(1) Number of pages 36

20. (2) Date of repair 19-8-88

(3) Initials of the Referencer

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P. WED. DEPARTMENT

G.O. No. / B.P. No.	2628.	Press. / Mis.

Dated 27. 00. 1884. 198 .

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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

READ—the following letter from Brigadier-General R. C. STEWART, Quartermaster-General, to the Secretary to Government, Military Department, dated Ootacamund, 6th October 1884, No. 1527-A. :—

I have the honor, by order, to forward, for sanction and transfer to the Public Works Department for disposal, the estimate, plan, &c., below-mentioned which have been approved by the Commander-in-Chief. The plan and estimate have been countersigned.

I. Detailed and abstract estimate, amounting to Rs. 3,480, for constructing a store-room at Vizianagrum for the 16th Regiment, Native Infantry (No. 33 in Schedule of Military Works printed with Proceedings of Madras Government, No. 6131 of 13th November 1883.)

II. Plan with specification and report.

No. 4978, Military.

Approved and transferred to the Public Works Department for disposal.

(By Order.)

OOTACAMUND, 7th October 1884. (Signed) A. R. KENNEY-HERBERT, Lieut.-Colonel, Offg. Secretary to Government.

ORDER—dated 27th October 1884, No. 2628 W., Public Works.

The estimate, amounting to Rs. 3,480, for constructing a store shed for the 16th Regiment, Madras Native Infantry, at Vizianagrum, in the Vizagapatam district, is sanctioned for execution when funds are available.

2. This sanction has been registered as Imperial Ordinary No. 41 W. of 1884-85, and classified as Military, Original Works.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, I Circle, with four enclosures.
" Examiner, Public Works Accounts, with duplicate abstract estimate.
" Military Department.

Exd. A. Aubert.
Spare Copies

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of {1884} Madras.

PUBLIC WORKS.

Dated October, 27th.

Recd.

Encl.

G.O., 27th Oct. 1884, No. 2628 W.

OCTOBER.

Store Shed

Estimate for a — for the 16th Regiment, Madras Native Infantry, at Vizianagrum, in the Vizagapatam district, sanctioned.

2628

24TH OCTOBER 1883, No. 3002 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers :—

From Brigadier-General R. C. STEWART, Quartermaster-General, to the Secretary to Government, Public Works Department, dated Fort St. George, 11th October 1883, No. 7094.

I have the honor, by order, to forward herewith the schedules of Military Works, major and minor, required to be provided for in the budget list of 1884-85.

2. Sir Frederick Roberts is about to address Government in the Military Department on the subject of the several large works of importance which are, in his opinion, of special urgency, and for execution of which he hopes funds may be made available next year; but meanwhile your attention is invited to them by their entry in red ink in the schedule.

From the same Officer, dated Fort St. George, 13th October 1883, No. 7151.

In continuation of this office letter, No. 7094, dated 11th instant, I have the honor, by order, to forward a supplementary schedule of Military Major Works, providing for the construction of new barracks for the Royal Artillery at St. Thomas' Mount.

Office note from the Examiner, Public Works Accounts, dated 13th October 1883, No. 734.

ORDER—dated 24th October 1883, No. 3002 W., Public Works.

Ordered that the schedules of military requirements on account of the Public Works Department, in the Madras Presidency, be forwarded to the Government of India, in the Military Department, in compliance with their No. 922 M.W. of the 21st September 1883.

2. Ordered also that the lists of military works be printed and circulated to the Superintending Engineers, in view to the necessary plans and estimates being early prepared and submitted for sanction.

3. The Superintending Engineers concerned will take immediate steps for the preparation and submission, for sanction, of estimates for all unsanctioned works included in the schedule.

(Here enter No. 3003 W., dated 24th October 1883.)

(True Extract.)

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

To Superintending Engineers.
To the Examiner, Public Works Accounts.
" Military Department.
" Financial "

Exd. A. Aubert.
Spare Copies

2628
9

A 3

GENERAL.
ACCOUNT.

Govt. of {1883} Madras.

PUBLIC WORKS.

Dated October, 24th.

Recd.

Encl.

G.O., 24th Oct. 1883, No. 3002 W.

OCTOBER.

Schedule of Military requirements

Ordered that the — on account of Public Works in the Madras Presidency for 1884-85, be forwarded to the Government of India.

2628
5

Western District.	Mangalore	..	*Barracks, Native Infantry.* Forge trough and cupola to the armourer's workshop, also a screen as per clause *e*, paragraph 13 of G.O.C.C., No. 12, dated 12th February 1874.	730	Original estimate for Rs. 500 sanctioned—*vide* Proceedings of Madras Government, Military, No. 2133, dated 13th September 1876. G.O., No. 2590 W., dated 4th October 1882.	When funds are available.
	Calicut	..	*European Infantry.* Introducing dry earth system	758	An important work. G.O., No. 2590 W., dated 4th October 1882.	Most important.
			European Infantry. Replacing the laterite flooring of the recreation room with concrete in chunam and asphalte.	2,140	Recommended. The laterite perishes rapidly. Sanction in abeyance.	Necessary.
	Cannanore	..	Replacing the present flooring of the school-room with concrete in chunam and asphalte.	770	Recommended. The laterite flooring perishes rapidly.	Do.
			Replacing the present wooden railings round the barracks with open laterite work.	639	Recommended on economic grounds. The wooden railings are expensive and require constant renewal. Sanctioned by Commander-in-Chief.	Do.
			Replacing the present flooring of the European infantry cells with concrete in chunam and asphalte.	1,100	Recommended. Laterite flooring is found to perish rapidly. Sanction in abeyance.	Do.
			Station Hospital. Sinking a well	664	Another well is required. The water-supply is very scanty during the hot weather. Sanctioned by Commander-in-Chief.	Very necessary.
			Ordnance Department. Raising the parapet of the magazine redoubt on a level with its eaves and moving the guard-room from inside to outside the ditch.	1,900	Desirable as a precautionary measure ..	Very desirable.
	Quilon	..	*Native Infantry.* An armourer's shop	1,700	Much needed. The existing building is unsuited to present requirements. Browning arms cannot be carried on.	Very necessary.
Bangalore Division.	Bangalore	..	*Royal Artillery.* A new latrine for the staff sergeant's quarters, Royal Horse Artillery, the present one being old and condemned on sanitary grounds.	2,100	Very necessary. This was condemned by a Board of which Deputy Surgeon-General was a member. Recommended in 1882.	Recommended.
			Ration shed for field batteries	1,750	G.O., No. 1232 of 14th May 1872. Much required. No cover for issue of rations.	When funds are available.
			A battery staff sergeant's quarters for Royal Horse Artillery. One more required is now desirable.	1,100	Very necessary. There is at present no quarters for battery quartermaster-sergeant. The Committee recommended the conversion of the present camp store into a quarter, the camp equipage being removed into old foot artillery barracks. First time recommended.	Conversion recommended .. Approved.

