M.R.O. 1—77,008—8-6-57.

(1) Number of pages 28

(2) Date of repair 1-6-44

(3) Initials of the Repairer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1799-Boc Press Mis—
98-99.

Dated [illegible] 1891

Not to be folded or roughly handled

17

Proceedings of the Madras Government, Public Works Department, 7th July 1871.

No. 98. Read the following letter from the Acting Chief Engineer for Irrigation, to the Secretary to Government, Public Works Department, dated Fort St. George, 19th June 1871, No. 137 :—

As directed by paragraph 5 of G. O., dated 28th March last, 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 1871-72 on 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.
		RS.			
1. 1 Executive Engineer, at Rs. 950 per mensem.	12 Months...	11,400	Surveys connected with the Rooshkoolia, Mahanuddy, and Vamsadara projects, Ganjam District.	Cost of storing and distributing 120,000 cubic yards per hour for 6 months (June to December inclusive) 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.	With reference to paragraph 3 of G. O., 12th May 1871, I am of opinion that this establishment should be continued as it is till Captain Beckley's Rooshkoolia project has been laid before Government.
Travelling Allowance	.....	1,500		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.	For carrying on the surveys of the Vamsadara an Assistant Engineer with one Surveyor and six Lascars will then be sufficient.
Contingencies	.....	652			
1 Surveyor, at Rupees 150 1 do., at ,, 75 1 do., at ,, 50 9 Lascars, at ,, 54 ...	12 Months...	3,948			
		17,500			
2. 1 Surveyor, at Rupees 150 2 Surveyors, at ,, 100 Lascars, at ,, 50 ...	12 Months...	3,600	Surveys for Godavery delta works.	For Godavery delta works already recognized as chargeable to Loan Funds.	The Superintending Engineer's statement shows four Surveyors at 50 Rs. per mensem, and a total of 4,800 Rs. The establishment allowed in this statement is sufficient.
3. 1 Surveyor, at Rs. 150 1 Draughtsman, at ,, 30 3 Lascars, at ,, 18 ...	6 Months...	1,188	Surveys of Unnummalanka tank.	1. Will furnish a supply for keeping the canals in the western delta of the Godavery navigable and for cultivation during dry weather. 2. Will tend to reduce the floods of the Yerrakalwa.	1 Draughtsman less and 1 Lascar more than in Superintending Engineer's statement.
4. 1 Surveyor, at Rs. 150 3 Surveyors, at ,, 50 1 Draughtman, at ,, 60 1 Do., at ,, 40 ...	12 Months...	4,800	Surveys for Kistna delta works.	3. Will furnish water for irrigation of land above anicut during monsoon. For 18 or say 20 lacs of Rupees 450 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 100,000 cubic yards per hour in June. For works already recognized as chargeable to Loan Funds.	
5. 1 Executive Engineer, at Rs. 950	Do. ...	11,400	Surveys for Perryaur diversion works.	Already recognized as a project of the first importance and likely to prove remunerative.	In the Superintending Engineer's statement 7,500 Rupees is entered for travelling allowance.
2 Assistant Engineers, at ,, 900	Do. ...	10,800			
Personal and Travelling allowances	.....	6,000			
		28,200			
1 Surveyor, at Rupees 165 ...	6 Months...	990			
1 Draughtsman, ,, 60 ...	9 ,, ...	540			
1 Do., ,, 40 ...	3 ,, ...	120			
2 Draughtsmen, ,, 120 ...	3 ,, ...	360			
6 Lascars, ,, 42 ...	6 ,, ...	252			
1 Writer, ,, 35 ...	9 ,, ...	315			
1 Calculator, ,, 35 ...	2 ,, ...	70			
1 Goomastah to gauge the Vigay, at Rupees 15.	9 ,, ...	135			
3 Goomastahs to gauge the Soorallyaur, at Rupees 45.	12 ,, ...	510			
		3,322			

Proceedings of the Madras Government, Public Works Department, 7th July 1871.

