

1. Number of pages. 20
2. Date of repair. 11-6-37
3. Initials of Referee

M.R.O. 1-22,400-22-11-20

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Cons. 17-3-57

G.O. No.	478	Press
		Mis.
47 49		
Dated	16-3-	18 57.

Not to be folded or roughly handled

11/6/37

Fort Saint George, Public Works Consultation of 17th March 1857.

Read the following papers.

No. 47. Extract from the Minutes of Consultation in the Military Department, dated 14th February 1857.

Read the following letter from the Military Board; to Colonel C. A. BROWNE, Secretary to Government, Military Department, dated 12th February 1857, No. 309.

SIR,

We have the honor to lay before Government, a full and detailed report from the Superintendent Gun Powder Manufactory on the buildings of the manufactory, and to add that a walk over the premises will fully confirm the correctness of the Superintendent's description of the defective state of the building.

2. There are so many buildings required that it is difficult to enumerate those most needed; but there is one building to which we would particularly allude and that is an office for the Superintendent.

3. It is desirable and indeed essential that the Superintendent should be present for many hours during the day, and to ensure this, good cover is requisite, for this object the Board believe that a trifling outlay would suffice viz. Rupees (1,500) one thousand and five hundred.

4. As we find it very difficult to allow alterations to be going on at the same time as the Manufactory is working, we advise that a sum of Rupees (5,000) five thousand, be granted to the Superintendent for such buildings as may be most needed, and that the Civil Architect be directed to visit the work at least once a week to satisfy himself about the progress, kind of work, and cost, but the whole expenditures and work to be under the Superintendent.

5. We may mention that the buildings of the Gun Powder Manufactory are very ancient nearly 50 years, and originally of a very slight form, and defective construction, at the same time they have been very inexpensive buildings to Government.

6. Those which are now proposed to be executed should be of a very ordinary description and run up with all expedition.

7. As the season is favorable; we recommend Government to grant the expenditure as early as possible.

(Signed) AENEAS SHIRREFF, Brigadier,
Commandant of Artillery.

(") G. BALFOUR, Lieut. Colonel,
Stipendiary Memb. r.

Referred to the Department Public Works.

(By Order.)

(Signed) H. MARSHALL, Lieut. Colonel,
Deputy Secretary to Government.

Letter from Major G. W. S. SIMPSON, Superintendent of the Gun Powder Manufactory; to Captain A. H. HOPE, Secretary to the Military Board, dated 2nd February 1857, No. 257.

SIR,

1. I have the honor to forward for the information of the Military Board, a report on the present condition of the several buildings forming the Manufactory, and to offer the following observations thereon.

Fort Saint George, Public Works Consultation of 17th March 1857.

2. The buildings most urgently requiring repairs and alterations, are the old Sulphur Room, and the Barrelling Room. The present arrangement for storing a supply like Sulphur (which inflames at a low temperature) in close contact with the Nitre Rooms, and the Firewood Terrace, I consider most dangerous, and one that I would anxiously beg the Board at once to rectify. The old Sulphur Room standing apart from all other stores, is a judiciously placed, and an extremely well built store. In the event of fire occurring under the present system, the Manufactory would lose all its most valuable stores. The Barrelling Room also needs immediate repair, the flooring being in a bad, indeed dangerous condition, from powder having worked under the cracks and hollows in the worn out planking.

3. The skylights and ventilators requested for the several rooms, are absolutely indispensable, both with regard to the health of the work people, and that they may be better enabled to carry on work.

4. The Sulphur refining Room, for the same reason, should have upper ventilators. The workmen now during the refining process, inhale Sulphurous Acid; it is irrespirable and most noxious; a free current of air by upper ventilation, would remove this vapour from the room.

5. The Artificer's, so called, workshop, is a wretched place, part of an old cattle shed, and is wholly unfit for work people.

