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MADRAS RECORD OFFICE

Government of Madras

Public works DEPARTMENT

G.O. No.	1167	Press
B.P. No.		Mis.
386-381		
Dated	23-4-	1873.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
23rd April 1873.*

No. 380. Read the following letter from Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Fort St. George, 25th March 1873, No. 92 :—

I HAVE the honour to submit the following report on the progress made with the works of the Madras Irrigation and Canal Company during the quarter ended 30th September 1872.

Expenditure during the Quarter.—The total expenditure for the period under review amounted to Rupees 23,732, as compared with Rupees 30,271 for the previous quarter.

2. The following is a detailed statement of the items on which the above outlay was made :—

1st Section, Main Canal (including head-works).—Rupees 500-10-2 on the 1st Section, Main Canal, 1 to 17 $\frac{1}{4}$ miles, the items being—

Anicut and head-works at Soonkasala	...	...	Rupees	0	14	2
Alteration to waste weir, No. 1	...	...	"	50	2	0
Do. " 3	...	...	"	201	7	0
Do. " 9	...	...	"	233	3	0
Special Superintendence and Sundries	...	...	"	15	0	0

2nd Section.—Rupees 9,410-6-10 on the 2nd Section, from the 17 $\frac{1}{2}$ to the 32nd mile, the particulars being—

Masonry walls and puddling	...	...	Rupees	169	1	10
Alteration to waste weir...	...	...	"	229	14	1
New waste weir at Poodoor	...	...	"	1,072	0	10
Repairs of Main Canal	...	...	"	7,939	6	1

3rd Section.—Rupees 865-10-2 on the 3rd Section, from the 33rd to the 43rd mile, the details being—

Excavation and embankment	...	...	Rupees	595	0	2
Repairs of canal	...	...	"	270	10	0

4th Section.—Rupees 2,230-2-1 on the 4th Section, or miles 44 to 60 of the canal, namely, for—

Alteration to waste weir, No. 4	...	...	Rupees	1,952	6	0
Repairs of canal	...	...	"	205	12	1
Contingencies for earthwork and masonry	...	...	"	72	0	0

5th Section.—Rupees 463-6-11 on the 5th Section, from the 61st to the 72nd mile, the item being—

Repairs of canal	...	...	Rupees	463	6	11
------------------	-----	-----	--------	-----	---	----

6th Section.—Rupees 367-6-6 on the 6th Section, or miles 73 to 91, namely, for—

Repairs of canal	...	...	Rupees	330	9	4
Lock gate	...	...	"	36	13	2

7th Section.—Rupees 1,387-7-3 on the 7th Section, miles 92 to 114, for—

Embankment and cutting	...	...	Rupees	74	8	0
Bridge, third class, at 100 miles 22 chains	...	...	"	44	3	6
Do. second " 105 " 9 "	...	...	"	55	12	6
Repairs of main canal	...	...	"	527	13	3
Alterations to waste weir No. 6	...	...	"	346	14	0
Do. " 9	...	...	"	338	4	0

*Proceedings of the Madras Government, Public Works Department,
23rd April 1873.*

8th Section.—Rupees 1,896-8-11 on the 8th Section, miles 115 to 143, the items being—

Lock of 10 feet lift at 118th mile ...	Rupees	23	6	0
Repairs of canal ...	..	1,873	2	11

9th Section.—Rupees 3,500-0-2 on the 9th Section, or miles 144 to 178 of the canal, on—

Lock of 8 feet drop at 169th mile 22nd chain ...	Rupees	69	14	7
Do. of 10 do. at 169th do. 60th do. ...	..	69	14	7
Do. of 10 do. at 170th do. 21st do. ...	..	69	14	7
Do. of 12 do. at 171st do. 60th do. ...	..	69	14	7
Do. of 10 do. at 172nd do. 50th do. ...	..	69	14	7
Do. of 10 do. at 174th do. 45th do. ...	..	69	14	7
Do. of 8 do. at 174th do. 74th do. ...	..	69	14	7
Do. of 10 do. at 176th do. 13th do. ...	..	69	14	7
Do. of 13 do. at 177th do. 72nd do. ...	..	69	14	9
Repairs of canal ...	..	2,870	12	9

Adamapully Anicut.—Rupees 43-6-0 were spent on repairs to this work.

