NOTES.

REFERENCE TO MADRAS P. W. D. CODE.

CHAPTER XV.—PARA. 2147.

1. This form should be used by the Executive Engineer in any of the following cases :—

a.—When he requires a grant, or an addition to an existing grant for carrying on a sanctioned Major work.

b.—When he is unable to utilize the grant at his disposal for any work, and wishes to resign it either wholly or in part.

c.—When he wishes to utilize the grant for one work upon some other.

2. Either of the columns for "Proposed New Grant" or for "Proposed Reduction," or both, may be used as required.

3. If it happens that the grant already allowed has been reduced, the entry in the column "Existing grant for current year" would of course be the amount less such reduction.

4. In the case of Irrigation Works the entries in the column "Departmental and Service Head" should show distinctly whether the proposed re-appropriation is debitable to Capital or Revenue, and the entries in the column "Works" should be so arranged as to show the project to the capital or Revenue Account of which the charge is debitable, and the class of Service to which the charge is debitable thus :—

———— Project.

(1)—Head works.

B. Land.

K. Buildings.

In cases of Productive Public Works the fact of their being so should be noted against the entries.

5. It being of the utmost importance that early intimation of possible lapses, or of excesses in outlay on works, should be communicated to the Government, a close watch should be maintained on the progress of all works by Executive Officers, and this form employed the moment the facts are sufficiently known.

1031 82.

P. W. D. Madras. Form No. M 46.

CIRCLE Second

DIVISION Kistna Western

FUND Provincial.

Application for a Re-appropriation of Budget Grants.

No. 1481/44 Dated 4th November 1882.

FORWARDED to the Secretary to Government, Public Works Department, through the Examiner of P.W. Accounts, for sanction, if approved.

L. W. Rundall

Superintending Engineer,
2nd Circle.

No. 552 Dated Madras, 17th November 1882.

FORWARDED to the Secretary to Government, Public Works Department, Madras.

The re-appropriations proposed may be sanctioned by the Local Government.

D. L. Carmichael

Examiner of P. W. Accounts,
Madras.

19th

Proceedings of Madras Government.

No. 3076-81 Dated 21st December 1882

ORDER THEREON.

Sanctioned.

21.12.82

R. S. M. Thompson Lt. Col.

Secretary to Government, P.W.D.

M

S.E. 2nd Circle

Exr. P. W. Accts.

Dated 22-12-82

APPLICATION TO THE Government of Mad[illegible]

FOR A RE-APPROPRIATION OF BUDGET GRANT.

PROPOSED NEW GRANT.

Departmental and Service Head.	Item No. of Budget.	Works.	Amount of Estimate.	Outlay to end of previous year.	Original grant for current year.	Existing grant for current year.	Proposed increase.	Grant as now proposed.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Provincial Original works Civil Buildings		Constructing District Munsiff's Court, Bapatla	12,620	-	12,320	6,000 (a) ~~5000~~	140 ~~1140~~	6,140
- Do -		Reserve with Govt.					1000	
							1140	

(a)
Rs 1000 Sanctioned in Govt Lr dated 7.4.82

PROPOSED REDUCTION.

Departmental and Service Head.	Item No. of Budget.	Works.	Amount of Estimate.	Outlay to end of previous year.	Original grant for current year.	Existing grant for current year.	Proposed reduction.	Amount at which grant for work will stand after reduction.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Provincial Original works Civil Buildings		Improvements to Guntur Jail	37,313	36671	500	500	- 400	100
	42	Constructing western Division Office, Duggirala	14,520	740	14,520	14,520	- 740	13,780
							- 1140	

EXPLANATION OF NECESSITY FOR RE-APPROPRIATION.

Station Bezwada

Dated 4th November 188 2

Signature

Jerow.

The Supt Engineer
b: Circle.

To,

The Chief Engineer
P. W. D.

No 1448 M.D.

Dated 15th Nov 82

No 3078 W of 21st Nov/82

Report of Inspection of the Execs Engineer's office, Madura.

Offers explanation as to the authority under which Impresto were given to the President L.F.B.F and to the Sub-Collector.

Subd in Receipt Regr.

No 3078 W of 21st Nov/82

Recorded with reference to G.O. No 2923 W of 6th November/82.

18.11.82

Co. 1375. M. 14.6.83
" 884. M. 31.3.83
" 2864. M. 16.11.82
" 153. M. 16.1.82
" 2. M. 6.1.83
Cir. 1830 — E.S. M
" 2847 - 28.11.82
Co. 1320. M. 29.5.82
No 1936. C. 30.10.82
Co. 2923. M. 6.11.82
" 2975. M. 10.11.82

To The Sanitary Engineer
Trichinopoly Circle

despd 21-11-82
JJ/11

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

31st March 1881, No. 884 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 100. Endorsement of the Revenue Department, dated 19th March 1881, No. 760.

Proceedings of the Board of Revenue, dated 10th March 1881, No. 418.

From C. KOUGH, Esq., Acting Sub-Collector of Madura, to the Collector of Madura, dated Dindigul, 12th February 1881, No. 55.

I HAVE the honor to address you on the subject of the Sub-Collector's bungalow under construction at Dindigul.

2. The work is being carried out on the plan sanctioned by Government.

3. In construction two departures have been made from the specifications submitted with the estimate. Both have been for the benefit of the work by effecting, first, greater durability, and, secondly, saving.

4. These alterations are the substitution of dressed stone for brick and Calicut patent tiles for the ordinary roofing tiles of the country.

5. The first of these produces a direct saving in construction of Rs. 521-12-5; as regards the second, although the tiles are dearer, the timber required is so much less that a saving in this is effected of Rs. 113.

6. The annexed statement shows under these heads the net saving, viz., Rs. 634-12-5.

7. But I wish to point out that in spite of this I shall be unable to complete the work within the estimate. The reasons are two-fold.

