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(1) Number of pages

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

241

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1928 Press —Mis.—

288-89

Dated 14—6— 1869.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 14th June 1869.

No. 288. Read the following Endorsement of the Acting Chief Engineer for Irrigation, dated Fort St. George, 31st May 1869, No. 200:—

Read the following letter from the Superintending Engineer, 2nd Division, to the Chief Engineer for Irrigation, dated Camp at Masulipatam, 17th May 1869, No. 33.

1 Sketch.
1 Detailed Estimate.
1 Abstract do. Rupees 21,360
1 Specification Report.

I HAVE the honour to forward plans and estimate for digging a channel by which to carry the water from the country on the right bank of the Masulipatam canal and the Sultanagram swamp to the creek running into the sea, near the Fort of Masulipatam; the fourth item in paragraph 8 of letter from this Office No. 7, 17th April 1865.

2. The work was begun, and Rupees 3,383 were expended from Local Funds under a misapprehension that the work was of a purely municipal nature.—*See* G. O., No. 1,502, 2nd June 1865.

3. In No. 118, 18th November 1868, Colonel Winscom has pointed out the mistake, for from want of an outlet much land is swamped for a considerable period of time, and probably in consequence Reh (Sawadu) is engendered.

4. Rupees 5,000 have been, as promised in your No. 108, 1st December 1868, allotted in Budget No. 419, page 28; but after we have paid our debt of Rs. 3,383, we shall have only Rupees 1,617 for this important work.

5. I hope that not only will early sanction be accorded, but an additional allotment of Rupees 5,000.

6. The calculations have been made by Mr. McAlpine from Bidders' Tables, and have been carefully checked by myself.

From Lieutenant-Colonel G. V. WINSCOM, R. E., Superintending Engineer, 2nd Division, to the Chief Engineer for Irrigation, dated Bezoarah, 18th November 1868, No. 118

IN G. O, No. 1,502, dated 2nd June 1865, the late Superintending Engineer of this Division placed before Government a scheme for making a cut through the sand ridge at Sevagunga, in order to drain off the vast accumulation of water which, coming from the west, inundates and renders impassable for many months in the year several miles of country, much of which might be recovered by the drainage suggested, and it was further intended that by this very useful work the tidal creek at Masulipatam should be deepened · but in the G. O. in question it was decided that the scheme should lie over.

2. There seems to have been some misapprehension of orders from the beginning on the matter, probably owing to the statement that of the Rupees 60,620, for which estimates were submitted, part was spoken of as chargeable to Municipal, part to Local, part to Income Tax, and part to Imperial Funds At any rate, Rupees 2,608-14-1 were spent on making the cut through the sand ridge at Sevagunga, before I stopped the work It is a project that should be taken up soon, for it bears in itself the elements of great good, both in the reclamation of land and the improvement of the Masulipatam creek; and whilst much regretting that any work should have been unwittingly done without the sanction of Government, I would respectfully ask not only that the amount already spent may be duly sanctioned but that early provision be made for the continuation of the work to the full extent originally proposed.

THIS letter from the Superintending Engineer, 2nd Division, transmits estimates, Rupees 21,360, for the drainage channel near Masulipatam, which has been entered in the Budget of 1869-70, and an allotment of Rupees 5,000, for the year, made in anticipation of the

Miscellaneous Public Improvements, Item 419, page 28.

receipt and sanction of an estimate. It forms a portion of the works on which orders were passed by Government on the 2nd June 1865, No. 1,502.

2. From the late Superintending Engineer's letter* it appears that the channel will drain a large extent of country which is now flooded and rendered impassable for many months, and it is considered that much of this area might be reclaimed and made useful were this channel, which was commenced under a misapprehension after the passing of the Order of Government above quoted, completed.

* No 118, 18th November 1868.

3. Colonel Moberly reports that Rupees 3,383 have been expended from Local Funds, and it is mentioned that it is intended, on the sanction of the estimate, to repay this. It appears to be tolerably clear that the work is one which, if beneficial to the town of Masulipatam, is also much needed as a part of the arrangements necessary for improving this part of the Kistna Delta, and it would seem to be advisable, therefore, that this drainage scheme should be treated entirely as an Imperial work.

