

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 3759

Press
Mis.

44-45

Dated 2 12 1868.

Not to be folded or roughly handled

WJ

10

*Proceedings of the Madras Government, Public Works Department,
2nd December 1868.*

No. 44. Read the following Endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 12th November 1868, No. 92 :—

Read the following letter from the Superintending Engineer, 4th Division, to the Chief Engineer for Irrigation and Joint Secretary to Government, Public Works Department, dated Madras, 2nd November 1868, No. 3,777.

1 Survey.
1 Plan.
2 Estimates.
1 Report.
1 Ayacut Statement.
1 Letter, No. 367, dated 2nd October 1868.

1. Adverting to your Memorandum No. 63, dated 17th September 1868, I have the honor of submitting revised plans and estimates, amounting in the aggregate to Rupees 6,300, for restoring the Mel-Cooppum high level reservoir in

the Arcot Talook, Vellore Range, North Arcot District, together with an explanatory letter from Lieutenant Brockman.

2. The profits of the work will now be reduced to $12\frac{3}{4}$ per cent.

3. I concur in the remarks of the Assistant Engineer, and recommend the amended project for favorable consideration and sanction from the funds provided for it in the Budget,* which could be

* Item No. 178. supplemented to make up the amount of the estimate, if found necessary, later in the year from savings.

From the Superintending Engineer, 4th Division, to the Chief Engineer for Irrigation and Joint Secretary to Government, Public Works Department, dated Camp at Poloor, 1st August 1868, No. 2,217.

1. In the current year's Imperial Budget, *vide* item No. 178, a sum of Rupees 4,800 is provided for the restoration of the Mel-Cooppum high level reservoir in the Vellore Range, North Arcot District, I have now the honor of enclosing, for the purpose of being laid before Government

2 Estimates.
1 Survey.
1 Plan.
1 Report.
1 Ayacut Statement.

for sanction, the documents marginally noted connected with that project.

2. The situation of the tank and other particulars are fully entered into in the report which accompanies, drawn up by Lieutenant Brockman. It will be observed that the tank is now in ruins, and of course yields no revenue. Its capacity is approximately estimated at 600,000 cubic yards, and as the supply is stated to be perennial, it is expected that there will be sufficient water for the irrigation of the land colored green in the survey, which measures about 380 acres, as also for the land under the Keel-Cooppum tank.

3. The works to be executed are filling breaches, raising portions of bund, building revetment, blasting rock to form a calingula, and constructing an aqueduct.

4. The revenue likely to accrue after the execution of these works is Rupees 804 (*vide* ayacut statement), which is a little more than 16 per cent. on the outlay viz., Rupees 5,000, contemplated in the estimates.

5. The Collector of the District approves of the project.

Could

*Proceedings of the Madras Government, Public Works Department,
2nd December 1868.*

6. The funds required in addition to the Budget provision are for savings later in the year, if found to be required.

Report to accompany Plans and Estimates for the restoration of the high level Reservoir in the North Arcot District of the Vellore Range.

1. This tank is formed by a bund of about 100 feet in mean length, extending along a valley running east and west, of a little over two miles in length. The extreme valley is at about two-thirds of its length from its head. Its drainage or catchment area is four square miles in area, but the actual water level of the tank at high level is of considerable depth of water retained at the bund, viz., forty-five feet from bottom of the tank to high water level. The actual contents of the tank may be taken roughly at 600,000 cubic yards, but this must be looked upon only as an approximate statement of its capacity, as the is much cut up by channels and encroached upon by spurs of the enclosing hills, therefore a true measurement of its contents almost impossible.

2. The spring water that flows down the channel of the Mel-Cooppum valley is reported and stated by the villagers to be perennial. This leads me to conclude that the construction of a bund will retain such an amount in the soil above as to keep the tank always partially full, the more effectually to obtain this a masonry wall, with a foundation depth of six feet and structure of twenty-four feet in height, has been provided in the estimate. This, it is presumed, check any percolation through the bed of the channel or bund when the tank is full.

3. The sluice of this tank is in good order, having been just constructed at the present purpose of irrigating the high lands on the south side will be formed in the ceiling of the out of the solid rock, by blasting away the portion now existing above the high level of the tank.