8. First, the specification for the portion to be covered with Bengal roofing has been found to be utterly inadequate. The rate allowed is only Rs. 12 per square, whereas the lowest for which the work can be done, as calculated by Mr. Anderson, C.E., is Rs. 32 per square, and no one will undertake it for less. The increase in this item alone would be Rs. 754.

9. The second is that the calculation for wood-work and masonry has been made together in a way that leaves no sufficient margin to cover the cost of timber alone. Roughly the gross timber required will be Rs. 2,000, whereas the specifications would give only about half of this.

10. I must therefore respectfully ask permission to submit herewith a supplemental abstract* estimate, as I do not wish to incur the responsibility of leaving a valuable work so far advanced in an unfinished or unprotected state.

* Together with the original estimate (detail and abstract).

11. I have commenced the work under orders, and, so far as I have gone, have effected saving, and I can fairly challenge any test of execution, but I cannot do impossibilities. I am forced to work by contract, but the rates are so low I can hardly get a man to face them. The wood-work has been absolutely declined by resident carpenters, and my Seristadar has had to travel to Negapatam and Trichinopoly to try and get some one to manage it there.

12. I solicit the favor of early orders.

No. 56.

SUBMITTED to the Board of Revenue for sanction with enclosures, with reference to G.O., No. 1,467 W., 23rd June 1880, and No. 1,987 W., 23rd August 1880, communicated with Board's Proceedings, Miscellaneous No. 8,149, 26th July 1880, and No 10,261, 20th September 1880, respectively. The additional allotment is necessary.

MADURA,
23rd February 1881.

(Signed) H. J. STOKES,
Collector.

SUBMITTED to Government with the request that sanction may be accorded for an additional allotment of Rs. 1,970-11-6.

(True Copy and Extract.)

(Signed) C. A. GALTON,
Secretary.

TRANSFERRED to the Public Works Department with the request that, in the circumstances of the case, an increased allotment may be granted.

(Signed) C. G. MASTER,
Secretary to Government, R.D.

No. 101. ORDER THEREON, 31st March 1881, No. 884 W.

THE original estimate framed by the Public Works Officers for a Sub-Collector's house at Dindigul amounted to Rs. 8,860, but the Sub-Collector in his letter of the 2nd April 1880, Z, printed with G.O., No. 1,467 W., dated 23rd June 1880, asserted that it could be constructed for Rs. 6,385 on certain conditions, the first of which was that the execution of the work must be left to the Revenue Department.

2. It was noticed at the time that there was nothing to show on what the Sub-Collector's estimate was based, and that as a fact the work could not be executed as a legitimate business transaction for the sum named.

3. The estimate was sanctioned for execution by the Revenue Department on the distinct understanding that the Public Works Department were entirely relieved from responsibility in connection therewith.

4. It now appears that the work will actually cost Rs. 8,355 at least and may possibly cost more, and this in spite of a saving of Rs. 634 by an alteration in the materials of construction.

5. The estimate previously submitted by the Sub-Collector, for the framing of which moreover it does not appear who is responsible, appears to have been, as indeed

was to be expected, altogether unreliable, and the Government cannot but condemn the method adopted of non-professional supervision.

6. Under the circumstances, however, the revised estimate, amounting to Rs. 8,355, is sanctioned, the additional amount now required, viz., Rs. 1,970, being appropriated from the Provincial Reserve of 1880-81.

7. This sanction is registered as Provincial No. 103 B. of 1880-81 and classified as Civil Buildings, Original Works. It cancels No. 8 B. of 1880-81.

(True Extract.)

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

To the Revenue Department, with ~~four~~ 7 enclosures.
" Superintending Engineer, Third Circle.
" Examiner of Public Works Accounts.
" Accountant-General.

Exd. E. C. Shunker.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of 1881 Madras.

PUBLIC WORKS.

To

THE REVENUE DEPARTMENT.

&c., &c., &c.

Dated March, 31st.

Issued

Recd. *Encl.*

G. O., 31st March 1881, No. 884 W.

MARCH.

Nos. 100-101.

Sub-Collector's house at Dindigul.—Sanctions with remarks the revised estimate for constructing the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

14th June 1880, No. 1,375 W.

Buildings and Roads.
Civil Works.

Read the following paper :—

No. 22. From Major D. H. TRAIL, R.E., Officiating Examiner, Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 26th May 1880, No. 29 W.

ADVERTING to G.O., No. 1,046 W., dated 28th April 1880, sanctioning an appropriation of Rs. 1,190 for the Sub-jail and Sub-Magistrate's Cutcherry at Tirupatúr, and directing that the sum may be made over to the District Magistrate, Madura, I have the honor to suggest that instead of making over the full amount as directed it would be preferable to grant the District Magistrate such funds as he may require from time to time, and that he may be requested to account for the expenditure incurred therefrom to the Executive Engineer concerned for incorporation in his accounts to this office.

2. The simplest and most suitable form of account in such cases is that of an imprest holder under the Executive Engineer, and as cases of officers not in account with this department being entrusted with funds for the execution of Public Works may be expected to occur often, I beg that this mode of dealing with such transactions may be adopted as a general rule in future.

3. Soliciting the favor of early orders in this matter.

No. 23. ORDER THEREON, 14th June 1880, No. 1,375 W.

THE Examiner's proposals are approved.

(True Extract.)

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

To the Superintending Engineer, Third Circle.
,, other Superintending Engineers.
,, Superintendents of Works.
,, Examiner of Public Works Accounts.
,, Judicial Department.
,, other Departments of Government.
,, Accountant-General.

Exd. E. C. Shunker.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1880) Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,
THIRD CIRCLE,

&c., &c., &c.

Dated June, 1881.

Issued

Read. *Encl.*

G. O., 14th June 1880, No. 1,375 W.

JUNE.

Nos. 22-23.

