

10. 2154. W. of 6-8-83
 9. 1734. W. of 14-7-84
 1681. W. of 5-7-84
 319. E. of 25-6-84
 305. E. of 20-6-84
 81. E. of 15-5-84
 978. W. of 15-4-84
 859. W. of 31-3-84
 1834. W. of 18-7-82
 4. 0. 858. W. of 31-3-84
 10. 755. E. of 27-3-84
 12970. W. of 19-10-83
 2944. W. of 14-10-83

Sp. 2806 No. 18 Sept 84.

Communicated
 to the Supt Engineer
 V Circle, and to the
 Examiner Public
 Works Accounts.

Ill.
 8-9-84

Mch 7723

Govt. of (1884) Madras.
 MILITARY.

To
 THE QUARTER MASTER GENERAL,
 &c., &c., &c.

108.C.
 65C

Dated August, 27th.

Issued

Recd.

Encl.

G.O., 27th August 1884, No. 4162.

B
 Sp. 2806 No. 18 Sept 84.

AUGUST.
 Nos. 411-415.

Cantonments—Conservancy.

Fort St. George.—Introduction from 1st Sep-
 tember 1884 of a revised scheme for the conser-
 vancy of —, directed.

S. E. V Circle
 By Mr. A.
 in P.W.D.

Aug 37/9.
 15-10-84

Aug 20/9
 20-10-84

2 Copies sent to 1067
 With order

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

9th October 1883, No. 5464.

Defences—Forts.

Read the following paper :—

No. 121. *From Colonel G. CHESNEY, Secretary to the Government of India, Military Department, to Colonel E. L. HANKIN, Secretary to the Government of Madras, Military Department; dated Simla, 7th September 1883, No. 833-M.W.*

Defences—Forts.

I am directed to acknowledge the receipt of your endorsement, No. 4036, dated 23rd July 1883, forwarding the Annual Inspection Report on Fort St. George for 1883, together with the orders of the Madras Government thereon, and requesting the orders of the Government of India on the proposal to demolish the outworks of the Fort and to change the position of the guns forming the north-east group from the interior demi-bastion at the north-east corner of the Fort to the Orillon demi-bastion.

2. In reply I am to state, for the information of the Governor in Council, that the Government of India sanction the dismantlement of the outworks of the Fort and the filling in of the adjacent ditches when funds can be provided.

3. The Government of India also accept the recommendation of the Commander-in-Chief, Madras Army, for the change in the position of the guns from the north-east demi-bastion to the Orillon demi-bastion.

4. As regards the disposal of obsolete small arms, gun-stores, &c., which are now stored in the arsenal, and the removal of the offices of the Accountant-General and of the Controller of Military Accounts from the Fort, I am to state that the recommendations of the Commander-in-Chief appear to the Government of India very advisable, and I am to suggest that they may receive the early consideration of the Governor in Council.

5. If the arsenal were relieved of all the obsolete arms, gun-stores, &c., a considerable reduction in the arsenal establishment, both Europeans and Natives, would be practicable.

No. 122. ORDER THEREON, 9th October 1883, No. 5464.

Communicated to His Excellency the Commander-in-Chief and departments concerned.

2. With reference to paras. 4 and 5, it is observed that orders have already been issued on the subject of the obsolete small arms, gun-stores, &c., now stored in the arsenal.

Procs. of Govt., No. 1979, dated 4th April 1883.

" " " 4983, " 13th Sept. "

3. As regards the removal of the offices of the Accountant-General and the Controller of Military Accounts from the Fort, the Government await His Excellency the Commander-in-Chief's further communication on the subject promised in para. 7 of the Quartermaster-General's letter recorded in Proceedings of Government, No. 4035, dated 23rd July 1883.

No. 123. *To the Secretary to the Government of India, Military Department;
dated 9th October 1883, No. 5465.*

(True Extract.)

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

To the Quartermaster-General.
" Inspector-General of Ordnance.
" Public Works Department.
" Financial Department.
" Controller of Military Accounts.
" Adjutant-General, for information.

Gobt. of (1883) Madras.

MILITARY.

To
THE QUARTERMASTER-GENERAL,
&c., &c., &c.

No: 2944 W of 17th October 1883

Communicated to
the Supg. Engr. Fifth Circle

Sof L. B.
W. S.

Dated October, 9th.

Issued

Recd.

Encl.

G.O., 9th October 1883, No. 5464.

No: 2944 W of 17th October 1883

OCTOBER.
Nos. 121—123.

Defences—Forts.

Fort St. George.—Orders of the Government of India on the Annual Inspection Report on —, communicated to departments concerned.

With Order

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

15th June 1882, No. 2903.

Defences—Forts.

Read the following papers:—

No. 281. From Lieutenant-Colonel J. EWING, Officiating Quartermaster-General, to Colonel E. L. HANKIN, Acting Secretary to Government, Military Department; dated Ootacamund, 31st May 1882, No. 336.

In submitting to Government the report on the annual inspection of Fort St. George with the correspondence as per margin, I am desired by the Commander-in-Chief to state that His Excellency thinks the proposal to dismantle the outworks of the Fort worthy of consideration, more especially looking to the decayed state they are in, the expense annually required to keep them from tumbling down, and the impossibility of their being made capable of carrying heavy guns.

2. Sir Frederick Roberts does not agree with Brigadier-General Stewart that the arsenal and magazine should be removed from the fort, as no better position could be found for them without incurring great expense. The Commander-in-Chief is aware that recommendations have been made, from time to time, to remove the arsenal from and to place the military hospital in the fort, but His Excellency is averse to both these proposals. His Excellency would remove all obsolete articles from the arsenal and make it as compact and little crowded as possible; but, however weak of trace and out of repair Fort St. George may be, he is satisfied that the arsenal is really safer in it than it would be at the Mount or anywhere else near Madras, unless considerable expense was incurred to fortify the site selected. As regards the hospital, His Excellency is of opinion that it is a great advantage having it outside, and some distance from, the fort. The present hospital answers admirably, and the Commander-in-Chief hopes the military will be allowed to continue using it.

