M.R.O. 1—77,006—8-6-37.

(1) Number of pages 22

(2) Date of repair 4-7-41

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 2851-52 Press ~~Mis.~~

183-86

Dated 10 · 11 1871 .

Not to be folded or roughly handled

No. 183. Read the following papers:—

From R. SMITH, Esq., Executive Engineer on special duty, Madura District, to the Acting Chief Engineer for Irrigation, dated Madura, 10th October 1871, No. 220.

I HAVE the honour to submit the subjoined report showing the progress made with the Perryaur investigations during the past month.

2. The contour survey of the country west of the Nellacumputty Tavalum has progressed as rapidly as the difficult nature of the ground would admit of. The elephant grass is very high this year, and retards operations occasionally.

3. Judging from what has been ascertained up to date, it may, I think, be safely assumed that the best site for the Perryaur Head-works will be found in, or adjoining, the tract now being surveyed. Lieutenant Greer reports there are two sites between the stream that falls into the Perryaur in longitude 77° 13′, and the sharp bend in this river in longitude 77° 10′ 30″, and one site about 440 yards below the bend. The last does not, however, seem to be a desirable one, as the bed of the Perryaur is 34′ lower there than it is at the sites above the bend, but it is possible that subsequent investigations may place it in a more favourable light. Escape saddles have been found for both sites above the bend, and there are two streams that could probably be converted into silting channels.

4. As it is now evident that a detailed survey and examination of *several* sites must be made before the close of this working season, I have to solicit early sanction for Rupees 4,500, in addition to the amount sanctioned in G. O., No. 1,400, of 22nd May last for expenditure, on preliminary investigations, in the Perryaur hill tracts during the current year.

5. The register and diagram showing the discharge of the Perryaur and the rainfall at the Perryaur camps during the past month are enclosed.

6. The plans and estimates for the head-works designed for sites Nos. 2 and 3, and for the works in the plains, will be submitted about the end of this month.

PERRYAUR PROJECT.

Table of Rainfall and Discharge of Perryaur during September 1871.

Date.	Rainfall at		Hours.	Water level in feet above datum.	Discharge.	
	Perryaur Camp.	Hythry Tavalum.			Cubic feet per second.	1,000 Cubic yards per day.
	Inches.	Inches.				
1st September ...	0·02	0·03	6 A. M.	0·69	5,115	1,597
			6 P. M.	0·60	483	
2nd ,, ...	0·23	0·16	6 A. M.	0·45	435	1,378
			6 P. M.	0·42	426	
3rd ,, ...	1·15	0·48	6 A. M.	0·45	435	1,392
			6 P. M.	0·45	435	
4th ,, ...	0·03	0·02	6 A. M.	1·30	752	2,242
			6 P. M.	1·05	649	
5th ,, ...	0·41	0·05	6 A. M.	2·03	1,160	3,059
			6 P. M.	1·30	752	
6th ,, ...	0·15	0·05	6 A. M.	3·55	2,079	5,045
			6 P. M.	1·90	1,074	
7th ,, ...	0·16	0·45	6 A. M.	1·80	1,012	2,933
			6 P. M.	1·45	821	

Table of Rainfall and Discharge of Perryaur during September 1871.—(Concluded.)

