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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1618 Press
94, 95 Mis.

Dated 4-7 1894.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 4th July 1872.

No. 94. Read the following letter from the Acting Chief Engineer for Irrigation, to the Secretary to Government, Public Works Department, dated Fort St. George, 5th June 1872, No. 90:—

1 Statement.

As directed by paragraph 5 of G. O., dated 28th March 1871, No. 913, I have the honour to submit a Statement of the Survey Establishments chargeable to Loan Funds.

Statement showing details of Survey Establishments proposed to be employed during 1872-73 for maturing Irrigation Schemes which are likely to be classed as Extraordinary.

Details of Establishments.		Period for which required.	Total amount.	Particular survey on which engaged.	Grounds on which it is expected that the project will be undertaken from Loan Funds.	Remarks.
1. 1 Executive Engineer, at 950 ...	Rs. 950			Surveys connected with the Rooshkoolia and Mahanuddy Projects, Ganjam District.	Cost of storing and distributing 120,000 cubic yards per hour for six months (June to December inclusive) will be about 18 lakhs of Rupees. The project may, therefore, (if the landowners and ryots will pay for the water) be expected to be remunerative. If the whole of the 120,000 cubic yards were used and paid for at the Godavery rates of charge and of supply per acre, the gross return would be at the rate of rather more than 13 per cent In Ganjam the corresponding rates will no doubt be both lower, probably neither of them more than half that of the Godavery, and the gross will probably be not more than 10 or 11 per cent.	The investigations connected with the Rooshkoolia Project are nearly completed.
Military pay ...	140					
Travelling allowance	60					
	1,150	4 Months.	4,600			
Office.						
1 Estimator and Writer ...	60					
2 Draughtsmen ...	50					
2 Lascars ...	14					
Office rent ...	15					
Contingencies ...	10					
	149	4 Months.	596			
Survey Establishment.						
1 Surveyor, 1st Class ...	150					
1 Do., 2nd do.	100					
4 Lascars ...	24					
	274	4 Months.	1,096			
			6,292			
2. 8 Surveyors ...	150			For taking surveys, etc., in connection with Delta Projects, Godavery District.	Already recognized as chargeable to Loan Funds.	Required for the Delta Project chiefly in connection with the improvement of the drainage.
12 Lascars ...	72					
	222	12 Months.	2,664			
3. 1 Surveyor, at ...	150			Additional surveys, etc., in connection with the Anumullunka Project.	1. Will furnish a supply for keeping the Canals in the Western Delta of the Godavery navigable and for cultivation during dry season. 2. Will tend to reduce the floods of the Yerrakalwa. 3. Will furnish water for irrigation of land above anicut during monsoon. For 6 or 7 lakhs of Rupees 170 millions cubic yards per annum could be stored and distributed. Of this quantity about half would be used for irrigation (June to December) of lands above the anicut level; and the remainder would be reserved for maintaining during the dry season a sufficient depth of water for navigation on the principal canals of the Western Delta, affording say an addition of from nothing at the end of December to 75,000 cubic yards per hour in June.	The information obtained up to date is insufficient. What is required should be done easily in six months. Superintending Engineer applies for a Surveyor for twelve months and eight lascars, six are enough.
6 Lascars, at ...	36					
	186	6 do.	1,116			

Statement showing details of Survey Establishments proposed to be employed during 1872-73, etc.—(Concluded.)