3. Sir Frederick Roberts does not agree with Brigadier-General Stewart that Fort St. George is useless as a place of refuge; it has been used before as such and may possibly be so again; under such circumstances, though the water inside the fort may be and no doubt is impure, people would not object to drink it if it were absolutely impossible to get better water from other sources, but unless the garrison was very hard pressed it would in all probability be found possible to resort to wells, which His Excellency understands exist within a reasonable distance of the fort and where the water is said to be good.

4. With regard to the main ditch, the Commander-in-Chief is strongly in favor of its being thoroughly cleansed, and to admit of this being done, with the least risk to the troops, His Excellency would recommend their being placed in tents in the early part of next cold season, either on the glacis, or at St. Thomas' Mount, Pallavaram, or wherever may be most convenient.

5. His Excellency is averse to another entrance being made into the fort, and is in favor of the fort being cleared of all people who have no actual calling there, and the space occupied by these being made available for the military.

From Brigadier-General R. C. STEWART, C.B., Commanding Centre District, to the Quartermaster-General, Fort St. George; dated Fort St. George, 1st April 1882, No. 106-G.

I have the honor to inform you that on Friday the 31st March 1882, accompanied by Colonel Gloag, Officer Commanding Royal Artillery, Centre District, Colonel Burton, Executive Engineer, and Major Atkinson, my Deputy Assistant Quartermaster-General, I held an inspection of Fort St. George, in accordance with instructions contained in Rule III of Order of Government, No. 6973, of 12th December 1879.

2. We carefully considered and discussed the reports of the former Committees, and we unanimously agreed that they had only urged what was actually necessary when they recommended the demolition of the decayed and useless outworks and the filling in of the fort ditch.

3. The expense of levelling the works would be diminished a good deal by employing the soldiers and two companies of Sappers, but the outlay would certainly be a great saving in the end; for after the work of demolition is completed, ditches filled in, ground levelled and tastefully laid out, the amount annually spent in patching, repairing, and propping up the old walls and casemates would no more be needed, and this of itself would be so considerable a saving as to soon show a satisfactory balance against the immediate outlay which would be required to render the fort a fit place for the residence of troops.

4. No one will say that the fort can be considered a defensive work against attacks from the sea face; it would be impossible for the old crumbling walls to sustain the firing of the heavy rifled ordnance required to oppose the ironclad, with its guns of heavy tonnage and long ranges. If the three detached batteries on the beach be added to so as to hold four guns each, they would afford far greater defence than the fort, as they command the harbour and anchorage opposite the fort and can carry heavy ordnance.

5. The retaining of the fort as a place of refuge and as a safe storage for valuable Government property and treasure in case of any attack from the land-side can hardly meet with approval when it is taken into consideration that, owing to the brackishness and impurity of the water in the fort wells, entire dependence has to be placed on the supply from the Seven Wells, situated beyond Rayapuram, some three miles from the fort, pumped (picottah) by Natives and conveyed by channels through the midst of the most populous part of the Native town.

6. I advocate the removal of the arsenal and magazine, turning the former into a hospital, but until such time I would not postpone the demolition of the works.

7. With modern appliances and engineering skill and with the help of the British troops in the fort and a couple of corps of Sappers, there is but little doubt the much needed work of demolition might be carried out both inexpensively and rapidly, and a lasting improvement effected both in a sanitary and pecuniary point of view; sanitary, so far that the filling in of the ditches would do away with that foul drain, the fort ditch, and also allow a free current of healthy sea air to circulate through the fort; pecuniary, in that the yearly item for repairs would be avoided, and the money thus expended laid out to far greater advantage in improving the barracks and buildings in the station of Fort St. George.

8. Finally, I think it is clearly admitted by all that, in its present condition, the fort is useless and very expensive. It has no defensive power towards the sea, it cannot be used as a place of refuge, and it cannot contain the garrison required for its proposed armament.

9. It would take but a very short time for the water of the wells to poison the people who foolishly might shut themselves up in it. Suppose that something of a place of refuge was required, would it not be better to have it in the form of an entrenched camp. The river Cooum, with a few minor works, would give sufficient defence landwards, a larger space would be joined, and new water-supply arranged.

10. I am very much against Colonel Burton's plan of cleaning out the fort ditch, something of the sort was attempted at Colombo when I was quartered there. Four or five men died on the spot; I might say a number got into a hopeless sickly state and were invalided. The mud and filth in the ditches must not be stirred.

11. In advocating the demolition of the works my point of view is to give the soldiers located in the place a more enjoyable existence than they have at present.

12. Having been stationed in the fort and had quarters with other Subalterns and Captains, where part of the Essex Regiment is now, I know what life in the upper storey (king's barracks) in the hot weather is, and I can fancy what it is in the lower storey.

13. Some people are averse to levelling the works from some sentimental ideas, but these I see are persons who have never occupied (and never likely to occupy) the quarters I have in Fort St. George, and where the British soldiers now are needlessly suffering from the exclusion of the mild breezes that are shut off from them.

The reports of the Officer Commanding Royal Artillery, Centre District, and of the Executive Engineer, Presidency, together with a plan of Fort St. George, are herewith attached.

From Lieutenant-Colonel W. H. BURTON, R.E., Executive Engineer, Presidency, to the Deputy Assistant Quartermaster-General, Centre District, (through Officer Commanding Royal Artillery, Centre District, St. Thomas Mount,) dated Chepauk, 5th April 1882, No. 54.

In accordance with your order, No. 986, dated 13th March 1882, I have the honor to report as follows concerning the existing state of Fort St. George.

As the general condition of the works and buildings as fully described by Captain A. C. Smith, R.E., Government Order No. 5372, Military Department, dated 23rd August 1880, still fairly represents the existing state of the buildings and works, I have nothing to add to or deduct from the report of that officer.