4. In addition to the probable irrigable area shown on the plan, and colored green, and which represents the land of Mel-Cooppum village that will be benefited by the construction of the tank, the land under the Keel-Cooppum tank itself, it is strongly presumed, will be benefited by the water and the water from the fields above that tank. The Keel-Cooppum villagers indeed are anxious to for go the use of their tank, and I propose cultivating its bed by the water from the Mel-Cooppum fields, and carrying off the surplus water by their tank sluice to irrigate the lands below. This would be certainly a feasible, and at the same time a profitable, idea.

Vellore,
22nd April 1868.

(Signed) R. R. E. BROCKMAN, Lieutenant, R. E.,
Assistant Engineer, Vellore District.

1. The estimates now submitted provide for the restoration of a tank situated on one of the small feeders of the river Cheyaur, in the south-west corner of the North Arcot District.

2. The tank has a catchment basin of only four square miles, and to retain the limited supply which is likely to be derived from so small an area, the embankment will have to be raised to the height of fifty feet, or about fifteen feet higher than the old native bund.

3. The storage capacity is estimated at 600,000 cubic yards, and the additional revenue at 804 Rupees, or about 12½ per cent. on the estimated cost, Rupees 6,320.

4. The original design provided for rough stone revetment with a slope of about three horizontal to four vertical; and allowed for only six feet between high water level and the top of the embankment. I requested the Superintending

*Proceedings of the Madras Government, Public Works Department,
2nd December 1868.*

Engineer's re-consideration of these and other points of less importance; and the estimates have been returned with the slope altered to 1½ to 1, and with the water surface lowered three feet.

5. The project has been carefully drawn up by the Range Officer, Lieutenant Brockman, R. E.; and believing that it will answer his expectations, I would beg to recommend it for sanction.

*6. The estimated amount is made up of the following items:—

	RS.
Earthwork and rough stone...	3,920
Masonry ...	880
Blasting for escape ...	900
Small aqueduct ...	620
Total ..	6,320

(Signed) J. C. ANDERSON, Colonel, R. E.,
Chief Engineer for Irrigation.

No. 45. ORDER THEREON, 2nd December 1868, No. 3,759.

IRRIGATION, No. 2.

1. With these papers the Chief Engineer for Irrigation submits, with his recommendation, estimates amounting to Rupees 6,320 for the restoration of the Mel-Cooppum high level Reservoir in the North Arcot District.

2. It appears that by the execution of the proposed works an annual revenue of 804 Rupees will be realised, representing a return of nearly thirteen per cent. on the estimated outlay.

3. The Collector approves of the project, and as it is likely to be remunerative, the Government sanction the estimate of Rupees 6,320, and authorise the work to be proceeded with from the sum of Rupees 4,800 provided for it in the Budget of the current official year.

Item 178.

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

To the Superintending Engineer, 4th Division.

- .. Accountant General.
- .. Controller of Public Works Accounts.
- .. Chief Engineer for Irrigation.
- .. Revenue Department.

Exd. S. T. Augustin.

Could...

Govt. of Madras

PUBLIC WORKS.

THE SUPERINTENDING ENGINEER

4th Dec 1868

Secy. to Govt.

Dated December, 2nd.

For.

G. O., 2nd Dec 1868, No. 872

DECEMBER.

Nos. 44-45

Mel-Coopum High Level Reservoir, amounting to Rupees 6,300, for restoration of the Mel-Coopum Reservoir in the North Arcot District.

No. 3777.

30
Sup. Engr. Office, Madras 2. October 1868

From,

Colonel A. J. M. Baileau R. E.
Superintending Engineer

To,

Colonel J. C. Anderson R. E.
Chief Engineer for Irrigation
and Joint Secretary to Government

Sir,

Adverting to your Memorandum No. 68 dated 17th September 1868 I have the honor of submitting revised plans and estimates amounting in the aggregate to Rupees 6,300, for restoring the Mel-Coopum high level Reservoir in the Arcot Taluk, Vellore Range, North Arcot District, together with an explanatory letter from Lieutenant Brockman.

2 The profits of the work will now be reduced to 12 3/4 per cent.

3 I concur in the remarks of the Assistant Engineer, and recommend the amended project for favorable consideration and sanction from the funds provided for it in the Budget, which could be

Item No. 178.

ff

Sir

3
F. A. Villars Colonel R.B.

Trans
The Anti-Slavery Socy. 4-20

To the Chief Engineer
for the City of New York
and Brooklyn

date Rec'd - 20 November 1968 (H.H.G.)