Date.	Rainfall at Perryaur Camp.	Rainfall at Hythry Tavalum.	Hours.	Water level in feet above datum.	Discharge. Cubic feet per second.	Discharge. 1,000 Cubic yards per day.
	Inches.	Inches.				
8th September ...	0·09	0·27	6 A. M.	1·82	1,024	3,086
			6 P. M.	1·62	905	
9th ,, ...	0·25	0·52	6 A. M.	1·40	798	2,894
			6 P. M.	1·80	1,011	
10th ,, ...	0·28	0·42	6 A. M.	2·27	1,318	4,672
			6 P. M.	2·75	1,602	
11th ,, ...	0·06	0·05	6 A. M.	2·30	1,337	3,878
			6 P. M.	1·92	1,087	
12th ,, ...	0·42	0·51	6 A. M.	1·75	981	2,938
			6 P. M.	1·52	855	
13th ,, ...	0·16	0·30	6 A. M.	1·66	927	3,222
			6 P. M.	1·92	1,087	
14th ,, ...	0·01	0·10	6 A. M.	1·75	981	2,883
			6 P. M.	1·45	821	
15th ,, ...	0·02	0·25	6 A. M.	1·30	752	2,346
			6 P. M.	1·22	714	
16th ,, ...	0·01	0·01	6 A. M.	1·25	731	2,208
			6 P. M.	1·05	649	
17th ,, ...	0·00	0·06	6 A. M.	0·95	609	1,901
			6 P. M.	0·87	579	
18th ,, ...	0·00	0·13	6 A. M.	0·95	609	1,861
			6 P. M.	0·80	554	
19th ,, ...	0·00	0·15	6 A. M.	0·65	501	1,603
			6 P. M.	0·65	501	
20th ,, ...	0·00	0·06	6 A. M.	0·52	457	1,442
			6 P. M.	0·48	444	
21st ,, ...	0 05	0·05	6 A. M.	0·37	413	1,322
			6 P. M.	0·37	413	
22nd ,, ...	0 01	0·01	6 A. M.	0·33	402	1,344
			6 P. M.	0·37	413	
23rd ,, ...	0·06	0·02	6 A. M.	0·35	408	1,267
			6 P. M.	0·25	384	
24th ,, ...	0·00	0·00	6 A. M.	0·25	384	1,258
			6 P. M.	0·33	402	
25th ,, ...	0·00	0·01	6 A. M.	0·25	384	1,210
			6 P. M.	0·20	372	
26th ,, ...	0·14	0·01	6 A. M.	0·12	384	1,069
			6 P. M.	0·07	314	
27th ,, ...	0·15	0·44	6 A. M.	0·10	349	1,192
			6 P. M.	0 30	396	
28th ,, ...	0·03	0·01	6 A. M.	0·38	415	1,346
			6 P. M.	0·42	426	
29th ,, ...	0·17	0·06	6 A. M.	0·25	384	1,192
			6 P. M.	0·15	361	
30th ,, ..	0·04	0·12	6 A. M.	0·25	384	1,258
			6 P. M.	0·33	402	
Total...	4·10	4·80	.....	.....	.....	65,038

Depth run off from Catchment Basin of 250 square miles = 3·02 inches.

Mean discharge ... ... { 2,167.933 Cubic yards per diem. / 90,330 ,, ,, per hour. / 677 ,, feet per second.

	Cubic yards.
Discharge of Perryaur in September 1869	67,424,000
,, of ,, in ,, 1871	65,038,000
Difference—Excess in September 1869...	2,386,000

Madura,
10*th October* 1871.

(Signed) R. SMITH,
Executive Engineer on special duty,
Madura District.

No. 184. From the Executive Engineer on special duty, Madura District, to the Acting Chief Engineer for Irrigation, dated Madura, 25th October 1871, No. 242.

As directed in your letter No. 171 of 20th instant, I have the honour to submit the subjoined estimate of the probable sum required to complete the field work in the Perryaur hill tracts.

	Rs.
Clearing jungle	1,400
Sinking trial-pits	2,000
Erecting huts	200
Petty establishment	500
Salaries of Lascars required at the old camp in connection with the gauging of the Perryaur	240
Sundries	160
Total...	4,500

2. From Lieutenant Greer's recent letters it appears that the central or No. 2 site is the best of the three alluded to in my monthly report for September last; but the country is evidently so very deceptive in those parts that nothing can be safely assumed until the completion of the contour survey. Lieutenant Christie's description of the Perryaur valley below the bend is probably correct, and if his conjecture regarding the non-existence of a site for the reservoir embankment is verified, no expenditure will be incurred there.

No. 185. Order thereon, 10th November 1871, No. 2,851.

IRRIGATION, No. 9.

As the Perryaur Project is proposed to be undertaken from Loan funds, and the Government of India have authorized the cost of the Survey establishment employed in connection with it to be charged to those funds, and as the Reserve under Agricultural Ordinary has been exhausted, the sanction of that Government will be requested to the appropriation of the sum of Rupees 4,500 which is stated to be urgently required for completing the field work in the Perryaur hill tracts, from the grant for the Pelandorai Project in the South Arcot District (Item No. 38) on which the outlay, it is expected, will fall short of the allotment, as it is of the utmost importance that the investigation of the project should be completed as expeditiously as possible.

(True Extract.)

(Signed) J. CARPENDALE, Colonel, R.E.,
Secretary to Government.

No. 186. (Docket No. 2,852, dated 10th November 1871.)

Copy of the above forwarded to the Government of India.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

Exd. E. C. Shunker.

No. 220 Special Executive Engineer's Office
Madura 10th October 1871

From

The Executive Engineer
Ono Special duty
Madura Dist.

To

The Actg Chief Engineer
for Irrigation
Fort Saint George

Sir

I have the honor to submit the subjoined Report showing the progress made with the Ferrasar investigations during the last month.