But for the following reasons I would submit, for the consideration of His Excellency the Commander-in-Chief as follows, that—

- (1) as the Government of Madras find it impossible to keep in proper repair so large and extensive a system of fortification works as is represented in Fort St. George in its outworks and *enciente*;
- (2) as in the event of any serious riot or fear of outbreak of hostilities from any quarter in the interior of India, as in 1857 for instance when this fort was last used as a place of refuge by the European inhabitants of Madras, it may be used again as a place of refuge for the unarmed portion of the European population, and for this purpose a larger space of ground than that afforded by the 42 acres within the *enciente* is necessary, which must be within the shelter to be afforded by the guns of the place;
- (3) that as a sheltered or protected area of nearly 26 acres in extent will be provided for this most necessary purpose in a work intended as this is as a place of refuge by the levelling of the outworks and by filling in the ditches of the outworks by the debris;
- (4) that as this modification of the fort is implied, although not explicitly stated, in the Government of India letter, No. 1721 S. D., dated 7th October 1880, when indicating the armament that should be mounted on the *enciente*, and is one therefore which is likely to receive due consideration by the Government of India;
- (5) that as the wet ditches have not been cleansed out for many years, at any rate probably not since they were first made, and as the main drains *debouche* into the main ditch, and as these drains having been at various times, and even so recently as February 1882, used as a receptacle for sewage, the ditches from having been originally 13 feet in depth below the top of the counterscarp wall are now but 11 feet deep, and the depth of water in them from having been 5 feet in the driest season of the year, and so even then a considerable obstacle is now barely 9 inches deep in many parts, and that this filling up consists in a large degree of sewage or black mud of the most offensive character in the dry season. By building across the junctions of outwork ditches with main ditch the short walls shown in red, the former can be properly filled up, the main ditch can be most economically emptied of this insanitary mud, and the broad space of low level ground (as regards crest of glacis) colored (burnt sienna) formed and consolidated for the purposes before indicated;
- (6) that even if the outworks were kept in a state of repair, and even if it had been proposed to re-arm them, their very extent would form a source of weakness to the small regular garrison which could only be left to form the *nucleus* of the defensive power which must be in the shape of the British population only newly armed in the circumstances we are imagining. The regular troops would not probably exceed 1 Battery of Garrison Artillery and may be one Company of British Infantry, and in this connection it seems to us essential to again station a Garrison Battery permanently in this fort.

Further, there is the discredit which is necessarily attached to any British Government flying our flag over such a ruinous lot of fortification works as Fort St. George now presents to the eye of any intelligent foreigner.

For the above reasons therefore, and supposing the work when commenced being vigorously pushed through to rapid completion, I would recommend that the work shown in tint on the plan be executed. The burnt sienna shows the newly formed ground under and within crest of glacis.

The blue shows the wet ditch to be permanently retained as such. The red lines show the new walls required to properly define and limit that ditch. The thick green line shows the limits of the *enciente* wall or escarp of the work.

Further, in the above-mentioned letter of the Government of India, a certain armament wares commended for the *enciente* of this fort, as follows :—

80-68 Pr. 24 Pr.
R. M. L. S. B.

N. E. Demi Bastion—					1
Right face ...	...	...	...	1	—
Salient ...	...	...	...	...	2
Left face ...	...	...	...	...	2
Left flank ...	...	...	...	...	2
Royal Bastion—					2
Right flank ...	...	...	...	...	2
Right face ...	...	...	...	1	—
Salient ...	...	...	...	...	2
Left face ...	...	...	...	...	2
Left flank ...	...	...	...	...	2
St. George's Bastion—					2
Right flank ...	...	...	...	...	2
Right face ...	...	...	...	1	—
Salient ...	...	...	...	...	2
Left face ...	...	...	...	...	2
Left flank ...	...	...	...	...	2
Wallajah Bastion—					2
Right flank ...	...	...	...	...	2
Right face ...	...	...	...	1	—
Salient ...	...	...	...	...	2
Left flank ...	...	...	...	...	2
Left face ...	...	...	...	...	2
S. E. Demi Bastion—					2
Right flank ...	...	...	...	...	2
Right face ...	...	...	...	V	—
Salient ...	...	...	...	...	1
Left face ...	...	...	...	...	1
Sea face, S. flank—					1
En resant ...	...	...	...	...	1
South Redan ...	...	...	...	1	—
Flag Staff Redan ...	...	...	...	...	1
North Redan ...	...	...	...	...	1
North flank, en resant ...	...	...	...	...	1

I wish to explain that this artillery requires certain works of a technical character, for instance each of six 80-68 Pr. R. M. L. gun requires a modern emplacement on certain racers, and that each group of the guns of the proposed armament require a set of expense shell and cartridge stores and artillery store. All this has already been fully detailed in the report of a Committee assembled for the purpose of choosing existing buildings most suitable as such stores, and all that is now required to mature estimates to place before Government in the usual form is the general approval of the Military authorities to that Committee's proposals, the preparation of these estimates awaits this approval.

As regards the entrances, there are now six in number, of which only four, the Wallajah, St. George's, South Sea Gate, and North Gate are used for carriages. A seventh has been projected by the President, Madras Municipality, as a local public improvement in order to afford a more convenient entrance and exit for His Excellency the Governor and for the Government officials whose offices are still in the fort. As Executive Engineer, Presidency Division, I have received orders to prepare plans, &c., for this new entrance, and have included therein an "iron fixed bridge" across a portion (23 feet) of the main ditch, a musketry gallery to the cut or grip to be made through the ramparts for the roadway, a heavy wood and iron loop-holed shutter or gate wherewith to close, when required, this roadway, ready means of extemporising a traverse in front of the gate, and a musketry parapet at sites of the cutting on the top of the ramparts.

I am of opinion, with reference to the future defensive capabilities of the fort, that in spite of the above modes of assisting the defence, the garrison would have a case of anxiety in the very existence of such a gateway; the more usual method of deadening a gateway into a fort by means of a draw-bridge over a bridge pit are here, by the nature of the problem, viz., to make an entrance without a draw-bridge and bridge pit, feasible; still, if the levelling of the outworks is approved for execution, there will be no necessity for making this so-called public improvement, for then will be possible in this latter case a straight road from the inner Wallajah Gate outwards through the glacis to the adjacent bridge over the Coom.

By the proposals thus again brought forward I believe that Fort St. George will be greatly improved—

- (a) in appearance,
- (b) in capacity for successful defence in troublous times,
- (c) in power of affording refuge to a distressed British population,
- (d) in sanitation at all times.

