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MADRAS RECORD OFFICE

Government of Madras

Public works. DEPARTMENT

G.O. No.	1819A	Press
B.P. No.	1819B	Mis.
122-A		
122B		
Dated	2-2-1894	195.

Not to be folded or roughly handled

No. 122A. Read the following letter from Colonel C. H. DICKENS, R.A., Secretary to the Government of India, Public Works Department, (Account—Irrigation.) to Colonel G. W. WALKER, R.E., Secretary to the Government of Madras, Public Works Department, Irrigation Branch, dated Fort William, 1st June 1874, No. 154 A I:—

In continuation of Public Works Department letter, No. 328 A G., dated 7th May 1874, I am directed to forward herewith a draft forecast prepared in this office of the actual and probable expenditure from Loan Funds on Irrigation works under the Government of Madras, and to request that, with the permission of that Government, you will be good enough to fill in to the best approximation that can be arrived at within a few days the grants that will probably be respectively required for expenditure on the works entered in the forecast for each of the years 1875-76, 1876-77, 1877-78, and 1878-79.

2. I am also to ask that the entries under "Amount of estimates" may be carefully checked, and such corrections as are necessary made in red ink. But a memorandum should be attached showing the reasons or authority for the correction. The entries in the column "Add for Establishment and Plant not in Estimate" have been made at the rate of 25 per cent. of the outlay, the figures being altered so as to make the total an even sum. If in any case it is considered probable that there will be an excess of outlay over the sanctioned estimate, the amount of such excess should be entered as a distinct item in red ink against the project concerned. (A statement showing the amounts comprising the entries under amount of estimate is attached for information).

3. Under the heading "Works in contemplation and for which estimates have yet to be sanctioned," such additional works as the Government of Madras may consider likely to be sanctioned within the next four years should be entered. But in such cases an explanation should be furnished of the grounds on which it is expected that the work will be sanctioned, and the present state of the estimates for them should be mentioned.

4. In the entries in the statement of "Estimated outlay, 1873-74" the actual outlay of the year should be substituted in communication with the Controller of Public Works Accounts.

5. Under "Outlay" the outlay from Loan Funds only has been entered. The items noted in the margin have been omitted from the amount of estimate, because they do not form a charge against the Extraordinary grant.

Capitalization of Land Revenue.
Simple interest charge while work is under construction.

6. I am desired to request that the required information may be supplied within a week so far as it can be given, and that if thought desirable a more complete statement may follow at leisure.

Statement of Estimated Actual and Probable Outlay to end of 1878-79 from Loan Funds on Irrigation Works under the Government of Madras.

* On works, exclusive of Establishment charges.

Expenditure from Loan Funds on Irrigation Works at Madras.

rednet Survey Establishment charge transferred to other works.

Proceedings of the Madras Government, Public Works Department,
7th July 1874.

Expenditure from Loan Fund on Irrigation Works at Madras. (Continued)

Works.	Amount of Estimate.	Expenditure already incurred from Ordinary Revenue.	Sum to be provided for from Loan Funds.	OUTLAY FROM LOAN FUNDS.				Total.
				Up to 1869-70.	1870-71.	1871-72.	1872-73.	
<i>Works on Northern Delta of Kistna Canal.</i>								
Enlarging and improving channels in Masulipatam Section ...	18,310	...	18,310	...	2,547	2,123	720	15,976
Widening head of Masulipatam canal for 1,000 yards from the ancient to the head of the Ellore Branch, Bezavada ...	11,353	...	11,353	1,411	803	1,092	1,403	4,707
Excavating Irrigation channels on west side of Masulipatam canal ...	4,980	...	4,980	2,863	711	300	— 74	4,093
Do. do. on east side of do. from 13th mile to Ankunari ...	1,561	...	1,561	1,374	66	...	...	1,440
Widening the lower portion of Pallairas channel ...	10,401	9,481	94	278	64	...	...	974
Irrigation channel from the 14th mile of Polonnarswades ...	613	613	...	379	...	...	...	173
Excavating channel 11 miles in length from the Masulipatam canal ...	1,406	...	1,406	1,330	...	...	...	1,330
Enlargement and improvement of Revis' canal ...	41,419	...	41,419	2,083	2,852	4,071	2,461	21,801
Improvements to the Eastern Bank of the Kistna ...	5,601	...	5,601	279	...	...	...	279
<i>Works on Southern Delta of Kistna Canal.</i>								
Enlarging the head of the Main Irrigation channel at Bezavada on the right bank of the Kistna ...	27,648	12,028	15,620	2,328	743	243	...	16,934
Silo channels from Tangeralu to Narasipatam ...	3,674	...	3,674	2,409	...	...	...	2,409
Extending the Connamare channels ...	16,517	7,858	8,659	1,741	171	...	...	9,570
Channel from Wollacorum to the water ...	14,046	11,000	3,046	4,207	...	...	...	9,843
Constructing first-class lock at Pongavali ...	2,357	1,803	554	1,131	...	...	...	1,803
Do. second do. do. at Jagannarayana ...	1,804	...	1,804	1,084	...	...	...	1,084
Cutting a new channel from Pongavali to the Kistna ...	22,451	26,532	4,081	2,084	...	...	...	2,084
A drainage channel to dispose of 4 drains which run into the Vellator channel ...	1,046	...	1,046	210	...	...	...	210
Drainage channel from outlets across the Rappas swamp, Irrigation channel from Narasipatam canal ...	340	...	340	841	...	...	...	1,181
Lock on the Connamare channel ...	287	...	287	253	...	...	...	540
Construction of an accommodation bridge across the Connamare channel at Kalapatour ...	467	...	467	...	...	...	...	467
Total Works...	201,624	71,510	130,114	53,482	2,286	8,311	5,082	61,181