Sub-Jail and Sub-Magistrate's Cutcherry at Tirupatúr.—The proposal of the Examiner of Public Works Accounts for placing funds at the disposal of the District Magistrate, Madura, for repairs, &c., to the — approved.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

16th November 1881, No. 2864 W.

Buildings and Roads.
Civil Works.

Read the following papers :—

No. 84. From Lieutenant-Colonel J. BEATTY, R.E., Superintending Engineer, Third Circle, to the Chief Engineer, Public Works Department, dated Kodaikánal, 6th May 1881, No. 166 T.C.

As directed in G.O., No. 799 W., of 23rd March 1881, I have the honor to submit an estimate for putting that portion of the Gúdalúr Ghât in British territory into thorough repair.

1 Estimate with detail and specification.
1 Abstract.

2. The Gúdalúr Ghât takes its name from the village of Gúdalúr in the Cumbum valley, Madura district, and that village is about 5 miles distant from the foot of the ghât. The ghât is, I am told, about 18 miles long, owing to the numerous windings among the hills, and it leads to the town of Peermade or Pirmerd in the Travancore country.

3. Only the first 4 miles of the ghât on the Madura side are in British territory, and it is these 4 miles that have been left without repair for some two years, and have consequently fallen into a very ruinous state. In several places the road is actually dangerous owing to landslips and the fall of revetments, but everywhere it is badly cut up, partly by wear and tear, and partly by the action of surface drainage.

4. The estimate for putting the piece of ghât in thorough order amounts to Rs. 6,820; and was prepared, under my instructions, by the Madura Sub-division Officer, Supervisor Sergeant McAlister, as Supervisor Littlewood, who was lately in that neighbourhood making a survey and levels of the Cumbum-Gúdalúr road, had returned to his ordinary duties in the Trichinopoly district.

5. The repairs consist of restoring portions of the road that have slipped; rebuilding revetments and parapet walls that have fallen; clearing vents of tunnels, many of which are completely choked; filling in ruts or gullies, which are in many places two feet deep; and reforming and remetalling the road surface. The ruts are to be filled in with the only gravel procurable, which is a kind of disintegrated rock, and the metal to be broken stone. There is no good gravel within many miles, and the best stone available is a kind of gneiss.

6. I have had a revised abstract estimate prepared in my office and attached to the estimate, in which I have lumped together a number of petty items, so as to reduce the total number as much as possible for account purposes.

7. As the department is but feebly represented* in Madura at present, I would strongly recommend that funds for this work be handed over to the Local Fund Board if, as I believe to be the case, they are willing to undertake it with their own establishment, which is said to be working well at present, especially in the Dindigul Circle.

* 1 Supervisor, Sergeant McAlister.
1 Overseer, Subroyalu Naidu.

No. 1242.

REFERRED, with the previous papers, to the Revenue Department for inquiry whether the Local Fund Board will undertake the work if funds be provided by the Public Works Department.

Public Works Department endorsement No. 644, dated 12th March 1881.
Revenue Department No. 752, dated 18th March 1881 (to be returned).

(By Order.)

CHEPAUK,
18th May 1881.

(Signed) C. C. RAWSON, Captain, R.E.,
Ag. Dy. Chief Engineer, P.W.D.

No. 1363.

TRANSFERRED to the Financial Department.

20th May 1881.

(Signed) C. G. MASTER,
Secretary to Government, R.D.

No. 921.

REFERRED to the Board of Revenue for report.

25th May 1881.

(Signed) G. S. FORBES,
Ag. Asst. Secy. to Govt., Finl. Dept.

No. 84-A. Endorsement of the Acting Assistant Secretary to Government, Financial Department, dated 10th November 1881, No. 1809.

Proceedings of the Board of Revenue, dated 1st November 1881, No. 2582.

Read the following letter from H. J. STOKES, Esq., President of the Local Fund Boards, Madura, to the Secretary to the Board of Revenue.

ENCLOSURE No. 1.

EXTRACT from the Minutes of Proceedings of the Local Fund Board, Dindigul Circle, passed at a Meeting held at Dindigul on Friday, the 26th August 1881.

* * * * *

Proceedings No. 132 *of* 1881.

Read Revenue Board's Proceedings, No. 1057, dated 14th June 1881, inquiring whether the Local Fund Board will undertake the repair of Gúdalúr Ghât road if funds be provided by Department of Public Works.

Read also Revenue Board's Proceedings, Miscellaneous No. 7540, dated 6th August 1881, requesting to report the decision of the Local Fund Board on the subject of their undertaking repair of Cumbum-Gúdalúr road if funds be provided from Department of Public Works.

Postponed till a special meeting is held on receipt of the answers of the Court of Wards to a letter of the Collector asking for a loan of Mr. Hardy's services to superintend this work. With their present establishment the Board would not be able to carry out the work.

ENCLOSURE No. 2.

EXTRACT from the Minutes of Proceedings of the Local Fund Board, Dindigul Circle, passed at a Meeting held at Dindigul on Friday, the 16th September 1881.

* * * * *

Proceedings No. 168 *of* 1881.

Read President's foot-note to Proceedings of the Board of Revenue, Miscellaneous No. 8104, dated 29th August 1881, requesting to obtain the views of the Local Fund Board on the subject of entrusting the supervision of Cumbum to Gúdalúr road and the Gúdalúr Ghât line to Mr. Hardy, the Gandamanáyakanúr Estate Engineer.

The Board accept Mr. Hardy's services and request the President to be good enough to arrange the cost of establishment.

ENCLOSURE No. 3.

Enclosures to Board's Proceedings, dated 30th September 1881, No. 645 R.S.

Letter—dated 7th October 1881, No. 150.

WITH reference to the Proceedings of the Board of Revenue as per margin, I have the honor to forward herewith copies of the resolutions of the Local Fund Board, Dindigul Circle, Nos. 132 and 168 of 1881, in which that Board express their inability to carry out the works with their present Engineering staff, and accept the services of Mr. Hardy lent to them by the Court of Wards† for the purpose.