In making these most radical proposals for the improvement of a work of such great historical interest and of such great defensive capabilities, if the question be patiently approached, I wish it to be fully understood that I do so with the utmost diffidence, fearing lest this may be taken as a recommendation for an attempt to wipe out this fort. I have no such after-thought and no such intention, and I am confident that if the work when commenced be carried vigorously through to completion in two years, then the future state of the place will be vastly improved; if, however, on the other hand, parts only of these works are now approved and the rest postponed, then it were better that no remodelling of Fort St. George be suggested. To attempt to do such a costly work as this must be out of the usual grants made for ordinary repairs to barracks, would be to so postpone the completion as to make it appear or seem impossible, and to make the cost double or treble the eventual cost if the work be commenced and finished in twenty-four months.

Memorandum by Officer Commanding, Royal Artillery, Centre District, on Fort St. George, on the Artillery question.

I inspected the fort as directed in district orders, and found it in a very dilapidated condition. I am of opinion that if the guns, as specified in the report of the Executive Engineer, Presidency Circle, are placed in the fort, at least two Batteries of Garrison Artillery in peace time will require to be located there to look after them, and, in the event of being actually required during any local riot, five Batteries of Garrison Artillery would be required to perform all the duties and furnish gun detachments, &c.

2. The work is useless as a sea defence.

3. I consider it unnecessary as a place of refuge in case of local outbreak, as there is a harbour and shipping into which non-combatant Europeans could be placed in perfect safety.

4. The circumstances of the case, as compared with 1857, have entirely altered, and rendered its upkeep as a place of refuge in the Coast quite needless.

5. I observe that all save six guns of the proposed armament or 38 guns are smooth bore, *vide* Colonel Burton's report. I deprecate *obsolete guns* being placed in charge of the Royal Artillery.

6. I do not feel called upon as an Artillery Officer to offer any remarks on other points referred to in Colonel Burton's report.

MADRAS,
6th April 1882.

(Signed) A. R. GLOAG, Colonel, R.A.,
2nd Brigade, Royal Artillery, Com-
manding Royal Artillery, Centre District.

No. 2672.

Forwarded to the Surgeon-General, Her Majesty's Forces, for report as to whether the cleaning out of the ditch as proposed by Lieutenant-Colonel Burton would, in his opinion, be prejudicial to the health of the residents of the fort and immediate neighbourhood.

(By Order.)

OOTACAMUND,
5th June 1882.

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

No. 282. From C. D. MADDEN, Esq., Officiating Surgeon-General, Her Majesty's Forces, Madras, to Colonel E. L. HANKIN, Acting Secretary to Government, Military Department; dated Ootacamund, 6th June 1882, No. 34-O.

I have the honor to acknowledge the receipt of your memorandum,* No. 2672, of 5th June 1882, requesting me to express my opinion regarding the cleaning out of the ditches of Fort St. George from a sanitary point of view.

* 4 Enclosures of which are herewith returned.

2. From the account given by the Executive Engineer, Centre District, it appears that a large quantity of deposit, consisting of sewage and black mud, has accumulated in the ditches of the fort.

3. This deposit must necessarily be of a very foul kind and the emanations arising from this when disturbed would be highly dangerous to the health of the inhabitants of the fort and its vicinity.

4. Should the measure be decided upon as one that is indispensably necessary, I beg to offer the following suggestions, viz. :—

- (a) That the troops and other inhabitants of the fort should be removed to a distance. I fear the glacis of the fort would be too near for an encampment.
- (b) That the work should be undertaken in the month of December and performed as quickly as possible, the filth being removed to a distance from any human dwellings.
- (c) That, in the event of cholera or any epidemic disease being prevalent in the town or neighbourhood at the time the operation may be contemplated, it should be deferred until a more healthy season.
- (d) I beg to add that the operation of removing this offensive mass of accumulated filth will in such a climate as Madras be a source of great danger to those immediately employed on the work.

No. 283.

ORDER THEREON, 15th June 1882, No. 2903.

Ordered that the foregoing report on Fort St. George be forwarded to the Government of India.

2. The Right Honorable the Governor in Council concurs generally in the views expressed by His Excellency the Commander-in-Chief in the Quartermaster-General's letter, dated 31st May 1882, more especially as to paras. 2 and 3, but in the face of the strong opposition of the Surgeon-General does not see his way to interfering with the main ditch.

(True Extract.)

W. D. Shapur

For Ag. Secretary to Government,
Mily. Dept.

To the Quartermaster-General, with plan.
 „ Surgeon-General, Her Majesty's Forces, Madras.
 „ Inspector-General of Ordnance.
 „ Public Works Department. *10/6/82*
 „ Adjutant-General, for information.

B. No. 15648. 23-6-81.

Profile 4525

Gobt. of (1882) Madras.
MILITARY.

B
No 1834 ind 18 July 82

Communicated
to the S. E. Fifth
Circle.

Cy
11.7.82

Att
12/7/82

To
THE QUARTERMASTER-GENERAL,
&c., &c., &c.

Dated June, 15th.

Issued

Recd. 12 July 1882 Encl.

G.O., 15th June 1882, No. 2903.

No 1834 ind 18 July 82

JUNE.
Nos. 281-284.

one copy to duty

Forwarding to the Government of India
report on the inspection of Fort St. George.

S. E. Fifth Circle.

Oct. 24.7
Sept 20/82
only 9/7 Re 14/7

with order
Sndd. in Receipt Regt

GOVERNMENT OF MADRAS.

MILITARY DEPARTMENT.

3rd March 1884, No. 1040.

Military Buildings—Demolition.

Read the following papers:—

No. 43. Extract of a memorandum from Lieutenant-Colonel A. KENNEY-HERBERT, Officiating Secretary to Government, Military Department, to the Quarter Master General; dated Fort St. George, 19th January 1884, No. 308.

Para. 1. It having come to the notice of Government that the demolition of a portion of the outworks of Fort St. George has been recently attempted, under the orders of the Brigadier-General Commanding Eastern District, the Secretary to Government, Military Department, is directed to request that information may be afforded as to the circumstances under which Brigadier-General Stewart has undertaken this work.

No. 44. Memorandum from Brigadier-General R. C. STEWART, Quarter Master General, to Lieutenant-Colonel A. KENNEY-HERBERT, Officiating Secretary to Government, Military Department; dated Bombay, 12th February 1884, No. 54-1051.