	Details of Establishments.		Period for which required.	Total amount.	Particular survey on which engaged.	Grounds on which it is expected that the project will be undertaken from Loan Funds.	Remarks.
4.	2 Surveyors, at 75 Rs. each per mensem ...	Rs. 150			Completion of irrigation and drainage schemes of the Eastern Delta, Kistna District.		Plans and estimates for the completion of irrigation and drainage of Kykalur portion are ready. The field work on the other portion will be finished in the current fair season and everything will it is hoped be ready within seven or eight months with the amount now estimated for.
	2 Do., at 50 ...	100					
	2 Do., at 30 ...	60					
	2 Estimators, at 50	100					
		410	4 Months.	1,640			
	2 Draughtsmen, at 40 Rs. ...	80	10 do.	800			
	42 Lascars, at 6 ...	252	4 do.	1,008			
	Contingencies		.....	152			
				3,600			
5.	2 Draughtsmen, at 50 Rs. ...	100			Do. do. Western Delta, Kistna District.	Already recognized as chargeable to Loan Funds.	In the Western Delta all field work has been completed. Plans and estimates, etc., are under preparation and will be ready for submission to Government within four months at the cost now estimated for.
	2 Do., at 40 Rs. ...	80					
	2 Estimators, at 50	100					
		280	4 Months.	1,120			
	Contingencies		.....	140			
				1,260			
	Total Kistna...		.....	4,960			
6.	1 Assistant Engineer... ...	450			For surveying and taking longitudinal and cross sections of the Coleroon in connection with the project for the Cauvery and Vennaur Regulator in the Tanjore District.	The regulation of the minor streams has already been provided for from Loan Funds.	Survey called for in S.I. of 7th March 1871 from Government of India. The work to be of any use must be very accurate and must be undertaken by an intelligent officer. No officer has hitherto been available for the duty, the work will occupy the establishment proposed for about eight months, and may be commenced in Nov. next, so the establishment is required for five months in 1872-73. Observations will be made during the next floods relative to the water level at various points, and from them it may be ascertained to what height the extra supply to be carried will raise the water.
	1 Surveyor ...	150					
	10 Lascars, at 6...	72					
		672	5 Months.	3,360			
7.	1 Executive Engineer, at ...	900			Perryaur Project.	Already recognized as a project of the first importance and likely to prove remunerative.	* To be employed in tracing road from crest of ridge to site of dam.
	Allowance at ...	75					
	1 Assistant Engineer... ...	1,025	2 Months.	2,050			Employed in Executive Engineer's office in completing plans and estimates.
	Perryaur allowances ...	620	12 do. ...	6,240			
	1 Writer, at ...	270	8 do. ...	2,160			
	1 Estimator, at ...	40					
		60					
	1 Writer, at ...	100	2 do. ...	200			
	1 Accountant, at ...	40					
		60					
		100	3 do. ...	300			

Statement showing details of Survey Establishments proposed to be employed during 1872-73, etc.—(Concluded.)

Details of Establishments.		Period for which required.	Total amount.	Particular survey on which engaged.	Grounds on which it is expected that the project will be undertaken from Loan Funds.	Remarks.
	Rs.					
8 Lascars, at 7 ...	56	*2 Months.	112	Perryaur Project.	Already recognized as a project of the first importance and likely to prove remunerative.	* Employed under Executive Engineer, and Lieut. M. Greer, R. E.
4 Do., at 7 ...	28	†1½ do. ...	42			† Employed under Lieut. C. C. Rawson, R. E.
4 Do., at 11 ...	44	‡8 do. ...	352			‡ To be employed in tracing road from crest of ridge to site of dam.
1 Gumastah to gauge the Vigay, at	15	9 do. ...	135			§ To gauge the Perryaur from July 1872 to February 1873.
8 Gumastahs to gauge the Soorollyaur, at 15...	45	12 do. ...	540			‖ Employed under the Overseer.
1§ Overseer, at ...	75					¶ Not commenced.
10‖ Lascars, at 12 ...	120					
	195	8 do. ...	1,560			
			14,191			
8. 1 Surveyor, at ...	150			Surveys for improvement of irrigation from the Tambrapoorny.	The object of the surveys is to determine which of several suggested sites will be best for storing water among the hills from which the Tambrapoorny receives its supply. It is believed that two or three reservoirs may be constructed at remunerative cost.	
6 Lascars, at 7 Rs. each	42					
	192	6 do. ...	1,152			
1 Draughtsman, at	40	4 do. ...	160			
			1,312			

FORT SAINT GEORGE,
5th June 1872.

(Signed) R. F. OAKES, Captain, R.E.,
Acting Chief Engineer for Irrigation.

No. 95. ORDER THEREON, 4th July 1872, No. 1,618.

ESTABLISHMENT, No. 7.

THE Government sanction the employment of the Survey Establishments detailed in the above statement, and direct that their cost be charged to the provision for establishments sanctioned by the Government of India from Loan Funds in paragraph 4 of their letter recorded in G. O., No. 935, dated 9th April 1872. In the event of the charges under Establishments, Extraordinary, exceeding the sanctioned grant as the year advances, the Supreme Government will be requested to supplement the allotment.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Acting Chief Engineer for Irrigation.
" Controller of Public Works Accounts.
" Financial Department.
To the Superintending Engineers 1st, 2nd, 6th, and 8th Divisions.
Exd. S. C. Shunker.

Fort St George
5th June 1872

№ 90

From

The Ag Chief Engineer for Irrigation

To

The Secretary to Government
P.W. Department

Sir,

As directed by paragraph 5 of G.O. dated 28th March 1871 № 913; I have the honor to submit a Statement of the Establishments chargeable to Loan Funds.

Enclosure Statement of Survey

I have the honor &c.

