

Local & Munl. (1896) Department.

MISCELLANEOUS.

G.O., No. 102 M

DATED 20th January 1896

[Despatch Abstract.]

Ootacamund Lake.

Communicating to the Municipal Council, Ootacamund
G.O., Public Works Department, sanctioning estimate of Rs 100000 for
filling in the upper portion of the ---- & ordering to complete
the work with the least possible delay.

BACK PAPERS.

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

FURTHER PAPERS.

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

Local & Municipal Dept.

NS. CURRENT No. *16 M*

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1895} Madras
PUBLIC WORKS.

2
mis

order No. 102 misd 20/1/96

*Communicated to
the Municipal Council, Ootac.
- Camund.*

*V.N.
17/1/96*

*W.H.S.
18.1.96.*

Dated December, 19th.

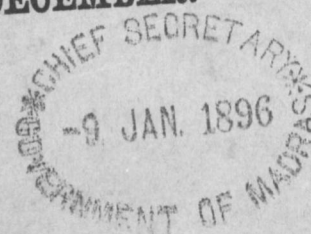
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G.O. No. 3246 W., 19th Dec. 1895.

DECEMBER.



Ootacamund Lake

Estimate of Rs. 1,00,000 for filling in the upper portion of the —, sanctioned, and the work ordered to be carried to completion with the least possible delay.

To The chairman M.C. Ootacamund

Dy 21/1/96

17. 4. 96

16/1 21/1/96

No. 3246 W., 19TH DECEMBER 1895.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From W. B. DEWINTON, Esq., Executive Engineer, Coimbatore Division, to the
Superintending Engineer, IV Circle, dated 23rd October 1895, No. 4276.

As directed in your No. 503/C.I., dated 27th August 1895, I have the honour
to forward herewith plans, sections and estimates for filling in the Ootacamund lake
above the Willow bund.

2. I greatly regret that there has been so much delay in the matter, but much
time was wasted in looking for the old surveys and estimates referred to by you,
which, when found, proved useless, and a fresh survey and sections had to be made.

3. I also regret that the estimate should be so much higher than was anticipated.
The reasons for the large excess are as follows :—

(1) My anxiety that the estimate should be ample for the work required and
should not need revision. To gain this end I have allowed ample provision for the
great settlement which is inevitable when earth is thrown into water of such depth
on a boggy bottom. I have provided for finding a considerable quantity of rock in
the cutting on south side of lake, as it is impossible to say beforehand how much
exists, and I have provided for filling in to 3 feet above present water level, i.e., to
level of race course on north side, to prevent the ground reclaimed from being a
continual swamp. None of these provisions are apparent in former estimates.

(2) Provision for draining the land reclaimed, not included in previous
estimates.

(3) Provision for land compensation.

(4) Provision for extension of lake supply channel and culvert.

(5) Provision for removing turf and surface soil and relaying.

On the other hand my rate is somewhat less on south side of lake than that
provided in previous estimates.

4. I believe that the estimate now submitted will be found to be ample and will,
very possibly, show a considerable saving in execution—while I am sure that, even
if the whole amount is required, it will be money well spent and do incalculable
benefit to the health of Ootacamund.

5. I beg for early orders on the subject, especially with regard to the construction
of the culvert under the Willow bund and excavation of channel thereto, which is the
first step necessary.

No. 413 W.

Copy forwarded with enclosures to the Chief Engineer, Public Works Depart-
ment, with reference to G.O. No. 2066 W., dated 19th August 1895.

2. The undersigned is of opinion—

(1) That the initial rate for earthwork of Rs. 10 per 1,000 is excessive and that
the work should, and can be done, for an initial rate of Rs. 8;

- (2) that laying 3" drain pipes is not necessary ;
 (3) that removing and relaying turf and top soil is not desirable. The result would not be commensurate with the cost.

If the above suggestions are approved, there will be a saving on the estimate of Rs. 27,592.

26th October 1895.

(Signed) J. HANNAN,
 Superintending Engineer, IV Circle.

Note by the Chief Engineer, Public Works Department.

The estimate for filling in the upper portion of the Ootacamund lake, as submitted by the Superintending Engineer, IV Circle, amounts to Rs. 1,27,900, an amount so greatly in excess of what was expected, that it becomes necessary to consider very carefully whether so large an estimate is really necessary.

2. It may be said at once that the estimate prepared some time ago by the Sanitary Engineer's Department was quite insufficient; it provided for raising the reclaimed ground to a level some 2 feet lower than that now provided by Mr. deWinton, which latter is certainly not unnecessarily high, and it provided for leaving one or more small ponds in the deepest portions of the reclaimed area, which would have greatly interfered with the value of the latter as a recreation ground.

3. The first point on which reduction appears possible is the rate for earthwork; Mr. deWinton allows an initial rate of Rs. 8 per 1,000 cubic feet, with an addition of As. 8 for every 20 yards of lead; the Superintending Engineer considers that an initial rate of Rs. 8 should suffice, and Mr. deWinton himself says that the estimate will "very possibly show a considerable saving in execution."

4. The allowance of As. 8 per 1,000 cubic feet for every 20 yards of lead also appears to be excessive; with proper organisation and with appliances for transport, such as any contractor to whom a work of this class may be entrusted will certainly adopt, the cost ought not to be more than half this amount.

5. It is not good policy to underestimate the probable cost of a work, but it is, if possible, worse policy to overestimate it, for in the latter case those responsible for its execution have no motive for economy, and contractors' tenders, as well as the cost of work departmentally executed, have a remarkable tendency to rise up to estimated rates.

