

Public Works (1898) Department.

G.O., No. 507. I ✓

✓
DATED

2 July 98

Immediate

33/11

[Despatch Abstract.]

Papauasau Reservoir Project Sanctioning

Estimate of Rs 2300 for preliminary expenses
in connection with the construction of the —
in the University & R.

110
F.L.J. Regd
4/2/98
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Indexed

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IRRIGATION.
ACCOUNT.

Government {1898} of Madras.
PUBLIC WORKS.

Recd.

Regd.

} 1898.

Enclosures

Spare copies

G.O., No. 507 I., 2nd July 1898.

JULY.

Papanasam Reservoir Project

Sanctioning estimate of Rs. 2,300 for preliminary expenses in connection with the investigation of the — in the Tinnevely district.

No. 507 I., 2ND JULY 1898.

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 Kodaikānal, 15th June 1898, No. 453 T.N.

With reference to G.O., No. 53 I., dated 19th January 1898, I have the honour to forward, for your approval and sanction, an estimate, amounting to Rs. 2,300, for preliminary expenses, and a proposition statement for survey establishment required for the investigation of Pápanásam reservoir project in the Ambásamudram taluk of the Tinnevely district as ordered therein.

2. It has been roughly calculated that a total length of 103 miles will require to be levelled and surveyed, and the proposed survey establishment is not excessive.

3. Provision is made in the estimate for hutting the temporary establishment on the hills.

ENCLOSURE.

REPORT to accompany the proposition statement for survey establishment and estimate, preliminary expenses, necessary for the investigation of Pápanásam reservoir project in Tinnevely district.

The proposition statement is called for in G.O., No. 53 I., dated 19th January 1898.

2. The works to be done are—

- (1) Laying down a base line almost parallel to the course of the river and taking cross sections from it at intervals of 2 furlongs up to points about 20 feet above the probable F.T.L. of the reservoir on both sides.
- (2) Taking survey of all the level lines.
- (3) Running a contour line all round above site of dam at the level of the probable full tank level.
- (4) Sinking trial-pits at intervals of 100 feet down to hard rock along the line of dam.
- (5) Taking a detailed longitudinal section along the line of dam showing the levels of trial-pits and taking cross sections at intervals of 100 feet for lengths of 300 feet above and 300 feet below the longitudinal line.
- (6) Clearing jungle for an average width of 10 feet along all the level lines.
- (7) Construction of huts for the accommodation of surveyor and lascars on the hills.

3. There is a survey plan showing the site of the reservoir and its waterspread, dated 14th October 1869, and initialled by Major G. M. Payne. The works to be done are roughly calculated from measurements made from this survey and they are as follows:—

No. 507 I., 2ND JULY 1898.

Length of base line which may be along the forest road about 4 miles—

	MILES.
Sixteen cross sections at intervals of 2 furlongs of an average length of 3½ miles each (16 × 3½)	56
Detailed longitudinal and cross sections of the site of dam about	6
Length of contour line at F.T.L. about	20
Total length of level lines	82
Add 25 per cent. for zigzags in the several lines and probable errors in measurements from survey map	21
Total length to be levelled and surveyed	103
Total length of jungle clearance for 10 feet width	103

Forty trial-pits, taking probable length of dam to be ¼ths of a mile, each 6 feet square and 10 feet deep on the average. $40 \times 6 \times 6 \times 10 = 14,400$.

4. Assuming that one mile of survey and of levels can be taken on the hills in a day, a survey establishment for about 3½ months will be required for surveying and levelling 107½ miles. It is quite certain that field work will be retarded very frequently by rains on the hills and it may take a longer period than 3½ months for field work. It is therefore considered that 7 months will be required in all for field work and plotting. The proposition statement, therefore, provides for a surveyor for 7 months and 8 lascars for 5 months. The pay of the former must be Rs. 80 and of the latter Rs. 8 each per month, as no men can be obtained for less pay for work on the hills.

The 8 lascars are made of—

- 2 chainmen.
- 2 staffmen.
- 1 for carrying instruments.
- 1 do. instrument box.
- 2 men for pegs and clearing branches of trees that may obstruct the field view of the telescope.

An average rate of Rs. 7-8-0 per mile for clearance of jungle and of Rs. 15 per 1,000 cubic feet for sinking trial-pits are assumed.

But payment will be made as per actual quantity and nature of work that may be done.

(Signed) S. GOPALAKRISHNA AIYAR,
Executive Engineer.

16th April 1898.

No. 184 I.

Note by the Chief Engineer for Irrigation.