List of Military Works estimated to cost Rs. 2,500 and under, and for which Funds are required in the Public Works Budget for 1884-85—*cont.*

Division or District.	Station.	Description of buildings, &c., and for what corps or department needed.	Approximate estimate of cost.	Remarks by the standing Barrack Committee as to the necessity of the buildings, references to former applications, orders of Government, &c.	Remarks by the Officer Commanding Division or District.	Remarks by the Commander-in-Chief.
		Royal Artillery—cont.				
Bangalore Division—*cont.*	Bangalore—*cont.*	Stone drains to forage yard and lines, Royal Horse Artillery.	Rs. 1,440	G.O., No. 3066 of 2nd December 1879. Much required.	Desirable	When funds are available.
		Cook-houses for sergeants' messes of two field batteries. One desirable.	1,470	Very necessary. First brought forward in 1882.	Very necessary	Approved.
		12th Royal Lancers.				
		To provide a gymnasium and fencing room ..	1,500	Very necessary. Recommended that half of No. 5 block, British cavalry barracks, be converted into a regimental gymnasium and fencing gallery. First time brought forward.	Strongly recommended ..	When funds are available.
		A latrine with twelve seats for use of the men whilst at stables is indispensable.	1,200	Very necessary. First time brought forward ..	Six seats urgently required.	Six seats approved.
		Commissariat Department.				
		To build, or render present building used as such (built for a native), quarters for the station butcher.	520	Very necessary, if the station butcher is to live at the slaughter-house. First time brought forward.	Desirable	When funds are available.
		To improve the road leading from slaughter-house to circular road near cavalry barracks to enable meat carts to travel to and fro without breaking down or injuring meat by jolting.	1,400	Necessary	Desirable when funds are available.	Do. do.
		Transport Department.				
		The speedy construction in the transport cattle-lines of a shed for carts and trollies.		The adoption of existing camel-sheds, which are more than are now required for camels, into these buildings is very necessary. The mules (other than sick ones) should be picketted in regular mule-lines, south of transport non-commissioned officers' quarters and only such mules left under shelter. First time these requirements have been brought forward.	Necessary, so far as recommended by Committee.	Approved.
		A saddle-room	1,200			
		Store-rooms				
		All being urgently required for the storage of saddles, line, gear, &c., and for protection of carts and trollies.				
		Army Hospital Corps.				
		Thirty-three huts to be erected in the vicinity of the south station hospital.	924	First time these requirements have been brought forward.	Necessary on the corps being embodied.	Do.
		Twenty-seven huts near the north station hospital are absolutely necessary for the use of the men of the native army hospital corps doing duty in Bangalore. Clause 204, paragraph 24, Army Circulars, 30th November 1882.	756			
		Medical Department.				
		Stables for medical subordinates attached to Royal Artillery and Cavalry, south station hospital.	1,000	Much required. Temporary stabling at present, which is objectionable.	Necessary if the medical subordinates are entitled to stabling.	When funds are available.
		British Infantry.				
		Roofing the corrugated iron urinals in barrack square.	1,320	G.O., No. 3665, dated 21st July 1876 .. .. ,, No. 4383 ,, 30th August 1876. ,, No. 2611 ,, 26th September 1876. ,, No. 2732 ,, 11th October ,, Strongly urged by the medical authorities.	Urgently required ..	Approved.
		Latrines for native followers	1,600	First recommended in 1882. Much needed, there being no proper resort to this class.	Required	Do.
	Wellington ..	Removing the present concrete floors of latrines of Nos. 1, 2, 3, 4 and 5 barracks and school blocks and relaying the same with 12 square tiles.	1,680	G.Os., Nos. 1472 and 1812, dated 4th and 9th June 1874. Recommended 1882. Very necessary. The present concrete flooring is always out of repair.	Very necessary	Do.
		Bath-rooms to Nos. 1, 2, 3, 4 and 5 blocks for pay sergeants.	2,350	Recommended 1881 and 1882. Very necessary, as at present the married pay sergeants who live upstairs are without bath-rooms.	Very desirable	Do.
		Brick tiled flooring, instead of present concrete, to covered passage leading from married quarters to latrines.	1,000	Recommended 1882. Very necessary. The present flooring is always out of repair.	Desirable	Do.
		Purveyor's stores to be enlarged as the space is insufficient for bedding, clothing and furniture.	2,000	Recommended 1882. Necessary	Necessary	Do.
		Supplying 7 cooking stoves to staff sergeants' quarters similar to those for married quarters.	600	Very necessary. First time brought forward ..	Very desirable	Do.
		Supplying cooking range to sergeants' mess capable of cooking for 30 sergeants.	800	Do. do. do. ..	Desirable	Do.
		Compound wall and alterations to the Commissariat buildings.	1,280	G.O., No. 345, dated 24th August 1875. Desirable.	Not urgently required ..	When funds are available.
		Drainage works near barracks	1,822	G.O., No. 1748, dated 23rd July 1872. Desirable, much wanted.	Recommended	Do. do.
		Erecting a stone reservoir and laying pipes between springs and outlet of spring water supply.	2,070	G.O., No. 6809, dated 28th November 1876, desirable.	Desirable	Do. do.
Ceded Districts.		*27th Regiment, Native Infantry.*				
	Bellary	School	1,300	The present building is wanting in room and ventilation. Rs. 1,000 was the amount of estimate in budget list for 1883-84 for 100 scholars, but provision has since been made for 130. G.O., No. 2590 W., dated 4th October 1882.	This is very much required, the present building being quite unsuitable.	Do. do.
		Latrine for the left wing	1,500	The present one is inconveniently situated for this half battalion and there is not sufficient seat accommodation for the whole regiment, G.O., No. 2590 W., dated 4th October 1882.	Recommended, but the estimate appears very high. The latrine is much required.	Estimate seems expensive.

