

Aug 29 1882

No 1762 rec'd 11th July 1882
Communicated to Officers
concerning

Cy


3. 7. 82

Gen Lupton & W. Stiles ✓
Ex W. W. Acott ✓

rec'd 11/7/82
Saml. in Receipt 1882

25/7

To whom paid.	Particulars.	No. and Date of Indent.	Amount.	Ship's Name.	Date of Invoice.	Ship's Name.	Particulars.
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Everitt Bros	Brass wire	31. 1. 82	5 2 1				
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					Balance Invoiced but not paid for on 30 th April 1882		
					1881 Dec: 23	Her Majesty	Ann
					1882 Jan: 27	Camorta	1 Casing 47 Eshander for Clifford's Pump shipped per Chilton in 1879.

	Balance Invoiced but not paid for on 31 st May 1882		9 2 2				
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					Balance of Expenditure uninvoyced on 31 st May 1882		
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			<u>£ 14 4 3</u>				
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	Total Debit for the Month <u>£ 5 2 1</u>						
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dia Office,
 9th June 1882
 W.G.

Thos. or Kei
 Accountant General

Madras. Provincial Local Funds. Public work

STATEMENT of PAYMENTS made in ENGLAND on account of STORES and FREIGHT, and of
INVOICES despatched to INDIA, during the Month of *May* 188*2*

EXPLANATION OF NECESSITY FOR MODIFICATION OF ALLOTMENTS.

The amount is required for whitewashing the Govt Telegraph Office at Bangalore.

When duly asst Coll. R. S.

Supdy: Engineer, 5th Circle.

[P. W. D. Code, Chapter IX, Para. 1187.]

P. W. D. Madras Form No. M 4

From

THE SUPERINTENDING ENGINEER,

5th CIRCLE.

To

THE SECRETARY TO GOVERNMENT,

PUBLIC WORKS DEPARTMENT.

Through the Examiner, P. W. Accounts.

No. X 1063, dated 21st June 1882

Submits application for modification of Imperial Other Services allotments for the reasons noted in the margin.

No. 7 B/P, dated 26th June 1882

Forwarded to the Secretary to Government, Public Works Department.

The amount applied for may be met from the Reserve in Government under Imperial Repairs Civil Buildings. Telegram.

D. C. Goudon

Examiner of P. W. Accounts.

Proceedings of the Government of Madras, No. 1764, dated 12th July 1882.

Read application from Superintending Engineer, Hyderabad, No. 1063 of 21st June 1882, requesting modification of Imperial Allotments.

ORDER THEREON.

The modifications shown in the accompanying statements are sanctioned.

(True Extract.)

Secretary to Government.

Here enter the Fund.

N. B.—If there is not room here for the whole of the explanation an additional half sheet or more of foolscap should be added and the explanation should be continued thereon.

17 R. 12/10/11. 21.7

17/10

Intd. in Receipt Book

Imperial Other Services

Application for modification of Allotments from the Grants for Minor Works, Repairs, and Tools and Plant.

Divisions.	MINOR WORKS.						REPAIRS.						Tools and Plant.	
	Military.	Civil Buildings.			Communications.	Miscellaneous Public Impts.	Military.	Civil Buildings.			Communications.	Miscellaneous Public Impts.		
		Postal.	Telegraph.	Salt.				Postal.	Telegraph.	Salt.				*
Presidency	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
	-	-	-	-	-	-	-	26	-	-	-	-	-	

Presidency

* When Funds are applied for under Provincial, the entries should be made in this Column; when under Imperial the Columns Postal, Telegraph and Salt should be filled up as required.

Station Madras
Dated 21 June 1882

Superintendent Engineer, 5th Circle.

N.B.—The application must be submitted in triplicate, but the explanations need only be given on one copy. The other copy will be returned showing the modifications, if any, made by Government on the Superintending Engineer's proposals. And the third will after sanction be retained in the Examiner's Office. The amount of additional grants required will be entered in black ink, reductions or surrenders in red ink with the minus sign prefixed.