6. The remarks in the report, speak to the condition of the other Manufactory buildings with sufficient distinctness. The building that I would not advise any outlay upon at present, is, the old foundry, as it must be re-modelled when the applied for machinery arrives; the other buildings should be placed in a state of repair, during the present dry season.

Report on the condition of the several buildings constituting the Gun Powder Manufactory.

The Office is a small, low, tiled, unceiled building, and does not possess sufficient accommodation. The central portion appropriated to the Superintendent is not sufficiently large or convenient for the duties carried on in it. The room occupied by the clerks is merely a corner of the rear verandah and so small* that one clerk cannot leave his desk without disturbing the others. From the lowness of the tiled roof, the entire building is intolerably hot, and trying to health.

The Office requires an additional upper Room for the Superintendent, with front and rear verandahs; the whole fitted up with shelves and other fixtures, adapted for the general duties of the Superintendent, and Chemical analysis. The present Superintendent's room will then be available for the writers, Conicopolies &c. The building also requires general repair.

Miscellaneous Godown.

This godown appropriated for the storing of Gram, and spare stores, requires general repair, the flooring is very much worn, and the walls, door, and Wood-work generally, require considerable repairs.

Gram Bush, Charcoal, Store Rooms.

These store rooms, forming the front and rear of a square with dead walls at either end, are in a ruinous condition. Not having been repaired for many years, the plaster is entirely peeled off from every portion of the Brick-work and the mortar between the bricks having crumbled away for several inches in depth, the whole building, has a decayed and neglected appearance. The entrance door is quite rotten, and bolts worn by rust.

These rooms require extensive and speedy repair.

Common Charcoal Godown.

This room has not been repaired for many years, roof in bad order. Flooring worn away, door old and dilapidated, this room requires general repair.

Model Room.

This room requires general repair, walls plastering. Doors and windows thorough repair, and floor entire renewal.

Fort Saint George, Public Works Consultation of 17th March 1857.

A few windows with glass and wooden shutters are required, and an open terraced verandah in front, to render the room available as a model, and instruction room.

Surgery.

This room requires plastering.

Nitre Refining Rooms.

These rooms are in fair order but require outside plastering, the addition of two skylights, would give more light and ventilation to the work people.

Evaporating Boiler and Still Rooms

Roof out of order—outside walls require plastering—a skylight in this room is a necessary improvement.

Sulphur Refining Room.

In fair order—outside walls require plastering—roof ventilation much required to carry off the sulphur fumes.

Sal Nitre Godown.

Doors and windows in bad order—walls require plastering—flooring entire renewal. This Godown has not been repaired for many years.

Pulverizing Sulphur Room.

In good order—outside walls require plastering.

Timber, Iron, and Tar Godown.

Requires entire repair—flooring worn out—roof bad—woodwork decayed.

Fire drying Grambush, Charcoal Room.

Earthen flooring at present—and requires renewal with stone flags—door and windows decayed.

This Room has not been repaired for many years.

Pulverizing Grambush Charcoal Room.

In good order—outside walls require plastering—this room requires a skylight, to give additional light and ventilation to the workpeople.

Sulphur Store Rooms.

Doors and windows very much out of repair—flooring requires renewal—outer walls plastering, have not been repaired for many years.

Composition Weighing Room.

In fair condition, but too dark for the work, and badly ventilated. Requires skylights, or additional glazed windows, and outside plastering.

Crude Saltpetre Store Room.

Walls require plastering, and roof thorough repair—flooring renewed and doors and windows repaired.

General Store Room and Overseer's Office.

Walls and pillars require plastering—present dilapidated flooring removed and stone floor laid down, the removal of the present centre pillars would afford more space, and enable stores now scattered in different buildings, to be kept together.

Fire drying Nitre Room.

The present Earthen floor in bad order. This room should have stone flooring.

Note.—The above buildings require painting—doors and windows—the timber of the roofs coating with tar.

