Archives I—10,006—16-8-77.

(1) Number of pages 30

48 (2) Date of repair -10-87 ✓

(3) Initials of the Referencer lons ✓

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W.D. DEPARTMENT

G.O. No. ~~B.P. No.~~	1768-W.	Press. ~~Mis.~~
Dated	19 7.	1884. ~~197~~.

A.K

Not to be folded or roughly handled

15 ✓

19th July 1884, No. 1768 W., Public Works.

1268

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Military Works.

Read—the following papers :—

From the Superintending Engineer, V Circle, dated 1st February 1884, No. 3787.
Endorsement thereon by the Military Department, dated 12th February 1884, No. 693.
From the Commissary-General, dated 15th February 1884, No. 2615 T.B.
Endorsement thereon by the Military Department, dated 16th February 1884, No. 768.

From Colonel W. H. BURTON, R.E., Officiating Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, dated Chepák, 5th July 1884, No. 1345.

I have the honor to return your endorsement, No. 443 C., dated 22nd February 1884, and its enclosures, alterations having been made as suggested by the Commissary-General in the plan and estimate for converting the camel-sheds in the Commissariat lines at Bangalore into sheds for carts, &c., of the Transport Department.

No. 1239 C., Public Works.

Submitted for the approval of Government in the Military Department.

(By Order.)

Chepák,
9th July 1884.

(Signed) C. BOWEN, Major, R.E.,
Deputy Chief Engineer, P.W.D.

No. 3320, Military.

Approved.

(By Order.)

Ootacamund,
11th July 1884.

(Signed) A. R. KENNEY-HERBERT, Lieut.-Col.,
Offg. Secretary to Government.

Order—dated 19th July 1884, No. 1768 W., Public Works.

The estimate, amounting to Rs. 1,545, for converting the camel-sheds at the Commissariat lines, Bangalore, into sheds for carts, &c., of the Transport Department, is sanctioned.

2. This sanction has been registered as Imperial Ordinary No. 18 W. of 1884-85, and classified as Military Original Works.

(True Extract.)

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

To the Superintending Engineer, V Circle, with four enclosures.
,, Examiner, Public Works Accounts.
,, Military Department.

Exd. E. Fernandez.
Spare Copies

BUILDINGS AND ROADS.
MILITARY WORKS.

Govt. of (1884) Madras.

PUBLIC WORKS.

Dated July, 19th.

Recd. *Encl*

G.O., 19th July 1884, No. 1768 W.

JULY.

Commissariat Lines, Bangalore

Estimate of Rs. 1,545, *for converting the camel-sheds at the* —, into sheds for carts, &c., of the Transport Department, sanctioned.

1768

(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.
Eastern District.	Fort St. George ..	*Arsenal.*	RS.			
		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.	1,300	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.
	Madras	*Body Guard.*				
		Dispensary for veterinary department for Body Guard.	1,300	*Nil*	Do.	When funds are available.
		Gun-powder Factory.				
		Breaking down house .. .. .. 1 Breaking down machine. 1 House for 6-horse power engine and boiler.	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.
		Powder magazine .. .. Wooden flooring and thorough repair.	1,100	G.O., No. 1501, dated 31st March 1875 ..		
		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.	950	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.

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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.
Eastern District—*cont.*		*Commissariat Department*—cont.	RS.			
	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.

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.
Western District.		*Barracks, Native Infantry.*				
	Mangalore ..	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.	750	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.	Required	When funds are available.
		European Infantry.				
	Calicut	Introducing dry earth system	758	An important work. G.O., No. 2590 W., dated 4th October 1882.	Important	Most important.
		European Infantry.				
	Cannanore	Replacing the laterite flooring of the recreation room with concrete in chunam and asphalte.	2,140	Recommended. The laterite perishes rapidly. Sanction in abeyance.	Depends on the result of the experiment made with these materials in the native infantry place of arms.	Necessary.
		Replacing the present flooring of the school-room with concrete in chunam and asphalte.	770	Recommended. The laterite flooring perishes rapidly.	Seems desirable	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.	Desirable	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.	Depends on the results of the experiment made in the native infantry place of arms with these materials.	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.	Recommended	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 ..	Do.	Very desirable.
		Native Infantry.				
	Quilon	An armourer's shop	1,700	Much needed. The existing building is unsuited to present requirements. Browning arms cannot be carried on.	Desirable	Very necessary.
Bangalore Division.		*Royal Artillery.*				
	Bangalore	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.	Urgently required ..	Recommended.
		Ration shed for field batteries	1,750	G.O., No. 1232 of 14th May 1872. Much required. No cover for issue of rations.	Desirable	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.
Bangalore Division—*cont.*	Bangalore—*cont.*	*Royal Artillery*—cont.	RS.			
		Stone drains to forage yard and lines, Royal Horse Artillery.	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. A saddle-room .. .. Store-rooms .. .. All being urgently required for the storage of saddles, line, gear, &c., and for protection of carts and trollies.	1,200	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.
		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	1,500	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 Com*missariat* 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 1875, desirable.	Desirable	Do. do.
Ceded Districts.	Bellary	*27th Regiment, Native Infantry.*				
		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.