In reply to his memorandum, No. 308, dated 19th January 1884, the Quarter Master General is desired by the Commander-in-Chief to inform the Secretary to Government, Military Department, that the Government of Madras having in their G.O., No. 4034, dated 23rd July 1883, accepted the principle of a general demolition of the outworks of Fort Saint George, and the Government of India having sanctioned the measure, G.O., No. 5464, dated 9th October 1883, the Commander-in-Chief directed the Officer Commanding the Eastern District to take advantage of some funds at his disposal to commence the work of demolition on the north-east counter-guard, which, for various reasons, was the most suitable outwork for the purpose.

The object in thus commencing the work of demolition was twofold—

- 1st.—It was anticipated that it would give a fair estimate of what the demolition of the other works would cost.
- 2nd.—It was an interesting experiment as to the extent dynamite might be utilized in the work of destruction.

His Excellency the Commander-in-Chief would propose to continue the operations in anticipation of the allotment of funds in the Public Works Department, the expenditure thereon being limited to the amount that may be at the disposal of the Officer Commanding the Eastern District.

There are certain outworks, such as the four ravelins which cover the entrances to the gateways which, in the opinion of the Commander-in-Chief, it may be desirable not to include in the work of demolition, but this is a question which His Excellency will do himself the honor of referring to Government at a later date.

Meanwhile Sir Frederick Roberts considers it very desirable that the demolition of the remaining outworks should be carried out without delay, as they are a weakness to the defences—in fact, some of them interfere with the line of fire of some of the guns on the *enceinte*.

No. 45.

ORDER THEREON, 3rd March 1884, No. 1040.

Action seems to have been taken in regard to this matter somewhat prematurely.

2. The question of the demolition of the outworks of Fort St. George was, in the opinion of the Government, suspended, pending a report that funds were available in the Public Works Department.

3. The experiments, as far as they have gone, have proved that the demolition of even a small portion of the outworks will be a far more difficult and costly operation than was anticipated, while they have rendered the appearance of the part of the fort upon which they were directed most unsightly.

4. His Excellency the Right Honorable the Governor in Council considers that further experiments on a small scale should be abandoned, and the whole question of the demolition held in abeyance until funds can be allotted in the usual course, and the work systematically undertaken.

(True Extract.)

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

To the Quarter Master General.
„ Public Works Department.
„ Adjutant-General, for information.

Govt. of (1884) Madras.

MILITARY.

To THE QUARTER MASTER GENERAL,
&c., &c., &c.

Dated March, 3rd.

Issued

Recd.

Encl.

G.O., 3rd March 1884, No. 1040.

MARCH.

Nos. 43-45.

Military Buildings—Demolition.

Fort St. George.—Abandonment of further experiments on a small scale of demolishing the outworks of —, directed, the whole question of demolition being held in abeyance until funds can be allotted and the work systematically undertaken.

GOVERNMENT OF MADRAS.

Public Works Department,

Chennai.

19th June 1884.

My dear Colonel,

I return to you Major Henry Herbert's note & send you the papers you require. I am sending a d/o to Hamilton asking him for his authority & desiring him to stop all further experiments.

I have estimate for additions to Chennai Office — the order sanctioning the estimate was not circulated as you surmised. It would appear that the order, on the original reference, to collect materials in anticipation of sanction having been circulated &

GOVERNMENT OF MADRAS,

Military Department,

Fort St. George,

18th Jan'y 1884

My dear Colonel
H.E. The Governor has
heard with some annoy-
ance that Br. General
Stewart has recently
been carrying on certain
Experiments with a
view to blowing up some
of the outworks of Fort
St. George. - He has de-
sired me to acquaint

you of this, for he con-
siders General Stewart's
action premature and
uncalled for. — It appears
that the ^{General} advanced Rs 500
out of his own pocket
for the experiments. —

It is true that in
accordance with P.O. (No. 1)
No 5465, of the 9th Oct
1883, the dismantlement

of the outworks of the
Fort may some day be
accomplished. But, in-
as much as funds are
not yet available for the
purpose, the question of
the method of demolition
has not yet come up to
Government for considera-
tion. —

Will you kindly en-
quire into the action taken
by the Officer P.W. Depart
serving under Genl. Stewart's
orders

and use your authority
to prevent further experiments?
Meanwhile I am addressing
the Q. M. General with re-
gard to the Brigadier
General. —

Believe me
Yours sincerely
Almoner Herbert.

Received approval further for
approval of the Satinche itself
not deemed necessary. I have
recalled all the signed orders
and also the packets of permits
papers. —

I should have replied to you
earlier, but I was in
kept me talking for a long time.
Took immediate action of course
you arrived last evening.

Yours sincerely
C. Chubb.

Chepauk

21 Jan 9. 84

My dear Brown

Hamilton has passed on your
note of 19th to me - asking for his
authority for the demolition (of the N^o
counterpane) on the North front of the
Fort now going on -

During October & November I was
pressed by B. Genl. Stewart Comd^r Eastern
District for an estimate for the demolition
of the outworks - the plan of which
had been approved of by the Govt of
India see G.O. 2944 W d 17.10.83.

On the 7 Dec. I put ^{forward} an estimate
amounting to (I think about) Rs 1500:
but I am writing hastily from memory.

On the 8 Dec H^o the Civil made an
inspection of the Fort and enquired of me
when the demolitions would commence -
I explained that my estimate for that of
the above named ~~out~~ outwork had

To the Comd^r Eastern District.

just been submitted and that when
it was sanc^d & when funds were
allotted it would commence in the
ordinary course -

H.E. enquired of B. Genl Stewart if
he had any funds at his disposal -
I said I had none - and Genl Stewart
replied he could let me have Rs500/-
at once - and I was accordingly asked
to commence demonstrations at once.

During the ensuing week I informed
S.E. in a demi official note of the above
he made no objections to the demonstration
being so commenced on receipt of above
funds - and I was directed by B. Genl
Stewart to make a commencement
whilst H.E. Genl was in quarters.

Arrangements were made accordingly
for this ^{on} 15th - wh: H.E. Genl failed to

be able to attend - but did so on
the further experiments on demonstration
on the 17th and expressed ^{himself} as well
pleased with the success thereof - and I
was urged by the mil^y authorities to con-
tinue the demonstrations to the extent of the
Rs500/- wh: had been provided by
the B. Genl. Comd^r E. Dist.