List of Military Works estimated to cost Rs. 2,500 and under, and for which Funds are required in the Public Works Budget for 1884-85—*cont.*

Division or District.	Station.	Description of buildings, &c., and for what corps or department needed.	Approximate estimate of cost.	Remarks by the standing Barrack Committee as to the necessity of the buildings, references to former applications, orders of Government, &c.	Remarks by the Officer Commanding Division or District.	Remarks by the Commander-in-Chief.
Coast Defence—*cont.*	Bellary—*cont.*	*Native Infantry Hospital.* Two small cook-rooms for use by 25th and 27th regiment.	600	A temporary arrangement for utilizing an unused latrine has been recommended, but has not been found to answer. There is no other place available, and out-door cooking is not advisable for sick. The lines are distant about 1 mile. This is included in the budget works for 1883-84, and the estimate (approximate) is for Rs. 1,200. The present is for two small sheds against the rear compound wall. G.O., No. 2590 W., dated 4th October 1882.	To turn a latrine, even an unused one and for a temporary arrangement, into a cook-room, seems to me altogether unsuited and objectionable. Two small cook-houses are undoubtedly required.	Cook-houses very necessary. Should there be no objection on sanitary grounds and if the latrine has not been in use, there seems no reason why the proposed arrangement should not answer.
		Ordnance Depot. Out-houses for the quarters of the laboratory sergeant, attached to the ordnance department.	650	These quarters have been recently formed from a portion of the depôt stores and are devoid of the accommodation asked for. Estimate sanctioned in G.O., No. 2461 W., dated 3rd September 1883.	Must be repaired and is therefore recommended.	When funds are available.
		Female Hospital. Compound wall	1,500	There is at present no fence round this hospital to ensure the privacy of the inmates. This hospital is close to the station hospital and the European infantry barracks.	This is, I think, very much required. There is absolutely nothing to prevent a passer-by seeing the patients in their beds. Privacy is also required for the patients walking about of an evening and for washing soiled linen.	Very desirable.

(Signed) D. J. S. McLEOD, Major,
for Quartermaster-General.

FORT ST. GEORGE,
11th October 1883.

2628
10

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers :—

From Brigadier-General R. C. STEWART, Quartermaster-General, to the Secretary to Government, Public Works Department, dated Fort St. George, 11th October 1883, No. 7094.

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2. Ordered also that the list of military works, estimated to cost below Rs. 2,500 each, be printed and circulated to the Superintending Engineers, in view to the necessary plans and estimates being early prepared and submitted for sanction.

3. The Superintending Engineers concerned will take immediate steps for the preparation and submission, for sanction, of estimates for all unsanctioned works included in the schedule.

(Here enter No. 3003 W., dated 24th October 1883.)

(True Extract.)

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

To Superintending Engineers.
To the Examiner, Public Works Accounts.
" Military Department.
" Financial "

Endorsement—dated 24th October 1883, No. 3003 W., Public Works.

Forwarded.

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

Exd. A. Aubert.
Spare Copies

2628

GENERAL
ACCOUNT.

Govt. of {1883 Madras.

PUBLIC WORKS.

Dated October, 24th.

Read. *Encl.*

G.O., 24th Oct. 1883, No. 3003 W.

OCTOBER.

Schedule of Military requirements

FORWARDING the — on account of Public Works in the Madras Presidency for 1884-85.

(Appendix to G.O., No. 3002 W., dated 24th October 1883.)

LIST of Military Works estimated to cost Rs. 2,500 and under, and for which Funds are required in the Public Works Budget for 1884-85.