4. The balance of the allotment available for the current year's expenditure, after reimbursing Local Funds, would be only Rupees 1,617, and, if funds are available, an increase of the allotment of the current year to 10,000 Rupees is recommended.

(Signed) J. MULLINS, Major, R. E,
Acting Chief Engineer for Irrigation.

No. 289. ORDER THEREON, 14th June 1869, No. 1,928.

CIVIL WORKS, No. 49.

THE Government sanction the estimate of Rupees 21,360, for excavating a drainage channel from the Sultanagram swamp aqueduct, on the Masulipatam canal, to the Tidal creek, but there are no funds available, under Miscellaneous Public Improvement, for the increase of the allotment made for this work, against Item No. 419 of the Budget. If therefore it be found necessary to reimburse Local Funds, at once, the expenditure made when the work was supposed to be a municipal one, the further expenditure in the current year must be confined to the balance of the allotment of Rupees 5,000 which will then alone be available.

(True Extract.)

(Signed) J. MULLINS, Major, R. E.,
Ag. Joint Secretary to Government.

To the Superintending Engineer, 2nd Division.
" Controller of Public Works Accounts
" Accountant-General
" Revenue Department.
" Chief Engineer for Irrigation

Exd. S. T Augustin.

Supdg. Engrs Office 2nd Dn
Camp Masulipatam
17th May 1869.

From The Superintending Engineer
2nd Division,

To The Chief Engineer
for Irrigation,

Sir,

I have the honor to forward plans and estimate for digging a channel by which to carry the water from the country on the right bank of the Masulipatam Canal and the Sultanagram swamp to the creek running into the sea near the Port of Masulipatam, the fourth item in para 8 of letter from this Office No 7. 17th April 1865.

2 The work was begun and Rs 3383 were expended from Local Funds under a misapprehension that the work was of a purely municipal nature see G.O. No 1502. 29 June 1865.

3 The No 118. 18th November 1868. Colonel

Mr Cowan has founded on the mistake. for
from want of an outlet much land is swamp-
-ed for a considerable period of time. and
probably in consequence Rot (Sausada) is
engendered.

4. Rs 5000 have been as provided in
year Rs 108. 12 December 1868, allotted in
Budget Rs 419. p. 28. but after we
have paid our debt of Rs 3383 we shall
have only Rs 1617 for this important work.

5 I hope that will early will early have
been accorded but an additional allotment
of Rs 5000.

6 The calculations have been made by
Mr Mcalpine from Bidders Tables and
have been carefully checked by myself.

I have the honor to be,

Sir,

Your Most Obedt Servant

J. Moberly Lieut R.E.

Supdg. Engineer D.M.

No 118

Supt Engineers Office
2d Div. Nagpore
18th November 1868.

From Lieut Colonel G. V. Nuscombe RE
Supt Engineer 2d Div.

To Lt Colonel J. C. Anderson RE
Chief Engineer for
Irrigation

Sir,

In G.O. No 1502 dated 22nd June 1865, the late Superintending Engineer of this Div. placed before Government a scheme for making a cut through the Sand Ridge at Senagpur in order to drain off the last accumulation of water which coming from the west, inundates and renders impassable for many months in the year several miles of country, much of which might be recovered by the drainage suggested, and it was further intended, that by this very useful work, the tidal creek at Mandalipatam should be deepened. But in the G.O. in question it

No 253

Supt Engineer 2d Div.

To

The Chief Engineer
for Irrigation

Nagpore 21st May 1869

Sir

I have the honor to forward herewith a Memorandum of Estimate for clearing a Channel to the Tidal Creek at Mandalipatam

was decided that the scheme should lie over.-

2. There seems to have been some misapprehension of orders from the beginning on the Matter, probably owing to the statement that of the Rs 60620. for which Estimates were submitted, part was spoken of as chargeable to Municipal, part to Local, part to Income Tax and part to Imperial Funds.- At any rate Rs 2608-14-1. were spent on making the cut through the sand ridge at Venagunga before I stopped the work.- It is a project that should be taken up soon for, it bears in itself the elements of great good, both in the reclamation of land and the improvement of the Masulipatam Creek. And whilst much regretting that any work should have been unwittingly done, without the sanction of Government, would respectfully ask not only that the amount already spent may be duly sanctioned, and that early provision be made for the continuation of the work to the full extent originally proposed.-