Proceedings of the Madras Government, Public Works Department,
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Establishment ...	...	...	...	14,251	3,553	2,771	2,422	22,961
Tools and Plant...	...	...	...	587	70	34	405	691
Survey Establishment	...	...	...	...	...	537	...	942
Deduct Survey Establishment charge transferred to other works.	201,624	71,510	130,114	70,284	12,909	11,673	10,909	105,775
<i>Works in the Pennair Delta.</i>	...	...	...	...	...	...	...	...
Improvements to the Survapally channel in connection with the Pennair ancient ...	42,006	...	42,006	18,835	6,600	8,000	1,838	35,372
Connecting Survapally channel with Jaffer Sahib's channel ...	2,263	...	2,263	...	...	...	...	...
Irrigation canal from Nellore to Kistnapatam ...	5,960	3,209	2,751	539	...	...	...	568
Improving embankment along the south margins of the Pennair weir at Nellore ...	1,640	1,563	77	54	23	...	...	77
Total Works...	58,869	6,772	52,097	19,428	6,751	8,000	1,838	36,017
Tools and Plant...	...	...	...	5,898	1,707	1,199	600	9,404
Survey Establishment ...	...	...	...	200	27	3	...	230
Deduct Survey Establishment charge transferred to other works on account of Establishment...	58,869	6,772	52,097	25,526	8,485	9,202	2,438	45,651
<i>Palandorai weir across Vellaur River in South Arcot District.</i>	...	...	...	...	...	...	...	...
Establishment ...	19,824	...	19,824	...	3,774	3,426	5,917	13,117
Tools and Plant...	...	...	...	...	696	1,026	1,009	2,731
Survey Establishment ...	...	...	...	...	188	19	...	157
Total Palandorai Ancient...	19,824	...	19,824	...	4,608	4,471	6,977	16,056
Deduct Establishment charge transferred to other works...	...	...	...	...	...	...	39	39
<i>Works in the Delta of the Coovary in Trichinopoly and Tanjore Districts.</i>	...	...	...	...	...	...	...	...
Surplus sluices for the Wyacondun channel ...	1,650	1,467	183	223	...	...	...	223
Ten surplus sluices on the north bank of the Coleroon ...	1,238	1,140	98	97	...	...	...	97

Expenditure from Loan Funds on Irrigation Works at Madras. — (Continued.)

Works.	Amount of Estimate.	Expenditure already incurred from Ordinary Revenue.	Sums to be provided for from Loan Funds.	OUTLAY FROM LOAN FUNDS.				Total.
				Up to 1869-70.	1870-71.	1871-72.	1872-73.	
<i>Works in the Delta of the Cauvery in Trichinopoly and Tanjore Districts. — (Concluded.)</i>	£	£	£	£	£	£	£	£
Completion of Wyacondun Extension Project ...	2,586	1,500	1,086	1,075	...	...	...	4
Additional laterite and rough-stone apron with retaining walls at the advanced portion of three sluices in the south branch of the Lower Coleroon Anicut ...	1,600	1,485	115	264	...	...	...	1,075
Completion of a front and rear retaining wall and apron along the south branch of the Lower Coleroon Anicut ...	7,010	3,305	3,615	1,775	...	...	...	264
Regulating works for the improvement of the Cauvery ...	13,779	...	13,779	8,544	522	268	...	2,113
Regulators for the principal branches of the river Vennaur ...	10,945	...	10,945	...	5,500	...	...	9,294
Establishment ...	47,536	8,087	39,449	...	10,179	1,172	...	17,475
Tools and Plant ...	...	...	...	17,87	3,500	10,305	1,877	22,752
Survey Establishment ...	...	...	...	2,708	612	1,304	2,169	6,425
Total Works ...	...	...	...	146	...	...	...	145
Add charge for Establishment transferred from other works ...	47,536	8,087	39,449	15,101	1,341	12,313	3,712	37,553
<i>Strengigam Anicut Project.</i>	...	...	...	...	...	...	...	...
Anicut on the Tambraparny river (Strengigam Anicut Project) in the Tinnevely District ...	83,160	3,844	79,316	42,174	3,731	9,263	15,008	70,176
Establishment ...	...	...	...	6,160	2,340	2,706	5,438	16,644
Tools and Plant ...	...	...	...	102	...	...	...	102
Survey Establishment ...	...	...	...	...	...	...	...	...
Total Strengigam Weir, Tank Project ...	83,160	3,844	79,316	48,436	11,006	12,721	18,546	91,512
Add charge for Establishment transferred from other works ...	...	...	...	...	...	134	...	134
Total ...	...	...	...	...	14,805	...	...	91,646