[P. W. D. Code, Chapter IX, Part 1187] P. W. D. Madras.
Form No. M 46 a.

To
THE SECRETARY TO GOVERNMENT,
PUBLIC WORKS DEPARTMENT,
Through the Examiner, P. W. Accounts.

No. 11 $\frac{B}{P}$, dated 28th June 1882.

The sum of Rs 42 may be met from the grant for Temporary Establishment and the difference from the Provincial Minor New Works allotment of the South Arcot Division.

Proceedings of the Government of Madras,
No. 1765W dated 12th July 1882.
Read application from Superintending Engineer,
4th Circle, No. 11 of 18th June 1882, request-
ing modification of Provincial Allotments.

(True Extract.)

Am. Thompson Lt Col Rg

Ag. Secy Secretary to Government.

* Here enter the Fund.

Entd. in Receipt Book

STATEMENT of PAYMENTS made in ENGLAND on account of STORES and FREIGHT, and
INVOICES despatched to INDIA, during the Month of May 1882.

Humboldt

Superintending Engineer 5th Grade

4079w. 22.3.82
1308w. 21.5.81.

N. B.—If there is not room here for the whole of the explanation an additional half sheet or more of foolscap should be added and the explanation should be continued thereon.

Provincial Fund.

Application for modification of Allotments from the Grants for Minor Works, Repairs, and Tools and Plant.

Divisions.	MINOR WORKS.						REPAIRS.						Tools and Plant.
	Military.	Civil Buildings.			Communications.	Miscellaneous Public Impts.	Military.	Civil Buildings.			Communications.	Miscellaneous Public Impts.	
		Postal.	Telegraph.	Salt.				Postal.	Telegraph.	Salt.			
South Arcot Division	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
						59							

Station Chepauk
Dated 23rd June 1882

* When Funds are applied for under Provincial, the entries should be made in this Column; when under Imperial the Columns Postal, Telegraph and Salt should be filled up as required.

Superintending Engineer, 5th Circle.

N.B.—The application must be submitted in triplicate, but the explanations need only be given on one copy. The other copy will be returned showing the modifications, if any, made by Government on the Superintending Engineer's proposals. And the third will after sanction be retained in the Examiner's Office. The amount of additional grants required will be entered in black ink, reductions or surrenders in red ink with the minus sign prefixed.

GENERAL ESTABLISHMENT.

Govt. of (1882) Madras.
PUBLIC WORKS.

To
THE SUPERINTENDING ENGINEER,
FIFTH CIRCLE,
&c., &c., &c.

Dated March, 22nd.

Issued

Recd.

Encl.

G.O., 22nd March 1882, No. 757 W.

MARCH.
Nos. 166-167.

Port of Cuddalore.—Sanctions estimate for temporary Survey Establishment employed in taking survey and levels in connection with improvements to the —

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

22nd March 1882, No. 757 W.

General.
Establishment.

Read the following paper:—

No. 166. From Colonel H. L. PRENDERGAST, R.E., Superintending Engineer, Fifth Circle, to the Chief Engineer, Public Works Department, dated Chepauk, 14th March 1882, No. 1332.

I HAVE the honor to submit for sanction an estimate of Rs. 60 for the Survey establishment employed in taking the One Estimate. survey and levels for the preparation of the estimate ordered in G.O., No. 1306 W., dated 21st May 1881, for improvements to the port of Cuddalore and fixing the bar. I request that an allotment of Rs. 60 may be granted, as the work has actually been done.

No. 167. ORDER THEREON, 22nd March 1882, No. 757 W.

THE estimate, amounting to Rs. 60, for temporary Survey Establishment employed in taking survey and levels in connection with improvements to the port of Cuddalore, is sanctioned as follows:—

1 Surveyor for 25 days at Rs. 50 per mensem	...	...	...	...	RS. 42
Registered as Provincial No. 42 W. of 1881-82 and classified as Establishment.					
5 Lascars for 18 days at Rs. 6 each per mensem	...	...	...	...	18
Registered as Provincial No. 143 W. of 1881-82 and classified as Miscellaneous Public Improvement, Original Works.					