I have the honorable
Sir
Your Most obed Servt
Commissioner & Collr
Supt Engineer &c &c

№ 200

Memorandum

This letter from the Superintending Engineer 2nd Division transmits estimate, Rupees 21,360 for the Drainage channel near Masulipatam, which has been entered in the Budget of 1869-70 and an allotment of Rupees 5,000 for the year, made in anticipation of the receipt and sanction of an estimate. It forms a portion of the works on which orders were passed by Government on the 2nd June 1865. № 1502.

Miscellaneous Public Improvements Item 419 page 28.

2 From the late Superintending Engineer's letter it appears that the channel will drain a large extent of country which is now flooded, and rendered impassable, for many months, and it is considered that much of this area might be reclaimed and made useful, were this channel, which was commenced under a misapprehension of-

ter

№ 118 - 18th November 1868

From The Superintending Engineer 2nd Division
To The Collector & Superintendent of Irrigation

Dated Beziwada 18th November 1868
Recd &c - 24th -
Regd &c - 1118.

Under the circumstances circumstances stated in the accompanying letter I request that the expenditure incurred (before the opening of the work) on "making a cart road Landbridge between Nos. 2608-14" may be charged to Canals and that early provision be made for Gratuity = ation if this work be carried out to full extent originally proposed. Vide G.O. № 1502 Dated 22nd June 1865.

From The Asst Engr
№ 105 Dt - 14th Dec/68

Copy

Memo of Rent &c

Carried forward — 135934

ter the passing of the order of Government above quoted, completed.

3 Colonel Moberly reports that Rupees 3383 have been expended from Local Funds, and it is mentioned that it is intended, on the sanction of the estimate to repay this. It appears to be tolerably clear that the work is one which, if beneficial to the town of Masulipatam, is also much needed as a part of the arrangements necessary for improving this part of the Kistna Delta, and it would seem to be advisable therefore that this drainage scheme should be treated entirely as an Imperial work.

4 The balance of the allotment available for the current year's expenditure after reimbursing Local Funds would be only Rupees 1,617, and, if funds are available, an increase of the allotment of the current year to 10,000 Rupees is recommended.

Fort St George
31st May. 1869

Lt Colonel Chamberlain Major R.E.
Acting Chief Engineer for Irrigation.

To

The Secretary to Government P.W. Dept
with 6 enclosures.

No.	1 Cuttle Height	2 Sub-leg Bastn	3	4 7×3	5 Cost of Centre 4×5	6 Cost Content of Centre 4×5	7 Sub-leg & Slope	8 1×7	9 Rate Value	10 Content Prism 8×9	Total Content Cubic yards 6·410
											131
						Brought forward					52875
20	5	5/6	12.2	61.0	50	3050.0	61	305	lifts	458	35108
21	5	5/6	12.2	61.0	"	3050.0	61	305	"	458	35108
22	5	5/6	12.2	61.0	"	3050.0	61	305	"	458	35108
23	5	5/6	12.2	61.0	"	3050.0	61	305	"	458	35108
24	5	5/6	12.2	61.0	"	3050.0	61	305	"	458	35108
25	5	1/2	8.6	43.0	"	2150.0	32	160	"	240	2390
26	5	1/2	4.9	24.5	"	1225.0	32	80	"	120	1195
27	5	1/2	8.6	43.0	"	2150.0	32	160	"	240	2390
28	5	5/6	12.2	61.0	"	3050.0	61	305	"	458	35108
29	5	5/6	12.2	61.0	"	3050.0	61	305	"	458	35108
30	5	5/6	8.6	43.0	"	2150.0	32	160	"	240	2390
31	2.5	5/6	8.6	21.5	"	1075.0	32	80	"	120	1195
32	2.5	1/6	14.7	36.8	"	1840.0	88	220	"	330	2170
33	5	1/2	18.3	91.5	"	4575.0	138	690	"	1035	5610
34	5	1/2	19.6	98.0	"	4900.0	157	785	"	1178	6078
35	5	1/2	17.1	85.5	"	4275.0	120	600	"	900	5175
36	5	5/6	15.9	79.5	"	3975.0	104	520	"	780	4755
37	5	1/6	15.9	79.5	"	3975.0	104	520	"	780	4755
38	5	1/6	15.9	79.5	"	3975.0	104	520	"	780	4755
39	5	1/6	15.9	79.5	"	3975.0	104	520	"	780	4755
40	5	1/2	17.1	85.5	"	4275.0	120	600	"	900	5175
41	5	5/6	18.3	91.5	"	4575.0	138	690	"	1035	5610
						Carried forward					359345