No. 1057, dated 14th June 1881.
Mis. No. 7540, dated 6th August 1881.
„ „ 8104, „ 29th „ „
„ „ 645, „ 30th September 1881.*

* Enclosures returned.

† Proceedings of the Court of Wards, No. 8104.

2. Mr. Hardy has been requested to submit proposals regarding establishment, &c., and they‡ will be sent up to Board when received. The difficulty is with regard to the supply of funds, and I request that arrangement be made to keep the Local Fund Board in sufficient funds in order that the work when commenced may be pushed on continuously without being stopped for want of funds. If funds can be at once placed at our disposal, there will be no difficulty in beginning the work immediately; but it is hoped that when once funds are allotted arrangements may be made for making the supply constant.

‡ Together with estimates, &c.

RESOLUTION—

SUBMITTED to Government with reference to their endorsement, dated 25th May 1881, No. 921.

2. To enable the Circle Board to undertake the immediate repair of the road in question, the Board have agreed to lend the services of Mr. Hardy, the Engineer in charge of the Public Works in Gandamanáyakanúr and other estates now under the charge of the Court of Wards—Board's Proceedings, dated 29th August 1881, Miscellaneous No. 8104.

3. The President is requested to return the original endorsement of Government forwarded to him with Board's Proceedings, dated 6th August 1881, Miscellaneous No. 7540.

(True Copies and Extract.)

(Signed) C. D. MACLEAN,
Acting Sub-Secy.

TRANSFERRED to the Department of Public Works.

(Signed) E. L. LAFFAN,
Acting Asst. Secy.

No. 85. ORDER THEREON, 16th November 1881, No. 2864 W.

THE estimate, amounting to Rs. 6,820, for repairing the portion of the Gúdalúr Ghât in British territory, is sanctioned for execution by the Local Fund Board, Dindigul Circle.

2. The outlay will be met from the allotment of Rs. 20,000 in the current year's Provincial Budget for completing the road from Cumbum to the foot of the Gúdalúr Ghât, and the Local Fund Board will be kept in funds by the Superintending Engineer in the manner prescribed in G.O., No. 1375 W., dated 14th June 1880.

3. This sanction has been registered as Provincial No. 95 W. of 1881-82, and classified as Communications, Repairs.

4. The Government await a reply to memorandum No. 1402, dated 13th June 1881, relative to the estimate for completing the road from Cumbum to the foot of the Gúdalúr Ghât.

(True Extract.)

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

To the Board of Revenue.
" Superintending Engineer, Sixth Circle.
" Examiner of Public Works Accounts.
" Financial Department.

Exd. E. C. Shunker.

Spare Copies

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

18th January 1882, No. 153 W.

Buildings and Roads.
Civil Works.

Read the following papers :—

No. 90. From Lieutenant-Colonel J. BEATTY, R.E., Superintending Engineer, Third Circle, to the Chief Engineer, Public Works Department, dated Trichinopoly, 30th May 1881, No. 317 T.C.

I HAVE the honor to submit herewith an estimate of Rs. 78,700 for making a first-class road, metalled and bridged throughout, from Cumbum to the foot of the Gúdalúr Ghât, in the Madura District.

Enclosures as per accompanying List.
Plans and Estimates sent separately.

2. The estimate was called for in G.O., No. 2828 W., of 7th December 1880, and I regret that I have not been able to submit it sooner. The delay has been due to the reduced state of the establishment and pressure of other work.

3. The piece of road now proposed to be made is about 10 miles long, and is situated at the head of the Cumbum valley. It is of importance as being part of the high road into north Travancore, *viâ* the Gúdalúr Ghât. A gravelled Local Fund road, on which there is considerable traffic, leads from Ammayanáyakanúr on the South Indian Railway, *viâ* Periyakulam, to Cumbum; and I have no doubt when this short but expensive section of the line is completed, and the portion of Gúdalúr Ghât in British territory put in good order, there will be great increase of traffic between Madura and Travancore.

4. The Cumbum-Gúdalúr road will be an expensive one to make for the following reasons:—

I.—Labor and carriage are scarce and dear in that neighbourhood; the head of the Cumbum valley being sparsely populated.

II.—Though the country is open and tolerably free from jungle (with the exception of the lines of the principal streams, which are well clothed with jungle,) it is reputed to be feverish and unhealthy.

III.—One considerable nullah and two minor ones, bearing the drainage of the adjoining hills, and with very steep fall in their beds, cross the line of road; these must become torrents at times of exceptional rain-fall in the hills, and as their banks are thickly fringed with trees and jungle, it becomes necessary to provide for the safety of the masonry works upon them by allowing very ample height and width of waterway.

5. It will be observed, by the longitudinal section of the line, that there is a total fall of 400 feet in the 10 miles from the foot of the ghât to Cumbum. The line had been laid out and partly formed at some time; but having been left unfinished and long neglected, it is now marked chiefly by the traces of side channels and the few small masonry works. It is almost straight; the steepest gradient upon it is one in 21, and that only for a short distance near the foot of the ghât.

6. The three principal streams are now the great obstacles to traffic on the line, owing to their deep channels and steep banks; and of course they are quite impassable when in flood. Otherwise, in dry weather it is, as an unmade road, a very practicable one for country-carts.

7. Between Cumbum and Gúdalúr the road passes over cotton soil; beyond Gúdalúr to the foot of the ghât a red clay, containing kunkur in places, is met with.

Firewood is of course abundant in the neighbourhood, especially on the principal streams.

The most convenient site for brick-making is on the Kuruvanuthu, a little way above the site of the proposed bridge.

The best limestone, so far as yet ascertained, is found between the Shuragam and Kakanodai nullahs, and the best place for burning it will be at the latter stream. The lime-stone is found in the nodular form.