Expenditure from Loan Funds on Water-supply Project at Madras.

Project for water-supply to the town of Madras and for irrigating lands in its vicinity.	61,176	6,070	55,106	78,347	6,215	...	—57,000	27,562
Establishment ...	...	...	...	14,649	1,363	...	...	16,012
Tools and Plant ...	...	...	...	787	3	...	...	790
Survey Establishment ...	...	...	...	...	...	...	...	...
Total Water-supply Project ...	61,176	6,070	55,106	93,783	7,581	...	—57,000	44,364
Add charge for Establishment transferred from other works ...	...	...	...	...	411	...	...	411
Total ...	...	...	...	...	7,992	...	...	44,775

Expenditure from Loan Funds on Irrigation works at Madras.

Chembrambankum Tank Project ...	35,543	2,000	33,543	17,854	...	...	...	17,854
Establishment ...	...	...	...	8,274	...	...	...	8,274
Tools and Plant ...	...	...	...	98	...	...	...	98
Survey Establishment ...	...	...	...	...	...	...	...	...
Total Chembrambankum ...	35,543	2,000	33,543	21,226	...	...	...	21,226
Add charge for Establishment transferred from other works ...	...	...	...	55	...	...	...	55
Total ...	...	...	...	21,281	...	...	...	21,281
<i>Perryar Project, Madura.</i>	...	...	...	...	...	...	...	...
Investigation of the Perryar Project in the Madura District.	450	...	450	...	...	426	...	426
Establishment ...	...	...	...	...	...	...	...	...
Tools and Plant ...	...	...	...	...	...	...	...	...
Survey Establishment ...	...	...	...	...	...	3,350	795	4,145
Total ...	450	...	450	...	...	3,776	795	4,571

Proceedings of the Madras Government, Public Works Department,
7th July 1874.

Abstract Account of Expenditure from Loan Funds from 1867-68 to 1872-73.

Projects.	Amount of Estimate.	Expenditure already incurred from Ordinary Revenue.	Sum to be provided for from Loan Funds.	ACTUAL OUTLAY TO END OF 1872-73.				Total.
				Works.	Establishment.	Survey Establishment.	Tools and Plant.	
<i>Irrigation Works.</i>								
Godavery Delta works ...	Rs. 2,91,497	Rs. 38,634	Rs. 2,52,863	81,177	23,752	133	2,781	Rs. 1,12,455
Kistna do. do. ...	2,01,034	71,310	1,29,724	81,101	23,103	465	631	1,09,290
Pennair do do. ...	58,809	6,772	52,037	50,017	2,020	—	200	54,037
Pelandarai weir across Vellur river in the South Arcot District.	13,824	—	13,824	12,117	2,707	—	—	14,824
Cauvery Delta works ...	47,828	8,387	39,441	30,725	8,716	31	161	49,633
Weir across the Tambraparni river known as the Sivagangam Weir Project ...	83,100	3,850	79,250	78,075	11,925	20	132	90,152
Project for water-supply to the town of Madras and for irrigating lands in its vicinity ...	61,176	6,177	54,999	57,502	16,723	—	200	74,425
Chendrabhaidam Tank Project ...	25,540	2,000	23,540	17,854	5,686	—	—	23,540
Perriyar Project, Madurai ...	40	—	40	40	—	—	—	40
Rural Irrigation or Delta boundary project ...	—	—	—	—	—	4,110	—	4,110
Grand Total, Madras ...	8,02,361	1,07,867	6,94,494	6,00,201	199,774	3,064	8,459	8,12,500

Proceedings of the Madras Government, Public Works Department,
7th July 1874.

No. 122AA.

Note by the Chief Engineer for Irrigation.

In reply to a telegram from the Government of India, it was reported yesterday that information for the forecast of expenditure from Loan Funds called for in the letter from the Government of India, No. 154 A.I., dated 1st June 1874, was not at present available, but seeing that approximate information is much needed, and that as regards probable outlay in the four years, 1875-76 to 1878-79 inclusive, a sufficiently reliable estimate can be given, the accompanying statement has been prepared for immediate transmission.