Division or District.	Station.	Description of buildings, &c., and for what corps or department needed.	Approximate estimate of cost.	Remarks by the standing Barrack Committee as to the necessity of the buildings, references to former applications, orders of Government, &c.	Remarks by the Officer Commanding Divison or District.	Remarks by the Commander-in-Chief.
		Arsenal.	Rs.			
Eastern District.	Fort St. George ..	A verandah to Section II, VI, and VII, Store ..	400	Very much needed for the storage of serviceable fire-engines which are now kept out.	Recommended	Approved.
		A store-room in the forge workshop	520	Very much needed, the present one being too small.	Do.	Do.
		Railings to miscellaneous workshop and a door between them and armourer's shop.	790	Very much needed	Do.	Do.
		A shed in the new park	440	Very much needed for painting canvas ..	Do.	Do.
		The verandah of the European infantry officers' mess-house to be extended.	1,900	Required as the present verandah is too small ..	Recommended. The mess-house has a very small verandah and would be much improved by a verandah along the sea-face of the building.	Do.
		A good water-tap for the quarters of the superintendent of fire-engines.	200	Very much needed	Recommended	Do.
		Body Guard.				
		Dispensary for veterinary department for Body Guard.	1,300	*Nil*	Do.	When funds are available.
		Gun-powder Factory.				
		Breaking down house	500	G.O., No. 59, dated 7th January 1874 ..	Recommended as being apparently portion of the scheme for the thorough renewal of the gun-powder factory—*vide* items in the list of major works.	Approved.
		1 Breaking down machine.				
		1 House for 6-horse power engine and boiler.				
		Powder magazine	1,100	G.O., No. 1501, dated 31st March 1875 ..		
		Wooden flooring and thorough repair.				
	Madras	*Commissariat Department.*				
		A wheat store-room for the Government bakery.	1,785	There is no place at present should emergency demand the storage of wheat without endangering the safety of the bread-stuffs by the introduction of weavils into the main building. Estimate sanctioned in G.O., No. 1863 W., dated 5th July 1883.	Recommended.	Do.
		The levelling of the bakery compound and a system of drainage to carry off the washing of the bakery.	930	There is no drainage-water lodges, and for sanitary purposes it is necessary that the ground should be levelled and a proper system of drains laid down.	Do.	When funds are available.

List of Military Works estimated to cost Rs. 2,500 and under, and for which Funds are required in the Public Works Budget for 1884-85—*cont.*

Division or District.	Station.	Description of buildings, &c., and for what corps or department needed.	Approximate estimate of cost.	Remarks by the standing Barrack Committee as to the necessity of the buildings, references to former applications, orders of Government, &c.	Remarks by the Officer Commanding Division or District.	Remarks by the Commander-in-Chief.
		Commissariat Department—cont.	Rs.			
Eastern District—*cont.*	St. Thomas' Mount.	Sinking a well, erecting a moat and trough apparatus, public cattle depôt.	800	Required in the public cattle depôt in consequence of there being no water nearer than a tank 250 yards distant from the lines which in the hot season is perfectly dry; during the period the bullocks have to be taken to the river for water.	Recommended. When funds are available.	When funds are available.
		Lavatories on the standard plan for the north barracks.	2,000	Urgently required for the barracks ..	Recommended. These barracks have no proper lavatories.	Approved.
		Lavatories on the standard plan for the south barracks.	2,000	Do. do. ..		
	Vizianagrum ..	Bath-room for hospital of the native infantry regiment.	360	Much required, there being no accommodation which could be used for the purpose.	Recommended.	Do.
		Hospital wall to be completed	286	Present wall encloses three sides of the hospital, while on the fourth side and nearest the regimental lines there is none. If wall is completed, all ingress and egress will be confined to the regular entrance and a better watch kept over the movements of patients.	Do.	Do.
		Three public latrines, viz., one for men in the left wing, and two for women, one in each wing, on dry earth system.	2,255	Much required, there being at present only one latrine for men in the right wing, sanctioned *vide* Proceedings of Madras Government, No. 292, dated 24th January 1874. Rs. 765 for one completed, sanction for three more asked for.	Do.	Do.
		Powder magazine with surrounding walls on standard plan.	1,990	Much required, the present magazine having been condemned and having no protecting walls round it. The shelves being built into the walls are continually attacked by white-ants.	Do.	Do.
		Armourer's workshop	900	Much required, the work having been sanctioned *vide* Proceedings of Madras Government, No. 1111, dated 17th April 1873, progress of work stopped on account of famine in 1877, and not since completed.	Do.	Do.
	Berhampore ..	A wall to the military hospital of the native infantry regiment.	1,016	There is no wall or fence separating the hospital from a small village which adjoins it, to which patients in hospital can find easy access. A proper wall is therefore absolutely necessary. Approved when funds are available—*vide* extract from list of works for 1878-79. Estimate sanctioned in G.O., No. 1236 W., dated 25th April 1883.	Do.	Do.
		School-house for a native infantry regiment ..	960	A school-house is absolutely required for the use of the regiment, the present building (regimental property) having fallen in and being utterly unsuited for the purpose. G.O., No. 3764, dated 6th July 1883. P.W., No. 1768, dated 23rd June 1883.	Do.	Do.

ENDORSEMENT

to
Appendix No. 3003 *W., dated* 24*th October* 1883.

BUILDINGS AND ROADS.

SCHEDULE of the probable requirements of the Madras Presidency on account of Imperial Works for 1884-85.