10th Section.—Rupees 11-12-3 on the 10th Section, miles 179 to 186 of the canal, on—

Repairs of canal ...	Rupees	5	0	0
Store and Store charges ...	..	6	12	3

3. Distribution Works.—The outlay on works of distribution was Rupees 2,094-2-10, namely, on the—

1st Section ...	Rupees	174	15	10
2nd do. ...	..	126	9	10
3rd do. ...	..	56	4	9
4th do. ...	..	142	3	8
5th do. ...	..	172	15	9
6th do. ...	..	198	2	0
7th do. ...	..	991	8	10
8th do. ...	..	183	6	2
9th do. ...	..	48	0	0
10th do. ...	..			

4. Buildings.—The outlay under this head was Rupees 745-5-0, the items being—

Central Hospital with out-houses at Kurnool ...	Rupees	85	11	0
Repairs to Jupaud Bungalow ...	..	231	10	0
Do. to Valapanoor do. ...	..	360	0	0
Sluice-keepers' huts ...	..	68	0	0

5. Telegraph Line.—The outlay under this head was Rupees 215-15-1, the particulars being—

Telegraph line from Hindry Office to Cuddapah ...	Rupees	129	14	5
Additional Gay's standard Insulators and replacing rotten poles ...	..	86	0	8

6. Abstract of Expenditure.—The following statement shows the expenditure on all works from the commencement to the close of the quarter compared with sanctioned estimates:—

*Proceedings of the Madras Government, Public Works Department,
23rd April 1873.*

Works.	Amount of Estimate.	Expenditure up to 30th June 1872.	Cost during the quarter ended 30th Sept. 1872.	Total Expenditure.	Add amount transferred to this from other works.	Deduct re-funds from this to other works.	Total Net Expenditure.	AMOUNT.	
								Available.	Increase of Estimate.
Anicut and head-works at Kurnool ...	RS. 3,03,080	RS. 60,327	RS. 1	RS. 60,327	RS.	RS.	RS. 60,327	RS. 2,42,753	RS.
Do. do. at Soonkasala ...	4,83,122	4,70,212	500	4,70,213	6	218	4,70,213	14,909	14,500
Do. do. at Sonaiswaram ...	1,71,727	66,134	865	66,134	...	1,978	66,134	1,05,593	16,023
Do. do. at Adamapully ...	4,37,900	4,37,275	43	4,37,318	...	373	4,37,301	599	...
Aqueduct across the river Hindry ...	2,76,250	2,76,325	...	2,76,325	...	...	2,76,325	75	...
Canal for one mile from the head-slucice of the Kurnool Anicut ...	65,000	49,285	...	49,285	...	...	49,285	15,715	...
Main Canal, 1st Section, 174 miles ...	10,83,877	10,98,089	500	10,98,589	...	...	10,98,589	...	...
Do., 2nd do., 18th to 32nd mile ...	19,71,650	19,80,240	9,411	19,89,651	...	...	19,87,673	...	...
Do., 3rd do., 33rd to 43rd do. ...	9,82,670	9,15,624	865	9,16,489	...	...	9,16,116	66,554	...
Do., 4th do., 44th to 60th do. ...	10,75,711	9,84,802	2,230	9,87,032	...	...	9,86,334	89,377	...
Do., 5th do., 61st to 72nd do. ...	8,80,738	8,76,833	463	8,77,296	...	...	8,76,008	4,130	...
Do., 6th do., 73rd to 91st do. ...	9,44,521	8,65,406	367	8,65,773	...	...	8,64,917	79,604	...
Do., 7th do., 92nd to 114th do. ...	7,64,411	6,69,898	1,388	6,71,286	...	...	6,71,125	93,286	...
Do., 8th do., 115th to 143rd do. ...	7,80,111	8,22,445	1,897	8,24,342	...	...	8,24,317	1,53,160	44,206
Do., 9th do., 144th to 178th do. ...	9,45,837	7,87,206	3,500	7,90,706	...	...	7,90,677	62,551	...
Do., 10th do., 179th to 186th do. ...	2,56,327	1,93,786	12	1,93,798	...	...	1,93,776	...	...
Total ...	1,14,24,932	1,05,53,887	20,677	1,05,74,564	6	5,065	1,05,69,505	9,30,231	74,804
Branch channels and sluices of 1st Section ...	7,003	5,401	175	5,576	...	...	5,576	1,427	...
Distribution works of 2nd Section ...	6,000	5,162	127	5,289	...	...	5,223	777	...
Do. do. of 3rd do. ...	11,150	10,286	...	10,286	...	...	10,286	804	...
Do. do. of 4th do. ...	46,777	33,631	56	33,687	...	...	33,687	13,090	...
Constructing a bund across the canal in the 45th mile, 4th Section ...	76	73	...	73	...	...	73	3	...
Distribution works of 5th Section ...	20,550	9,297	142	9,439	...	...	9,439	11,111	...
Do. do. of 6th do. ...	71,400	42,415	173	42,588	...	...	42,588	28,812	...
Do. do. of 7th do. ...	42,045	19,692	198	19,890	...	...	19,890	22,155	...
Do. do. of 8th do. ...	49,000	30,397	992	31,389	...	...	31,389	17,611	...
Do. do. of 9th do. ...	46,448	32,037	183	32,220	...	...	32,220	14,223	...