May 20/1891

Victims being revised, & the estimated amount in the aggregate to pay about for restoring the Hotel, in the Arsenal Prison, & Range. For the arrest of Dutton with an explanatory letter from Mr. Brinkman & recommendation of the Project for leaving the consideration.

Chap J. Engrs. Office 1st Div.
Camp Polson 4th August 1868
Ha

From,

Colonel A. J. M. Bailean Lt.
Superintending Engineer N. B. Co.

Ed,

Colonel J. C. Anderson R. E.
Chief Engineer for Irrigation
and Joint Secretary to Government
Public Works Department

Sir,

In the current year's Imperial Budget vide item A 2178 a sum of Rupees 4000 is provided for the restoration of the Melcooppuram high level reservoir in the Vellore Range North Arcot District. I have now the honor of enclosing for the purpose of being laid before Government for sanction the documents marginally noted connected with that project.

2. The situation of the tank and other particulars, are fully entered into in the report which accompanies drawn up by (Lieutenant Brickman - It will be observed, that the tank is

Now

now in ruins and of course yields no revenue.
The capacity is approximately estimated
at 600,000 Cubic Yards and as the supply
is stated to be perennial, it is expected that
there will be sufficient water for the irrigation
of the land colored green in the survey
which measures about 380 acres, ~~as also~~
for the land under the Nilcappam Tank.

The works to be executed
are filling breaches, raising portions of
bund, building revetment, blasting rock
to form a Malingalah and constructing
an Aqueduct.

The revenue likely to accrue
after the execution of these works is Rs 2004
(vide Ayaat statement) which is a little
more than 16 per cent on the outlay, viz.
Rupees 5,000 contemplated in the estimates.

The Collector of the
District approves of the project.

The funds required in
addition to the Budget provision
can be given from savings

later

N^o 92. 50

The estimates now submitted pro-
vide for the restoration of a Tank situated on
one of the small faders of the river Chayaur in
the south west corner of the North Arcot District.

The tank has a catchment basin
of only 4 square miles, and to retain the limi-
ted supply which is likely to be derived from
so small an area, the embankment will have
to be raised to the height of 50 feet, or about
15 feet higher than the old native bund.

The storage capacity is estimated
at 600,000 cubic yards and the additional reve-
nue at 80 1/4 Rupees or about 12 3/4 per cent on the
estimated cost, Rupees 6,320.

The original design provided for
rough stone revetment with a slope of about
3 horizontal to 1 vertical, and allowed for only
6 feet between high water level and the top
of the embankment. I requested the Super-
intending Engineer's reconsideration of these
and

and other points of less importance; and the estimates have been returned with the slope altered to $1\frac{1}{4}$ to 1 and with the water surface lowered 3 feet

The project has been carefully drawn up by the Range Officer Lieutenant Brockman R.C.; and believing that it will answer his expectations, I would beg to recommend it for sanction.

The estimated amount is made up of the following items.

Earthwork and rough stone 3920
Masonry 800
Blasting for escape 900
Small aqueduct 620

Rupies 6320

Fort. George L. Commandant Col. R.C.
12th November 1868
Chief Engineer for Irrigation

The Secretary to Government
P.W. Dept

LIST of Estimates of Irrigation Works in the District

No. of Estimates	Taluq.	Village Number.	Description of Works.	Amot Estn.	
				New.	Rs.
1	2	3	4	5	
12 of 1868-69	Ar. 6	8	Restoring the Mullappam high level Reservoir		6320
			Ar. 6		
			Col. R.C.		
			Chief Engineer for Irrigation		
			25 June 1868		

Ar. 6
Col. R.C.
Chief Engineer for Irrigation
25 June 1868

P.W. Dept

and other points of less importance; and the estimates have been returned with the slope altered to $1\frac{1}{4}$ to 1 and with the water surface lowered.

drawn
 Brachma
 answer his
 mend it for same
 made up of the follow
 earthwork and
 masonry
 Plaster
 small

Fort. St. George
 12th November 1868
 Chief Engineer for Irrigation
 The Secretary to Government
 P. M. Jeff

LIST of Estimates of Irrigation Works in the District of NORTH ARCOT recommended for the Sanction of the Superintending Engineer.