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Class.	Original Works. Major Works. Works in progress.	Original Works. Major Works. New Works.	Original Works. Major Works. Total.	Original Works. Minor Works.	Original Works. Total.	Repairs.	Establishment.	Tools and Plant.	Suspense.	Grand Total.	Remarks.
				IMPERIAL, ORDINARY. *Military.*		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
(1) Accommodation for troops—Buildings for European troops in the plains—Permanent.	Chingleput.	St. Thomas' Mount.	1	New barracks for Royal Artillery.	A	40,000	..	40,000	..	..	..	..	..	..	..	Estimate of Rs. 1,27,750 sanctioned in G.O., No. 1894 W., of 25th July 1882. Item No. 2, Class A Works, of Budget of 1883-84.
	Coimbatore.	Malapuram.	2	Barracks for detachment British Infantry to accommodate 100 men.	A	40,000	..	40,000	..	..	..	..	..	..	..	Estimate of Rs. 90,330 sanctioned in G.O., No. 1840 W., of 18th July 1882. Item No. 3 Class A Works, of Budget of 1883-84.
	Presidency.	Bangalore..	3	Alterations and additions to wash-houses for the British Infantry.	A	4,500	..	4,500	..	..	..	..	..	..	..	Estimate of Rs. 12,500 sanctioned in G.O., No. 1102 W., of 7th May 1880. Item No. 1, Class B Works, of Budget of 1883-84.
	Do. ..	Fort Saint George.	4	A covered gymnasium to be erected in the Ball Ally of the European regiment.	A	..	9,800	9,800	..	..	..	..	..	..	..	Estimate awaited. Item No. 17, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	5	An armourer's shop on the standard plan, for the European Infantry regiment.	B	..	5,000	5,000	..	..	..	..	..	..	..	Estimate awaited.
	Chingleput.	St. Thomas' Mount.	6	Constructing six blocks of stables for two field batteries of Royal Artillery.	A	..	20,160	20,160	..	..	..	..	..	..	..	Estimate of Rs. 20,160 sanctioned in G.O., No. 2747 W., of 1st October 1883.
	Do. ..	Do. ..	7	Plunge-bath for Royal Artillery.	B	..	12,600	12,600	..	..	..	..	..	..	..	Estimate awaited. Item No. 1, Appendix B, Budget of 1883-84.

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1884-85—*cont.*

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Class.	Original Works. Major Works. Works in progress.	Original Works. Major Works. New Works.	Original Works. Major Works. Total.	Original Works. Minor Works.	Original Works. Total.	Repairs.	Establishment.	Tools and Plant.	Suspense.	Grand Total.	Remarks.
				IMPERIAL, ORDINARY—*cont.*		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
				Military—cont.												
Accommodation for troops—Buildings for European troops in the plains—Permanent.	Presidency.	Bangalore..	8	Garrison gymnasium of the 4th class.	B	..	44,600	44,600	..	..	..	..	..	..	..	Estimate of Rs. 44,600 sanctioned in G.O., No. 1560, of 21st June 1876. Item No. 12, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	9	Quarters for senior apothecary, north station hospital.	B	..	4,830	4,830	..	..	..	..	..	..	..	Estimate awaited. Item No. 15, Appendix B, Budget of 1883-84.
	Bellary ..	Bellary ..	10	Three blocks of stables for Royal Artillery at	A	2,000	..	2,000	..	..	..	..	..	..	..	Estimate of Rs. 10,000 sanctioned in G.O., No. 2099 W., of 1st August 1883. Item No. 10, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	11	Infectious disease ward of station hospital.	B	..	8,000	8,000	..	..	..	..	..	..	..	Estimate awaited. Item No. 8, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	12	Pipes and cisterns to supply water from the artesian well to British troops.	B	..	3,000	3,000	..	..	..	..	..	..	..	Estimate awaited.
	Do. ..	Do. ..	13	Completion of system of drainage of wash-houses.	B	..	3,000	3,000	..	..	..	..	..	..	..	Estimate awaited.
	Coimbatore.	Cannanore.	14	Plunge-bath for British Infantry.	B	..	4,690	4,690	..	..	..	..	..	..	..	Estimate of Rs. 4,690 sanctioned in G.O., No. 418, of 10th February 1876. Item No. 5, Appendix B, Budget of 1883-84.
Do. do. in the hills—Permanent.	Do. ..	Malapuram.	15	Canteen for detachment British Infantry.	B	..	5,000	5,000	..	..	..	..	..	..	..	Estimate awaited. Item No. 3, Appendix B, Budget of 1883-84.
	Nílgiri ..	Wellington.	16	Extending the 6-inches water main-pipe from the barrack square to the married quarters at	A	9,400	..	9,400	..	..	..	..	..	..	..	Estimate of Rs. 9,530 sanctioned in G.O., No. 198 W., of 18th January 1882. Item No. 25, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	17	Gymnasium at ..	B	..	15,000	15,000	..	..	..	..	..	..	..	Estimate awaited.
Accommodation for troops—Buildings for native troops.	Presidency.	Madras ..	18	New regimental school at the Perambúr lines.	B	..	2,500	2,500	..	..	..	..	..	..	..	Do.
	Do. ..	Do. ..	19	Two latrines for the regimental lines at Ráyapuram.	B	..	3,000	3,000	..	..	..	..	..	..	..	Do.
	Chingleput.	Pallávaram.	20	One mortuary room for each of the three hospitals, Nos. 1 to 3.	B	..	3,000	3,000	..	..	..	..	..	..	..	Estimate awaited. Item No. 29, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	21	Regimental magazine on the standard plan.	B	..	4,500	4,500	..	..	..	..	..	..	..	Estimate awaited.
	North Arcot.	Vellore ..	22	School-house for a Native Infantry regiment.	B	..	5,000	5,000	..	..	..	..	..	..	..	Do.
	Presidency.	Bangalore.	23	Accommodation for regiment of Native Cavalry. Rs. Place of arms and armourers' shop. 7,165; Infirmary .. 5,800; Magazine .. 2,750; Guard-room .. 3,540; School .. 1,715; Water-trough .. 510; Water-well .. 2,320; Drains, roads, &c. 5,800	A	..	29,600	29,600	..	..	..	..	..	..	..	Estimate awaited. Item No. 24, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	24	Accommodation for one regiment of Native Infantry (less magazine).	A	..	14,610	14,610	..	..	..	..	..	..	..	Estimate awaited.
	Do. ..	Do. ..	25	Regimental latrines for Queen's Own Sappers and Miners.	A	3,960	..	3,960	..	..	..	..	..	..	..	Estimate awaited. Item No. 25, Appendix B, Budget of 1883-84.
	Trichinopoly.	Trichinopoly.	26	Accommodation for one regiment of Native Infantry. Rs. Place of arms and guard-room .. 8,450; Cells .. .. 920; Store-room .. 2,200; School-room .. 2,650; Magazine .. 650; Armourers' shop. 2,330	A	..	17,200	17,200	..	..	..	..	..	..	..	Estimate awaited. Item No. 28, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	27	Accommodation for a third regiment of Native Infantry as above.	A	..	17,200	17,200	..	..	..	..	..	..	..	Estimate awaited.
	Do. ..	Do. ..	28	Two latrines for Native Infantry regiment.	B	..	5,200	5,200	..	..	..	..	..	..	..	Estimate awaited. Item No. 33, Appendix B, Budget of 1883-84.
	Bellary ..	Bellary ..	29	Armourers' shop for a regiment of Native Cavalry.	B	..	2,695	2,695	..	..	..	..	..	..	..	Estimate awaited.