3D

Statement showing details of Survey Establishments proposed to be employed during 1871-72.—(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.			
6. 1 Surveyor, at Rs. 150 ...	12 Months...	1,800	Surveys for improvement of irrigation from the Tambrapoorney.	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 Tambrapoorney receives its supply. It is believed that two or three reservoirs may be constructed at remunerative cost. This project has been under notice since 1856, but till quite lately no special staff of Surveyors have been sanctioned for the examination of the ground.	
1 Do., at ,, 100 ...	Do. ...	1,200			
1 Draughtsman, at ,, 40 ...	Do. ...	480			
14 Lascars, at ,, 7 each	Do. ...	1,176			
7 Do. extra, at ,, 3½ do.	6 Months...	147			
		4,803			
Total...	...	63,413			

FORT SAINT GEORGE,
19th June 1871.

(Signed) J. G. RYVES, Major, R.E.,
Ag. Chief Engr. for Irrigation.

Proceedings of the Madras Government, Public Works Department, 7th July 1871.

No. 99. ORDER THEREON, 7th July 1871, No. 1,799.

IRRIGATION, No. 7.

ORDERED that this statement be forwarded to the Government of India.

(Here enter No. 1,800, dated 7th July 1871.)

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Acting Chief Engineer for Irrigation.
To Superintending Engineers.
,, Major R. B. Kennedy.
To the Controller of Public Works Accounts.

Encl. E. C. Shunker.

Govt. of 1871 Madras.

PUBLIC WORKS,

To

THE ACTING CHIEF ENGINEER FOR

IRRIGATION.

&c., &c., &c.

Dated July 7th.

Read.

Read

G. O., 7th July 1871, No. 1,799.

JULY

Nos. 99-99

Survey Establishments.—Passing orders on letter from the Chief Engineer for Irrigation submitting a statement of the survey establishments chargeable to Loan Funds.

79

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, *7th July* 1871.

No. 100.

No. 1,800.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

IRRIGATION, No. 8.

SIR,—In paragraph 12 of the orders on the Madras Public Works Budget Estimate for 1871-72, the Government of India, with a view to relieve the reduced grant for Establishments, under "Ordinary," of such charges as may be legitimately met from other sources, intimated their willingness to sanction, conditionally, from Loan Funds, the cost of all survey establishments which may be employed on working out irrigation projects likely to be classed as "Extraordinary," and, on the requisite details being submitted, promised to issue the necessary instructions for giving effect to the arrangement.

2. With reference to those orders, and in continuation of Colonel Orr's letter of the 28th March 1871, No. 914, in paragraph 9 of which the probable cost of the survey establishments was assumed to be Rupees 50,000, I am now directed to forward a statement giving details of the establishments—the particular survey work on which they are engaged—and the grounds on which it is expected the work will be classed as Extraordinary. The total cost of the establishments is now estimated at Rupees 63,413, and I am to request that authority may be granted for debiting this amount to Loan Funds.

I have the honour to be,
Sir,
Your most obedient servant,

Colonel, R.E.,
Secretary to Government.

Exd. E. C. Shunker.

MEMORANDUM.

REQUESTED for reference the under-mentioned papers

Papers sent with Chief Engineer's No. 1375
19th June 1871.

OFFICE OF THE CHIEF ENGR. FOR IRRIGATION, P. W. Department,
23 August 1871.

P. W. Stanton
Head Clerk.

To

The Registrar of the Government Offices
Ph. Pkt

Memo

Supp Engs 1st Dw No 209 - 25 April 71 - 2 Mile Cable Cmc

d — 2d — 30 - 14 June — —

d — 3 — 297 - 23d May — Cmc —

Supp Engsh — do 579 - 13th May — Cmc —

d — do 5 — 96 - 23d May — Cmc —

d — d 7 — 16 — 27 April — —

d — do 8 — 513 - 23d May — Cmc —

d — d 8 — 723 - 6 June — Cmc —

The above from letters and its Enclosures sent to Mr Hankin on 3rd Aug 1871

Fort St George
19th June 1871

No 137.

