

(1) Number of pages 2

(2) Date of repair 10/2/31

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. <u>2749</u>	Press
<u>290-291</u>	Mis.
Dated <u>16</u> <u>11</u>	18 <u>70</u> .

Not to be folded or roughly handled

for

No. 290. Read the following letter from the Superintending Engineer, 7th Division, to the Secretary to Government, Public Works Department, dated Camp at Cochin, 5th October 1870, No. 148 :—

In submitting a supplemental estimate for the water supply of the station of

1. Revised Estimate, No. 28, Rupees 23,672.
2. Do., No. 29, „ 4,722.
3. Plan of Pressure Cistern.
4. Plan of masonry lining to Snowdown tunnel.
5. Range Officer's report No. 124, of 26th September 1870.
6. Register of rainfall, etc.

Ootacamund, called for in G. O. No. 2,253, of 19th September 1870, together with the Range Officer's report on the subject, I have the honour to point out that the excess chiefly represents new and additional work not entered in the

original estimate, and ought therefore to be treated more as a new estimate for the purpose of extending the project. The original estimate for the north supply amounted to Rupees 8,000. On reference to the comparative statement it will be observed that the earthwork has been exceeded by Rupees 861, due to the necessity of changing the site of the reservoir dam, while the item of Rupees 833-5-8 saved goes towards covering cost of tunnel (undertaken with the sanction of the Superintending Engineer), which sum in all probability would have been sufficient for the work had not more than half of the line of tunnel turned out to be rock of the hardest description, which could only be removed by blasting; and as the site for the pipes and that of the tunnel now completed are the same, the cost of excavating the line for the pipes would have been similarly increased. The southern project has been worked out for its original estimate of Rupees 4,000, the whole of the increase of its present estimate being additions not contemplated when the estimate was framed. The Range Officer's letter explains the additions now estimated for. The dams of both reservoirs have been successfully completed, and the reservoirs have been gradually filled during the south-west monsoon. The northern and main reservoir has reached a depth of 16·8 feet above the floor of its delivery sluice, or 2·7 feet below the crest of its waste weir, while the smaller or southern reservoir, the Range Officer reports, is quite full, and water to a depth of 3 inches has for some time flowed over the waste weir, the height of which, I believe, is 18 feet above the floor of its delivery sluice. The Government Chemist speaks in the highest terms of the purity of the water.

2. The cost of the requisite arrangements for drawing off the water as near the surface as possible, as pointed out in the papers printed with G. O. No. 1,937, dated 18th June 1868, is entered. This estimate does not, however, include the plan advocated by the Sanitary Commissioner and printed with G. O. No. 3,907, dated 14th December 1869, for the execution of which the Municipality are unable to provide funds. The preparation of an estimate for this work must therefore lie over; but in order to complete the bazaar water supply two pressure reservoirs are now provided for. The probable cost of lining the tunnel, cut through Snowdown saddle with brick has also been included in this estimate; as it is very desirable that the latter work should be completed as early as practicable, I trust Government may be pleased to sanction it, and may have it in their power to allot the required funds, (Rupees 2,500—*vide* estimate,) so as to allow of its being taken in hand at once.

3. The revised estimates now forwarded aggregate Rupees 28,394 against those of Rupees 12,000, sanctioned in G. O. No. 1,503, of 12th May 1868, giving

*Proceedings of the Madras Government, Public Works Department,
16th November 1870.*

an increase of Rupees 16,394 requiring the sanction of Government. The expenditure incurred up to end of the past official year is Rupees 11,069-5-5, and the current year's allotment is Rupees 1,657, which sums, together with those of Rupees 360 promised to be provided in G. O. No. 2,253, of 19th September, and of Rupees 2,500 herein applied for, amount to Rupees 15,586-5-5, leaving a balance of Rupees 12,808 to be provided with funds in the outgoing Budget, or from the Reserve of 1871-72.

No. 291. ORDER THEREON, 16th November 1870, No. 2,749.

CIVIL WORKS, No. 22.

In Proceedings dated 12th May 1868, No. 1,508, the Government accorded sanction to two estimates of Rupees

8,000 and Rupees 4,000, respectively, for the supply of drinking water to the public buildings and private residences on the north and south side of the Ootacamund lake.