The stone most easily procurable is a kind of gneiss, of a grey colour, which can be burnt off in layers, and broken to sizes for building purposes. It will have to be carted $2\frac{1}{2}$ miles to the large bridges.

There is no good gravel available within many miles, but an inferior description is met with near the village of Gúdalúr. Disintegrated rock is also found near the foot of the hills, and material for metalling in abundance there, and in small quantities all along the line.

8. The works now proposed include the formation of a roadway 24 feet wide at top, of which 18 feet will be gravelled with the best material that may be found near the line, to a thickness of 10 inches. The berms and side slopes, where the road is on embankment, are to be turfed. All streams are to be provided with suitable masonry works.

9. The estimate provides for building the three principal bridges with coursed rubble in chunam, carefully grouted and pointed. The arch-work is to be of brick, faced with cut-stone; the cut-waters also being of large stone, carefully fitted and laid. The foundations of the Kuruvanuthu bridge are to be protected, in the lower part of the bed which is sandy, with a masonry flooring and aprons with retaining walls. Elsewhere the foundations will be protected with floorings and aprons of packed stone, strengthened with piling.

10. The minor masonry works, consisting of sixteen new tunnels and one road dam, are to be built of brick in chunam; covering stones being used instead of arch-work, as these can be obtained at a reasonable price.

11. The existing masonry works, which consist of fifteen road dams, varying from 23 to 74 feet in length between wings, will be repaired and strengthened with rear aprons.

12. In an appendix to this letter I have given an abstract showing the nature and cost of the several items in the estimate now submitted.

13. As recommended in my letter No. 166 T.C. of 6th instant, in the case of the Gúdalúr Ghât repairs, I would suggest that this work also should be handed over to the Local Fund Board of the Dindigul Circle, if they are willing to undertake it on the understanding that it is to be carried out in strict accordance with the plans and specifications that accompany the estimate.

C.E. No. 1402.

REFERRED, in continuation of No. 1242, dated 18th May 1881, to the Revenue Department, for inquiry whether the Local Fund Board, Dindigul Circle, will undertake the work if funds be provided by the Public Works Department.

(Signed) C. C. RAWSON, Captain, R.E.,
13th June 1881. Ag. Deputy Chief Engineer, P.W.D.

To the Revenue Department, with twenty-four enclosures.

No. 90-A. Endorsement of the Chief Secretary to Government, Financial Department, dated 28th November 1881, No. 1910.

Proceedings of the Board of Revenue, dated 22nd November 1881, No. 2907.

Read the following letter from H. J. STOKES, Esq., President of the Local Fund Boards, Madura, to the Secretary to the Board of Revenue, dated ———, No. 168.

IN continuation of my letter No. 150 of the 7th instant, I have the honor to forward herewith copy of Mr. Hardy's letter, No. 3 of the 20th idem, submitting proposals for repairing the Cumbum-Gúdalúr roads, &c.

The estimates,* &c., for both the road works are returned.

* 1. Estimate for the repair of the Ghât road.
2. Superintending Engineer's letter, with 24 enclosures, No. 3177 C., dated 30th May 1881, forwarding estimates for the repairs of the Cumbum road.

Read also G.O., Financial Department, dated 8th November 1881, No. 2167.

THE President's letter read above is submitted for the orders of Government in continuation of Board's Proceedings, dated 1st November 1881, No. 2582.

(A true Copy and Extract.)

(Signed) E. GIBSON,
Acting Sub-Secretary.

TRANSFERRED to the Public Works Department, with reference to G.O., No. 2864, dated 16th November 1881.

(Signed) E. S. LAFFAN,
for Chief Secretary.

No. 90-B. From the Superintending Engineer, Sixth Circle, dated 28th November 1881, No. 82 M.D.

No. 90-C. Proceedings of the Board of Revenue, dated 12th December 1881, No. 3210.

No. 90-D. From the Superintending Engineer, Sixth Circle, dated 31st December 1881, No. 135 C.

No. 91. ORDER THEREON, 18th January 1882, No. 153 W.

THE estimate for constructing a first-class road from Cumbum to the foot of the Gúdalúr Ghât, the amount of which has been reduced by the Chief Engineer from Rs. 78,700 to Rs. 72,148, by limiting the width of metalling to 12 instead of 18 feet, is sanctioned for execution by the Local Fund Board, Dindigul Circle.

2. A sum of Rs. 13,180 is available for the work in the current year's Provincial Budget, and Rs. 20,000 will be provided in the budget of the ensuing year. The Local Fund Board will be kept in funds by the Superintending Engineer in the manner prescribed in G.O., No. 1375 W., dated 14th June 1880. The petty establishment required by the Local Fund Engineer should be charged to the estimate.

3. This sanction has been registered as Provincial No. 113 W. of 1881-82, and classified as Communications, Original Works.

(True Extract.)

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

To the Board of Revenue, with twenty-one enclosures.
" Superintending Engineer, Sixth Circle.
" Examiner, Public Works Accounts, with duplicate Abstract Estimate.
" Financial Department.

Exd. S. T. Austin.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1882) Madras.

PUBLIC WORKS.

To

The BOARD OF REVENUE,

&c., &c., &c.

Dated January, 1882.

Issued

Recd. Encl.

G.O., 18th January 1882, No. 153 W.

JANUARY.

Nos. 90-91.

Road from Cumbum to the foot of the Ghâdalûr Ghât.—Estimate for constructing a first-class — sanctioned for execution by the Local Fund Board, Dindigul Circle.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

6th January 1881, No. 2 W.

Buildings and Roads.
Civil Works.

Read the following papers:—

No. 3. From Lieutenant-Colonel J. BEATTY, R.E., Superintending Engineer, Third Circle, to the Chief Engineer, Public Works Department, dated 9th December 1880, No. 1,212 T.C.