LIST of Estimates of Irrigation Works in the District of NORTH ARCOOT																
No. of Estimates	Taluq.	Village Number.	Description of Works.	Amount of Estimate		Total.	Ayacut.		Average revenue of last 5 years.	Highest revenue during the above period.	Date & cost of last Repair.		Expected increase of revenue	Explanation of necessity &c.	Remarks.	
				New.	Repair.		Acres.	Assessment.			Year	Amount.			15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
			Restoring the small cistern and high level Reservoir	Rs. 5000	Rs. 1450	Rs. 6450										Has in ruins before the old survey - the tank is a ruin. The masonry shown in column - No. may be expected to be small by direct photo. The project in there for the masonry for Sanction.
																Fuller & Co.
																Ag. Collector

North Arcot
 Collector's Office
 25th June 1868

Fuller
 J. G. Carter

27th Dec 1868

a

12

COLORED INK

1/11/44 09/68
22 Rama Rao/88 22 3959

1/2258/68.

(9)

72

umb

Report to accompany Plans and Estimate for the re-construction of the Melcoorum High Level Reservoir in the Arcot Taluq of the Vellore Range of the North Arcot District.

This Tank is formed by a bund of about 400 feet in mean length, constructed at the gorge of a valley running east and west of a little over two miles in length. The extreme width of the valley is at about two-thirds of its length from its head. Its drainage or catchment basin is about 4 square miles in area, but the actual water spread of the Tank at High Level is of small extent considering the depth of water retained at the bund, viz., 45 feet from bottom of hill channel to High Water level. The cubical contents of the Tank may be taken roughly at 6,00,000 cubic yards, but this must be looked upon only as an approximate statement of its capacity, as the interior is much cut up by channels and encroached upon by spurs of the enclosing hills thereby rendering a true measurement of its contents almost impossible.

The spring water that flows down the channel of the Melcoorum valley is very abundant, and stated by the villagers to be perennial. This leads me to conclude that the construction of the bund will retain such an amount in the soil above as to keep the tank always partially filled, and the more effectually to obtain this, a masonry wall with a foundation depth of 6 feet and superstructure of 24 feet in height has been provided in the estimate. This, it is presumed, will check any permeation through the bed of the channel or bund when the Tank is full.

The sluice of this Tank is in good order having been just constructed at the period when the Tank breached. A high level sluice on the south side will be formed in the calongula for the purpose of irrigating the high lands on the south of the channel.

be realized, representing a

E
-
L

1845

Vellore Range Office,
Vellore, 22nd April 1868.

It appears that by the execution of the proposed work an annual revenue of 804 Rs. will be realized, representing a

channel. The bank
 solid rock
 isting as
 shown
 represent
 will be
 the land
 strongly
 water an
 Tank.
 to forge a
 living, ~~by~~ one water from the Nilcoorpu
 fields and carrying off the surplus water by their
 Tank sluice to irrigate the lands below. This
 would be certainly a feasible, and at the same
 time a profitable, idea.

W. S. Balmanu Esq. P. E.,
 Asst. Engineer, Vellore Range
 Vellore Range Office,
 Vellore, 22nd April 1868.

Public Works Department
 No 3759

Proceedings of the Madras Government
 Under date the 2nd Decr/68

Read the following

From The Chief Engineer for
 Irrigation } A.B. No 92 dated 12th Novr/68/

With these papers
 the Chief Engineer for
 Irrigation submits, with
 his recommendation, 2
 Minutes authorizing to
 Rs 6320 for the re-lin
 ing of the Nil-Coor
 pump High Level Reservoir
 in the North West dis
 trict.

It appears that by
 the execution of the proposed
 work an annual re
 venue of 804 Rs will
 be realized, representing a

a return of nearly 13
per cent on the estimated
outlay -

The Collector ap-
proves of the project,
and as it is likely
to be remunerative, the
Government sanction
the estimate of Rs 6320
and authorize the work
to be proceeded with from
the sum of Rs 4800
provided for it in the
Budget of the Current Official

Mem 178.

9. J. Day 4/10/11 ✓
3. Accts hand ✓
4. Conk No ✓
2. Bill Dues for Insp ✓

Line 440.9

To The Superintending Engr.
U. S. Arsenal

de, de, de

17. 17.

Head.

L. 1.

G. O. 2d Ser. 1868, No. 3759

Nos 44-45

Mr. Eugene Hill and reservoir

Estimated amounting to \$ 6,300 for
the restoration of the Mel. Copernic Hill
Reservoir in the North Carol dis-
trict, mentioned.