As I informed the Ch: Secy of the
proposed demonstrations before the Comd^r -
and the S.E. - both before any
commencement was made - I
understood no objection existed to
my going on, to the above extent,
whilst the Estimate was running
its course - now - I do not know
where the Estimate is - or what impedes
its sanction. Yours faithfully

W. H. Burton

This matter was brought
forward in Council on
22^d January - and
action of Col. Barton &
Lieut. Hamilton explained.

W. S. the Governor decided
that the matter should be
again brought forward when
the C. in C. returns, - and
that the experiment should
be stopped for the present.

W.

24-1-84

demolishing the
outworks of Fort St.
George.

S.A.W.

Cu

25-3-84

Reminda should go
to S.E. V. drawing
his attention to the order
of 6-8-83, and calling
for immediate report
respecting date when
the estimates then
called for will be
submitted.

It should be added
that H.E. the S. in C.
especially desires the
prompt submission of
the estimates for the works
specified in para 11 (IV)
of the R.M. S.'s letter dated
28-6-83 W.P. 455.

26-3-84

To W.

L.O. No 2154 W
of 6.8.83 (on M.D. Pres.
No 4025 of 23.7.83)
directed the S. S. V Circle
to see to ^{the} early pre-
paration of estimates
for the carrying out
of the suggestions in
paras 11 to 15 of the
2^d Mr. Gault's letter
No 453 of 28.6.83.

One of those suggestions
was (item IV para 11)
that "all the outworks
on the North-west &
South fronts should
be removed"

Beyond this, no
distinct order has
been issued calling
for estimates for
the ~~removal~~ of
of the cost of

has such been called
for?

III.
25-3-14

Memo

The undersigned
has the honor to call
the attention of the
Suply Supr. I Circle
to G.O. No 2154 W dated
6 August 1883, and
to request that an
immediate report
may be submitted
as to the date on
which the estimates
therein called for
may be expected.

2. H.B. the ^{G. in C.} ~~Commodore~~
in Chief especially
desires

desires prompt sub-
mission of the estimates
for the works specified
in para 11 (IV) of the
Quarter Master General's
letter No 453 dated
28th June 1883.

III
26-3-84
G.O. G.O. Mil 1040 a/3-3-84
G.O. 2944 W a/17-10-83
" 2154 W a/6-8-83
" 1834 W a/18-7-82

R.C.
A. No. 978 W. 15-4-84.

* "All the outworks on the
north-west & south fronts
(of Fort St. George) should be
removed and the drawbridges
to the gateways at the
entrance bastions put in
order" -

No 455 C a/27-3-84

Done

978W

28 Dec S.S. V Canceled
Date 27/3/84

GOVERNMENT OF MADRAS.
MILITARY DEPARTMENT.

27th August 1884, No. 4162.
Cantonments—Conservancy.

- Read the following papers:—
- No. 411. From Brigadier-General R. C. STEWART, Quarter Master General, to Lieutenant-Colonel A. KENNEY-HERBERT, Officiating Secretary to Government, Military Department; dated Ootacamund, 10th May 1884, No. 67-C. (Conservancy).
- I am desired by the Commander-in-Chief to submit, for the consideration and approval of Government, a scheme for the better conservancy of Fort St. George.
2. His Excellency has been aware that the sanitary condition of the fort has not been at all times satisfactory, and the probability of an outbreak of sickness arising amongst the troops, who are at present overcrowded within a very limited area, has been a source of anxiety.
3. Furthermore, it seemed desirable to remedy the general untidiness of the fort which has been the result of imperfect supervision and of divided responsibility.
4. His Excellency has therefore called on the Officer Commanding the Eastern District to frame a scheme for remedying the defects in the arrangements for controlling the conservancy of Fort St. George, and the one now submitted, after careful consideration and revision, seems to Sir Frederick Roberts to meet the necessities of the case.
5. Hitherto the responsibility of conservancy has been divided amongst several departments. The Staff Officer has been entrusted with the general supervision of the fort conservancy, but the Barrack Master has control over the sanitary condition of the interior, and the Executive Engineer that of the outworks.
6. The present establishment is divided between the Barrack, the Commissariat, the Engineer and the Civil departments, while the officer actually responsible has no power to punish any one employed, nor has he any control over the several departmental establishments. A reference to schedule A which accompanies this letter will show the present arrangements under which the conservancy is worked.
7. It is now proposed to place all these establishments entirely under the Staff Officer, who will be solely and entirely responsible for the cleanliness of the fort, under the immediate orders of the Officer Commanding the Eastern District. Schedule A shows the present expenditure as Rs. 1,400-9-7, and schedule B shows that proposed to be Rs. 1,397-11-7.
8. In addition to the above proposed measure to which I am to solicit the approval of Government, I am desired to draw special attention to the necessity for transferring all the conservancy establishments now attached to public offices located within the fort to the control of the Staff Officer.

9. It will be apparent that this scheme would not be complete if the Staff Officer had no control over the sanitary condition of the public offices, and in His Excellency's opinion it is essential that this should form a component part of it.

10. No extra expenditure is contemplated under this head, it being merely proposed to transfer the sum now allotted to each public office for conservancy to the control of the Staff Officer.

11. The measures here proposed would then give to the Staff Officer the entire supervision of the conservancy of the fort, excepting those portions under regimental control and which must of necessity be kept distinct.

12. With this explanation I am desired to submit the scheme for the consideration and orders of Government.

From Brigadier-General R. C. STEWART, C.B., Commanding Eastern District, to the Quarter Master General; dated Fort St. George, 17th October 1883, No. 324-G

With reference to your letter of 11th September 1883, number and subject as per margin, I have the honor to submit, for the approval of His Excellency the Commander-in-Chief, a defined scheme for the conservancy of Fort St. George.

2. The necessity for a total revision and re-arrangement of the existing conservancy department of Fort St. George having been fully stated in the correspondence which has already passed, I am of opinion that it is unnecessary to reiterate the same, and beg to submit the proposed scheme in a succinct and comprehensive form as possible.

I. The present arrangements for conservancy.

The Staff Officer and Superintendent of Details, Fort St. George, is entrusted with the general supervision of the fort conservancy and is held responsible for its general cleanliness. The Barrack Master is entrusted with the sanitary state of the inside of the fort, and the District Engineer attends to the sanitary condition of the outworks.