2. The sum of Rs. 42 is allotted from the budget provision for temporary establishment and Rs. 18 from the Provincial Reserve.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, Fifth Circle.
„ Examiner of Public Works Accounts, with Estimate.
„ Marine Department.

Exd. S. T. Austin.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1881} Madras.
PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,
THIRD CIRCLE,

&c., &c., &c.

Dated May, 21st.

Issued

Recd.

Encl.

G. O., 21st May 1881, No. 1,306 W.

MAY.
Nos. 43-44.

Port of Cuddalore.—Accepts the several conclusions arrived at by the Chief Engineer and Master Attendant as to the measures to be adopted for the improvement of the — and fixing the bar, and directs the Superintending Engineer to submit the requisite estimates.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

22nd March 1882, No. 757 W.

General.
Establishment.

Read the following paper:—

No. 166. From Colonel H. L. PRENDERGAST, R.E., Superintending Engineer, Fifth Circle, to the Chief Engineer, Public Works Department, dated Chepauk, 14th March 1882, No. 1332.

I HAVE the honor to submit for sanction an estimate of Rs. 60 for the Survey establishment employed in taking the survey and levels for the preparation of the estimate ordered in G.O., No. 1306 W., dated 21st May 1881, for improvements to the port of Cuddalore and fixing the bar. I request that an allotment of Rs. 60 may be granted, as the work has actually been done.

No. 167. ORDER THEREON, 22nd March 1882, No. 757 W.

THE estimate, amounting to Rs. 60, for temporary Survey Establishment employed in taking survey and levels in connection with improvements to the port of Cuddalore, is sanctioned as follows:—

1 Surveyor for 25 days at Rs. 50 per mensem	RS. 42
Registered as Provincial No. 42 W. of 1881-82 and classified as Establishment.	
5 Lascars for 18 days at Rs. 6 each per mensem	18
Registered as Provincial No. 143 W. of 1881-82 and classified as Miscellaneous Public Improvement, Original Works.	

2. The sum of Rs. 42 is allotted from the budget provision for temporary establishment and Rs. 18 from the Provincial Reserve.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, Fifth Circle.
" Examiner of Public Works Accounts, with Estimate.
" Marine Department.

Exd. S. T. Austin.
Spare Copies

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

21st May 1881, No. 1,306 W.

Buildings and Roads.
Civil Works.

No. 43. Read the following paper:—

Joint Report by the Chief Engineer and the Master Attendant on the Port of Cuddalore.

WE were enabled to examine this port on the 11th April.

2. The existing mouth which is that used for the port is now about one-third of a mile south of the Gori village, which is again half a mile south of the flagstaff.

3. The sand dune on which the two latter are situated is generally well raised (the highest point being at the flagstaff some thirty feet above mean sea level) and planted.

4. While the mouth, formed chiefly by the action of the Paravanar river, has in ordinary course moved north, the limit in this direction by local information appears to be near the place where an unsuccessful attempt was made some years ago to open and fix a permanent passage to the sea opposite the custom-house, in the hopes that this would permanently remain open from the united action of the Gudalur and Paravanar rivers here intended to be concentrated.

5. The Guddelum river has evidently but little practical effect in determining the position of the mouth of the port, though no doubt when its own bar is closed the stream passing south to the Paravanar serves to create a scour in the backwater past the custom-house, and in this way must have a beneficial action in keeping clear the passage for boats.

6. Although when the Paravanar mouth was last open to the northernmost limit the scour in the backwater eroded to some extent the base of the high sand dune on which the flagstaff is placed, and although it was then thought expedient to adopt some precautionary measure in order to counteract such action, the injury was not apparently serious, and so far as can be judged there would appear to be no question as to the thorough safety of the sand dune whatever may be the course taken by the river or the position of the mouth.