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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.
Ceded Districts—*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 ½ 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.	620	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	1,600	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.

Fort St. George,
11th October 1883.

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

ENDORSEMENT.

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.					Repairs.	Establishment.	Tools and Plant.	Suspense.	Grand Total.	Remarks.
						Major Works.			Minor Works.	Total.						
						Works in progress.	New Works.	Total.								
(1) Accommodation for troops—Buildings for European troops in the plains—Permanent.				IMPERIAL, ORDINARY. *Military.*		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
	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. 90,830 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.					Repairs.	Establishment.	Tools and Plant.	Suspense.	Grand Total.	Remarks.
						Major Works.			Minor Works.	Total.						
						Works in progress.	New Works.	Total.								
				IMPERIAL, ORDINARY—*cont.* *Military*—cont.		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
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. ..	Malapuram.	15	Canteen for detachment British Infantry.	B	..	5,000	5,000	..	..	..	..	..	..	..	Estimate awaited. Item No. 3, Appendix B, Budget of 1883-84.
Do. do. in the hills—Permanent.	Nilgiri ..	Wellington.	16	Extending the 6-inches water main-pipe from the barrack square to the married quarters at	A	9,460	..	9,460	..	..	..	..	..	..	..	Estimate of Rs. 9,530 sanctioned in G.O., No. 198 W., of 18th January 1882. Item No. 23, 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.					Repairs.	Establishment.	Tools and Plant.	Suspense.	Grand Total.	Remarks.
						Major Works.			Minor Works.	Total.						
						Works in progress.	New Works.	Total.								
				IMPERIAL, ORDINARY *cont.* *Military*—cont.		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
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.
Ordnance Works.	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.
	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 1882. 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. New additional compound wall. Two bridges.	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.
	Do. ..	Do. ..	37	Improvements to the wheel shop of the gun carriage factory.	B	..	4,000	4,000	..	..	..	..	..	..	..	Estimate awaited.
Commissariat Buildings.	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	

1768

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.

rder—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 ndia, in the Military Department, in compliance with their No. 922 M.W. of the 1st September 1883.

2. Ordered also that the lists of military works be printed and circulated to the uperintending Engineers, in view to the necessary plans and estimates being early epared 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

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.

No. 3787

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,
Chepauk, 1st February 1884.

1768

From
THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To
THE Chief Engineer
P. W. D.

SIR,

I have the honor to submit for sanction an Estimate of Rs 1533 for converting the Camel Sheds in the Commissariat Lines at Bangalore, into Sheds for Carts, Trollies and Stores of the Transport Department. The work is entered as urgently required, on page 4 of the Schedule of Military Minor Works - Appendix to G. O. No 3002W dated 24 October 1883.

Enclosures.
1 Estimate.
1 Report & Specification.
1 Plan

I have the honor to be
Sir
Your Most Obedt. Servt.

Wm Prendergast
Col R.E.
Superintg Engr
5 Circle

10

Pro 3126/83
13.2.84

P W Deptt
Chepauk
9th Febry/84
No 304 C

Submitted for the approval of Govt: in the Military Dept:
(By order)

C. Unwin. Major R.E.
Dy Ch. Engr P.W.D.

Mily No 693. 12 Madras Feb 84.

REQUESTED TO BE RETURNED WITH REPLY

Referred for the countersignature of the Commissary General, if approved.

A Kenney Herbert Lt Col.
Offg Secry to Government.

Mily: 1884

From No. 645

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

From the P. W. Dt:
304 C.

To
THE Chief Engineer
P.W.D.

D/9 Feby
R/11 —

Dated 1st } February 1884
Recd. }

ENCLOSURES. 3

No. 3787

Commissariat Lines at Bangalore — Submitting for sanction an estimate of Rs 1533 for converting the Camel sheds into carts sheds for carts &c of the Transport Department.

No 3787 8

Endorsed

No. T.B.
2615

COMMISSARY-GENERAL'S OFFICE,
Transport Branch,
Madras, 15 February 1884

From Colonel B. H. W. Magrath,
COMMISSARY-GENERAL.

1768

To
THE SECRETARY TO GOVERNMENT,
MILITARY DEPARTMENT.
Fort Saint George.

Sir,

In returning the enclosures received + returned with your endorsement No 693 of 12th February /84 on letter No 3787 8/1st Feby/84 from the Superintending Engineer 5th Circle, I have the honor to point out that No 1 Camel Shed has apparently only one entrance large enough to admit a cart, viz the one at the end.