2. The Government of India ask that the entries under amount of estimates may be carefully checked and corrected, but this cannot be done without causing delay, except in the case of the Godavery Delta for which the only alteration apparently required is the addition of the amounts recently sanctioned for Tools and Plant, and this correction has accordingly been made. Some excess is likely to occur on the Pennair Delta works in consequence of irregularities connected with contracts there, as already reported to Government. Similarly supplemental sanction will be required for the anicut across the Vellaur river, (Pelandarai Anicut Project,) 1st, for providing additional storage work which has been contemplated from the first; and, secondly, on account of increased cost of work already included in the estimate. Again, on item 5, improvements connected with the Cauvery Delta, the increased rate for cut-stone work recently sanctioned by Government will cause an excess. Definite information as to the amount of supplemental sanction which will be required is in no case available.

3. The column "actual outlay from Loan Funds in 1873-74" has been corrected from the progress reports furnished to this office, except for item 4, for which particulars are not at the moment ascertainable. The entries are exclusive of establishment charges, which are not shown in the progress reports.

4. With regard to works in contemplation, the following explanations are given with reference to paragraph 3 of Colonel Dickens' letter.

Item 7, completion of Central Delta, Godavery.—Estimates, amounting to Rupees 7,38,000, have been in this office for some time past, but the works already sanctioned being fully as much as the establishment available for supervision can manage, it is not proposed to commence the improvements before 1876-77; as soon as more pressing papers have been disposed of, these estimates will be reviewed and submitted to Government.

As above-mentioned the amount of the estimates is ... Rs. 7,38,000
Add for Tools and Plant, 8 per cent. ... ,, 59,040

Add for establishments, 25 per cent. ... ,, 7,97,040
... ,, 1,99,260
... ,, 9,96,300
£ 99,630

And as this agrees sufficiently closely with the £100,000 entered in the column "total required" that sum may stand. Indeed, I am not in a position at the present time to say whether the estimates will require any material revision.

Item 8, completion of works in the Kistna Delta.—The estimates for some of the sub-sections of the delta have been received, and many of those for other sub-

*Proceedings of the Madras Government, Public Works Department,
7th July 1874.*

sections are in a forward state. Some will certainly be brought forward for sanction within the current year. The estimates are entered at £100,000 in the column "total required." I do not think their amount will be less than £750,000, for those originally submitted for one-half of the delta amounted to Rupees 33,61,200, and the drainage works were found to be altogether inadequate. It has been assumed that about 3½ lakhs will be required yearly in this delta, which is about as much as can be spent on New Works with labor available.

Item 9, Roshkote Project.—The revenue report has not yet been received, but so far as anything is known of the financial aspect of the scheme, it is improbable that the returns will justify its execution from Loan Funds, consequently no outlay has been provided for in the statement.

Item 10, Periyar Project.—The estimates are before Government, and I do not know whether any decision has been arrived at with regard to this scheme, consequently no entries for expenditure on its account have been made.

Item 11, Sangam Project.—The estimates have been submitted, and there has been much subsequent correspondence with regard to the financial merits of the scheme. 295,000 have been entered in the statement as the probable outlay in the four years, pending a final decision of the question whether it is to be carried out from Loan Funds or from the Ordinary grant.

5. The more important information required by the Government of India can be given in a telegram.

(Signed) JOHN MULLINS, Lieut. Colonel, R.E.,
Chief Engineer for Irrigation.

No. 123B.

ORDER THEREON, 7th July 1874, No. 1,819-A.

IRRIGATION, No. 13.
Account.

These papers will be communicated to the Controller of Public Works Accounts in continuation of G.O., No. 1,717, of the 26th June 1874, with a view to the examination and revision

of the entries in the several columns of the statement received from the Government of India up to and inclusive of that headed "Grant 1874-75" for the works for which estimates have been sanctioned.

2. The entries made by the Chief Engineer for Irrigation to show the probable outlay during the years 1875-1876 to 1878-79 appear to the Government to be reasonable, and are therefore accepted.

3. Ordered that a copy of these Proceedings be transmitted at once for the information of the Government of India.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Officiating Controller of Public Works Accounts.
" Chief Engineer for Irrigation.

Ed. E. C. Shunker.

Spare Copies

Chem. No.

* On works, exclusive of Retatshement charges
N.B. The probable outlay shown for the 4 years includes provision for Retatshement

known & expenditure sumble
of at each in provided the
estimate - covered from the former
primary through fund 1879-70 1870-71 1871-72. 1872-73

Brought forward
Worth on Eastern Delta of Cadaver
 Extension of Irrigation in the Eastern Del.
 -land

1000000

Somnig elucio and King Channel to S. Cañada

*Aqueduct over horizontally elongated
cylinders*

Work on Western Bell of London

Extension of irrigation in Proctora section 13046
Improvements to Arces Canal 11323

North - for the crop drainage of the Island }
High Level Canal

Masonry agreed to over the law

Under tunnel under Andy Channel
Sloping down the banks of the Western
Keller Branch Canal from Virginia
to Keddadawale

W. H. Wood

Total correct

Relativismus

Tools and planks.