2. The Contour survey of the Country West of the Nellacumpatty Tavalum, has progressed as rapidly as the difficult nature of the ground would admit of. The Elephant grass

is

is very high, this year, and retards operations occasionally. —

3. Judging from what has been ascertained, upto date, it may, I think, be safely assumed, that the best site, for the Perryaur Steel works, will be found in, or adjoining, the tract now being surveyed. Lieutenant Price reports there are 2 sites between the stream, that falls into the Perryaur, in Longitude 77° 13', and the sharp bend, in this river, in Longitude 77° 10' 30"; and one site about 440 yards below the bend. The last does not, however, seem to be a desirable one, as the bed, of the Perryaur, is 3½' lower there, than it is at the sites above the bend, but it is possible that subsequent investigations may place it in a more favourable light. Escape saddles have been found for both sites, above the bend, and there are two streams that could, probably, be converted into silting Channels. —

4. As it is now evident that a detailed survey, and Examination, of several sites must be made, before the close of this working season, I have to solicit early sanction for Rs 4.500 in addition to the amount sanctioned in G.O. N°1400, of 22d May, last, for expenditure, on preliminary investigations, in the Perryaur Hill tracts, during the Current year? —

5. The Register and Diagrams Showing

Showing the discharge of the Ferryman,
and the rain-fall at the Ferry-four
Camps, during the last months are enclosed.

6. The Plans and estimates, for the
Headworks, designed for Sites Nos 2
and 3, and for the works in the Plans,
will be submitted about the end of
this month.

I have the honor to be
Sir
Your Most Obedient Servant
Smitta
Executive Engineer
Pro Superintendent
Madura Divn

No. 2442 Special Executive Engineers Office

Madura 25th October 1871

From

V. Smith Esquire

Executive Engineer Aruppukottai

Madura District

To

Major R. H. Cadell R.E.

Offg. Chief Engineer for Irrigation

Madras.

Sir,

I have the honor to submit herewith, for the information of Government, the Progress Report of the Survey operations carried on by the Establishment under my charge during the month of October 1871.

Statement.

	Rupees	
Charing charges	1,400	
Office Establishment	2,010	
Sinking Wells		
Erection of Pucca Wells	200	
Pillar Establishment	500	
Advance of Leaves granted at 1½		
ads Rupees per Candy as under		
Rupees of the Allowance	240	
Sundries	160	
Total Rs.	4,500	

Public Works 1871 Department

Rupees 220

Rs. 5242

From

The Executive Engr.

One Special duty

Madura Distt.

To

The Actg. Chief Engr.

for Irrigations

Fort St. George.

Dated 10th October 1871.

Desp. 11th October 1871.

Received 8th November 1871.

Enclosures 2.

Submits the report showing the progress made with the Perrenaur investigations during the past month.

No. 183

No. 2851-2852-10th Nov. 71.

2. From Lieutenant Pearse's recent
letters it appears that the Central, or No.
2 Site, is the best of the three alluded to
in my Monthly Report, for September last;
but the Country is evidently so very
deceptive, in those parts, that nothing can
be safely assumed until the Completion
of the Contour Survey. Lieutenant Christie's
description of the Perryaur valley, below
the Dam, is probably correct, and if
the non-existence of
his Conjectures, regarding a Site for the
Reservoir embankment, is verified no
expenditure will be incurred there.

I have the honor to be
Sir
Your Most Obedient Servant

Executive Engineer
On Special Duty
Madura Distt.