In G.O., No. 53 I., dated 19th January 1898, it was decided that the Pápanásam reservoir project in the Tinnevely district should be fully investigated and the Superintending Engineer, VI Circle, was directed to make arrangements for making the necessary surveys.

2. He now submits a proposition statement for a surveyor for 7 months on Rs. 80 per mensem and 8 lascars for 5 months on Rs. 8 per month each. The statement has been forwarded to the Chief Engineer, Public Works Department, for the necessary sanction.

3. The cross sections should be taken at intervals of one furlong and not of two as stated in the report, but the estimate has not been altered on this account as the cost of clearing jungle is rather an uncertain item. The jungle is all preserved forest and, for the most part, of dense growth. The clearance of survey lines should be arranged for in communication with the Forest Department.

4. For hutting the survey establishment, clearing jungle, &c., the Superintending Engineer also submits an estimate, amounting to Rs. 2,300, which is approved and may be sanctioned.

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

21st June 1898.

4

No. 507 I., 2ND JULY 1898.

ORDER—No. 507 I., dated 2nd July 1898.
The following estimate is sanctioned:—

Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D.	43. Minor Works and Navigation.
Preliminary expenses for investigating the Papanasam Reservoir Project.	Tinnevely Division.
Estimate	Original Works.
2. This sanction is registered as No. 46 I. of 1898-99.	RS. 2,300
(True Extract.)	

Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, VI Circle,
" Examiner, Public Works Accounts,
" Revenue Department.

Encl. W. D'Moss.

Public Works (1898) Department.

CURRENT No. 5454

W/S to Gov VI

from the Chief Eng for Irrgn

Order

No. 184 I

Dated 21-6-98

Received } 30.6.98
Registered }
Enclosures 79 (2 plans)
Spare copies

SUBJECT.

Papanasam Reservoir —
Estimate of Rs 2300 for
preliminary expenses for
investigating the — note
recommending for sanction
the —

BACK PAPERS.

No.	Date.
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FURTHER PAPERS.

No.	Date.
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PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

42.
Under date the
Read the following
Note by the Chief Eng.
for Irrigation.

+ Eng. G.

Issue

27.6.98.

In G.O. No. 539, of
19 Jan 98, it was decided
that the Papana sam
reservoir project in the
Tinnevely Dt. should
be fully investigated
& the Supg Eng. Vicarib
was directed to make
arrangements for
making the necessary
surveying the proposed
reservoir.

2. He now submits
a proposition statement
for a surveyor for
7 months on Rs 80 per
month & 8 lascar
for 5 months on Rs
8 per month each.

The statement

The estimate if approved
may be checked in
G.O. E.I. said that the
survey should commence
in June. The estimate
appears to have been
submitted a little late.

CCB
17/6/98

Sir, The estimate has been
checked.

17/6/98

the Chief Eng. P.W.D.,
for the necessary sanction.

24 For putting the
survey establishment
clearing jungle, Rs. the
Supt. Eng. also submits
an estimate, amounting to
Rs. 2300, which is
approved & may be
sanctioned.

205079 27.2.78

Order thereon

The following
estimate is sanctioned.

make for the proposed

at the
works
for which

3 The cross sections should
be taken at intervals of
one furlong and not of
two as stated in the report.
But the estimate has not
been altered on this account
as the cost of clearing jungle
is rather an uncertain item.
The jungle is all presumed
fresh and for the most part
of dense growth. The clearance
of survey lines should be
arranged for in communication
with the Forest Department.

RS.

2. This sanction is
registered as No. 46. J
of 1898-99.

20/6/88

W.H.
21.6.98

To The Chief Eng. P.W.D.
Supt. Eng. P.W.D.
P.W.D.
D. Dept.

ERS.

Public Works (1898) Department.

CURRENT No. 22 J.R.

From the Superintending
Engineer
W. C. K. C.

Order

No. 453 J.R.

Dated 15 June 98

Received 18 - DO -

Registered

Enclosures 2

Spare copies

SUBJECT.

Investigation of Papanaem
Reservoir Project — Forwards
for sanction an estimate of Rs
2300 for preliminary expense
and a proposition statement
for survey establishment
required for the —

No.	Date.

FURTHER PAPER

No.	Date.

Report to accompany the proposition ^{estimate} State
- ment for Survey Establishment and preliminary
- ary expenses necessary for the investigation of
Plafavinas and Reservoir Project in Linn County
District -

Map G.