The square formed by the Refinery and store rooms is in very bad order—the Laterite paving worn into deep hollows, and impeding work, and forming pools of water during rain. The

75
5

Fort Saint George, Public Works Consultation of 17th March 1857.

whole of this pavement requires renewal, and the wood terrace in the centre of the square requires repair the entrance gate is in a bad state, and needs repair and paint.

Composition Mixing and Deposit Rooms.

In good repair, the roof of the building low, ventilation bad, and light deficient. Two skylights would rectify these deficiencies. Thirty-two individuals have now to breath a confined atmosphere, impregnated with Sulphur, Nitre, and Charcoal particles.

Artificers' Work Shop.

This building, apparently only occupied as a temporary arrangement, forms one end of an old Cattle shed, conveniently situated, but it requires an additional six feet of length, and three feet of height, with windows and doors. The roof is bad, and no egress for the smoke from the Forges. The floor earthen. The building at present is too small, and unfit for the Artificers in every respect.

Foundry.

This formerly fine and well built erection is altogether out of repair, but admits of being made a most efficient and useful building, indispensable when the Charcoal Cylinders are introduced into the Manufactory.

Overseer's and Supervisors' Quarters.

In thorough repair.

Mill Building, No. 1.

In good order.

Mill Building, No. 2.

In good order.

Mill Building, No. 3.

In good order.

Mill Building, No. 4.

In good order.

Press Room, No. 1.

Requires outside plastering, and slight repairs to doors.

Press Room, No. 2.

In serviceable order.

Cake Room, No. 1.

Door requires repair.

Cake Room, No. 2.

In good order.

Note.—The cake drying enclosure attached to the Press rooms, have neither terraces or side walls, and the cake when laid out to dry, is liable to become mixed with gravel and stones. *Cake drying Brick and Chunam Terraces with low boundry walls, are imperatively necessary.*

Corning Room, No. 1.
Requires blue washing outside—doors put in thorough repair.

Corning Room, No. 2.
Requires blue washing outside—doors put in thorough repair.

Note.—The construction of the Corning Rooms is faulty; the floor being level with the ground the floors should be raised at least six inches.

Barrelling Room.

This room is very much out of repair, in fact nearly ruinous the flooring is worn away in hollows, the doors and door frames are falling the level of the flooring is flush with the entrance, it should be six inches higher. The room being small, and only lighted by the doorways, rain always causes a cessation of work.

Fort Saint George, Public Works Consultation of 17th March 1857.

This room requires four glazed windows to be added, and Porticos enclosed at the sides to each doorway.

Glazing Room.

The doors and door frames are in very bad order, and the floor very much worn, like all the other buildings, the floor is on too low a level; and should be raised six inches.

From the doorways having no outer screen, rain accompanied with wind causes a cessation of work, besides making the room damp for many days. The doorways require Porticos, and the room, four glazed windows, or inner glass doors.

East drying terrace.

In good repair.

West drying terrace.

In good repair.

Winnowing room.

This room is in very bad repair, and very ill adapted for one of the most important processes in the manufacture of Powder. The floor is on the ground level, allowing gravel to be brought in by the wind; the doorways being flush with the walls the currents of air necessary for Winnowing are not properly directed into the room. The floor is thoroughly out of repair, and the doors and door frames in a dilapidated condition. The roof requires slight repair. This room should have four glazed windows or inner glass doors, the floor newly laid and raised six inches. The doorways screened by Porticos with curved side walls to form a wind funnel. The present bad arrangement is one of the causes of the Madras Powder being dusty, and no care will effectively remedy this draw back until the room is better constructed.

Coopers Room.

Floor requires renewal, doors repaired and Porticos added, walls require plastering.

Painters Room.

The roof in bad order, walls require plastering floor entire renewal—doors and windows in very bad order.

Old Sulphur room.