The arrangements have been found extremely unsatisfactory and faulty, no less than six departments having direct or indirect interest in them. It is very obvious that under such arrangements the authority of the responsible officer and his control is exceedingly limited, and in fact any changes in the hands employed may be made and he know nothing about it.

The schedule A appended presents at a glance—

II. The present establishments and departments under which they severally work.

It will be observed that the Barrack, the Commissariat, the Engineer, and the Civil departments divide the whole establishment between them, i.e., they each contribute a portion of the working establishment, or the pay of a portion of the total expenditure, while the actual responsible officer (the Staff Officer) has no power to dismiss or otherwise punish any one employed, and in fact any changes in the hands employed may be made and he know nothing about it.

The system, moreover, is unnecessarily rather complicated; as an illustration, I may mention the subject of carts and labor employed in the simple matter of watering the roads and streets of the fort. The carts are the property of Government, the Commissariat department provides hired bullocks, and the Barrack provides the coolies to fill the carts and do the work, entailing trouble on two departments, which could easily be arranged by one. To obviate this and similar mixed arrangements in future, it is proposed to relieve all these departments of all control over the fort conservancy and to place the same under the Staff Officer, who will be directly responsible to the Officer Commanding the Eastern District.

III. The cost of the present establishment and whence met.

This will be seen in schedule A opposite each department.

IV. Proposed future arrangements.

The appended rules for the future conservancy of Fort St. George set forth the arrangements it is proposed to adopt in the future for the care and conservancy of Fort St. George.

V. The future establishment.

In the schedule B attached the proposed future establishment is given, and it is requested that the whole of the establishment as shown in Schedule A should be transferred to the Staff Officer, and, so far as the conservancy is concerned, no other establishment need be retained.

The scheme as now proposed will be distinct from all the departments that have now any control over sanitary measures, and will rest solely and entirely with the Staff Officer under the orders of the General Commanding the Eastern District.

The suggestion made by you that the pay of the conservancy sergeant should in future be Rs. 25 has been adopted and entered in schedule B. It is also thought that the future holder of this appointment should be, as proposed, a non-commissioned officer of the unattached list with Rs. 25 as staff salary with the rank and pay of a sergeant of infantry.

From a comparison of the schedules A and B, a decrease will be observed in the total expenditure of the proposed new scheme as compared with the existing arrangements, which is owing to a proposed reduction in the number of toties, this decrease being inclusive of a slight increase of Rs. 5 in the extra establishment proposed of two subordinate supervisors and a writer.

As already detailed in the former correspondence, the two subordinate supervisors it is considered should be men selected from the regiment in garrison whose duty would be to supervise the Native establishment in every part of the fort under the immediate orders of the conservancy sergeant; this would involve no special knowledge that could not be perfectly understood in a couple of days, and any laxity or inattention to their duties would entail their being sent back to their regiment and other men employed.

As proposed in a former letter, I would again urge the necessity of all sanitary arrangements at public offices being transferred to the conservancy department; no additional expenditure would be necessary, as it would merely be a transfer of the sum allowed by each public office to the Staff Officer to defray the cost.

As above proposed, the entire conservancy of the fort, with the exception of such parts as are under regimental control and which of necessity must be kept distinct, would be under the entire control of the Staff Officer, and who would thus be in a position to exercise the fitting authority and adopt all necessary measures.

Rules for the care and conservancy of Fort St. George.

I. The conservancy and cleanliness of the fort to be under the control and management of the Staff Officer and Superintendent of Details (such parts being excepted as are under regimental control and which will hereinafter be defined).

II. The establishment under the orders of the Staff Officer will be as follows:—

- | | |
|--------------------------------|-------------------------------------|
| 1 Conservancy sergeant. | 20 Pairs of bullocks for above. |
| 2 Do. supervisors. | Boat establishment. |
| 1 Writer. | 1 Lamp-lighter maistry. |
| 4 Maistries. | 7 Lamp-lighters. |
| 18 Toties. | 9 Water carts. |
| 18 Sweepers (male). | 9 Pairs of bullocks for above. |
| 9 Do. (female). | 1 Maistry, } for filling the carts. |
| 6 Waterwomen. | 8 Coolies, } |
| 4 Picotta men. | 2 Tyndals. |
| 8 Rubbish carts with bullocks. | 20 Lascars. |
| 16 Night-soil carts. | |

III. The fort police will be as before—

- 1 Daffadar.
- 17 Peons.

IV. Those portions of the fort that will fall under "regimental control" are as follows:—

- (a) All buildings used as barracks.
- (b) The space enclosed by railing on the right of the road from the main square towards St. George's Gate and from the corner of the police tannah to the north-west corner of the barrack on the west and facing the commissariat stores and jail.
- (c) The steps leading to the cook-rooms on the rampart next the military prison.
- (d) The cook-houses set apart for the troops.
- (e) The parcherry square, viz., the space enclosed by the barrack buildings, known as No. 13, A Block.

- " 14, B "
- " 15, C "
- " 16, D "

All and every other portion of the fort will be under the direct control and management of the Staff Officer.

V. The sanitary condition of the fort being thus placed under the Staff Officer, he is empowered to issue notices to all residents (officers of the European regiment excepted) regarding the state of their premises, or want of attention on the part of their servants.

VI. When any infringement of the rules in force is observed in any quarters set apart for and occupied by officers of the regiment garrisoned in the fort, the Staff Officer should bring such to the notice of the Officer Commanding the Regiment, who will at once issue the necessary orders.

VII. The establishment allotted will be paid by the Staff Officer at his office, and he is empowered to dismiss at once any of the Native subordinates of the establishment for dereliction of duty.

VIII. Sections 4 "Bazaar," 6 "Cattle and vehicles," 7 "Native followers," 10 "Liquors," and paras. 99, 101, 102, 103, 106 and 108 of section 11 of the "Regulations and Standing Orders for the garrison of Fort St. George" will be strictly enforced and attended to by the Staff Officer.

IX. In all cases where professional advice may be considered necessary and desirable before carrying out any improvement, or to consult on any sanitary measures affecting any part of the fort, the Staff Officer will submit the same for the approval of the General Commanding the Eastern District, who, if he considers such suggestion advisable, will issue orders to assemble a committee to consider the subject. Such committee to be composed generally of any of the following officers:—

The Staff Officer.