Curry Relativism

Reduct Survey Relinquishment charge transfered to book 2
400000

20917

112,435

Expenditure from Loan Funds on Irrigation works at Madras

Rs & P

annual expenditure from the outlay from loan funds
of already provided
estimated expenditure from 1869/70 to 1870/71 1871/72 1872/73
Revenue

Works on Southern Delta of Western Canal.

Enlarging and improving Channels in head of Western Section.

Bridening head of Muralipattam Canal

for 1000 yards from the present to the head of the 6th Branch (Bogwarda)

Re-opening Irrigation Channels on west side of Muralipattam Canal

do on east side of do from 130 miles to Subramani

Bridening the lower portion of Salween Channel

Irrigation Channel from the 14th mile of Salween Channel

Re-opening channel 11 miles in length from the Muralipattam Canal

Arrangement and improvement of Upper Canal

Improvements to the Eastern Bank of the Western

Carried forward

18,310	"	18,310	9686	3547	2123	720	15946
11,353	"	11,353	1411	833	1092	1461	4797
4986	"	4986	3863	717	397	-76	4905
1561	"	1561	1875	56	"	-29	1102
10205	"	9481	326	66	"	22	906
613	"	613	179	"	"	"	179
1405	"	1405	1379	"	"	"	1397
4149	"	4149	808	3882	4171	5664	21,605
5691	"	5691	270	"	"	"	270
95762	"	9681	86263	27089	3077	7785	75667
							52537

Shed

Brought forward

Annual expenditure from the ordinary fund
already provided
Estimated ordinary

Estimate Ordinary for from exp to			
	Revenue	Exp	Balance
1870/71	1870/71	1870/71	1870/71
1871/72	1871/72	1871/72	1871/72
1872/73	1872/73	1872/73	1872/73
1873/74	1873/74	1873/74	1873/74
1874/75	1874/75	1874/75	1874/75
1875/76	1875/76	1875/76	1875/76
1876/77	1876/77	1876/77	1876/77
1877/78	1877/78	1877/78	1877/78
1878/79	1878/79	1878/79	1878/79
1879/80	1879/80	1879/80	1879/80
1880/81	1880/81	1880/81	1880/81
1881/82	1881/82	1881/82	1881/82
1882/83	1882/83	1882/83	1882/83
1883/84	1883/84	1883/84	1883/84
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1901/02	1901/02	1901/02	1901/02
1902/03	1902/03	1902/03	1902/03
1903/04	1903/04	1903/04	1903/04
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1914/15	1914/15	1914/15	1914/15
1915/16	1915/16	1915/16	1915/16
1916/17	1916/17	1916/17	1916/17
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1918/19	1918/19	1918/19	1918/19
1919/20	1919/20	1919/20	1919/20
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1921/22	1921/22	1921/22	1921/22
1922/23	1922/23	1922/23	1922/23
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1924/25	1924/25	1924/25	1924/25
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1927/28	1927/28	1927/28	1927/28
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1929/30	1929/30	1929/30	1929/30
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1931/32	1931/32	1931/32	1931/32
1932/33	1932/33	1932/33	1932/33
1933/34	1933/34	1933/34	1933/34
1934/35	1934/35	1934/35	1934/35
1935/36	1935/36	1935/36	1935/36
1936/37	1936/37	1936/37	1936/37
1937/38	1937/38	1937/38	1937/38
1938/39			

Doyle and Southern Bell of Post Land.

Enlarging the head of the main irrigation channel.

enlarging the head of the main Brighton Channel at B. 200 yds in the S. 1/4 1 & 200 yds in

met at De Gorda and the right bank of the Rio Grande Channel from December 1 to 2, 1901.

side channels from Saginaw to the Gulf of Mexico.

Channel from Galatbaham and L. 4' 10" to 4' 11" extending the Connamoo Channel.

Channel from Malabogpo and to tide water.
Constructing first-class D. & N. P. road.

Constructing first class back at Saganallan
Do second do " at Saganallan

do second do a at Jagshamdy
cutting a new channel from Sakaw to pay

meeting a new element from Sadavard Kapany
to Kizampattam.

A drained channel to dispose of 4 drainages

which runs into the Vellator Channel

Drainage channel from outlet to across the

Panpharao Luampo

Irrigation channel from the Zampataru Canal

W. A. Pearson Esq. former Prisoner at Sing Sing now in
Lock on the Commonwealth Channel.

work on the Commerce Commission
Construction of an accommodation

construction of an accommodation
bridge across the Cammore Channel at Knapton

bridge across the Lammoxmore Channel at Rattray.

Vol. 1
Establishment
Boys and Girls
Survey to the Establishment

Restatement

Coat of arms of the
House of Lords

Wants and Wants
In your estate plan

Winney estate

Total Profit

total station

large transferred to other.