I HAVE the honor to inform you that out of the five Government buildings at Pámban (*vide* accompanying list), formerly in charge of the Public Works Department, two were transferred to the Telegraph Department and the remaining three are still in charge of this department.

2. Two buildings, Nos. 4 and 5, are rented to the Port Officer and a subordinate of the Telegraph Department, and building No. 3 is unoccupied.

3. As there is no Public Works subordinate within 50 miles of Pámban to look after the repairs of these three buildings, I have the honor to request that the two buildings, Nos. 3 and 4, may be transferred to the Telegraph Department; and that building No. 5, which is now rented by the Port Officer, may be handed over to the Marine Department, on condition that they will maintain them and hand them back to the Public Works Department if required at any future date.

MADURA DISTRICT.

Statement showing the Government Buildings at Pámban.

Number.	By whom Occupied.	Remarks.
1	Telegraph Office	Transferred to Telegraph Department ten years ago.
2	Do.	Do. to do.—*Vide* G.O., No. 2,112 W. of 13th August 1879.
3	Unoccupied	Proposed to be transferred to the Telegraph Department.
4	Rented by Assistant Telegraph Master.	
5	Rented by the Port Officer ...	Do. do. to the Marine Department.

9th December 1880.

(Signed) J. BEATTY, Lieut.-Colonel, R.E.,
Superintending Engineer, Third Circle.

No. 4. Memorandum from the Superintendent of Telegraphs, Madras Division, to the Deputy Chief Engineer, Public Works Department, dated Madras, 20th December 1880, No. 2,595.

IN reply to his No. 2,882 of the 17th instant, has the honor to state that the Telegraph Department has as much accommodation as it at present requires at Pámban.

2. The undersigned will, however, inspect the buildings on his next visit to Pámban, and if necessary again communicate with the Public Works Department on the subject.

(Signed) R. B. FLINDELL,
Superintendent, Madras Division.

No. 4-A. From J. H. TAYLOR, Esq., Lieutenant, R.N.R., Master Attendant, Administrative Department, to the Secretary to Government, Public Works Department, dated Madras, 20th December 1880, No. 11,239.

WITH reference to your office endorsement No. 2,882 of 17th December 1880, I have the honor to inform you that I have only just recommended to Government that the building occupied by the Port Officer, Pámban, be taken over by the Marine Department, and that an upper room be built at the cost of Port Fund. The house is required to be permanently transferred.

2. I should be glad if the unoccupied building No. 3, mentioned in the statement forwarded, is conveniently situated and suitable for an office as, if so, I would ask that it be placed at the disposal of the Port Officer, Pámban, who now hires a place for his office at Rs. 3 per mensem.

No. 5. ORDER THEREON, 6th January 1881, No. 2 W.

THERE is no objection to the buildings numbered 3 and 5 being handed over to the Marine Department on the conditions specified by the Superintending Engineer.

2. Building No. 4, now rented by the Telegraph Department, will be similarly transferred to that department.

(True Extract.)

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

To the Superintendent of Telegraphs, Madras Division.
" Marine Department.
" Superintending Engineer, Third Circle.
" Examiner of Public Works Accounts.

Exd. S. T. Austin.
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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of [1881] Madras.

PUBLIC WORKS.

To

THE SUPERINTENDENT of TELEGRAPHS, MADRAS DIVISION,

&c., &c., &c.

Dated January, 881.

Issued

Read. Encl.

G. O., 6th January 1881, No. 2. W.

JANUARY.
Nos. 3–5.

Government Buildings at Pámban, Madura District.—The transfer of certain —— to the Marine and Telegraph Departments sanctioned.

Public Works Department.
No. 1830 dated 8th August 1881.

Circular Memo:

Chief Engineers Circular No. 1670 dated 16th July 1881.

For the last five lines of para 2 of the above Circular substitute the following words. "May be entrusted with the duties of cashier."

Para 2 will then read as follows.

The replies having now been received and considered, the Chief Engineer is of opinion that in cases where the appointment of a special cashier has not been sanctioned, the Head Clerk may be entrusted with the duties of cashier.

By order

Major R.E.
Dy. Chief Engineer P.W.D.

To
Supg. Engineers
Supt.s of Works
Engr. Architect to Govt.
Exr. of P.W. Accounts.

Public Works Dep[art]t

No 2847 dated 28th November 1881.

Circular.

A case has recently been tried at the Criminal Sessions of the High Court in Madras, in which a Divisional Account-ant was convicted of criminal misappropriation of Govern-ment money, effected by the interpolation in the divisional cash book of fraudulent entries purporting to be payments for work done and value received.

2. It is therefore necessary to warn all officers of the depart-ment responsible for the disbursement of money that the rigid scrutiny of their cash books is a matter of grave importance, and that they must take every precaution to be assured not only that vouchers support entries made but that interpolations are guarded against as far as possible.

3. Executive Engineers and other disbursers are now direc-ted to check every entry in their cash book with the voucher supporting it. They must further check and initial the totals at foot of each folio and see that they are clearly and legibly inked in; this is not to be left until the close of the month, but must be done as soon as the entries in each folio are checked. There-could then be no possibility of an interpolation without the totals so inked in and initialled being altered or obliterated. Any alteration resulting from a clerical error should be recorded in red ink and initialled in red ink by the disburser. Similarly also totals 'brought forward' on each folio should be initialled after check with totals 'carried forward' from previous folios.

4. Superintending Engineers will at their inspections of Divisional and Sub Divisional Offices, note whether these orders are observed

/By order/

Lieut. Coll. R.E.
Sy. Dy. Chief Engineer
P.W.D.

To,
Supg. Engineers.
Corlg. Archt. to Govt.
Genl. Supdt P.W. Stores.
Exr. of P.W. Accounts.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General Account.

No. 142.

