sluice with shutters which could be opened in a few minutes but the design has this grave defect that it takes a long time to close the vents again and while they are being closed it sometimes happens that half the contents of the tank escapes. An improvement in the method of closing the vents is under consideration.

W. Hughes

Ootacamund.
31st May 1897

Chief Engr for Irrigation

To,
The Joint Secretary to Govt. P.W.D.
Irrigation Branch.

13-6-97

Public Works (189) Department.

CURRENT No. 30 T A

Order

From The Supg Engineer
Eth Circle

No. 426 T A

Dated 22nd May 1897

Received 26-5-97

Enclosures 4

Spare copies

SUBJECT.

Uppar Odai Dam in Korampallum Tank - Forwards for approval and Sanction an estimate amounting to Rs 4000 for constructing an apron in front of —

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

---

3 S.P

SUPG. ENGINEER'S
No. 4/325 ...
13 APR 1897

Report to accompany the estimate of Rs 4,800 & 4750 for improving & restoring Uppar Odai Dam in Korampallam Tank Srivaikuntham Anicut System. Tambrapurni River.

(Improvements) providing concrete apron in front Rupees 4,800.

Returned to S.E.

Restoration ——————————— " —— ~~4750~~ 4700.

The dam has 48 vents regulated by falling shutters. Two of the vents on the left & five on the right end have their floors 6 feet below F.T.L and all the others 8 feet. There was a heavy cyclone on the 14th of November last prece~~e~~ded by rain for two or three days. There was a fresh down the Odai which has a drainage basin of 170 Sqr. miles. Water in front of the Dam on the 12th morning was 4.30 (the F.T.L being 8.00) & it began to rise gradually. As the state of the weather was suspicious two of the low level vents were opened. The water rose gradually to 5.20 on the 13th afternoon when 6 of the high level vents & 1 more of the low level vents were opened; on the 14th Morning it had risen to 6 when the remaining one high level vent and 23 more of the low level vents were opened. At 1 P.M. the water was 6.50 when all the remaining low level vents were also opened. Even after all the vents were open water in the tank was rising rapidly it being 7.70 at 3. P.M. & 7.80 at 6. P.M. at about 4. P. M. the

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

3 S.P

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4 S.P

2

forwards. It has therefore been decided that, in restoring the work, it must be protected in front by the formation of a floor of surki concrete with a retaining wall, 15 feet broad. This estimate accordingly provides for it as well as for restoring the work to its original state with a deeper foundation under the bodywall The chief Engineer for Irrigation has communicated in his Memorandam No $\frac{VI}{17\text{-}T\cdot N}$ dated 15th March 1897 that he will design an improved method of closing the vents. It is not known if this will involve any alteration in the design of the masonry part of the work & if so, the necessary alteration may be made in his office.

3. The works proposed are unremunerative The restoration of the dam is absolutely necessary for the supply of existing irrigation under the tank about 1080 acres & of the Tuticorin town. The formation of front apron is necessary to protect the dam from destruction in future.

Exe: Engr
8.4.97.

Enclosures

2 Estimate
2 Tracings
1 Report

CHIEF ENGINEER
FOR IRRIGATION.
26 MAY 1897
No. R 30 T.N.

1

General Report

[illegible]
5818/97

Encl No 4 to S.E. 6th No. 446 T.N. / 22-5-97

OFFICE OF THE SUPERINTENDING ENGINEER,
6TH CIRCLE,

No. 446 T.N.

Trichinopoly, 22nd May 1897.
Op. 50

2 18.

From
Lt. Col. C. V. Boddy R.E.
~~The~~ Sperintending Engineer,
6th Circle.

To

The Chief Engineer,
for Irrigation

SIR,

4 ENCLOSURES.
2. Estimates
1. Tracing Plan
1. General Report.
Bulky file retained.

With reference to the correspondence ending with your Memorandum No: X II / 17 T.N. dated 15th March 1897, I have the honor to forward for your approval and sanction an estimate amounting to Rs 4,800 for constructing an apron, 15 feet wide, of Concrete in Surki Mortar, protected by a retaining wall of rough stone in Surki mortar in front of the Uppar Odai dam in Korampallam tank. I also forward another estimate amounting to Rs 4,700 together with a detailed report and plan for the restoration of the damaged vents, 19 to 27, in the same dam, to their original state. This estimate was not called for, but it is submitted

300—20-4-96

as any improved method of closing the vents - referred to in the concluding paragraph of your Memo: No: $\frac{VI}{17 T.N.}$ dated 15th March 1897, will not probably materially affect the amount of the estimate.

2. The Collector has countersigned the Estimate.

I have the honor to be
Sir,
Your most obedient Servant,

J. V. Woolley
Lt Col. R.E.
Supg Engineer, VI Circle

19/6/97

P. W. D. 6th CIRCLE.

CHIEF ENGINEER
FOR IRRIGATION.
26 MAY 1897
No. 13072

FROM
THE SUPERINTENDING ENGINEER,
6TH CIRCLE.

TO
THE CHIEF ENGINEER,

NO.

Dated.
Received. 189 .

Enclosure.

2

8

Public Works (1897) Department.

G.O., No. 5679. ~~16[illegible]~~ W

DATED 18. June 1897

[Despatch Abstract.]

Dredger. Letter from the Govt of Bengal enquiring if ~~the~~ an English ladder dredger which is available for transfer from the Sone Circle is required for ~~the~~ any of the Circles in the Madras Presy: Comtd to the S.Es I & II Circles for early report.

[P.W. 25.
5,000—20-11-96.]

26.6.97

Indexed. 15/6

Public Works (1897) Department.

G.O., No. ~~1644 W~~ 5679.

DATED 18. June 1897

[Despatch Abstract.]

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[P.W. 26.
5,000—30-11-96.]

26.6.97

Indexed. 18/6