The District Engineer.

The Officer Commanding the Regiment in Garrison.

The Fort Surgeon.

The Deputy Assistant Quarter Master General of the District.

X. All latrines or urinals within any public offices, excepting such as are under regimental control, to be attended to by the fort conservancy establishment.

XI. No toty or sweeper entertained and paid by the conservancy department is allowed to undertake any private work in the fort.

XII. The Staff Officer will send a report monthly to the Deputy Assistant Quarter Master General for the information of the Officer Commanding the Eastern District detailing any measures taken during the month to ensure due attention and compliance of conservancy rules, and bringing to notice any steps taken for punishing negligence on the part of any of the establishment.

No. 412. With report from Controller of Military Accounts; 9th August 1884, B.

Statement of Proposition for Revision of Establishment.

Extract from Military Department of Government of India.			Office to which the Proposition refers.	NATURE OF CHARGES.										Proposed Establishment.										PROPOSITION.						Grounds of Proposition.	Local Government's recommendation.	ORDERS OF GOVERNMENT OF INDIA.	
No.	Date	Conservancy Establishment, Fort St. George.*		Present Establishment.						Description.	Scale.			Cost.			Average Cost.	Permanent.			Temporary.			Mily. Dept.	Finl. Dept.								
				Minimum.	Maximum.	Annual Increase.	Minimum.	Maximum.	Average Cost.		Minimum.	Maximum.	Annual Increase.	Minimum.	Maximum.	Average Cost.		Increase per Men-sem.	Decrease per Men-sem.	Period.	Increase per Men-sem.	Decrease per Men-sem.											
Statement of Propositions.																																	
To place the entire conservancy establishment under one head.																																	
No. 4162, dated 27th August 1894. Sanctioned with the following modifications:—Four maistries to receive Rs. 8-0 each per mensem, and male toties Rs. 6 each.																																	

* Two toties at Rs. 5 each and two pairs bullocks at Rs. 17-8-0 each, at present paid in the Civil department.

FORT ST. GEORGE,
31st July 1884.

(Signed) R. A. WALTERS, Colonel,
Staff Officer and Superintendent of Details.

No. 3899.

Referred to the Public Department for information as to whether there is any objection to the proposed transfer (para. 8, *et seq.*, of the Quarter Master General's letter, No. 67-C., dated 10th May 1884) of the sweepers and toties of the civil office establishments in Fort St. George to the control of the Staff Officer.

(By Order.)

OOTACAMUND,
12th August 1884.
To the Public Department.

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

No. 413. *Endorsement from the Public Department; dated 20th August 1884, No. 1873.*

There is no objection in the Civil department to the proposed transfer.

(By Order.)

OOTACAMUND,
20th August 1884.

(Signed) H. TREMENHEERE,
Acting Assistant Secretary.

No. 414. ORDER THEREON, 27th August 1884, No. 4162.

The Right Honorable the Governor in Council approves the scheme submitted by His Excellency the Commander-in-Chief for the future conservancy of Fort St. George, and directs that it be introduced from the 1st September 1884.

2. With reference to the proposal to give the four sweeper maistries now employed Rs. 10 and male toties Rs. 8 each a month, instead of the present rates of Rs. 7 and Rs. 5, respectively, it is not alleged that any difficulty has hitherto been experienced in obtaining labor for conservancy purposes, and the remuneration now given appears to be generally sufficient for whole time menials of the class in question; but as, under the new arrangements, fewer hands will be employed, and the time of the men will consequently be more fully occupied—in other words additional work will have to be performed—the Government consider that an increase of 1 rupee 8 annas a month in the case of the maistries and of 1 rupee to each male toty will be ample.

3. Thus modified, the proposed scale of establishments and of rates of pay shown in the amended proposition statement is sanctioned, the financial result being a monthly saving of Rs. 41-4-0 or Rs. 495 annually.

4. From the 1st September 1884, the sweeper and toty establishments of all public offices, Civil and Military in the fort, will be placed under the control of the Staff Officer and Superintendent of Details, to whom the sanctioned pay of the men will be transferred each month for disbursement to them.

No. 415. *To the Secretary to the Government of India, Military Department; dated 27th August 1884, No. 4163.*

(True Extract.)

A. Kenney Herbert Lt.-Col.,
Offg. Secretary to Government.

To the Quarter Master General, with 1 enclosure.

- " Adjutant-General.
- " Public Department.
- " Revenue Department.
- " Public Works Department. *with 10.2/10/11*
- " Inspector-General of Ordnance.
- " Commissary-General.
- " Controller of Military Accounts.
- " Superintendent of Family Payments and Pensions.
- " Surgeon-General, Her Majesty's Forces.
- " Surgeon-General with the Government of Madras.

Exd. E. C. Shunker.

40. 2154. W. a/ 6-8-83
 40. 1734. W. a/ 14-7-84
 1681. W. a/ 5-7-84
 319. E. a/ 25-6-84
 305. E. a/ 20-6-84
 81. E. a/ 15-5-84
 978. W. a/ 15-4-84
 859. W. a/ 31-3-84
 1834. W. a/ 18-7-82
 40. 855. W. a/ 31-3-84
 40. 755. W. a/ 27-3-84
 40. 1290. W. a/ 19-10-83
 2944. W. a/ 14-10-83

No. 2306 & 18th Sept 84.

Communicated
 to the Supt Engineer
 V Circle, and to the
 Engineer Public
 Works Accounts.

W.
 8.9.84

H. E. V Circle
 By M. A.
 in P. W. A.

1879
 37/9
 15/8/84

No. 7723

Govt. of (1884) Madras.
 MILITARY.

To
 THE QUARTER MASTER GENERAL,
 &c., &c., &c.

10 d. c.

6 s. c.

Dated August, 27th.

Issued

Recd.
 15/9/84

Encl.

G.O., 27th August 1884, No. 4162.

No. 2306 & 18th Sept 84.

AUGUST.
 Nos. 411-415.

Cantonments—Conservancy.

Fort St. George.—Introduction from 1st September 1884 of a revised scheme for the conservancy of —, directed.

2 Copies sent to 10/5

With order