2. The Acting Superintending Engineer now submits revised estimates of Rupees 23,672 and Rupees 4,722 for the two schemes, together with a letter from the Officer in charge of the Neilgherry Range furnishing detailed explanations of the causes of excess. The revised estimate for the north supply project includes a sum of Rupees 10,000 for the construction of two cisterns which were not provided for in the original estimate, but which are now considered necessary to meet the requirements of the Ootacamund and Khandal bazaars. These cisterns are intended to hold 77,650 and 40,000 gallons, respectively, and are to be supplied from the Marlimund reservoir. The proposed outlay on them represents 63 per cent. of the increase. The former estimate allowed for simply excavating the saddle near Dr. Pope's school and laying down pipes, but it was subsequently determined to tunnel the saddle. It was believed that this change of plan would not materially affect the cost of the work, but rock having been met with for more than half of the line of tunnel, blasting became necessary and has led to increased expenditure. A sum of Rupees 2,500 is provided for lining the tunnel with brick, and the remainder of the excess is due to the arrangements made for drawing off the supply near the surface in accordance with the suggestion communicated by the Government of India in their orders recorded in G. O. No. 1,937, dated 18th June 1868. To this last-mentioned cause is almost entirely due the excess of Rupees 722 over the original estimated cost of the south supply scheme.

3. The Acting Superintending Engineer reports that the water in the northern or main reservoir has reached a depth of more than 16 feet above the floor of its delivery sluice, and that the smaller reservoir is quite full. The water is stated to be of the purest description.

4. In originally giving their approval to the scheme of water supply under consideration, all that the Government contemplated was to bring the water down to the bazaar and to form a reservoir at the source in order to increase and regulate the supply, but they had no intention of carrying out from Imperial Funds any works designed to store or distribute the water in the town. His Excellency in

*Proceedings of the Madras Government, Public Works Department,
16th November 1870.*

Council is therefore not prepared to sanction the construction of the two cisterns which, if considered indispensable, should be built at the cost of the Municipality. The open channel has been cut to the vicinity of the church, and as its extension to the village of Khandal should be carried out by convict labour, no appropriation of money for the purpose is needed.

5. With these exceptions the excess over the original estimate for the north supply scheme is passed, and Colonel Farewell will submit an amended estimate showing what the increase of cost will be under these orders. The revised estimate of Rupees 4,722 for the south supply scheme is sanctioned.

6. The expenditure up to the end of the past official year was Rupees 11,069, and a sum of Rupees 1,657 has been allotted during the current official year chiefly to cover the cost of the Jail Establishment, Police guards and Sappers working pay, for which purpose a further sum of Rupees 360 was promised to be provided in G. O. No. 2,253, dated 19th September 1870. In addition to this sum Lieutenant-Colonel Farewell requests that Rupees 2,500 may be at once placed at his disposal for lining the tunnel of the north supply scheme, the balance of the estimates being included in the outgoing Budget. His Excellency the Governor in Council regrets that he is not at present in a position to provide the grant applied for, but he hopes to be able to do so from savings as the year advances.

7. In their orders in the Public Department, dated 30th November 1869, No. 1,627, the Government approved of certain suggestions of the Sanitary Commissioner in connection with the supply of drinking water to the residents at Ootacamund. It appears from the papers now before them that the Municipality at that station do not expect to be able to meet any part of the large outlay which will be entailed by the adoption of the Sanitary Commissioner's proposals. The Commissioners therefore desire the completion of the projects now in hand, leaving the further development of the scheme to be undertaken at some future time, and in this arrangement His Excellency in Council concurs, but the Municipality will distinctly understand that the Government cannot authorize any expenditure of Imperial funds on the Water supply of Ootacamund beyond the amount now sanctioned.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To the Superintending Engineer, 7th Division.
" Controller of Public Works Accounts.
" Public Department.

Exd. E. C. Shunker.

W. 7/1/80
Supt. Engineer's Office,
7th Division,
Camp Cochin 5th Oct 1870
From, The Superintending Engineer,
7th Division
To, The Secretary to Government,
D. P. Works,
Madras.

Sir, In submitting a Supplemental
Enclosure
1. Revised Estimate
No. 28 N° 23672 - Estimate for the Water Supply of the
2. D. W. 29 - 4722
3. Plan of Pressure Station of Dotakamund, called for in
Cistern -
4. - of Masonry G. D. W. 2253 of 19th September 1870, together
with the Range Officer's report on the
5. Range Officer's
Report N° 124 of
26 Sept 1870 - Subject, I have the honor to point
out that the excess chiefly represents
new and additional work not entered
in the original Estimate, and ought
therefore to be treated more as a
new Estimate for the purpose of
extending the Project - The original
Estimate for the North Supply amount-
ed to Rupees 8000 - On reference to the

