

(1) Number of pages 12

(2) Date of repair 11.4.71

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No.	2344	Press
	498-499	Mis-
Dated	28.9.	18 71.

Not to be folded or roughly handled

No. 493. Read the following letter from R. SMITH, Esq., Executive Engineer, on special duty, Madura, to the Acting Chief Engineer for Irrigation, dated Madura, 5th September 1870, No. 127:—

I HAVE the honour to submit the annexed report showing the progress made, during the past month, in investigating and maturing the Perryaur project.

2. The examination of the country commanded by the proposed channels has been steadily proceeded with; and, if no unforeseen event occurs, the bulk of the field-work in these parts will be completed about the end of the current month.

3. From information gathered subsequently to the date of my last report, I think the cheapest arrangement would be to construct the low weir referred to in paragraph 3 of that paper. I therefore intend estimating for this plan in detail, as well as for the channel from the Chittanay Anicut, alluded to in paragraph 4 of the report just noticed.

4. The field-work on the north of the Vigay has progressed very satisfactorily under Lieutenant Christie; the difficulties met with are not so great as I had anticipated, and by taking the channel through the Ramarauzpuram and Natchicolum Tanks a saving will be effected that will almost, if not entirely, cover the cost of the rocky cutting near the village of Vellamputty. The trial pits show that this will be about 400 yards in length, and that the average depth will not exceed 2 yards. The section of the channel will be considerably reduced in this cutting, as the rock is apparently compact syenite or gneiss. A velocity of 10 feet per second may be safely allowed here.

5. Before deciding on this reach of the channel a contour line will be taken, along the southern slope of the Vellamputty spur, to see what would be gained by going round, instead of through, this ridge; the latter is undoubtedly the better line of the two, but if the former turns out to be a cheaper one it must, I suppose, be adopted.

6. On the south of the Vigay the surveying and levelling operations, preparatory to staking out the main branch channels, have been vigorously prosecuted by Lieutenant Greer, and I have every reason to believe that all the principal lines will be set out and surveyed before the 1st proximo.

7. As the north-east monsoon is fast approaching, and no particulars have been received regarding the direction of the proposed tunnel at the Perryaur Hills, Lieutenant Greer considers it would be well to postpone going up there until the 1st of December next; and I agree with him as he informs me that there will be ample time between this date and the middle of February to carry out the investigations ordered in G. O., No. 1,236, dated 12th May 1870, and that the sinking of trial pits in October and November would be slow and expensive work on these hills.

Proceedings of the Madras Government, Public Works Department,
28th September 1870.

8. The subjoined summary shows the surveying and levelling done during the month under review :—

Where engaged.	Rank and Names.	Miles of channel set out.	Square miles of country surveyed.	Lineal miles of country surveyed.	LEVELLING OPERATIONS.	Miles plotted.	Number of permanent bench marks fixed.	Number of trial pits sunk to the full depth.	Remarks.
					Aggregate length of longitudinal and transverse Sections in miles.				
North of the Vign.	Lieutenant C. H. P. Christie, R.E.	19½	...	...	52	...	9	75	Engaged for two days with the Executive Engineer. Sick in camp three days; delayed by rain two days.
	Surveyor Walter ...	...	11	...	27½	9	...	...	Sick in camp for four days.
South of the Vign.	Lieutenant M. Greer, R.E.	...	...	...	50	100	35	15	Engaged for five days in going over ground with the Executive Engineer.
	Surveyor C. Shashachellum Moodelliar Acting Surveyor Kishna Row.	...	...	72	...	63	50	...	Indisposed for four days.
	Total...	19½	11	72	192½	172	94	90	Principally round tanks, and along roads.

No. 499.

ORDER THEREON, 28th September 1870, No. 2,344.

IRRIGATION, No. 27.

ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To R. Smith Esq.,
To the Acting Chief Engineer for Irrigation.
.. Superintending Engineer, 8th Division.

Exd. S. T. Augustin.

N: 127

3B
Special Executive Engineer
Madras 5th September 1870.