No 2274

From

The Maj Chief Engineer
for Irrigation.

To

The Secretary to Govt
P W Dept

Dated 31st May 1869.
Recd 31st May 1869.

No 200 3 E. 6 S.T

Encls 6.

+ 2 Encls

Recommends for the sanction of Government an estimate of Rs 21,360 for a drainage channel near Masulipatam.

No 1928. 14 June 69

No 288

C. 2nd June 1869 R. 44.

No 9 of 1869-70

Calculation of the Cubical Contents of Drainage Channel from Sultanagarum Swamp Aqueduct to Levagungah Bridge.

Bottom width 30 feet: Slopes 1½ to 1

No.	1 Length	2 Height	3 Tabular Number of Centre	4 1×3	5 Width of Centre	6 Content for Centre 4×5	7 Tabular Number of Slopes	8 1×7	9 Ratio to Vertical	10 Content of Slopes 8×9	Total Content Cubic Yards 6+10
					Feet						
					Brought forward						135.934
42	5	8/8	19.6	98.0	50	4900.0	156	780	1½	1170	6070
43	5	8/7	18.3	91.5	"	4575.0	138	690	"	1035	5610
44	5	8/7	18.3	91.5	"	4575.0	138	690	"	1035	5610
45	5	8/8	19.6	98.0	"	4900.0	156	780	"	1170	6070
46	5	13/8	25.7	128.5	"	6425.0	275	1375	"	2063	8488
47	5	13/12	30.6	153.0	"	7650.0	382	1910	"	2865	10515
48	2.63	12/11	28.1	73.91	"	3696.0	324	852	"	1278	4974

Tidal Creek to Sevagungah Bridge — Cubic Yards — 185 07

Exd for Masulipatam Range
Offce Masulipatam
10th May 1869

J. M. McAlpine
Executive Engineer in Charge
Exd for Masulipatam Range

J. Lucchesi Lieut Col. R.E.
Superintending Engineer Exd Dn

Supg. Engr's Office 2nd Dn
Camp Masulipatam.
17th May. 1869.

No.	1 Length	2 Height	3 Tabular Number of Centre	4 1×3	5 Width of Centre	6 Content for Centre 4×5	7 Tabular Number of Slopes	8 1×7	9 Ratio to Vertical	10 Content of Slopes 8×9	Total Content Cubic Yards 6+10
					Feet						
1	2.37	12/10	26.9	63.75	30	1912.5	297	603.9	1½	905	2818
2	5	10/10	24.4	122.0	"	3660.0	244	1220.0		1830	5490
3	5	10/7	20.8	104.0	"	3120.0	178	890.0		1335	4455
4	5	8/6	17.1	85.5	"	2565.0	121	605.0		908	3473
5	5	7/5	14.7	73.5	"	2205.0	89	445.0		668	2873
6	5	5/5	12.2	61.0	"	1830.0	61	305.0		458	2288
7	5	6/5	13.4	57.0	"	1710.0	74	370.0		555	2265
8	5	5/4	11.0	55.0	"	1650.0	50	250.0		375	2025
9	5	4/4	9.8	49.0	"	1470.0	39	195.0		293	1763
10	5.67	4/4	9.8	55.57	"	1667.1	39	221.1		332	1999
								Cubic Yards.			29449

Exd for Masulipatam Range
Offce Masulipatam
10th May 1869

J. M. McAlpine
Executive Engineer in Charge
7th or Masulipatam Range
Exd

Public Works Dept.