6. I consider therefore that the cost of the 5,085,800 cubic feet of earth available from the side cutting should not exceed Rs. 11 per 1,000 cubic feet at the outside, and that the estimated rate may safely be reduced to this amount.

7. It will be noted that Mr. deWinton adds one-sixth to the quantity of earth required for filling, on account of "Settlement." Settlement in the ordinary sense of the word there will certainly be none, as the earth will, after settlement, certainly not occupy a smaller space than it does in its natural position on the flank of the hill from which it is to be taken; but it is very possible that a certain amount over and above what the sections show will be absorbed by the soft and muddy bottom of the lake; I doubt whether this amount will be anything like the one-sixth allowed by Mr. deWinton, but I would not reduce the estimated quantity on this account, but would allow the excess to go towards balancing the reduction proposed below.

8. Again a reduction of one-sixth is allowed in the amount available from the cutting on the side of the lake, on account of rock; this seems an overliberal allowance, as all small boulders and decomposed rock can be used, but may stand, any surplus being used as proposed at the end of the previous paragraph.

9. A very serious item in the estimate is the heavy cost of the earth (1,778,300 cubic feet) to be obtained from the Jail Hill owing to the fact that the side cutting will not give the full quantity required. If the views expressed in the two last paragraphs are correct, the quantity to be thus obtained will not be quite so great as that

estimated, and a still further reduction may be made by taking the side cutting down to a lower level than that shown on the sections; there is no reason why this should be 5 feet above the ground level of the reclamation, and it may be taken at least 3 feet lower than the sections show. This will give in round numbers an additional supply of quite 600,000 cubic feet, and with a moderate allowance for the extra earth obtainable, if the loss by settlement and allowance for rock is less than Mr. deWinton's estimate, the quantity to be obtained from the Jail Hill would probably not greatly exceed one million of cubic feet.

10. The cost of the earth obtained from this source is so great, and the objections to cutting into the side of the hill are, in my opinion, so strong, that it is desirable to consider whether it is worth while using this million of cubic feet at all.

11. It will be seen from the estimate that the filling for the first 200 feet from the Willow bund, i.e., up to about cross section No. 5 on the plan practically absorbs this quantity, which would be used if the filling stopped at cross section No. 5 instead of extending right up to the Willow bund, and I am strongly of opinion that this plan should be adopted; there is no particular virtue in the Willow bund which should render it compulsory for the reclamation to extend thereto, and the nearer we approach to it, owing to the increasing depth of water, the more costly the reclamation becomes.

12. The reduction of 200 feet in the length of the recreation ground will be insignificant as compared with its total length, while the saving in cost will be substantial.

13. A further saving of Rs. 8,088 may be made by the omission of the provision for drainage pipes, which I agree with the Superintending Engineer in considering entirely unnecessary; to say nothing of the fact that I think Mr. deWinton has considerably underestimated their cost.

14. A somewhat doubtful point in the estimate is the provision of Rs. 5,775 for removing and relaying the turf on the race course, but on the whole, I think it should be allowed.

15. If the suggestions made above be approved, the estimate will be altered as follows:—

	RS.
<i>Deduct—</i>	
Reduction of rate at Rs. 2-8-0 per 1,000 cubic feet on 5,085,800 ...	12,714
Reduction of earth from Jail Hill	32,009
Omission of earth from Jail Hill	8,088
Drain pipes	
Total ...	52,811
<i>Add—</i>	
600,000 cubic feet extra from southern cutting at Rs. 11 per 1,000...	6,600
Total ...	46,211

Reducing the total amount of the estimate to Rs. 81,189, or, say, Rs. 82,000, an amount which, though considerably in excess of what was expected, is not in my opinion excessive, considering the immense value of the ground which will be reclaimed.

MADRAS,
 18th November 1895.

(Signed) J. PENNYCUICK, Colonel, R.E.,
 Chief Engineer, P.W.D.

No. 3914 C.

I return the plan with the centre line of rails marked thereon. The inner rail will be about 14 feet from the wire fence on the Willow bund at its nearest point. The Willow bund road will not therefore require removal.

The railway could, if desired, be shifted 10 feet or 15 feet further away from the Willow bund road.

(Signed) F. R. UPCOTT,
 Consulting Engineer for Railways.
 9th December 1895.

ORDER—No. 3246 W., dated 19th December 1895.

It appears from the papers that the cost of filling the upper portion of the Ootacamund lake is considerably greater than was anticipated, and is estimated by the Executive Engineer, Coimbatore Division, at Rs. 1,27,900; this amount can, in the opinion of the Chief Engineer, be reduced to Rs. 1,00,000 by the measures proposed in paragraphs 6 to 9 and paragraph 13 of his note.

2. The estimate reduced to Rs. 1,00,000 by the modifications mentioned in paragraph 1 of this order is accordingly sanctioned,* and the work should be put in hand and carried to completion with the least possible delay.
- * Registered as Provincial No. 87 W. of 1895-96 and classified as Miscellaneous Public Improvements, Original Works.

3. The Superintending Engineer, IV Circle, will report as soon as possible what sum he can expend during the current year, and whether he can carry it out with the staff at present at his disposal; if not an early application for the additional establishment required should be submitted.

(True Extract.)

C. R. Burton

Under Secy. to Govt., P.W.D.

To the Superintending Engineer, IV Circle,
with plans and estimate (24).
" Examiner, Public Works Accounts,
" Local and Municipal Department, for communication
to the Municipal Council, Ootacamund.

Exd. Shaik Karim.
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READ AGAIN G.O., No.
189 ,

DATED

CURRENT No.

ENCLOSURES TO G. No.

ORDER OF GOVERNMENT

A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

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