Proceedings of the Madras Government, Public Works Department,
23rd April 1873.

Works.	Amount of Estimate.	Expenditure up to 30th June 1872.	Cost during the quarter ended 30th Sept. 1872.	Total Expenditure.	Add amount transferred to this from other works.	Deduct re-funds from this to other works.	Total Net Expenditure.	Amount.	
								Available.	Increase or Estimate.
<i>Distribution.---(Concluded.)</i>	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Distribution works of 10th Section ...	10,000	7,742	48	7,790	.....	.....	7,790	2,210	.....
Do. do. at Soonkasala ...	925	925	.....	925	.....	.....	925	.....	.....
Kurnool Town Water-supply ...	1,699	1,417	.....	1,417	.....	.....	1,417	282	.....
Total...	3,13,073	1,98,475	2,094	2,00,569	.....	66	2,00,503	1,12,570	.....
Breach repairs of August 1870 ...	68,570	59,004	.....	59,004	1,562	.....	60,566	8,004	.....
<i>Buildings.</i>									
Central Hospital, with out-houses and compound wall at Kurnool ...	5,050	4,781	86	4,867	.....	.....	4,867	183	.....
Repairs to do. do. ...	68	60	.....	60	.....	.....	60	8	.....
Overseer's hut at Kurnool ...	1,245	.....	.....	.....	.....	.....	.....	1,245	.....
Office, Store-house, and Workshop at Soonkasala. Powder Magazine, Store, and Station roads at Bowanassy Division ...	5,947	5,986	.....	5,986	.....	.....	5,986	.....	39
Office, Store-room, and Artificers' shed at do. ...	4,359	4,359	.....	4,359	.....	.....	4,359	.....	.....
Repairing the above buildings at do. ...	7,298	7,523	.....	7,523	.....	.....	7,523	423	.....
Improvement of the road approaching to the above building and repairing culverts at Bowanassy. Converting the unfinished buildings intended for a Gunpowder Manufactory into a Hospital at Bowanassy ...	578	318	.....	318	.....	.....	318	260	.....
Office and Store building at Valapanoor in do. ...	427	31	.....	31	.....	.....	31	396	20
Repairs to Valapanoor Bungalow ...	1,970	1,990	.....	1,990	.....	.....	1,990	.....	35
Office and Store at Jupaud in Nagatoor Division. Repairs to Jupaud Bungalow in do. ...	564	239	360	599	.....	.....	599	.....	.....
Office and Store at Puggydial in do. ...	4,123	4,123	.....	4,123	.....	.....	4,123	.....	.....
Do. do. at Chintagoonta in Koondaur Division. Do. and temporary Store-shed at Ayalore in do. Repairs to Anicut Office at Zorapore ...	1,000	123	231	354	.....	.....	354	646	.....
Office, Store, and Workshop at Kurnool ...	3,977	3,833	.....	3,833	.....	.....	3,833	144	.....
Iron and Brass Foundry at do. ...	5,283	5,278	.....	5,278	.....	.....	5,278	5	.....
Room for receiving and despatching stores at do. ...	642	67	.....	67	.....	.....	67	575	.....
	327	308	.....	308	.....	.....	308	19	.....
	30,612	15,158	.....	15,158	.....	.....	15,158	15,454	.....
	15,328	15,168	.....	15,168	.....	.....	15,168	160	.....