Calculation of the Cubical Contents of Drainage Channel from Lavaguzah Bridge to Tidal Creek.

Bottom width 50 feet. Slopes 1½ to 1

No.	1 Length	2 Depths	3 Tabular No. of Centres	4 1×3	5 Width of Centres	6 Content of Centres 4×5	7 Tabular No. of Slopes	8 1×7	9 Ratio to Vertical	10 Content of Slopes 8×9	Total Content Cubic Yards 6+10
	Ch				Feet						
1	5	2/2	4.9	24.5	50	1225.0	10	50	1½ to 1	75	1300
2	5	2/2	4.9	24.5	"	1225.0	10	50	"	75	1300
3	5	3/2	6.1	30.5	"	1525.0	16	80	"	120	1645
4	5	3/2	6.1	30.5	"	1525.0	16	80	"	120	1645
5	5	3/2	6.1	30.5	"	1525.0	16	80	"	120	1645
6	5	3/3	7.3	36.5	"	1825.0	22	110	"	165	1990
7	5	4/3	8.6	43.0	"	2150.0	30	150	"	225	2375
8	5	4/4	9.8	49.0	"	2450.0	39	195	"	292	2742
9	5	5/5	12.2	61.0	"	3050.0	61	305	"	458	3508
10	5	5/5	12.2	61.0	"	3050.0	61	305	"	458	3508
11	5	5/5	12.2	61.0	"	3050.0	61	305	"	458	3508
12	6	1/4	12.2	61.0	"	3050.0	62	310	"	465	3515
13	5	5/4	11.0	55.0	"	2750.0	50	250	"	375	3125
14	5	5/5	12.2	61.0	"	3050.0	61	385	"	458	3508
15	5	5/4	11.0	55.0	"	2750.0	50	250	"	375	3125
16	5	6/4	12.2	61.0	"	3050.0	62	310	"	465	3515
17	5	6/5	13.4	67.0	"	3350.0	74	370	"	555	3905
18	5	5/5	12.2	61.0	"	3050.0	61	305	"	458	3508
19	5	5/5	12.2	61.0	"	3050.0	61	305	"	458	3508
						Carried forward					52875

Enclosed in a letter from the Superintg 2d Drain to the Chief Engr & Secy to Govt No 33 2/17 dd May 1869.

P.W. 2274/69.

Detailed Estimate No 9 of 1869-70
Excavating Senaganga Drainage Chl from Sultangaram Swamp Aqueduct to Tidal Creek Kamoum Lng
to Rs 21,360 — — —
From 1st June 69 to 1288.

One sheet: Retd to Controller.
19/2/70

Public Works Dept.
No 1928 17h

Proceedings of the Madras Government.
Under date the 16 June 1869.
Read the following.

From the Secy Chief Engineer for Irrigation
Hereunder No 2007 31 May 69

The Government sanction the estimate of Rupees 21,360, for excavating a Drainage channel from the Sultanagram Swamp Aqueduct, on the Masulipatam Canal, to the Tidal Creek, but there are no funds available, under Miscellaneous Public Improvement, for the increase of the allotment made for this work, against Item No 419 of the Budget. If therefore it be found necessary to

Re-

reimburse Local funds,
at once, the expenditure made
when the work was supposed
to be a Municipal one, the
further expenditure in the
current year must be con-
fined to the balance of the
allotment of Rs. 5000 which
will then alone be available.

670 Supdg Engr 2d Dn Circle &c
4. Controller P. W. Accts
5. Accountant S.
1. Revenue Dept.
3. Ch. Engineer for Irrigation

Dept. 17/6/14

14	5	3/5	12.2	61.0	"	3050.0	61	305	"	458	3508
						Carried forward					52875

Rec 2274

Govt. of {1869} Madras.

PUBLIC WORKS.

To The Superintending Engr.
2nd Division

Dated

Recd 5.11 Ins 4

G O 14 June 1869, No. 1928

Nos 288-289

Drainage channel Estimate
of Rs 21360 for excavating a
drainage channel from the
Sullanagram Swamp Agreed
on the Manalipalam Canal,
to the Tidal creek, sanc-
-tioned in the Remarks.