READ—the following papers :—

Office Note from the Examiner of P. W. Accounts,	dated	24th	March 1882,	No. 1295.
Memorandum by the Chief Engineer, P. W. Dept.,	,,	30th	,, ,,	,, 758 C.
From the Superintending Engineer, First Circle,	,,	11th	April ,,	,, 81 G.D.
,, ,, ,, Third Circle,	,,	15th	,, ,,	,, 57.
,, ,, ,, Fourth Circle,	,,	15th	,, ,,	,, 142.
,, Consulting Architect to Government,	,,	21st	,, ,,	,, 56.
,, Superintending Engineer, First Circle,	,,	1st	May ,,	,, 61 G.L.
,, ,, ,, Sixth Circle,	,,	2nd	,, ,,	,, 222 T.J.
,, ,, ,, Second Circle,	,,	9th	,, ,,	,, 46 G.L.
,, ,, ,, Fifth Circle,	,,	10th	,, ,,	,, 444.

No. 143.

ORDER—dated 29th May 1882, No. 1328 W., Public Works.

It is observed from the foregoing papers that the Chief Engineer, Public Works Department, the Examiner, Public Works Accounts, five Superintending Engineers out of six, and the Consulting Architect agree in opinion that the rule in paragraph 1257 of the Public Works Code, prescribing that treasure chests should be secured by two locks of different patterns, is unsuitable, and that every officer having cash in his charge should be responsible for its proper custody and be expected to make such arrangements as may be necessary for its safe keeping.

2. The Government accept this view and direct that paragraphs 1257 and 1267 be modified accordingly.

(True Extract.)

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

To Superintending Engineers.
To the Consulting Architect to Government.
,, Examiner of Public Works Accounts.

Exd. C. Howarth.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated May, 29th.

Recd. *Encl.*

G.O., 29th May 1882, No. 1328 W.

MAY.

Nos. 142-143.

Treasure Chests.

Proper custody of —. Directs modification of paragraphs 1257 and 1267 of the Public Works Code relative to the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

No. 34.

READ—the following letter from D. C. GORDON, Esq., Examiner of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 30th October 1882, No. 130 W.:—

I have the honor to submit, for information and orders of Government, Notes of my inspection of the office of the Executive Engineer, Madura Division, and beg to call attention to paragraph 5.

ENCLOSURE.

NOTES of Inspection by D. C. GORDON, Esq., Examiner of Public Works Accounts, of the Office of the Executive Engineer, Madura Division, on the 19th October 1882.

1. J. C. Johnston, Esq., is the Executive Engineer; Kistnasawmy Sastry, the Accountant. The division was last inspected in March 1882.

2. The Executive Engineer and two Sub-divisional officers have drawing accounts. Under the Executive Engineer there are three imprests, Rs. 100 with Mr. Taylor, Rs. 1,000 with the President, Local Fund Board, Madura, and Rs. 1,000 with the Sub-Collector, Dindigul. Under Conductor Littlewood there are two imprests, Rs. 100 and 25. The imprest accounts are all in order.

3. Six Treasuries and Sub-Treasuries are drawn upon throughout the division. The distinguishing initials on cheques of the several officers are not always adopted. This will now be arranged for. In the pass-book of the Huzur Treasury *all* cheques are entered promiscuously; only the cheque number is quoted and the cheque-book number is nowhere entered. This point has already been brought to notice of Government in the Inspection Report of the Vizagapatam Division (G.O., No. 2066 W., dated 12th August 1882,) and has been further specially referred to the Provincial Accountant-General by the Examiner. It causes great trouble to reconcile treasury and cash-book balances, because it is impossible to at once check the pass-book entries from any single cash-book, there being no guide except the cheque number, and in the few entries recorded in the pass-book for October, at least four cheque-books were in use, and in two consecutive entries the same cheque number happened to occur. There cannot be much trouble to treasury officers to quote the book number, cheque number, and initial, and so save time to divisional offices. The Executive Engineer draws out his own cheques, but does not cross them. The Code rule was pointed out, and should be observed in all cases.

4. The sub-divisional cash-books are submitted twice a-month. The copies should be written up synchronously with the originals to save time. In the head-quarter's cash-book there were numerous petty payments debited to miscellaneous advances, for train fares to lascars, &c., adjustable on audit of the travelling allowance bill. It would be better to allow the Head Clerk to hold an imprest sufficient to meet these payments, the amount being large enough to allow of recoupment being made only when the travelling allowance bill has been received audited. The recoupment could then be charged out at once to establishment travelling allowance, and the numerous debits and credits to miscellaneous advances would thus be obviated. Irrigation outlay is charged in the cash-book to "transfers irrigation," and is posted into the general cash abstract. This is unnecessary and only duplicates entries; such outlay should be charged to the proper head and posted into the irrigation cash abstract, the total being transferred at the close of the month from the irrigation to the general cash abstract book. The cash-book is now written up by the Head Clerk, who keeps the key of the cash-chest, the Accountant at the close of the day scrutinising the entries and filling in the heads for the cash abstract.

5. The register of works is up to date and neatly kept. The most important work in progress is the restoration of Tirumal Naick's Palace. The estimate has been perpetually subject to revision, and has within the last few days been again returned for modifications. In the register of works the several sub-works are detailed by sub-heads of expenditure, but in the work voucher submitted with the accounts to the Audit Office the outlay is distributed only by the several component works and in no detail of sub-heads. It is recommended for approval of Government that the outlay on this work as a whole be audited by sub-works irrespective of sub-heads, because the expenditure transferred from the Trichinopoly Division was recorded only by sub-works, and although the subsequent outlay in the Madura Division has been recorded by sub-heads following the description of work done, it will probably be quite impossible ever to distribute the up-to-date outlay over sub-heads of any revised estimate which may eventually be sanctioned, and any result (assuming success possible) from so distributing outlay must naturally be approximate and of little practical advantage. The work vouchers might therefore continue to be submitted, as at present, by sub-works, the register of works being still kept by sub-heads. The completion report may perhaps be in accordance with the estimate, though it is very doubtful whether there can be any reliable distribution of old outlay.