Comparative Statement it will be observed that the Earth Work has been excused by P. 861, due to the necessity of changing the site of the Reservoir Dam, while the item of P. 833.5.8, saved, goes towards covering Cost of Tunnel (undertaken with the sanction of the Superintending Engineer), which even in all probability would have been sufficient for the work had not more than $\frac{1}{2}$ of the line of Tunnel turned out to be Rock of the hardest description which could only be removed by blasting, and as the site for the pipes and that of the Tunnel now completed are the same, the Cost of excavating the line for the pipes would have been similarly increased. The Southern Project has been worked out for its original Estimate of P. 4000, the whole of the increase of its present Estimate

being additions not contemplated when the Estimate was framed. The Range Officer's letter explains the additions now estimated for. The Dams of both Reservoirs have been successfully completed & the Reservoirs have been gradually filled during the South West Monsoon. The Northern & Main Reservoir has reached a depth of 16.8 feet above the floor of its delivery sluice or 2.7 feet below the crest of its waste weir, while the smaller or Southern Reservoir the Range Officer reports, is quite full and water to depth of 3 feet has for some time flowed over the waste weir, the height of which, I believe, is 18 feet above the floor of its delivery sluice. The Government Chemist speaks in the highest terms of the purity of the water. The Cost of the requisite arrangements for drawing off the water as near the surface

[Faint, illegible handwritten text]

1

This except is chiefly composed of
four lines; the substitution of a turned

for a cutting at Santhan involving
an extra outlay of Rs 687.

The masonry lining of the said tunnel,
Rs 2500.

The construction of a large masonry cistern
at or near the old Bazaar Rs 6000.

The construction of a similar reservoir at
Kandul Rs 4000.

There are other charges in respect of
bridges &c which are already estimated
and which need not be alluded to.

The tunnel is cut and must be
sanctioned and the tunnel would not
be secure without a masonry lining
so that charge must be sanctioned also.

The two cisterns remain to be considered.
In my opinion the Govt. ought not to undertake
the construction of them. All that Govt.

was contemplated was to bring water down an
earthen open channel to the Bazaar and to
form a reservoir ^{at the source} in order to increase and
replete the supply. The Govt. never understood
to store or distribute water in the town. I
would disallow the two cisterns unless the
Municipality constructs them if they are
considered indispensable.

The open channel has been cut to the
vicinity of the Church. It is proposed to
extend the channel to the village of
Kandul. This might done by a gratulation
loan of convict labour but no money
should be appropriated for the purpose.

The second & smaller water supply scheme
was estimated to cost Rs 4000. It has
cost Rs 4722. I would sanction the

Excess. The

Copy to be sent to the

to the Public Works Department

to the Public Works Department

to the Public Works Department

... ..
... ..
... ..

No 4012

Referring to the information that
the Govt cannot sanction any expenditure
of Imperial Funds in the water supply
of Otacamund beyond the amount
now prescribed.

I am prescribed. *NP*
I am much grieved that of the two reservoirs
are not built by the Govt. There will
be little or no prospect of the expenditure
which has been incurred in connection with
the water supply project serving of the
disputed area. The municipality have
not money to construct a tank and unless
the Govt. will do so the inhabitants of
the Otacamund & Bagaur will still
have to drink the filthy water of
the lake. I would therefore the reservoirs
if any antiaquarian money can be found.

I concur with the H.E. the Govt. He can
only double the funds by withdrawing them
from other necessary purposes. I only have had it shown already that

Public Works Department
2749
Proceedings of the Madras Government
Under date the
Read the following

From The Superintending Engineer } H.E. No 1148 of 5th October 1870.
7th Dec

See separate memo
N
I O S

In Proceedings dated
12 May 1868 No 1508 the
Government accorded sanc-
tion to two estimates of
Rs 8,000 and Rs 2,000 respec-
tively for the supply of
drinking water to the
public buildings and
private residences on the
north and south side of
the Otacamund Lake.
The Acting Superintending
Engineer now submits
revised estimates of Rs
23672 and Rs 4732 for
the

the two schemes together
with a letter from the
officer in charge of the
Seiberry Range fur-
nishing detailed expla-
nations of the causes of
excess. The revised esti-
mate for the north sup-
ply project includes a
sum of P^o 10,000 for the
construction of two cis-
terns which were not
provided for in the origi-
nal estimate, but which
are now considered neces-
sary to meet the require-
ments of the Olatamund
and Khavotel Barzaro.
These cisterns are intended
to hold 77,650 and 40,000
gallons respectively and
are