An originally well built room, but now in a ruinous condition. If put in thorough order would be a most useful store for Sulphur, and afford the means of removing that material from its present dangerous neighbourhood to the Nitre and Firewood stores. (Vide Report of Committee, Colonel McLeod, President, to Military Board, dated 23rd August 1856.)

Magazine.

In good repair but the palisading requires removal, and a wall ten feet high built in room. The small windows require trifling alteration to render them more suited for a Magazine than at present.

Bullock shed.

In serviceable condition.

Straw yard.

Requires extension repair to the palisading.

Bricklayers room.

Slight repair to door required.

Note. All the doors, windows, and roofs require painting, and many of the bolts and fastenings better secured.

Every building in which the Powder passes through the several processes of Manufacture, should have at least twelve feet all round flagged with square brick. At present the gravel almost enters the rooms, and is continually carried in by the feet of the workmen, so creating a constant source of peril.

(Signed) G. SIMPSON, Major,
Superintendent Gun Powder Manufactory.

Fort Saint George, Public Works Consultation of 17th March 1857.

No. 48. From Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 4th March 1857, No. 10663.

SIR.

I do myself the honor to enclose for the early orders of Government, copy of a despatch No. 158, of the 2nd Instant from the Civil Architect at the Presidency, respecting the premises of Mr. Williams on the Pantheon road which are obtainable as an office, for a monthly rent of from 130, to 140 Rupees.

2. It will be seen that Lieutenant Colonel Atkinson manifests a lively reluctance to the separation of the two offices of Civil Architect and Garrison Engineer into distinct and independent establishments, which is essential to real efficiency, and to the full development of that direct personal responsibility in the Head of each office, from which so much benefit may be expected to the public service.

3. Nothing can be more completely unsatisfactory to my own judgment than the joint footing of mixed and undefined management, which as yet continues to prevail. So long as the office servants are liable to requisitions alike from the Civil Architect and the Garrison Engineer, there can be no proper control exercised by either, and the present confusion is likely to continue unless the separation of the establishments be authoritatively enjoined, as Lieutenant Colonel Atkinson overlooking the Extract Proceedings of the Chief Engineer No. 9934, under date the 28th January 1857, continues to feel at liberty to employ his time in preparing Plans and estimates for works within the Garrison of an exclusively "Military" character.

4. Subject to any future detailed modifications which experience may shew to be requisite, I do myself the honor to strongly recommend that the aggregate drawn hitherto for the office of the Superintending Engineer Presidency Rupees 1491, be equally divided between the Civil Architect and the Garrison Engineer, and to give early effect to the independent action of each officer that a sum of Rupees 745-8 plus Rupees 40 for a Storekeeper be allotted to Lieutenant Colonel Atkinson and of 745-8 plus Rupees 30 for a Storekeeper be assigned to Captain Rawlins from the 1st Instant.

5. It is entirely for the Government to decide upon an extra expenditure being incurred for the office rent of the Civil Architect when that Officer maintains the requisite accommodation is obtainable without any additional outlay. I deem it my duty to state that for my own part, the efficiency and economy which I fully expect, to result from the entirely independent action of the Garrison Engineer, aided by an Official Staff whose connexion with the former Superintending Engineer's office is completely severed, will far more than compensate for the cost of a separate office for the Civil Architect. Instead of facilitating habitual intercommunication and mutual references between the two offices, I am of opinion that nothing short of a wide practical separation by distance will ensure the good effects to be anticipated from the new professional administration. It possibly may be practicable hereafter, if it be then thought desirable, to have both Engineer Offices within the Garrison, but on first introducing the new system, and under peculiar circumstances in many respects, I would earnestly counsel that the Civil Architect's office should be as unconnected with the Fort as that of Major Silver, the municipal Civil Engineer.

6. It would of course be proper to concede the privilege of priority of selection throughout to the Senior officer, and the method to be pursued might be to alternately select each one individual, until the respective allotments are made good.