Proceedings of the Madras Government, Public Works Department,
23rd April 1873.

Quarters for Sub-Assistant Engineers and Assistant Surveyors at Koondaur ...	1,236	561	.....	561	.....	.....	561	675	.....
Engineer's Bungalow at Dhoor ...	4,980	4,923	.....	4,923	.....	.....	4,923	57	.....
Sluice-keepers' huts ...	3,200	2,819	68	2,887	.....	.....	2,887	313	.....
Total...	98,862	77,648	745	78,393	.....	.....	78,393	20,563	94
Line of Telegraph...	72,000	66,404	216	66,620	.....	12	66,608	5,392	.....
Grand Total...	1,19,77,437	1,09,55,418	23,732	1,09,79,150	1,568	5,143	1,09,75,575	10,76,760	74,898

*Proceedings of the Madras Government, Public Works Department,
23rd April 1873.*

Quarter's Expenditure.—It will be remarked that the expenditure of the quarter is shown to have been Rupees 23,732, and the net total outlay, up to 30th September 1872, Rupees 1,09,75,575.

Excess Expenditure.—The subjoined statement shows the expenditure in excess of sanction at the end of the quarter to have been Rupees 74,898:—

Works.	Excess Expenditure up to 30th June 1872.	Excess Expenditure during the Quarter ended 30th Sept. 1872.	Total.	Add transferred to this from other works.	Deduct Refunds.	Excess Net Expenditure on 30th Sept. 1872.
<i>Main Supply.</i>	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Hindry Aqueduct... ..	75	...	75	...	...	75
Main Canal, 1st Section, last excess .. 24,402						
Deduct amount sanctioned during the last quarter 10,190	14,212	500	14,712	6	218	14,500
Main Canal, 2nd Section, last excess... 16,870						
Deduct amount sanctioned during the last quarter 8,280	8,590	9,411	18,001	...	1,978	16,023
Do. 8th do.	42,334	1,897	44,231	...	25	44,206
Total...	65,211	11,808	77,019	6	2,221	74,804
<i>Buildings.</i>						
Office, Store-house, and Workshop at Soonkasala... ..	89	...	89	...	...	89
Do. do. at Valapanoor	20	...	20	...	...	20
Repairs to Valapanoor Bungalow	...	85	85	...	...	85
Total...	59	35	94	...	...	94
Grand Total...	65,270	11,843	77,113	6	2,221	74,898

7. *Preparation of Revised Estimate.*—The excess expenditures upon the Hindry Aqueduct, 1st Section, 2nd Section, Office, Store-house, and Workshop at Soonkasala, and Office, Store-house and Workshop at Valapanoor, were sanctioned by the Chief Engineer for Irrigation in his Nos. 127 of 25th February 1873, and 95 of 2nd December 1872, respectively, under the authority conveyed in G. O. No. 18 of 5th January 1869, and the Acting Manager has been written to on the subject of the excess expenditure upon repairs to the Valapanoor Bungalow. The excess outlay on the 8th Section, Main canal, has been sanctioned by Government in G. O. No. 65, dated 9th January 1873.