1. The proposition statement is called for in G. O.
No. 531 dated 19th January 1898.

2. The works to be done are: -
(1) Laying down a base line almost parallel to
the course of the river and taking cross sections from
it at intervals of 2 furlongs up to points about
20 feet above the probable F.T.L. of the reservoir on
both sides.

(2) Taking survey of all the level lines

(3) Running a contour line all round above side of
dam at the level of the probable full tank level.

(4) Sinking trial pits at intervals of 100 feet down
to hard rock along the line of dam.

(5) Taking a detailed longitudinal section along
the line of dam showing the levels of trial pits and
taking cross sections at intervals of 100 feet for
lengths of 300 feet above and 300 feet below the longi-
tudinal line.

(6) Clearing jungle for an average width of 10 feet
along all the level lines.

3. ^{Construction of maps for the proposition} Here is a Survey plan showing the site of
the reservoir and its waterspread dated 14th October

1869 and initiated by Major G. M. Payne. The works to
be done are roughly calculated from measurements

made from this survey and they are as follows: -

Length of base line which may be along the forest road
about 4 miles.

16 cross sections at intervals of 2 furlongs of an average length of $3\frac{1}{2}$ miles each — $(16 \times 3\frac{1}{2}) = 56$ miles.

Detailed longitudinal and cross sections of the life of dam about 6 miles

Length of contour line at F.T.L. about 20 miles

Total length of level lines 86 miles

Add 25 per cent for zig zags in the several lines and probable errors in measurements from survey maps 21 $\frac{1}{2}$ miles

Total length to be levelled and surveyed 107 $\frac{1}{2}$ miles

Total length of jungle clearance for 10 ft width 107 $\frac{1}{2}$ miles

40 trial pits taking probable length of dam to be $3\frac{1}{4}$ miles. Each 6 ft square and 10 ft deep on the average — $40 \times 6 \times 6 \times 10 = 14400$.

4. Assuming that one mile of survey of levels can be taken on the hills in a day, a Survey Establishment for about $3\frac{1}{2}$ months will be required for surveying and levelling 107 $\frac{1}{2}$ miles. It is quite ^{Certain} that field work will be retarded very frequently by rains on the hill and it may take a longer period than $3\frac{1}{2}$ months for field work. It is therefore considered that 7 months will be required in all for field work and plotting. The proportion statement therefore provides for a Survey for 7 months and 8 lascaros for 5 months. The pay of the former must be Rs 80 and of the latter Rs 8 each per month as no more can be obtained for less pay for work on the hills.

The 8 lascaros are made of

- 2 Chainmen
- 2 Staffmen
- 1 for carrying instrument box
- 1 " " instrument box
- 2 men for pejs and clearing

An average rate of Rs $7\frac{1}{2}$ per mile for clearing area of jungle and of Rs 15 per 1000 cubic feet for sinking trial pits are assumed. But payment will be made as per actual quantity and nature of work that may be done —

Gopal Das
16.4.28
Executive Engineer

No. 453. T.M.

OFFICE OF THE SUPERINTENDING ENGINEER,
6TH CIRCLE,
Kodaikanal 15th June 1898.
Trichinopoly.

From

Alfred O. V. Boddy
Superintending Engineer,
6th Circle.

To

The Chief Engineer,

for Irrigation

SIR,

2 ENCLOSURES.

1. Estimate
1. Pro. Chalk.
Flagged.

With reference to G.O. No. 53. I.
of 19th January 1898. I have the honor to
forward for your approval and sanction
an estimate amounting to Rs. 2300 for
preliminary expenses, and a proposition
statement for Survey Establishment, re-
quired for the investigation of Pa-
vinsam Reservoir Project in the Am-
bassandram Taluk of the Tinnevely
District, as ordered therein.

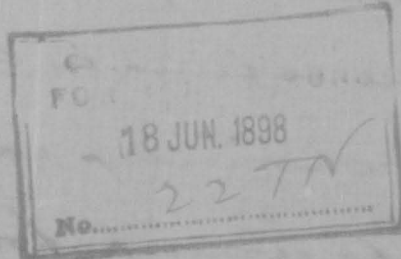
2. It has been roughly calculated
that a total length of ¹⁰³~~107~~ $\frac{1}{2}$ miles will
require to be levelled and surveyed,
and the proposed survey establishment
is not excessive.

3. Provision is made in the esti-
-mate for putting the temporary

establishment on the hills.

I have the honor to be
Sir.
Yours most obedt Servant.

J. T. Roddy
Lieut. Col.
Eng. & Survey, W. Circle



[Handwritten signature]
13/1/98

[Handwritten mark, possibly "28" with a diagonal line]