are to be supplied from the
Marlunund River. The
proposed outlay on
them represents 63 per-
cent of the increase. The
former estimate allowed
for simply excavating
the saddle near Dr.
Pope's school and laying
down pipes, but it was
subsequently determined
to tunnel the saddle.
It was believed that this
change of plan would
not materially affect the
cost of the work, but
rock having been met
with for more than
half of the line of tunnel,
blasting became necessary
and has led to increased
expenditure

expenditure. A sum of
Rs 2,500 is provided for
lining the tunnel with
brick, and the remainder
of the excess is due to the
arrangements made for
drawing off the supply
near the surface in ac-
cordance with the sug-
gestion communicated
by the Govt of India,
in their orders recorded
in L.O. No. 1937 dated
18th June 1868. So this
last mentioned cause
is almost entirely due
the excess of Rs 722 over
the original estimated
cost of the south supply
scheme.

The Acting Sup Engineer
reports that the water
in

192
in the northern or main
Reservoir has reached a
depth of more than 16
feet above the floor of
its delivery sluice, and
all that the Govt contemplated
was to bring the water down to
the Bazaar and to form a reservoir
at the source in order to increase
and regulate the supply, but they
had no intention of carrying out
from Imperial Funds any
work designed to store or dis-
tribute the water in the town. His
Excellency in Council is therefore
not prepared to sanction the construction
of the two cisterns which, if considered
indispensable, should be built
at the cost of the Municipality.
The open channel has been
cut to the vicinity of the church, and
as its extension to the village of
Chandul should be carried out
by convict labor, no appropriation
of money for the purpose is needed.
With these exceptions the
current official year chiefly
excess over the original estimate for the
north supply scheme is passed, and
Col. Farewell will submit an amended
estimate showing what the
increase of cost will be under
these orders. The revised estimate
of Rs 4,722 for the north supply
scheme is sanctioned.

Reservoir has reached a
depth of more than 16
feet above the floor of
its delivery sluice, and
all that the Govt contemplated
was to bring the water down to
the Bazaar and to form a reservoir
at the source in order to increase
and regulate the supply, but they
had no intention of carrying out
from Imperial Funds any
work designed to store or dis-
tribute the water in the town. His
Excellency in Council is therefore
not prepared to sanction the construction
of the two cisterns which, if considered
indispensable, should be built
at the cost of the Municipality.
The open channel has been
cut to the vicinity of the church, and
as its extension to the village of
Chandul should be carried out
by convict labor, no appropriation
of money for the purpose is needed.
With these exceptions the
current official year chiefly
excess over the original estimate for the
north supply scheme is passed, and
Col. Farewell will submit an amended
estimate showing what the
increase of cost will be under
these orders. The revised estimate
of Rs 4,722 for the north supply
scheme is sanctioned.

working pay, for which
purpose a further sum
of Rs 360 was promised
to be provided in L. O.

No 2253 dated 19 Sept 70.

In addition to this sum
Lieut Col. Farewell
requests that Rs 2500

may be at once placed

at his disposal for lining

the Tunnel of the North

supply scheme the ba-

lance of the estimates

being included in the

outgoing Budget. His

Excellency the Governor

in Council regrets that

he is not at present in

a position to provide the

grant applied for but he

hopes to be able to do so

from

from savings as the year
advances.

In their orders in
the Public Departt
dated 30th November 1869.

In 1627, the Government
approved of certain sug-
gestions of the Sanitary

Commissioner in con-

nection with the supply

of drinking water to the

residents at Olacamund.

It appears from the papers

now before them that the

Municipality at that

Station do not expect to

be able to meet any part

of the large outlay which

will be entailed by the

adoption of the Sanitary

Commissioners proposals

The

5/19/19

Indubitably

Respectfully

Group

... ..
... ..
... ..
... ..
... ..

(10)

The Commissioners therefore
desire the completion of
the projects now in
hand, leaving the fur-
ther development of
the scheme to be under-
taken at some future
time and in this arrange-
ment His Excellency
in Council concurs; but the Municipality will
distinctly understand that
the Govt cannot authorize
any expenditure of Imperial
funds on the water supply
of Dalacamund beyond the
amount now sanctioned.

[Signature]

40
4

- 7. The Supg Engineer
- 5. Controller P. & A. Accts.
- 11. Public Department

17th April 1870

Govt. of 1870 Madras.

PUBLIC WORKS.

To The Superintending Engineer
7th Division

Further Pro 423 D/10-3-7
856 22

Dated

Recd.

G.O. 16 Nov 1870 No. 2749

Nos. 2900 291

Water supply Projects at Coim-
batoor. Vaping orders in
the letter from the Sd/-y of the
y^r Govt submitting estimates
for the Water supply Projects
at Coimbatore.