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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No. / B.P. No: 3052	Press. / Mis.
Dated 17-12-1878	197 :

Not to be folded or roughly handled

Archives I—5,806—24-2-78.

GP

3652
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

29th November 1878, No. 979 I.

Irrigation.
Account.

Read the following paper :—

No. 147. Endorsement of the Acting Chief Engineer for Irrigation, dated Fort St. George, 23rd November 1878, No. 346 I.

From G. T. WALCH, Esq., Acting District Engineer, Godavari, to the Chief Engineer for Irrigation, dated Dowlaishvaram, 28th October 1878, No. 2,441.

1 Lieutenant Dorward's letter, No. 171, in original.
2 Plans.
2 Estimates.
* 2 Plans.
2 Estimates.

I HAVE the honor to forward herewith letter (to be returned), No. 171, of 20th July 1878, from the Officer in charge of the Western Delta, together with its enclosures,* proposing two masonry drops on the Agadalunkah.

2. This channel is the one sanctioned in G.O., No. 2,065, dated 30th July 1874, and the necessity for "drops" on it was always foreseen and will be found referred to in paragraph 8 of the District Engineer's letter, No. 1,050, of 3rd July 1874.

3. I would recommend the construction of the works as now proposed. The combining of the bridge required over the channel with one of the "drops" is the cheapest and neatest way of providing it, and as the road was in existence before the channel was dug the means of crossing are not debitable to Local Funds.

4. When I originally, as Officer in charge of the Western Delta, suggested this channel I specially pointed out† that it was for irrigating land for which no provision is made in the "Projects," and that being the case I should have thought its cost might legitimately have been met from "Extensions and Improvements;" but as the earthwork and head sluice of the channel have been charged to the provision for the Ellore Canal in the "completion estimates" these works, if sanctioned, will, I suppose, also have to be charged to the same head, and it is considered that they may be so without excess on the total sanction for that canal (Rs. 2,76,604)‡ as the provisions for compensation for land (Rupees 7,440) for the "mid-level channel" and for the Pandikodu drain (Rupees 5,385) are considerably greater than will be required.

† Letter, No. 428, of 30th November 1873.

‡ See G.O., No. 1,362, dated 20th April 1877.

5. Three thousand, one hundred, and ten acres of land paying full water-tax were irrigated under this channel in the past year, and though the quantity of water being passed into it this year is only that for acres 3,000 at 1·9 cubic yards per hour, much larger area than that is being cultivated under it this year.

From Lieutenant A. R. F. DORWARD, R.E., Assistant Engineer in charge, Western Delta Division, Godavari District, to the District Engineer, Godavari District, dated Chettipet, 20th July 1878, No. 171.

I HAVE the honor to forward herewith two plans and estimates for drops on Agadalunkah channel.

2 Plans.
2 Estimates.

2. These drops are required to lessen the great fall of the water in the channel for the first mile.

3. At present the water in rear of the head sluice stands at about + 23, and at one mile is about + 14, giving a fall of 9 feet in the first mile. Owing to this great fall the channel, since it was dug, has scoured out considerably.

4. The fall in the second and third miles is also considerable, but there the channel has stopped scouring out and has arrived at a permanent section and drops are not necessary.

5. At two miles the water stands at + 10·5, at three miles at + 7·25, at four miles at + 6·5, and at eight miles, the end of the channel, at + 5·25.

At three miles the ground level is about the same as at the end of the channel, *i.e.*, about + 4·5.

6. For the first mile the soil is of a light friable nature, easily scoured away; for the next three and half miles it is of a stiff soapy nature, unfit for cultivation, and able to stand a very considerable velocity of water without scouring.

7. It is now proposed to drop the water immediately in rear of the head sluice to + 21·0 and to raise it to + 18·25 at one mile.

8. The cost of the drop immediately in rear of the head sluice is estimated at Rupees 375, and of that at one mile, which has been designed with a bridge having a roadway 9 feet wide to accommodate bandy traffic on the village road from Gundugole to Ellore, at Rupees 1,100.

The bridge is a very necessary work as the villagers who use the road have been put to considerable inconvenience for want of it. A temporary bridge, suitable for bandies and protected from scour, would be an expensive work and the gravelled crossing the villagers have hitherto had has never stood well.

9. The fall of the channel in the first mile will be reduced by the construction of the drops from 9 feet to 2·75 feet, and I do not think the velocity that will be generated by the latter fall will prove too great. Very probably the water in rear of the sluice will not stand so high as + 21·0 as the channel has scoured out to a very irregular section, and it is difficult to calculate what it will stand at.

The bed level at quarter mile is at present + 19·4, at half mile + 16·47, at three and quarter mile + 13·93, and at one mile + 12·5).

At quarter mile the bed has scoured out to a width of 14 feet; at half mile the width is 6 feet; at three and quarter mile 4 feet; and at one mile 10 feet.

From one to three miles the average bed width is about 10 feet. Below three miles the channel has not changed the section it was originally dug to.

10. A very little extra banking will be required for a short distance about drop at one mile. This is allowed for under "making banks and approaches" in the estimate for the drop.

11. There is no provision in the Ellore Canal completion estimate for these works; but if it be considered advisable to charge them to that estimate, instead of to funds specially provided from Revenue or Capital Ordinary, there is no doubt that it can be done without exceeding the total estimate, Rupees 2,76,604, for the Ellore Canal, the provisions for compensation for land in that estimate being unnecessarily large.

SUBMITTED to Government.

2. The estimates are recommended for sanction as follows:—

Godavari, Delta System
Revenue, Extensions and Improvements.
(3)—Distributaries.
Ellore Canal.
Agadalunkah Channel.
C—Works.

	Estimates. Rs.
Constructing drop at first mile	1,100
Do. do. in rear of head sluice	375
Total ...	1,475

(Signed) J. O. HASTED, Lt.-Col., R.E.,
Ag. Chief Engineer for Irrigation.

3052
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No. 148. ORDER THEREON, 29th November 1878, No. 979 I.

THE estimates, amounting to Rupees 1,475, for constructing drops on the Agadalunkah Channel of Ellore Canal in the Godavari Delta System are sanctioned under Revenue Extensions and Improvements.

2. This sanction has been registered as No. 267 I of 1878-79.

(True Extract.)

Lt.-Col., R.E.,
Acting Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Superintending Engineer, First Circle.
" Chief Engineer for Irrigation.
" Examiner of Public Works Accounts.
" Revenue Department.
" Collector of Godavari.

Exd. C. Howarth.
14 Spare Copies

Revenue Depatt

IRRIGATION.
ACCOUNT.

No 5494.

Govt. of [1878] Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,
FIRST CIRCLE,
&c., &c., &c.

Dated November 29th.

Issued

Encd. 14 Accr Encl.

G. O., 29th November 1878, No. 979 I.

Des Ltr

NOVEMBER.

Nos. 147-148.

No. 3052
Communicated to the
Board of Revenue.
17. Dec /78.

Agadalunkah Channel, Godavari Delta.—Sanctions estimates for constructing drops on the —.

11 Feb Board's Proc