P. S.—Since the foregoing was written, a further letter has been received from the Civil Architect No. 161 of 3rd Instant, and it is forwarded in original.

2. Throughout this production the same unwillingness to comply with the system ordered by superior authority is betrayed, and in order to swell the expenditure representing the "Civil Department," the cost of groins (clearly exceptional) of roads and even of municipal outlay have been added.

3. Moreover the Civil Architect overlooks the instructions of the whole of the Military works of the Presidency including Vepery, and Perambore being placed under the Garrison Engineer.

Fort Saint George, Public Works Consultation of 17th March 1857.

4. If therefore the groins (Rupees 1,36,795,) and the Government roads (Rupees 1,21,223,) and the succeeding items be withdrawn from Lieutenant Colonel Atkinson's list, it will be seen that the average expenditure of the two offices is nearly equal. But again this statement includes all the Civil offices within the Fort, the whole of which are to form the future charge of the Garrison Engineer, and I apprehend that it would require very little ingenuity to prepare a list shewing that the duties of the Garrison Engineer as laid down in the Extract Proceedings of the Chief Engineer will comprize a *larger* expenditure than that of the Civil Architect.

5. In fact the net figures as they now stand shew respectively.

Rupees...3,18,457, Civil

and ,, 3,39,471, Military

giving the slight difference in excess to the latter head, and I therefore feel confident that the equal division of establishment proposed in para. 4 of the body of the letter will be found equitable and appropriate.

No. 49. ORDER THEREON, No. 478; dated 16th March 1857.

The Extract Minutes of Consultation above recorded refers to this Department a letter from the Military Board giving cover to a report from the Superintendent of the Gun Powder Manufactory relative to the state of the buildings composing the Manufactory, and recommending that a sum of 5,000 Rupees may be granted to the Superintendent for such buildings as may most urgently need repair, and that the Civil Architect should be directed to visit the works and satisfy himself as to their progress and cost during execution. The letter from the Chief Engineer advocates the separation of the offices of Civil Architect and Garrison Engineer into distinct and independent establishments, and recommends that the amount hitherto drawn for the office establishment of the Superintending Engineer Presidency Division, be equally divided between the Civil Architect and the Garrison Engineer. Before passing orders on the propositions contained in the foregoing communications, the Right Honorable the Governor in Council considers it highly desirable, in order to prevent confusion and clash of authority, that the respective duties of the Civil Architect and Garrison Engineer should in the first instance be clearly defined and settled. He resolves therefore to request that the Chief Engineer will state his opinion as to the charges to be respectively assigned to each Officer and the limits within which they should exercise their functions; as also the establishment which he would propose for each, with reference to para. 3 Extract Minutes Consultation 22nd January 1857, No. 165, and the extent of their respective charge.

2. The Chief Engineer is requested to forward for the information of Government a copy of his Proceedings of the 28th January 1857, No. 9934, referred to in para. 3 of his letter.

(Signed) H. FORBES,

Acting Secretary to Government.

Superintendent

98
Nothing has yet been
determined either here or in the
Central Office as to the respective
charges of the Civil Architect and
Sarrison Engr; and probably it is a
point which the Fort will have to de-
termine themselves. As the Sarrison
Engr will doubtless have charge of
the Fortifications of St. George and all
Civil Building within the limits
of the Fort, the Civil Architect will
appear to be the proper authority for
the charge of all works beyond the
limits of the Fort, whether Civil or
Military, on the same principle

that the District Supt of Chingleput directs the military works at St. Thomas' Mount in addition to all his district duties. If the Garrison Supt were to have charge of all military buildings at the Presidency without reference to any limits, and the Civil Architect of all civil works, the arrangement is likely to be attended with a clashing of authorities. On the other hand, it seems desirable that the Garrison Supt's attention should be confined to the Fort and all Civil Buildings within its limits and to such military works as properly belong to the Garrison, e.g., barracks occupied by troops forming part of the Garrison.