Sir.

Your Most Obedient Servant.

H.F. Dale Captain RE
Ag Chief Engineer for Irrigation

Rec 28 Feb/91 Rec 652 654

P. W. 1872 Dat Gillingham
To Thos Gardner Esq
Com 20 Feb/91
The Ge Chief
Engineer for England
&c
The Secretary to
Govt to Bld

-A-90

Paid 5 -
Rec'd 5 June 1872
Rec'd
Rec'd

Submits a statement of the Survey Establishments chargeable to Loan Funds

A°. 1618. 4th July/72

Statement showing details of Survey Establishment Irrigation schemes which are likely to be classed as Extra to proposed to be employed during 1872-73 on maturing ordinary.

Details of Establishments	Period for which required	Total amount	Particular on which survey engaged	Grounds on which it is expected that the project will be undertaken from Loan Funds	Remarks
1 1. Executive Engineer at Rs 950			Surveys connected with the Rushikulya & Mahanuddy Gunjam Projects.	Cost of storing and distributing 120000 cubic yards per hour for the months (June to December) will be about 18 Lacs of Rupees. The project may therefore (if the landowners and ryots will pay for the water) be expected to be remunerative. If the whole of the 120,000 cubic yards were used and paid for at the Godavery rates of charge and supply per acre, the Gross Return would be at the rate of rather more than 13 per cent. In Gunjam the corresponding rates will no doubt be both lower, probably neither of them more than half that of the Godavery, and the Gross will probably be not more than 10 or 11 per cent.	The surveys & connected with the Rushikulya Project are nearly completed
Military Pay 140					
Travelling Allowance 60					
1150	4 Months	1600			
Office					
1 Estimator & Sentry Rs. 60					
2 Draftsmen " 50					
2 Cascas " 14					
Office Rent " 15					
Contingencies " 10					
149	4 Months	596			
Survey Establishment					
1 Surveyor 1st Class Rs 150					
1 do 2nd do 100					
4 Cascas 21					
271	4 Months	1096			
		6292			

Details of Establishments	Rupees for which required	Total Amount	Particulars on which Survey engaged	Grounds on which it is expected that the Project will be undertaken from Loan Funds.	Remarks
2. 3 Surveyors 12 Lascars	Rs 150 72 222	12 months 2664	For taking in Connection Project-Godavery	Surveys re with Delta ary District	Already recognized as chargeable to Loan Funds	Required for the Delta Project-chiefly in connection with the improvement of the drainage.
3. 1 Surveyor at 6 Lascars at	Rs 150 36 186 6 d.	1116	Additional in Connection with Pennaur Chi-	Surveys re the Anu ject	1. will furnish a supply for filling the Canals in the Interior Delta of the Godavery navigable and for cultivation during dry Season— 2. will tend to reduce the floods of the Vyera Kalwa 3. will furnish water for irrigation of land above ancut during monsoon. For 6 or 7 lacs of Rupees 170 millions enough. cubic yards per annum could be stored and distributed. Of this quantity about Half would be used for irrigation (June to December) of lands above the ancut field; and the remainder would be reserved for maintaining during the dry season a sufficient depth of water for navigation on the principal canals of the present delta, affording say an addition of 3mm nothing at the end of December to 7500 cubic yards per hour in June.	The information obtained up to date is insufficient. What is required should be done easily in 6 months- Superintending Engineer applies for a Surveyor for 12 months and 8 Lascars- 6 are enough.

Details of Establishments	Rate per Annum	Total Annual Charge	Duration Engaged	Grounds on which it is expected that the Project will be undertaken from Loan Funds	Remarks
4. 2 Surveyors at 75 Rs each per mensem	150		Completion of Irrigation and drainage Schemes of the Godavery Delta & Kistna District.	Already recognized as Chargeable to Loan Funds.	Plans & Estimates for the completion of Irrigation and drainage of Ryakalva portion are ready. The field work on the other portion will be finished in the current fair season and every thing will it is hoped be ready within 7 or 8 months with the amount now estimated for.
2 Do Asst. 50 Rs	100				
2 Do at 30 Rs	60				
2 Estimators at 60 Rs	100				
	410	11 Months	4510		
2 Draftsmen at 40 Rs	80	10 Months	800		
42 Coolies at 6 Rs	252	11 Months	1008		
Contingencies			152		
			3600		
5. 2 Draftsmen at 50 Rs	100		Do Do Western Delta Kistna District		In the Western Delta all field work has been completed. Plans & estimates are under preparation & will be ready for submission to Government within 6 months at the cost now estimated for.
2 Do at 40 Rs	80				
2 Estimators at 50 Rs	100				
	280	11 Months	1120		
Contingencies			180		
			1300		
Total Kistna			4900		
6. 1 Assistant Engineer Rs	150		For Surveying & taking Longitudinal & Cross sections of the Rivers in connection with the Project for the Canning & Cocanada Regulator in the Tanjore District	The Regulation of the Rivers & Streams has already been provided for from Loan Funds	Survey called for in GOI 97 March 97 from Government of India. The work to be of any use must be very accurate and must be undertaken by an intelligent officer. No officer has hitherto been available for the duty the
1 Surveyor	150				
12 Coolies at Rs 6	72				
	672	5 Months	3360		