Expenditure from loan funds on Irrigation works at Madras.

1876

Works in the delta of the Cauvery

in Krishnapuram and Sanyal Puram.

Surplus sluices for the Hyacinth Channel.

Two surplus sluices on the north bank of the Coleroon.

Completion of Hyacinth Extension Project.

Additional latirike and rough Stone Spout

with retaining walls at the advanced

portion of three sluices in the South

Branch of the lower Coleroon Ancient

Completion of a front and rear retaining

wall and upon along the South

Branch of the lower Coleroon Ancient

Regulating works for the improvement of the Cauvery

Carried over

Expenditure from loan to Building from loan funds									
Known balance of expenditure									
incurred for from U.K.									
from 1881-82 to 1890-91									
and (cont.) from 1891-92 to 1900-01									
me.									
£	£	£	£	£	£	£	£	£	£
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
1238	1140	48	97	"	"	"	"	"	"
2586	1207	1006	1070	"	"	"	"	"	"
Total									
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
1238	1140	48	97	"	"	"	"	"	"
2586	1207	1006	1070	"	"	"	"	"	"
Total									
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
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Total									
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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1238	1140	48	97	"	"	"	"	"	"
2586	1207	1006	1070	"	"	"	"	"	"
Total									
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
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2586	1207	1006	1070	"	"	"	"	"	"
Total									
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
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Total									
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Total									
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Total									
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Total									
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2586	1207	1006	1070	"	"	"	"	"	"
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1238	1140	48	97	"	"	"	"	"	"
2586	1207	1006	1070	"	"	"	"	"	"
Total									
1650	1467	103	223	"	"	187-78	187-78	187-78	187-78
1238	1140	48	97	"					

Porto

Porto in the Country Delta (Conts.)

Brought forward

Regulators for the principal Branches of the river

Wunnam

Total Porto

Relakhotmuk

Darbari Plant

Survey Relakhotmuk

Total Country 47833
Add Charge for Relakhotmuk transp. from other works

Expenditure from Gov. Funds on Irrigation Works at Subbar.

Porto

Shreeguntham Ancient Project
Ancient on the Tambaparnay River
(Shreeguntham Ancient Project) in the
Zambhedy District

Relakhotmuk

Tools and Plant

Survey Relakhotmuk

Total Shreeguntham Ancient Project 83160
Add. Charge for Relakhotmuk transp. from other works

Amount	Estimated from Gov. Funds	Actual from Gov. Funds	Balance
27883	8907	18976	12170
1995	1995	9	2010
47833	2907	12107	3690
			11305
			4477
			30709
			1830
			169
			168
			66
			5712
			37373
			32
			13266

Amount	Estimated from Gov. Funds	Actual from Gov. Funds	Balance
83160	3004	79276	42174
			9857
			9857
			13250
			76070
			6163
			2345
			2730
			3459
			14697
			132
			125
			96
			29
			18576
			91832
			134
			12053
			91916

Expenditure from San Fernando re Migration Loans & Interest.

20

Particulars	Amount expended			Bulky from San Fernando		
	£	s	d	£	s	d
Contractors & other charges	35523	2000	33543	17054	-	-
Relativities	-	-	-	3274	-	-
Tools and Plant	-	-	-	90	-	-
Laborer Relativities	-	-	-	-	-	-
Total San Fernando	35523	2000	33543	21228	-	-
Relativities	-	-	-	-	-	-
Tools and Plant	-	-	-	-	-	-
Laborer Relativities	-	-	-	-	-	-
Total Charge for Relativities & Plant	-	-	-	53	-	-
Total	35523	2000	33543	21281	-	-

Appropriation from Indian Funds in account of Irrigation works at Madras.

1890-91

Amount Estimated to be incurred on the works provided for in the Estimate	1890-91	1891-92	1892-93	Total
from the Madras Fund				

Perrins Project Madras
Investigation of the Perrins Project at the Madras

Estimated 450

426

426

Estimated
Tools and Plant
Survey Station Madras

450

450

426

426

450

450

426

426

795

3350

4145

795

3776

4571

A sketch account of the population from 1857-60 to 1872-73.

Project		Estimated Amount	Actual Amount	Balance	Remarks
Irrigation Works					
Canary Belli Works		2,24,000	2,24,000		
Trietha do		2,01,620	7,070	1,30,114	
Pennar do		5,00,000	67,720	5,20,000	
Palandam river across Vellor river in the West of it		1,00,000		1,00,000	
Canary Belli Works		4,00,000	3,00,000	1,00,000	
Work across the Tambaram river known as the					
Tharamangalam weir Project		83,160	3,000	79,200	
Project for water supply to the town of Madras and					
for irrigating lands in the vicinity		6,11,700	6,000	5,57,000	
Chamburankulam Tank Project		3,50,700	2,000	3,30,700	
Perruvar Project - Madras		4,000		4,000	
Perambalur or Vella boundary Project					
Grand Total Madras		8,12,000	13,000	6,65,120	

Letter to the Chief Engineer for Irrigation

In reply to a telegram from the Govt.