Cost of Establishments.—The cost of executive permanent establishments amounts for this quarter to 18 per cent. on the expenditure for construction; that of the temporary establishments to 1.31 per cent., and that of the general management to 15.18 per cent.

Total cost of Establishments.—The total cost of the permanent establishment was therefore 15.36 and of temporary establishment 1.31 per cent. on the expenditure.

No. 381.

ORDER THEREON, 23rd April 1873, No. 1,167.

IRRIGATION, No. 20.

ORDERED that this report be forwarded to the Home Government.
(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,

Secretary to Government.

Exd. E. C. Shunker.

Fort Saint George
25th March 1873.

No. 92.

From
The Chief Engineer
for Irrigation
To
The Secretary to Government
Public Works Department

Sir,
I have the honor to submit the following report on the progress made with the works of the Madras Irrigation and Canal Company during the quarter ended 30th September 1872.

The total expenditure for the period under review amounted to Rupees 23,732, as compared with Rupees 30,271 for the previous quarter.

The following is a detailed statement of the items on which

which the above outlay was made.

Rupees 500-10-2 on the 1st Section main Canal 1st to 17¹/₄ Miles, the items being.

1st Section, Main Canal (including head works).

- Amnicut and Head Works at Lunkasala ————— Rupees — " — 14-2
- Alteration to Waste Weir No. 1 — " — 50-2-"
- do: ————— do: ————— " 3 — " — 201-7-"
- do: ————— do: ————— " 9 — " — 233-3-"
- Special Superintendence and Sundries ————— } " — 15- " — "

Rupees 9,410-6-10 on the 2^d Section from the 17¹/₂ to the 32^d Mile, the particulars being -

2^d Section.

- Masonry walls and find = dling ————— Rupees — 169-1-10.
- Alteration to waste weir — " — 229-14-1.
- New waste weir at Pooeloor — " — 1072-4-10.
- Repairs of Main Canal — " — 7939-6-1.

Rupees 865-10-2 on the 3^d Section from the 33^d to the 43^d Mile, the details being -

3^d Section.

- Excavation and Embankment — 595-4-2
- Repairs of Canal — " — 270-10-"

4th Section

Rupees 2230-2-1 on the 4th Section or Miles 44 to 60 of the Canal namely for Alteration to waste weir — No. 4. Rupees } 1952-6-"

- Repairs of Canal — " — 205-12-1
- Contingencies for Earth work and Masonry — " — 72- " — "

5th Section.

Rupees 463-6-11 on the 5th Section from the 61st to the 72nd Mile, the item being.

- Repairs of Canal — Rupees 463-6-11.

6th Section.

Rupees 367-6-6 on the 6th Section or Miles 73rd to 91, namely for -

- Repairs of Canal — Rupees 330-9-4
- Lock Gate — " — 36-13-2

7th Section.

Rupees 1387-7-3 on the 7th Section, Miles 92 to 114 - for -

- Embankment and cutting ————— } Rs. — 74-8-"
- Bridge 3^d Clafs @ 100-22- " — 44-3-6
- do - 2^d - do. — 105-9- " — 55-12-6

- Repairs of Main Canal — " — 527-13-3.
- Alterations to Waste Weir No. 6 — 346-14-"
- do: ————— do: ————— No. 9 — 338-4-"

8th Section.

Rupees 1896-8-11 on the 8th Section Miles 115 to 143, the items being, Lock

Lock of 12 feet lift at
118th mile. Rs. 23-6-

Repairs of Canal ———— 1873-2-11.