Schedule of the probable requirements of the Madras Presidency on account of Imperial Works for 1884-85—*cont.*

Head of Classification.	Executive Division.	Locality.	Item No.	Projects and Works.	Class.	Original Works. Major Works. Works in progress.	Original Works. Major Works. New Works.	Original Works. Major Works. Total.	Original Works. Minor Works.	Original Works. Total.	Repairs.	Establishment.	Tools and Plant.	Suspense.	Grand Total.	Remarks.
				IMPERIAL, ORDINARY *cont.*		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
				Military—cont.												
Accommodation for troops—Buildings for native troops—*cont.*	Coimbatore.	Quilon ..	30	Magazine for Native Infantry barracks.	B.	..	3,560	3,560	..	..	..	..	..	..	..	Estimate awaited.
	Do. ..	Do. ..	31	Store-room for do. ..	B.	..	5,000	5,000	..	..	..	..	..	..	..	Do.
	North Arcot	Vellore ..	32	Armourers' shop for a regiment of Native Infantry.	A.	1,980	..	1,980	..	..	..	..	..	..	..	Estimate for Rs. 2,800 sanctioned in G.O., No. 1547 W., of 20th June 1881.
	Vizagapatam	Vizianagram.	33	Regimental store-room, to be included as storage for Camp Equipage.	B.	..	5,000	5,000	..	..	..	..	..	..	..	Estimate awaited.
	Presidency.	Fort St. George.	34	Mounting ordnance ..	A.	32,000	..	32,000	..	..	..	..	..	..	..	Estimate of Rs. 42,035 sanctioned in G.O., No. 2970 W., of 19th October 1883. Item No. 2, Class B Works, Budget of 1883-84.
Ordnance Works.	Do. ..	Madras ..	35	Completing the emplacements and improving the store-rooms, &c., of the coast batteries.	A.	22,300	..	22,300	..	..	..	..	..	..	..	Estimate of Rs. 42,320 sanctioned in G.O., No. 1661 W., of 13th June 1883. Item No. 34, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	36	Improvements to the gunpowder factory. Further estimates required— Glazing and dusting house, one group. Incorporating mills, one group. Drying-house. Pebble cutting house. Granulating house to be converted into a pebble cutting machine house.	A.	20,000	..	20,000	..	..	..	..	..	..	..	The last sanction brought up the total sanctions to Rs. 2,26,655. G.O., No. 2748 W., of 1st October 1883. Item No. 4, Class A Works, Budget of 1883-84. Further estimates are awaited.
Commissariat Buildings.				New additional compound wall. Two bridges.												
	Do. ..	Do. ..	37	Improvements to the wheel shop of the gun carriage factory.	B	..	4,000	4,000	..	..	..	..	..	..	..	Estimate awaited.
	Presidency.	Guindy ..	38	Converting the late Superintending Engineer's office at Guindy into a Commissariat slaughter-house.	B	..	11,800	11,800	..	..	..	..	..	..	..	Estimate for Rs. 11,800 sanctioned in G.O., No. 1399 W., of 12th May 1883. Item No. 43, Appendix B, Budget of 1883-84.
	Do. ..	Madras ..	39	Quarters for station butcher.	B	..	4,740	4,740	..	..	..	..	..	..	..	Estimate awaited. Item No. 44, Appendix B, Budget of 1883-84.
	Do. ..	Do. ..	40	Sheds for public cattle and lines for their attendants.	B	..	20,000	20,000	..	..	..	..	..	..	..	Estimate awaited.
	Do. ..	Do. ..	41	Quarters for three warrant and five non-commissioned officers of the Commissariat department.	A	..	26,740	26,740	..	..	..	..	..	..	..	Estimate of Rs. 26,740 sanctioned in G.O., No. 1836 W., of 2nd July 1883. Item No. 45, Appendix B, Budget of 1883-84.
	Nilgiri ..	Wellington.	42	Bakery at	A	..	10,000	10,000	..	..	..	..	..	..	..	Under consideration.
	Coimbatore.	Cannanore.	43	Converting the old artillery stables at Cannanore into a bakery and sinking a well.	A	2,660	..	2,660	..	..	..	..	..	..	..	Estimate of Rs. 7,660 sanctioned in G.O., No. 2213 W., of 10th August 1883. Item No. 41, Appendix B, Budget of 1883-84.
	Do. ..	Malapuram.	44	Quarters for Commissariat staff sergeants.	B	..	4,000	4,000	..	..	..	..	..	..	..	Estimate awaited.
Fortifications.	Presidency.	Bangalore.	45	Entrenchment as place of refuge including ordnance depôt. Rs. Fortifications .. 16,000 Ordnance buildings .. .. 14,900 Laboratory .. 1,880	A	..	32,780	32,780	..	..	..	..	..	..	..	Estimates aggregating Rs. 34,280 sanctioned in G.O., No. 3060 W., of 30th October 1883.
				Total ..		1,78,800	3,67,805	5,46,605	54,660	6,01,265	3,50,000	2,18,791	14,269	..	11,84,325	

2628
12

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

READ—the following letter from Brigadier-General R. C. STEWART, Quartermaster-General, to the Secretary to Government, Public Works Department, dated Fort St. George, 22nd October 1883, No. 7336 :—

In continuation of this office letters, Nos. 7094 and 7151, dated 11th and 13th instant, respectively, forwarding schedules of major and minor works to be provided for in the Public Works budget of 1884-85, I have now the honor to annex a list of the more important major works, classified as per margin, and entered in the order of their urgency, which His Excellency the Commander-in-Chief would wish submitted for the special consideration of Government with the following observations.