India, it was reported yesterday, the information
for the present of expenditures from Government funds

Collected for in the letter from the Govt. No 1524

dated 1 June 1974 was not ~~immediately~~ ^{at present} available

but seeing that approximate information is

much needed, ~~and~~ ^{therefore} as regards the

balance in the 4 years 1975-76 to 1978-79

will have, a sufficiently reliable estimate

Can be given, the accompanying statement

has been prepared for immediate transmission

2. The Govt. of India ask that the entire under

amount of estimates may be carefully checked

connected, but this ~~is not to be done without causing~~ ^{cannot be done without causing}

delay, except in the case of the Godavari Delta

in which the only ^{apparently} alteration required is the addition

of the amounts payable, sanctioned for Tools & Plant,

and this correction has accordingly been made.

Some crops is likely to occur on the Pennar Delta

water in consequence of irregularities connected

with contracts there, as already reported to Govt.

Similarly, supplemental sanction will be required

the current crop the better river (Columbia)
 Ancient project / 1st for providing additional storage,
 work which has been contemplated for some time,
 and 2nd on account of increase cost of work already
 included in the estimate - Again on item 5, improve-
 ments connected with the Canvey Delta, the increase
 10 per cent. on work recently sanctioned by Govt. will
 cause an excess - Definite information as to the
 amount of supplemental sanction which will be
 required is not now available.

3. The column "Actual mileage from Loan funds
 in 1873-74" has been corrected from the Prop.
 reports furnished to this Office, except for item
 4, for which particulars are not at the moment
 ascertainable. The entries are exclusive of establish-
 ment charges, which are not shown in the Prop.
 reports.

4. With regard to works in contemplation, the
 following explanations are given with reference
 from 3 of Colonel Dickens' letter.

Item 7. Completion of Central Delta Godavari
 Estimate amounting to Rs. 7,38,000
 have been in this Office for some time past,
 but the works already sanctioned being fully as
 much as the establishment are able to supervise

Can be done, it is not proposed to commence the
 improvements before 1876-77 - As soon as more definite
 plans have been decided upon, these estimates will be
 reviewed and submitted to Govt. As above mentioned

The amount of the estimate is	7,38,000
added for Tools Plant & Incident	59,000
	<hr/> 7,97,000
added for Establishments 25 per cent	1,99,200
Rs. 99,630	<hr/> 9,96,300
	Rs. 99,630

And as this agrees sufficiently closely with
 the £100,000 entered in the column "Total required"
 that some may stand - I should have been
 in a position at the present time to say whether
 the estimate will require any material revision
 Item 8. Completion of works in the Eastern Delta
 The estimates for ~~many~~ some of the sub-sections
 of the Delta have been received, and many
 of those for other sub-sections are in a forward
 state - Some will certainly be brought forward
 for sanction within the current year - The
 estimates are entered at £100,000 in the
 column "Total required". I do not think
 their amount will be less than ~~£100,000~~
 750,000

for these originally submitted for one half of the
 Delta amounting to Rs. 3,61,200 etc. etc.

All communications
should be addressed to
the Secretary.

No. 134 of 1874

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

Account

Irrigation

To
The Secretary to the Government of
Madras
Public Works Department
Irrigation Branch.

Fort William 16 June 1874.

Sir

In continuation of Public
Works Department letter no. 328 A.G.
dated 7th May 1874. I am directed
to forward herewith a Draft forecast
prepared in this Office of the actual
and probable expenditure from loan
funds on Irrigation works under
the Government of Madras and to
request that with the permission of
that Government you will be good

It has been ascertained that about 1200000 will be
required yearly, in this Delta, which is about as
much as can be spent on new works with the labour
available.

Item 9. Aroorkhoolia project. The Revenue report
has not yet been received, but so far as anything
is known of the financial aspect of the scheme, it
is improbable that the returns will justify its execution
from loan funds, consequently no entry has been
provided for in the Statement.

Item 10. Panyang Project. The estimates are before
Government, and I do not know whether any
decision has been arrived at with regard to this
scheme. Consequently no entry for expenditure
on its account has been made.

Item 11. Sanyang project. The estimates ~~are~~ have
been submitted, and there has been much subsequent
correspondence with regard to the financial merits
of the scheme. £95,000 have been entered in the
Statement as the probable outlay in the 4 years,
pending a final decision of the question whether
it is to be carried out from loan funds or from the
Ordinary grant.

122 A.G.

5. The more important information required by
the Government of India can be given in a telegram 1/7/74

It enough to fill in to the best approximation that can be arrived at within a few days the grants that will probably be respectively required for expenditures on the works entered in the forecast, for each of the years 1875/76, 1876/77, 1877/78 and 1878/79.