2. It is desirable that the 3 side entrances, each 5 feet wide, (painted red in the plan) should be widened to 10 ft to admit of Carts being conveniently packed and removed as required.

3. Arches or 10 feet beams would

obviate

obviate the necessity of the present supports and give the necessary width to the side entrances.

I have the honor to be
Sir,
Your most obedt: Servant
Lieut: Coll:
for Commissary General

Bm

1768

12

Fort St George
16 Feby/84

No 768

Transferred to the Public Works Department, and the referred papers returned in view to the plan and Estimate being revised as suggested by the Commissary General.

(By order)

A Kenney Herbert Lt Col.
Offg Mily Secry to Govt.

Chepauk
No. 443C 22nd Feby
Forwarded to the Supdg Engr V Circle for the necessary action
(Return requested)
By order
C. Unwin. Major R.E.
Under-Secretary to Govt. P.W. Dept.

Mily 1884 D6

From
THE COMMISSARY-GENERAL,
Madras,

To
THE SECRETARY TO GOVERNMENT,
MILITARY DEPARTMENT,
Fort St. George

S.B.
No. 2615

Enclosure 4

Dated 15th } February 1884
Despd. 16 }

Points out that it is desirable that the 3 side entrances each 5 ft wide of No. 1 Camel shed should be widened to 10 ft: to admit of Carts being conveniently packed & removed as required.

No. 1785 of 18-7-84

Transferred

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,
Chepauk, 5th July 1884

No. 1345

1768

From
THE Offg. SUPERINTENDING ENGINEER,
5TH CIRCLE,

To
THE Chief Engineer
Public Works Department.

Enclosures. 5
returned

SIR,

I have the honor to return your endorsement No 443C dated 22nd February 1884, and its enclosures, alterations having been made as suggested by the Commissary General in the Plan & Estimate for converting the Camel Sheds in the Commissariat lines at Bangalore into Sheds for Carts &c of the Transport Department.

I have the honor to be
Sir,
Your most Obdt. Servant
W H Rhutn
Offg. Supdg Engr 5th Circle

13 Coll Rs.

p 6

Chief all
9th July /84

No 1239C

Submitted
for the approval
of Govt in the
Military Department
(By order)

C. Hunn Major R.E.
Dy Chief Engr, P.W.D.

---

47 No 3320
Approved
(By order)
A Kenney Herbert Lt Col
Offg Secy to Govt M.D.
11 July 1882

G. O. No 3002 W. 26-10-83
No 304C. 9-2-84

V.S. 30/7

From July 1884 ~~[illegible]~~
D.C.
Offg
THE SUPERINTENDING ENGINEER,
5TH CIRCLE,
No 3478
~~From~~ The P. W. D. S.

To

THE Chief Engineer
P. W. Deptt
1239C

D/9 July
R/11

Dated 5th } July 1884.
Recd. }

ENCLOSURES. 5

No. 1345

Converting the Camel sheds into sheds for Carts.

~~Returns Endorsement~~ No. 443C of 22-2-84. Alteration having been made as suggested by the Commissary General

Endorsed

B & R
Military

PUBLIC WORKS DEPARTMENT.

1768

No 1768 W

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 17th July 1884

READ the following

From the Superintending Engineer V Circle	H.E. No. 3787 of 12th Feby 1884.
Endorsement thereon by the Military Department	" No. 693 of 12th Feby 1884.
From the Commissary General	" No. $\frac{T.B}{2615}$ of 15th Feby 1884,
Endorsement thereon by the Military Department	" No. 768 of 16th Feby 1884.
From the Supg Engr V Circle	" No. 1345 of 5th July 1884,
Endorsement thereon by the Military Dept	" No. 3320 of 11th July 1884,

The estimate amounting to Rs 1545, for converting the Camel sheds at the Commissariat lines Bangalore into sheds for Carts &c. of the Transport Department, is sanctioned, ~~against~~ ~~the~~

14

~~the [illegible] works grant to~~
~~the Superintending Division~~

2. This sanction has been registered as Imperial ordinary No. 18 W of 1884-85, and classified as Military Original works.

Cy.
17.7.84.

17.7.84

To

The Supg. Engr. V Circle
with 4 enclosures ✓
" Examr. P. W. Accounts ✓
" Military Department ✓

Despd 25/7/84

Cu
[illegible] 15.7.84

1768.

5853
5668

Govt. of (1884) Madras.

PUBLIC WORKS.

(15)

Dated

Recd. Fwd.

G.O. 19th Jul 1884, No. 1758 W.

Commissariat Lines
Bangalore

Estimate of Rs 1,546
for converting the
Camel sheds at the
into sheds for
Carts &c of the
Transport Depôt.
Sanction