Class A.—Works actually in progress, to complete which grants are wanted.
Class B.—Urgent works not yet commenced, for which grants are requisite.

2. *Class A.*—These works being all in actual progress, nothing need be said in regard to the necessity of suitable grants being allotted for their completion.

3. *Class B.*—As estimates for the first two items in this list have been submitted it may be presumed that the grants originally made to them in the preliminary issue of the current year's budget, but subsequently withdrawn by the Government of India, will be shortly re-allotted, so that by the opening of next year they will belong to Class A.

4. It appears probable that item No. 3, bakery at Wellington, will similarly belong to Class A by next year; but in case any unforeseen delay should retard the estimate, the Commander-in-Chief would suggest that the grant for it may not be allowed to lapse, but be obtained for transfer to either item No. 4 or item No. 5 (for both of which estimates have been submitted), works which His Excellency considers of the highest importance.

5. The importance of item No. 6, quarters for warrant and non-commissioned officers of the Commissariat Department at Madras, has already been strongly urged, and from reports of medical officers it is evident that these men continue to occupy their present dwellings in Black Town, only with the greatest danger to their health.

6. Accommodation for a Native Infantry Regiment at Bangalore, item No. 7, is urgently required to provide for the 14th Native Infantry on its return from the Bengal Presidency; and it seems as well here to note that whatever station the regiment might have been sent to, this accommodation would be necessary for it. Plans and estimates for this item have been called for, so that they may be completed by the time the final issue of the budget is made.

7. Stabling for Batteries, Royal Artillery, at St. Thomas' Mount, item No. 8, is a work which has found a place in so many previous lists, and is, in the Commander-in-Chief's opinion, so desirable that it is hoped nothing will be allowed to interfere with its part execution next year.

8. Items 9 and 10, improvements in water-supply and drainage arrangements to the barracks of British troops at Bellary, are works strongly urged on the Commander-in-Chief by the medical authorities, and their importance in connection with the health of the troops requires that they should receive early attention.

9. Items 11, 12, and 15 have appeared in previous year's lists, but have held to give place to more immediately important works; they are, however, of real importance, and should not be delayed.

12

10. Item No. 14, accommodation for a third Native Infantry Regiment at Trichinopoly, finds a place in this list in anticipation of the return from Beluchistan of the 1st Native Infantry, for it is most undesirable that the regiment should take up the buildings now occupied by the 30th Native Infantry, in which cholera has shown itself in each of the past two years, and it will accordingly have to build lines for itself at once, for which lines these public buildings will be requisite.

11. All the other works entered in the schedule first furnished from this office are considered to be really requisite, and it is only because an undue demand for funds would have to be made in connection with them that His Excellency does not include them in the list of Class B works, with which the present remarks deal.

12. Sir Frederick Roberts trusts that what has been said above will satisfy Government of the necessity for making a strong appeal to the Government of India for a specially liberal grant for military works in the coming year, so that none of the many important original works included in Class B may be allowed to stand over any longer.

Enclosures.

Class A.—Works commenced, for completion of which grants are required.

Command.	Station.	Item No.	Work.	Cost.	Remarks.
				Rs.	
Eastern District.	Madras ..	1	Gunpowder mills, alterations and additions to.	2,24,105	
	Do. ..	2	Coast batteries, completion of ..	43,320	
	Do. ..	3	Armament, Fort St. George, mounting of, &c.	10,350	
	St. Thomas' Mount.	4	Barracks, Royal Artillery, completion of.	1,49,350	
Ceded Districts.	Bellary ..	5	Stables for field battery, completion of.	9,570	
Western District.	Cannanore ..	6	Bakery, conversion of old stables into.	8,270	
	Malapuram ..	7	Barracks for detachment ..	90,830	

Class B.—Works of special urgency not yet commenced, for which grants are absolutely requisite.

Command.	Station.	Item No.	Work.	Cost.	Remarks.
				Rs.	
Eastern District.	Madras ..	1	Gymnasium, BritishInfantry, Fort St. George.	9,500	Rs. 5,000 allotted in preliminary issue of budget, but subsequently withdrawn.
Bangalore Division.	Bangalore ..	2	Accommodation, Native Cavalry Regiment.	29,600	Rs. 15,000 do. do.
	Wellington ..	3	Bakery for depôt	20,000	Merely approximate sum—See G.O., No. 2663 W., dated 22nd September 1883 (M.D. No. 5401, dated 5th October 1883). Rs. 8,000 withdrawn.
	Bangalore. ..	4	Entrenchment .. .. 16,100 Ordnance depôt 16,780		G.O., M.D., No. 5231, dated 26th September 1883.
	Trichinopoly.	5	Accommodation, one Native Infantry Regiment.	17,260	Rs. 10,000 asked for from Government of India—*Vide* G.O., No. 2659 W., dated 21st September 1883 (M.D. No. 5347, dated 3rd October 1883).
Eastern District.	Madras ..	6	Quarters for warrant and non-commissioned officers, Commissariat Department.	26,320	
Bangalore Division.	Bangalore ..	7	Accommodation for one Native Infantry Regiment.	16,610	
Eastern District.	St. Thomas' Mount.	8	Stables for Royal Artillery, two batteries.	20,160	
Ceded Districts.	Bellary ..	9	Water-supply to barracks, Royal Artillery and British Infantry, by pipes.	3,000	
	Do. ..	10	Drainage improvements to British Infantry and Royal Artillery.	3,600	
	Do. ..	11	Armourer's shop, Light Cavalry ..	2,695	
Eastern District.	Vellore ..	12	Do. Native Infantry.	2,900	
Bangalore Division.	Bangalore ..	13	Latrines, Sappers and Miners ..	3,960	
	Trichinopoly.	14	Accommodation for a third Native Infantry Regiment.	14,280	
Western District.	Cannanore ..	15	Boarded floor to Station Hospital.	5,570	