Rupees 3500-4-2 on the 9th Sec- 9th Section
tion, or miles 144 to 178 of the Canal on,

Lock of 8 feet drop at 169-22- Rs. 69-14-7.

— do. — 10 — " — " — 169-60 — " — 69-14-7.

— do. — 10 — " — " — 170-21 — " — 69-14-7.

— do. — 12 — " — " — 171-60 — " — 69-14-7.

— do. — 10 — " — " — 172-50 — " — 69-14-7.

— do. — 10 — " — " — 174-45 — " — 69-14-7.

— do. — 8 — " — " — 174-74 — " — 69-14-7.

— do. — 10 — " — " — 176-13 — " — 69-14-7.

— do. — 13 — " — " — 177-72 — " — 69-14-7.

Repairs of Canal ———— " — 2870-12-9.

Rupees 43-6- " were spent on Adampully
repairs to this work. Ament.

Rupees 11-12-3 on the 10th Section, 10th Section
miles 179 to 186 of the Canal, on

Repairs of Canal ———— Rs. 5- " —

Store and Store charges — " — 6-12-3.

The outlay on works of distri- 3. Distribu-
bution was Rupees 2094-2-10 mainly tion Works.
on the

1st Section ———— Rs. 174-15-10.

2nd — do. ———— " — 126-2-10.

3rd Section ———— Rupees " " "

4th — do. ———— " — 56-4-9.

5th — do. ———— " — 142-3-8.

6th — do. ———— " — 172-15-9.

7th — do. ———— " — 198-2- "

8th — do. ———— " — 991-8-10.

9th — do. ———— " — 183-6-2.

10th — do. ———— " — 48- " —

4 Buildings.

The outlay under this head
was Rs. 745-5- " the items being:

Central Hospital with out.

houses at Hinnivoli. Rupees 85-11- "

Repairs to Imperial bungalow — 231-10- "

— do. — to Valapanoor — do — " — 360- " —

Sluice keepers duto — " — 68- " —

Telegraph line.

The outlay under this head was
Rupees 215-15-1. the particulars being:

Telegraph line from Hinchry
Office to Cuddapah — Rs. 129-14-5.

Additional Gay's standard
Insulators and replacing
rotten poles ———— " — 86- " — 8.

Abstract of Expenditure.

The following statement shows
the expenditure on all works from
the commencement to the close of the
quarter compared with sanctioned Estimates.
Works.

Amount.

[illegible]

Amount	Expenses	Cost	Total
to 30 June the	1872	quarters	Expenses
Estimate	included	30 Sept 72	total

1

[illegible]

Improvement of the road approaching to the above building & repairing culverts at Bommanafy
 Converting the engine shed buildings into a Hospital at do
 Office and Store building at Valapamoor in do
 Repairs to Valapamoor Bungalows
 Office and Store at Supand in Nagarator Divy
 Repairs to Supand bungalow in do do
 Office and Store at Pungichal in do do
 do do at Chintagunta in Roundam Divy
 do and Temporary Store Shed at Ayalon in do do
 Repairs to Amikul Office at Bangalore
 Office, Store and Workshop at Amikul
 Iron and Brads Foundry at do
 Room for receiving and dispatching Stores at do
 Quarters for Sub Assistant Engineers and Assistant Surveyors at Roundam
 Engineers Bungalow at Dhorr
 Plumbers keepers huts