From

Major J. G. Ryves R.E.
Acting Chief Engr for Irrigation.

To

Colonel J. Carpendale R.E.
Secretary to Govt P.W.D.

Sir.

As directed by para: 5 of G.O. dated 26th March last I have the honor to submit a statement of the survey establishments charged to Loan Funds.

I have the honor to be
Sir
Your most obedient servant.

J. G. Ryves Major R.E.
Acting Chief Engr for Irrigation.

Encls:- 1
Rog/13.

137

Rec'd 28th June 1871 Nº 652 & 654

Public Works 1871 Department
Depo: Officer for July
Nº 2937
The Chf Engr for Info
To The Secretary for Info
& Nec. D.

Dated 19th June
Rec'd 23rd June 1871

Nº 137
Inclosure

Submits a statement of the survey establishments chargeable to Loan Funds.

Nº 98

Nº 1799-1800-7 Aug 71

28 June 1871 R. W. Daly

Statement showing details of Survey Establishments for irrigation schemes which are likely to be started in the ensuing [illegible] paid to be employed during) 1871-72 as maturing) ordinary. 15)

Details of Establishments	Period for which employed.	Total amount which engaged.	Particulars of work on which employed.	Remarks
1 Executive Engineer at Rs 950 per mensem	12 months	11,400	Surveys carried out to the Rosakonda, Pattanuddy & Yanadam offets. Godavery Delta Land District.	
Travelling) allowance		1000		
Contingencies		653		
1 Surveyor at Rs 150				
1 do " 75				
1 do " 50	12 months	3,948		
9 Lascars " 24				
		17,500		
1 Surveyor at 150 Rs				
2 do " 100 "	12 months	3,600	Surveys for Godavery Delta Works	
Lascars 50 "				
1 Surveyor at 150 Rs				
1 Draughtsman 30 "	6 months	1,188	Surveys of Upper Sankaramalam	
3 Lascars " 18 "				

Gravity supplies to a portion of the project will be obtained from Dam Tanks

Cost of storing) and distributing) 120,000 cubic yards per land for 6 months, hence to exceed [illegible] which about 10 lacs of Rupees. The project may therefore (if the landowners are quite willing to 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 angle return would be at the rate of rather more than 13 per cent. On Gonjam the corresponding rates will no doubt be both lower, probably neither of them more than ½ that of the Godavery, and the gross will probably be not more than 10 or 11 per cent.

With refce to p. 3 of Co. 12 May 1871. Govt of opinion that Mr Ertt should be continued as it is, till Capt. Beckley's Report on Godavery project has been laid before Govt.

— For carrying out the surveys after Yanadam and Gonjam with the Surveyor & Draftsman with them be sufficient

For Godavery Delta works already recognized as chargeable to Loan-Funds.

The Ld Engineer's statement shows 4 Surveyors 50 Rs per mensem — under total 1-4800 Rs. The Establishment allowed in this statement is sufficient.

Will furnish a supply for keeping the canals in the Western Delta of the Godavery navigable and for cultivation during dry weather

1 draftsman less and 1 Lascar more than in Superintendt Statement.

Details of establishments	Period for which total required amount will be engaged	Estimated money required	Grounds on which it is expected that the project will be undertaken from Loan funds	Remarks
			weather.	
			2. Will thereby be reduced the floor of the Nerukkalveru.	
			3. Will thereby be obtained water for irrigation of land about amount during monsoon— the 18 or say 20 lacs of Rupees 1450 millions cubic yards now annually carried to sea from this district. Of this quantity about half would be used for irrigation (June to December) if dams about the anicut level, and the remainder would be reserved for maintaining during the dry season a sufficient depth of water for irrigation on the principal canals of the Western Delta affording any an addition of from nothing at the end of December to 100 000 cubic yards per hour in June.	
4 1 Surveyor at 150 Rs 3 Os at 50 " 1 Draughtsman 60 " 1 Os 40 "	12 months 4800	Surveys for Kistna Del. tal works.	For works already recognized as chargeable to Loan funds.	
5 1 Executive Engr at 950 Rs 2 Asstt Engineers at 900 Personal & travelling allowances	12 months 11400 " 10800 6000 28.200	Surveys for Periyar diversion works.	Already recognized as a project of the first importance, and likely to prove remunerative.	In the Asst. Engr. Kistna 7500 Rs. is entered for Trav. Allce.