2. I am also to ask that the entries under "amount of estimates" may be carefully checked and such corrections as are necessary made in red ink. But a memo should be attached shewing the reasons or authority for the correction. The entries in the column "Add for Establishment and Plant not in estimate" have been made at the rate of 25 per cent of the outlay the figures being altered so as to make the total an even sum. If in any case it is considered probable that there will be an excess of outlay over the sanctioned estimate the amount of such excess should be entered as a distinct item in red ink.

Return
Requests

in ink against the project concerned. (A statement shewing the amounts comprising the entries under amount of estimate is attached for information.)

3. Under the heading "Works in contemplation and for which estimates have yet to be sanctioned" such additional works as the Government of Madras may consider likely to be sanctioned within the next four years should be entered. But in such cases an explanation should be furnished of the grounds on which it is expected that the work will be sanctioned, and the present state of the estimates for them should be mentioned.

4. In the entries in the statement of "Estimated outlay 1873/74" the actual outlay of the year should be substituted in communication with the Controller of Public Works Accounts.

5. Under "Outlay" the outlay from loan funds only has been entered.

The

The items noted in the margin have been omitted from the amount of estimate because they do not form a charge against the Extraordinary grant. -

Capitalization
of Land Revenue
Simple interest
Charge while
work is under
construction

6. I am desired to request that the required information may be supplied within a week, so far as it can be given; and that if thought desirable a more complete statement may follow at leisure.

I have the honor to be
Sir,

Your most obedient servant

W. Dickins Coll. R.A.
Secretary to the Gov. of India.
W.D.

Pub. Works 1874 Dept.
No. 3442

From

The Govt of India

Dated 1 June 1874 }
Received 8 — — }

No. 154 A. D.

Encl. 11.

G.O. No. 1819 B. 7-7-74.

Regarding
a Draft for- cast of
probable expenditure
from loan funds on
Irrigation works in the
Madras Presidency, &
requesting that it
may be checked and
corrected where necessary
and returned with a
Memo. of such alterations
if any may be made -
G.O. 18-1907-1819-B-7-74

Ok 122A

1819 B. 7-7-74

Proceedings of the Government of India
Read the following

From the Govt of India

(H.B. No. 154 A. D. 7 1874
June 7/74)

These papers will
be communicated to the
Controller of Public
Works Accounts, in
continuation of H.B.
No. 1717 of the 25th June 1874,
with a view to the ex-
amination and re-
vision of the entries
in the several columns
of the statement received
from the Govt of India,
up to and inclusive
of

of that headed "Grant 1874-75"
for the work for which
estimates have been
sanctioned.

2- The entries made
by the Chief Engineer
for Irrigation to show
the probable outlay
during the years 1875-76
to 1878-79 appear to be
reasonable and are therefore accepted.

3- Ordered that a copy
of these Proceedings
be transmitted at once
for the information of
the Govt of India.

G. C. Esq. 18/9/73 dated
Copy of the above for-
warded to the
Govt.

To, The Controller &c. &c.
" Chief Engineer for Irrigation
S. Esq. dated 1/27/74.
Ms. Dir. to the Govt 7/7/74
S.C. " " " 27/7/74

Examination of India.

Ms. Dir. 7/7/74
S.C. " 27/7/74

These papers will be communicated to the
Controller of P.W. & in continuation of G.O.
No. 1717 of the 25 June 1974, with a view
to the ~~consideration~~ examination and revision
of the entries in the second column of the
Statement received from the S of I upto
inclusive of that headed "Grant 1974-75"
for the works for which estimates have been
sanctioned.

2. The entries were ~~sent~~ by the Chief Secy.
for Migration to show the probable outlay
during the years 1975-76 to 1978-79
appear to the Government to be reasonable
and are therefore accepted.
3. Order that a copy of these Proceedings
be transmitted at once for the information
of the S of I.

By Secy. 1/2/79

G. S. S.

To Valentin
 in works.

Four one hundred and fifty four
 Forecast down bank mtlas for
 4 years. Total five hundred and
 seven thousand namely, one
 hundred and twelve, one hundred
 and thirty five, one hundred and
 thirty and one hundred and thirty
 thousand.

Depth 27

17/74

507000

112000
 105000
 130000
 130000
507000

3442

Govt. of 1874 Madras.

PUBLIC WORKS.

To

The Offg. Comr.
of P.W.
Recd. by Mr. J. J. J.

Dated

Recd.

6 July

1874

1875

No. 1224 B.

Forecast of outlay

Passing orders on a letter
from the Govt. of India for
forwarding a draft forecast
of probable expenditure from
Govt. Funds on P.W. Works
in the Madras Presidency
and requesting that it may
be checked & corrected where
necessary and return of with
memo. of such alterations