From,

R. Smith Esq.
Executive Engineer, Special duty
Madras District

R. C.

Major J. Mullins R.E.
Acting Chief Engineer
for Irrigation
Madras

Sir,

I have the honor to submit the annexed Report showing the progress made, during the past month, in the investigating, and, making, the Periyar Project.

2. The examination of the Country, Commanded by the proposed Channels, has been steadily proceeded with; and, if no unforeseen event occurs, the bulk of the field-work, in

in these parts, will be completed about the end of the current month.

3 From information gathered, subsequently to the date of my last Report, I think the Cheapest arrangement would be to Construct the low weir referred to in paragraph 3 of that paper; I therefore intend estimating, for this plan, in detail, as well as for the Channel, from the Chittanay Anicut, alluded to in paragraph 4 of the Report just noticed.

4 The field-work, on the North of the Pichay, has progressed very satisfactorily under Lieutenant Christie; the difficulties met with are not so great as I had anticipated, and by taking the Channel through the Ramarajapuram and in

Satchicolum.

Satchicolum Tanks, a saving will be effected that will almost, if not entirely, cover the cost of the rocky cutting near the village of Villampally. The trial pits show that this will be about 100 yards in length, and that the average depth will not exceed 2 yards. The section of the Channel will be considerably reduced, in this cutting, as the rock is, apparently, compact granite or gneiss. If a velocity of 10 feet per second, may be safely allowed here.

5 Before deciding on this reach of the Channel a contour line will be taken, along the Southern slope of the Villampally spur, to see what would be gained by coming round, instead of through this ridge.

the latter is, undoubtedly, the better line of the two, but if the former turns out to be a cheaper one it must, I suppose, be adopted.

6. On the south of the River the surveying and levelling operations, preparatory to staking out the main branch channels, have been vigorously prosecuted by Lieutenant Greer, and I have every reason to believe that all the principal lines will be set out and surveyed, before the 1st Proximo.

7. As the North-east monsoon is fast approaching and no particulars have been received regarding the directions of the proposed Channel at the Perry and Mills, Lieutenant Greer considers it would be well to postpone going up

up there until the 1st of December next; and I agree with him as he informs me that there will be ample time, between this date and the middle of February, to carry out the investigations ordered, in P.O. N^o 1236, dated 12th of May, 1870, and that the sinking of trial pits, in October, and November, would be slow and expensive work on these hills. —

8. The subjoined summary shows the surveying and levelling done during the month.

months under review:-

Where engaged	Rank and Name	Miles or Camp out	Days miles of Camp earned	Days miles of Camp earned	Levelling operations	Miles plotted	Number of permanent bench marks fixed	Number of large pits sunk to the full depth	Remarks
South of the river	Lieutenant C. W. Christie, R.E.	19 1/2	0	0	52	0	9	75	Engaged for 2 days with the Executive Engineer.
	Surveyor Walter	0	11	0	27 3/4	9	0	0	Sick in camp 3 days - delayed by rain 2 days.
	Lieutenant M. G. Grier, R.E.	0	0	0	50	100	35	15	Sick in camp for 4 days.
South of the river	Surveyor C. P. Panchakellum	0	0	0	63	63	50	0	Engaged for 5 days in cutting over ground with the Executive Engineer.
	Surveyor H. C. Heddell	0	0	0	63	63	50	0	Engaged for 5 days in cutting over ground with the Executive Engineer.
	Lieutenant H. C. Heddell	0	0	72	0	0	0	0	Principally round banks, drains along roads.
	Total	19 1/2	11	72	192 3/4	172	94	90	

I have the honor to be
 Sir
 Your Most Obedient Servant
 J. M. M.
 Executive Engineer
 On special duty
 Madras District

No 3725
Govt. of 1870 India

PUBLIC WORKS.

To

Dated

Recd.

Enc.

G. O. 28 Sept. No. 2344

Nos. 498-499

Perraur Project. Letter

From the Ex. Secy., on
Special Duty, Madras,
reporting on the progress
of the investigations
of the Perraur Project