Details of establishments | Period for which detail amount which is required | Particulars

1 Surveyor at 165 Rs	6 months	990
1 Draughtsman 60 "	9 "	540
1 Do 40 "	3 "	120
6 Coolies 10 "	3 "	360
1 Writer 35 "	6 "	210
1 Calculator 35 "	9 "	315
1 Groomastab to gauge Tul Vigay at 15 Rs	9 "	70
3 Do to gauge Tul Soorulgaur at 45 Rs	12 "	135
		540
		3329

b. 1 Surveyor at 150 Rs — 6 months — 900
1 Do " 100 " — Do — 600
1 Draughtsman 40 " — Do — 240
4 Coolies at 7 " each — Do — 168
7 Do extra 1 1/2 " — 6 months — 147
4105

Total Rs 63,413.

Fort St George
19th June 1871

Amount for which it is expected that the project will be undertaken from loan funds.

Remarks.

197

Object of the survey is to determine which of several suggested sites will be best for storing water owing to the hills from which the Sambrapoonay receives its supply. It is believed that two or three reservoirs may be constructed at remunerative cost. This project has been under notice since 1856 but till quite lately no special staff of surveyors have been sanctioned for the examination of the ground.

Major RE

Acting Chief Engr for Irrigation

P. W. Debt.

No. 1799.

Proceedings of the Madras Government

Under date the 2nd June 1871

Read the following

From the Actg. Chief Engr. for Irrigation, P.W.D. No. 137 dated 19th May 1871.

Ordered that this Statement be forwarded to the Govt. of India.

R.O. dated 1800 of 7th Sep

To. The Secty: to the Govt. of India.

Sir.

In paragraph 12 of the orders on the Madras Public Works Budget Estimates for 1871/72, the Govt. of India, while declining the proposed grant for establishments under "Ordinary" Canal charges as ought to be legitimately met from other sources, intimated their

1870
12

To
The Chief Engr: for Irrgtn.
" Supdg: Engineers.
Major R. St. Kennedy
Contr: of P. W. D.

Recd 8/7/71.

P. W. 2937/71

Submitted to Govt. as referred to para 5 of G.O. dated 28th March 1871.

their willingness to Sanction, conditionally, from loan funds, the cost of all Survey establishments which may be employed on working out Irrigation projects likely to be classed as "Extraordinary", and, on the requisite details being submitted, promised to issue the necessary instructions for giving effect to the arrangement.

With reference to those orders, and in continuation of Col Orr's letter of the 28th March/71, No 914, in paragraph 9 of which the probable cost of the Survey establishments

-lishments was assumed to be Rs 50,000, I am now directed to forward a statement giving details of the establishments, the particular Survey work on which they are engaged, and the grounds on which it is expected the work will be classed as Extraordinary. The total cost of the establishments is now estimated at Rs 63,413, and I am to request that authority may be granted for debiting this amount to loan funds.

Dept. 8/7/71 with 25
Govt. of Bom. 1799 of 1871.

25

Enclosure No. 12 to Despatch No. 71

Cyp

Govt. of 1871 Madras.

PUBLIC WORKS.

To Hudty Chief Engr for Irrigation Cudd

To the Secretary to the Govt of Madras

Dated

Recd. 7th July 1871

G. O. 7th July 1871 Nos. 1791-1800.

Nos. 98-99 & 100