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No. 5769, Military.

Forwarded.

Ootacamund,
26th October 1883.

(Signed) E. L. HANKIN, Colonel,
Secretary to Government.

Order—dated 12th November 1883, No. 3183 W., Public Works.

Ordered to be forwarded to the Government of India in continuation of endorsement, No. 3003 W., dated 24th October 1883.

(Here enter No. 3184 W., dated 12th November 1883.)

(True Extract.)

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

To the Military Department.

Endorsement—dated 12th November 1883, No. 3184 W., Public Works.

Forwarded.

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

Exd. A. F. Goodall.
Spare Copies

13

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of | 1883 | Madras.

PUBLIC WORKS.

Dated November, 12th.

Recd. *Encl.*

G.O., 12th Nov. 1883, No. 3184 W.

NOVEMBER.

Military Works

LIST of major — in the order of their urgency for which funds are required in 1884-85.

QUARTERMASTER-GENERAL'S OFFICE,

Ootacamund, 6th October 1884.

Barracks and Buildings Estimates.

No. 1527/A.

From

THE QUARTERMASTER-GENERAL,

To

THE SECRETARY TO GOVERNMENT,

MILITARY DEPARTMENT.

SIR,

I HAVE the honor, by order, to forward for sanction and transfer to the Public Works Department for disposal, the estimate, plan, &c., below-mentioned which have been approved by the Commander-in-Chief. The plan and estimate have been countersigned.

I. Detailed and abstract Estimate amounting to Rs: 3480/- for constructing a Store Room at Vizianagram for the 16th Regiment N.I.

†Vide page 6 of List attached to G.O. No. 3002 W 24-10-83 D.P. (No: 33 in Schedule of Military Works printed with P.M.G. No: 6131 of 13th November 1883)

II. Plan with Specification and Report.

I have the honor to be
Sir
Your obedient Servant

A. Hutchins
Major
Offg. Dy. Qr. Mr. General.

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15

G.O. No 3002 W. dy 24.10.83.
" " 3033 W " 24.10.83
" " 3184 W. " 12-11-83

Military (1884) Department.

No 5210

From

The Quarter Master General.

To

The Secretary to Government.

Military Department.

No 1527/4

Dated 6.
Recd. 7. } Oct

Postacommb
7 October 1884

+4 Enclosures.

(+1 plan)

Forwarding detailed and abstract Estimate for constructing a store room at Vizianagram for 16 Regt N. I.

OSS 9/10

Reimbursable C. 22.10.84. Ca. 2.11.84.

A 4978 Approved and transmitted to the Public Works Department for disposal.

(By order)

A. Kennedy Herbert Lieut Colo
Offg Secy to Govt

may be sanctd. I should have thought it desirable to have iron bars to the windows of room in which stores are kept, but the point has probably been considered by C.E. & S.E.

Ch.
15.10.84

By for Budget note & draft sanction.

by
15/10

Public Works Department, 188-85.

Current No. 8430 2628/16
Letter No. 4978
Dated the 7th October 84
From the Mil Secy to Govt

Note of Remarks.

The accompanying plan and estimate provide for constructing a store shed for the 16th Regiment N.I. at Vizianagram. The amount of the estimate is Rs 3,480.

2. The building consists of two store rooms, one measures 24'x24', the other 18'x24', and a verandah at one end — with a verandah in front. The verandah at the end measures 20'x24', and is railed in on two sides.

3. The roofing is to be of flat and pan tiles resting on sal wood common rafters which are supported on teakwood trusses. The doors and

DW 16/10

and windows are to be of teak. The flooring is to be formed of cut stone.

4. The scantlings of the timbers differ very slightly from the standard. The trusses of the roofing of the two rooms are badly placed — relieving arches have been provided over doors and windows, however.

5. The plan and estimate have been countersigned by the Offg. Dy. Qr. Mr. Genl.

14th Oct 1884

BH

B.T.P.
Mily. works

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 26/28/17

READ the following

From the Quarter Master General - H. E. No: 1527/A dy 6th October 1884.
Endorsement thereon by the Military Deptt. H. E. No: 4978 dy 7th October 1884.

The estimate amounting to Rs. 3,480, for constructing a store shed for the 16th Regiment, Madras Native Infantry at Vizianagram in the Vizagapatam District, is sanctioned, for execution when funds are available.

This sanction has been registered as Imperial Ordinary No: 41 W of 1884-85, and classified as Military, Original Works

CS.
22.10.84

WS
24.10.84

To The Suptg. Engr. I Circle with 4 encls.
" Examiner P. W. Accts with duplicate estimate.
" Military Deptt.

17

Cir

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4
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Govt. of [1884] Madras.

PUBLIC WORKS.

(185)

Dated

Rcd.

Encl.

G.O., 27 Sept 1884 No. 2078

65-
4.