Perryair Project

Table of Rainfall and Discharge of Perryair during September 1891

Date	Rainfall at Perryair camp Inches	Rainfall at Hythe Tarelaw Inches	Hours	Water level in feet above datum	Discharge Cubic feet per Second	Discharge 1000 gallons per day	Date	Rainfall at Perryair camp Inches	Rainfall at Hythe Tarelaw Inches	Hours	Water level in feet above datum	Discharge Cubic feet per Second	Discharge 1000 gallons per day
Sept 1	0.02	0.03	6 a.m	0.69	5115	1592	Sept 16	0.01	0.01	6 a.m	1.05	731	2208
			6 p.m	2.60	483					6 p.m	1.05	649	
" 2	0.23	0.16	6 a.m	0.45	435	1378	" 17	0.00	0.06	6 a.m	0.95	609	1901
			6 p.m	0.42	426					6 p.m	0.87	579	
" 3	Not Read	0.18	6 a.m	0.48	435	1392	" 18	0.00	0.13	6 a.m	0.95	609	1861
			6 p.m	0.45	435					6 p.m	0.80	554	
" 4	0.03	0.02	6 a.m	1.30	752	2242	" 19	0.00	0.15	6 a.m	0.65	501	1603
			6 p.m	1.05	649					6 p.m	0.65	501	
" 5	0.41	0.05	6 a.m	2.03	1160	3059	" 20	0.00	0.06	6 a.m	0.52	457	1442
			6 p.m	1.30	752					6 p.m	0.48	444	
" 6	0.15	0.05	6 a.m	3.55	2078	5045	" 21	0.05	0.05	6 a.m	0.37	418	322
			6 p.m	1.90	1074					6 p.m	0.37	413	
" 7	0.16	0.45	6 a.m	1.84	1012	2933	" 22	0.01	0.01	6 a.m	0.33	402	1344
			6 p.m	1.45	821					6 p.m	0.37	413	
" 8	0.09	0.27	6 a.m	1.82	1024	3086	" 23	0.06	0.02	6 a.m	0.35	408	1267
			6 p.m	1.62	905					6 p.m	0.25	384	
" 9	0.215	0.52	6 a.m	1.40	798	2894	" 24	0.00	0.00	6 a.m	0.25	384	1258
			6 p.m	1.80	1011					6 p.m	0.33	402	
" 10	0.28	0.42	6 a.m	2.27	1318	4672	" 25	0.00	0.01	6 a.m	0.25	384	1210
			6 p.m	2.75	1652					6 p.m	0.20	372	
" 11	0.06	0.05	6 a.m	2.30	1337	3878	" 26	0.14	0.01	6 a.m	0.12	384	1069
			6 p.m	1.92	1087					6 p.m	0.07	314	
" 12	0.42	0.51	6 a.m	1.75	981	2938	" 27	0.15	0.44	6 a.m	0.10	349	1192
			6 p.m	1.52	855					6 p.m	0.30	396	
" 13	0.16	0.30	6 a.m	1.66	927	3222	" 28	0.03	0.01	6 a.m	0.38	415	1346
			6 p.m	1.92	1087					6 p.m	0.42	426	
" 14	0.01	0.10	6 a.m	1.75	981	2883	" 29	0.17	0.06	6 a.m	0.25	384	1192
			6 p.m	1.45	821					6 p.m	0.15	361	
" 15	0.02	0.25	6 a.m	1.30	752	2346	" 30	0.04	0.12	6 a.m	0.25	384	1258
			6 p.m	1.22	714					6 p.m	0.38	402	
							Total	4.10	4.80		Total		65,038

Depth run off from Catchment Basin of 250 Square miles = 3.02 inches
Mean

Mean Discharge { 2,167,933 Cubic yards per diem
90,330 " " hour
677 Cubic feet per Second

Cubic yards

Discharge of Perryaurin September 1869 = 67,424.000

Do ——— of —— do in September 1871 = 65,038,000

Difference — Excess in September 1869 = 2,386,000

Approved.

Spl. Co. Engrs. Office
Maduras 10th October 1871

Executive Engineer
On Spl. duty
Madura Distt.

Compared by. G.M.R
M.M.

Public Works Department
No 2851.
Proceedings of the Madura Government
19

From
The Executive Engineer
in charge of Special duty
Madura Division
To
The Secretary to Government
Public Works Department
Fort St George

Dated the 10th October 1871
No 220 of 10th Oct 1871
Received 24th October 1871

As the Carigar project
is proposed to be undertaken
from Loan funds, and the
Government of India have
authorized the Cost of the
Survey Establishment em-
ployed in connection with
it to be charged to those
funds, I am the Revenue
under Agricultural Ordinary
has been exhausted, the
sanction of that Government
will be required to the
Appropriation of the amount

Enclosure No 1 in a letter from the Executive Engineer On Special duty Madura District dated 10th October 1871.

No 220.

To The Actg Chief Engr for Irrigation
Fort Saint George

10.10.71

Table of Rainfall and discharge of Perryaur during September 1871.

P W 10 Nov 71 Sheet 183.

attached to the urgently
required for completing
the field work in the Periyar
Hill Tracts, from the
grant for the Pelandoray
Project in the South Arcot
District (Sheet No 38) on
which the outlay, it is
expected, will fall short
of the allotment. As it is of the utmost importance that
the investigation of the Project should be completed as expeditiously
as possible.

Docket No 2852 of

Copy of the above
forwarded to the Govt of India.

To the Supdt Engr 5th Div
Executive Engr
Executive Engr
Ch Engr & Secy

Desp 2 13/11/71.

Nov. 3 Desp 20/11/71.

Desp 2 13/11/71.

No 243.

Govt. of {1871} Madras.

PUBLIC WORKS.

To

The Superintending Engineer

6th Division

Dated

Recd. Encl. 2

G. O. 10th March, No. 2851-2852

Nos. 185 & 186

Docketed

Requesting sanction to certain appropriations of funds for works in connection with the Pennaur Project

Pennaur Project. The Sanction of the Funds so Re promised to be obtained & certain appropriation of funds for works in connection with the Pennaur Project.