Details of Establishment	Number employed	Rate of Salary	Period for which required	Total amount	Particular amount in which included	Grounds on which it is expected that the project will be undertaken from Loan Funds	Remarks
1 Executive Engineer	Rs	950					
Allowance at	Rs	75					
		1025	2 months	2050			
1 Assistant Engineer	Rs	520	12 do	6240			
Peryaun Allowance	Rs	270	* 8 do	2160			
1 Writer at	Rs	40					
1 Estimator at	Rs	60					
		100	2 do	200			
1 Writer at	Rs	40					
1 Accountant at	Rs	60					
		100	* 8 do	800	Perryaur	Project Already recognized as a project of the first importance and likely to prove remunerative.	
8 Lascars at 7	Rs	56	2 do	112			
4 do at 7	Rs	28	* 1½ do	42			
4 do at 11	Rs	44	* 8 do	352			
1 Quinnatah to Gouge the Keian at	Rs	15	9 do	135			
3 Quinnatahs to Gouge the Soorrliyaur at 15	Rs	45	12 do	540			
* 1 Overseer at	Rs	75					
* 10 Lascars at 12	Rs	120					
		195	8 do	1560			
				14191			

The work will occupy the Establishment proposed for about 8 months & may be commenced in November next so the Establishment is required for 6 months in 1872/73 — Observations will be made during the next floods relative to the water level at various points & from them it may be ascertained to what height the extra supply to be carried will raise the water.

* To superintending Draughtsman from each Sluice to Sluice by dam.
{ Employed in Executive Engineers Office in completing Plans & estimates
* Employed under Ex. Engineer & Lt. in Qrter Mr.
* do Lieut C.C. Ramsden RE.
* To Gauge the Perryaur from July 1872 to February 1873
* Employed under the Orderly

Details of Establishments	Paid for which required	Total annual	Particulars on which
8. 1 Surveyor at ₹ 150			Surveys for
6 Cooleys @ ₹ 7 each 42			ment of irriga
192	6 months	1152	the Trichinopoo
1 Draughtsman at ₹ 40	4 do	160	
		1312	

survey engaged	Grounds on which it is expected that the project will be undertaken from Loan Funds	Remarks
impracticable from	The object of the Survey is to determine which of several suggested sites will be best for storing water among the hills from which the Trichinopoly Peroomy receives its supply. It is believed that 2 or 3 Reservoirs may be constructed at Remunerative cost	Not Commenced

Ant. St. George
5th June 1852

Compd

A. F. D'Arcy Captain RE
Ag Chief Engineer for Irrigation

P. W. 2804/72

Ans. duly rec'd 8th Sept 94

No 1618.

The Government sanctioned the employment of the Survey Establishments detailed in the above Statement, & directed that their Cost be charged to the provision for Establishments sanctioned by the Govt. of India from Loan Funds in Para 4 of their letter recorded in G. O. No 935 d/9th Apl 1872. On the extent of the charges under Establishments Extraordinary, exceeding the sanctioned grants as the year advances, the Supreme

C/o 2804

Govt. of Madras.

PUBLIC WORKS.

To Mr. Hydrabad Pugh for Irrigation

Government will be requested to supplement the allotment.

18/10/[illegible]

Dated

Read. Encl. 1

G. O. 4th July 1873. No. 1618.

Nos. 94 & 95

Establishment. Sanctioning certain items in the Statements submitted by the Chief Engr. for Irrigation, & the Survey Establishments chargeable to Loan Fund.

To the Ch. Engineer for Irrigation
Controller of Civil
Finance Department
S. Engrs. 1st & 2nd. & 3rd. Circles

Desp. to 10/7/73

[illegible]

MADRAS RECORD OFFICE.

Government Records.

Public Works Department.

G. O. (Printed).

Dated 4th July 1872.

No. 1618 W

No. 94 & 95.