6. The register of buildings in charge of the Executive Engineer is approaching completion. Of rented buildings there are no arrears of rental.

7. The schedules of miscellaneous advances and deposits are clear, the outstandings due to petty contractors are trifling, and for current works there is no stock in the division, and no padugai or other leasable properties.

8. The schedule of rates is said to be up to date and useful in check of rates for estimates.

9. The office is in satisfactory order, and when the little roughness, which has existed between the office hands in regard to the distribution of work, and the relative positions of Accountant and Head Clerk, has been smoothed over, there will be nothing to complain of.

No. 35.

ORDER—dated 6th November 1882, No. 2923 W., Public Works.

Communicated to the Superintending Engineer, Sixth Circle, for the information and guidance of the Executive Engineer, Madura Division.

2. The Superintending Engineer will submit his views on paragraph 5 of the Examiner's notes.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Offg. Secretary to Govt., P.W.D.

To the Superintending Engineer, Sixth Circle.
,, Examiner, Public Works Accounts.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ACCOUNT.

Gobt. of {1882} Madras.

PUBLIC WORKS.

Dated November, 6th.

Recd. *Encl.*

G.O., 6th Nov. 1882, No. 2923 W.

NOVEMBER.

Nos. 34-35.

Divisional Office, Madura.

Inspection Notes of the — by the Examiner of Public Works Accounts, communicated to the Superintending Engineer, Sixth Circle.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 71.

READ—the following paper:—

From Lieutenant-Colonel H. R. MEAD, R.E., Superintending Engineer, Sixth Circle, to the Acting Chief Engineer, Public Works Department, dated Trichinopoly, 27th October 1882, No. 401 M.D.—(Through the Examiner, Public Works Accounts.)

In G.O., No. 2864 W., dated 16th November 1881, Rs. 6,820 is sanctioned for the repairs of a portion of the Gúdalúr Ghât, and in G.O., No. 153 W., dated 18th January 1882, Rs. 72,148 is sanctioned for constructing a first-class road from Cumbum to the foot of the Gúdalúr Ghât. These works are being carried out by the Local Fund Board, who have entrusted the work to Mr. Hardy, the Gundamanayakanur Estate Engineer, and this Department provides the funds as ordered in the above Government Orders in the manner prescribed in G.O., No. 1375 W., dated 14th June 1880.

2. Mr. Hardy has been provided with an imprest of Rs. 1,000, and he accounts for the expenditure incurred therefrom to the Executive Engineer, Madura, who incorporates it in his accounts.

Mr. Hardy complains, and I believe fairly, that this imprest of Rs. 1,000 is not sufficient, and that there is considerable delay from the distance he is from the Executive Engineer in the recoupment.

3. The arrangement also adds considerably to the office work in the Madura Division, and as this Department has nothing to do with either the management or check of the work I submit that there is no advantage in this plan, and I request permission to make advances from time to time to the Local Fund Board and that they should make their own arrangements in supplying Mr. Hardy with funds and in carrying out the work.

4. Should this, through account rules, be not allowable, I must ask, under paragraph 1,208, Code, that the sanction of Government may be obtained for Mr. Hardy's imprest to be raised to Rs. 3,000.

No. 71-A.

No. 927 S.E. 6th.

Endorsement on the above.

Forwarded to the Chief Engineer, Public Works Department, with the following remark:—

Paragraph 3.—The Superintending Engineer's suggestion that advances be made to the President, Local Fund Board, may be adopted. The Executive Engineer may be instructed to make advances from time to time, debiting the amounts to "Miscellaneous Advances" in his accounts, and crediting that head and debiting the work as soon as he receives accounts from the President. At present the President is in receipt of an imprest of Rs. 1,000, apparently for the same work, if so, this imprest should be withdrawn.

8th November 1882.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

No. 72.

ORDER—dated 10th November 1882, No. 2975 W., Public Works.

The suggestions of the Examiner, Public Works Accounts, are approved for adoption by the Superintending Engineer, Sixth Circle.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Offg. Secretary to Govt., P.W.D.

To the Superintending Engineer, Sixth Circle.
" Examiner, Public Works Accounts.
" Board of Revenue.
" Financial Department.

Exd. S. T. Austin.
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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1882) Madras.

PUBLIC WORKS.

Dated November, 10th.

Read.

Encl.

G.O., 10th Nov. 1882, No. 2975 W.

NOVEMBER.

Nos. 71-72.

Gudulur Ghat Road.

Approving of the proposed arrangement for keeping in funds the officer in charge of the works on the —.

No 1446 M.D

Supt. Engineer's office,
Vaichimopatty, 11th November 82.

From

Lt-col H. R. Mead R.E.
Supt. Engineer, Trichy.

To,

Colonel R. H. Sankey C.I.E. R.E.
Chief Engineer, Mad.

Sir,

With reference to your No 1936c of 30th Ultimo, on the Report of Inspection of the Executive Engineer's office, Madura, calling for explanation as to the authority under which Imprests were given to the President Local Fund Board Madura and to the Sub-Collector, I have the honor to inform you that these Imprests were given to enable them to carry on the Road from Tumbum to the foot of the Gudalur Ghaut and the Sub-Collector's Butcherry works at Dindigul.

2. The Examiner apparently

seems to have been satisfied as to
why the Imprest have been given,
as he has not taken any exception
to this course when inspecting the
Madura Do. office as will be seen
from para 2 of his notes of inspection
printed with L.O. No 2923 of 6th
November 1882.

I have the honor to be
Sir
Your most obedient servant

Sd/ [illegible] 22nd 1882

Supt. Engineer, Trichy.