578	318	"	318	"	"	318	260	"
427	31	"	31	"	"	31	396	"
1970	1990	"	1990	"	"	1990	"	20
564	239	"	599	"	"	599	"	35
4123	4123	"	4123	"	"	4123	"	"
1000	123	"	357	"	"	354	646	"
3977	3833	"	3833	"	"	3833	144	"
5283	5278	"	5278	"	"	5278	5	"
642	67	"	67	"	"	67	575	"
327	308	"	308	"	"	308	19	"
30612	15158	"	15158	"	"	15158	15454	"
15328	15168	"	15168	"	"	15168	160	"
1236	561	"	561	"	"	561	675	"
4980	4923	"	4923	"	"	4923	57	"
3200	2819	"	2887	"	"	2887	313	"
Total	98862	77648	745	78393	"	78393	20563	94
Line of Telegraph	72000	566404	216	66624	"	12	66608	5392
Grand Total	11977437	10955418	23732	10979130	1568	5743	10975575	1076760

Grand Total - 11977437 10955418 23732 10979130 1568 5743 10975575 1076760 74898

Quarters by expenditure - It will be remarked that the expenditure of the quarter is shown to have been Rupees 23732; and the net total outlay up to 30th September 1872 Rupees 109,75,575.

Excess expenditure - The subjoined statement shows the expenditure in excess of sanction at the end of the quarter to have been Rupees 74,898:-

Works	Excess expenditure up to 30 th June 1872	Excess expenditure during the quarter ended 30 th Sept 1872	Total	Add transfers made to this from other works	Deduct Refunds	Excess net expenditure on 30 th September 1872
Main Supply						
Hindry Aqueduct	75		75			75
Main Canal Section last exp.						
Excess -	24402					
Deduct amount sanctioned during the last quarter	10690	14212	500	14712	6	218
Main Canal 2 ^d Section last exp.	16870					
Deduct amount sanctioned during the last quarter	8280	8590	9411	18001		1978
do - 8 th do	42334	1897	44231		25	44206
Total	65211	11808	77019	6	2221	74804
Buildings						
Office, Store House and Workshop at Sombhaisala	39		39			39
do do at Valapamoor	20		20			20
Repairs to Valapamoor Bungalows		35	35			35
Total	59	35	94			94
Grand Total	65270	11843	77113	6	2221	74898

17 6

7. The excess expenditures upon the
Dondy, Aqueduct, 1st Section, 2^d Section,
Office, Store House and Workshop at
Sionkassala, and Office, Store House
and Workshop at Valapamoor ^{was} sanc-
tioned by the Chief Engineer for Assa-
tion in his No 127 of 25th February 1873,
and 95 of 22^d December 1872, respectively,
under the authority conveyed in G. O.
No 18 of 3rd January 1869, and the Acting
Manager has been written to on the
subject of the excess expenditure upon
Repairs to the Valapamoor Bungalow.
The excess outlay on the 8th Section
Main Canal has been sanctioned
by Government in G. O. No 65 dated
9th January 1873.

The cost of Executive permanent establishments amounts for this quarter to .18 per cent on the expenditure for construction; that of the temporary establishments to 1.31 per cent, and that of the general management to 15.18 per cent.

The

Total cost of
Establisments.

The total cost of the permanent establishment was therefore 15.36 and of temporary establishment 1.31. per cent on the expenditure.

Have the honor to
be

Your most obed^t servant,

Wanderhulms

Little Col Mr

Chief Engineer for Injections.

MS 1873 & 2170

No. 2170

From
The Chief Engineer
for Navigation

To
The Secretary to
Government
P. O. No. 2.

Dated 25th March 1873
Received 4th April.

Enclosure - one.

No. 2.

Submits the report on
the progress made with
the works of the Bras
du Nord Company
during the quarter ended
30th September 1872.

With view, &c.

No. 1167
I send Mr. Macdonald
to the Home for

MS 1873 & 2170

W. W. Letter to Engrs dated
12th May 1873

CP-2170
Govt. of 1873 Madras.
PUBLIC WORKS.

To

Dated

Recd.

Encl.

G. 23rd April 1873, No. 1167

Nos. 380 & 381

Progress Report, submitted
by the Engineer for District,
of the works of the
M. S. S. Co. for the
quarter ended 30th Sep/72
ordered to be for-
warded to the Home
Govt.