7. The main question therefore is how and where to fix the mouth so as to facilitate to the greatest degree the passage of cargo boats between the shipping in the offing and the custom-house.

8. A glance at the map shows that the mouth for securing this object must be fixed directly east of the southernmost point of the sand dune on which the village of Gori is placed, and judging from past action it is possible that the present mouth may have moved up to the point in two or at most in four years' time.

9. It will not of course be desirable to wait for the full completion of such movement to construct such works as may be necessary for fixing the position of the bar, as difficulties of a serious character might present themselves in case of unexpectedly heavy floods in the Paravanar or from other cause.

10. To fix the mouth we are of opinion that a revetment of much the same character as that employed and which has proved successful at Negapatam should be constructed, the work being, if possible, put in hand on the abatement of the next north-east monsoon.

11. The line of this proposed revetment and its return to the north, which will thus in future form the north of the proposed mouth, is shown roughly on the annexed plan, and detailed plans and estimates should, we think, now be called for as early as possible if Government approve of the views above expressed.

12. A difficulty connected with the mouths which successively form at Cuddalore is the deposit of sand which apparently invariably occurs across the backwater immediately north and west of the mouth, wherever or however formed, due no doubt to the check occasioned by the effluent stream to the velocity of the water coming from the Guddelum.

13. On the occasion of our inspection, this sand bar had for a short distance only one foot of water on it and was greatly complained of by the boatmen; inquiries, however, elicited the fact that there was nothing unusual in this state of matters, and that laden cargo boats have almost invariably in past years had to wait for half tide in order to get over the bar.

14. This inconvenience occurs so frequently in ports, both at home and abroad, that it cannot *per se* be looked on as exceptional, though no doubt it should, if possible, be remedied.

15. An examination of the backwater immediately east of the revetment constructed by the late General Lawford shows that a fair depth has here been preserved as no doubt the result of confining the stream at this point, and it may therefore be hoped that, in fixing the mouth as now proposed immediately opposite the revetment in question, the formation of this inner bar may in a measure be counteracted and a better depth preserved than is now the case.

16. The employment of the hand dredge adverted to in Captain Taylor's letter of 1st March printed with G.O., 9th March 1881, No. 606 W., may prove advantageous, but it must be borne in mind that the currents by which the bar is formed recur with each tide and that the action is thus constant.

17. It only remains for us to express an opinion as to the measures which should be adopted in case the revetment by which we propose to fix the mouth of the port has not all the intended effect in keeping the latter fixed and open, though we have no reason to suppose that it would be less efficacious than the similar work at Negapatam.

18. As in that case, we would recommend that a series of short groynes should be constructed along the sea-side of the sand-spit to the south, the terminal one being 100 feet long and placed 200 or 300 feet south of the mouth as fixed.

19. These works while securing the sand-spit from erosive action of the surf and arresting sand in movement along the coast during the south-west monsoon, would, we are satisfied, have a beneficial effect, while the long terminal groyne would bring such action on the mouth proposed to be fixed as would ensure its remaining permanently open for the passage of cargo boats.

20. No measures need in our opinion be taken with reference to the Guddelum river, except to keep it closed save at exceptional flood periods when it may threaten inundation to neighbouring lands.

(Signed) R. H. SANKEY, Col., R.E.,
Chief Engineer, P.W.D.

(Signed) J. H. TAYLOR, Capt., R.N.R.,
Master Attendant, Administrative Department.

7th May 1881.

No. 44.

ORDER THEREON, 21st May 1881, No. 1,306 W.

THE Government accept the several conclusions arrived at by the Chief Engineer and Master Attendant as to the measures to be adopted for the improvement of the port of Cuddalore and fixing the bar, and direct that the Superintending Engineer adopt early arrangements for submission of the requisite estimates.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, Third Circle.
„ Marine Department.

Exd. E. C. Shunker.
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