118
Fort St. George; and that the Civil Architect should be required to look after all works beyond the limits of the Garrison, such as detached military buildings, civil buildings, and the roads thence under the charge of Capt. Myster as Supt of Fort roads.

The Civil Architect is the better paid officer who has the larger charge, and what he gives up within the limits of the Fort should be made up outside its walls. The present order will not however decide the question; there is reason to suppose that the Fort will be called upon to decide when the practice at Fort St. George and Bombay may be ascertained.

aimed to help the Govt to determine
the

I suspect that I think
that some confusion &
lack of authority is likely
to arise from two offices
having charge of burial
- viz of a kind of a
Bureau from their exercising
their power in the same
locality - It would be
very inconvenient.
I think that the Garrison
Bureau should have
charge of the burials
in the Govt, & the Civil
Architect of the
burial of the

13th.
Bureau of the Garrison
Bureau repaired the
burial houses &
the Civil Architect
the Burial of the
- formerly.

I should like to
see a list of all
public buildings
at the Presidency,
& see probably is
one in the Central
office, and a
distribution of
clerk's might be
well once made
R. J.

tained to help the fort to
the

Members

General

Adjutant

Quartermaster

Sergeant

Chaplain

Commissary

Surgeon

Clerk

Of

W

at

17^a

P.W.D.

No. 478

Extract from the Minutes of Consultation
Under date the 16th March 1857.

Read the following Paper

Extract from the Minutes of
Consultation in the Military
Department.

(Here enter 14th February 1857 38.)

From the Chief Engineer.

(Here enter 1st March - u - u 10663,

A
G
M
of
M.R.M.

The Extract Minutes
of Consultation above recorded
refers to this Department a
letter from the Military Board,
giving cover to a report from
the Superintendent of Gun Powder
manufactory, relative to the state
of the buildings composing the
manufactory, and recommending
that a sum of 5000 Rupees
may be granted to the
Superintendent

Superintendent for such
buildings as may most
urgently need repair and
that the Civil Architect
should be directed to visit
the works and satisfy him-
self as to their progress and
costs during execution. The
letter from the Chief Engineer
advocates the separation of
the offices of Civil Architect
and Garrison Engineer into
distinct and independent
establishments, and recom-
mends that the amount
hitherto drawn for the office
Establishment of the Super-
intending Engineer Presiding
Division, be equally divided
between the Civil Architect
and the Garrison Engineer.
Before passing orders on
the propositions contained
in the foregoing communications,
the

* He would propose for each, with
reference to para 3 & Mins. Com.
22nd January 1857 No 165, and the
extent of their respective charges.

19 ✓
the Right Honorable the Governor
in Council considers it highly
desirable, in order to prevent
confusion and clash of au-
thority, that the respective
duties of the Civil Architect
and Garrison Engineer should
in the first instance be
clearly defined and settled.
He resolves therefore to request
that the Chief Engineer will
state his opinion as to the
charges to be respectively
assigned to ^{each} ~~these~~ officers, and
the limits within which they
should exercise their func-
tions, as also the establishment which

The Chief Engineer is requested
to forward for the information
of Government a copy of his Proce-
dings of the 28th January 1857 No 9934,
referred to in para 3 of his letter;

9 Copies to the Chief Engr
with an Orig. Encl. Disp^d 17th

Copy in as per 14: 11
 Of 21st November 1857.
 13th Nov 1857.
 (A. M. H. from 1: 1)

21st Nov 1857 Defiant
 R. to Com: 17th March

14/4/78.

Abstract Memo: of Com:
 Dated 16th March 187.
 From Chief Engineer 29/12/57
 1857 6/12/57 1857 6/12/57
 1857 6/12/57 1857 6/12/57
 1857 6/12/57 1857 6/12/57
 1857 6/12/57 1857 6/12/57

see the duties of the Civil Service
 and the duties of the Civil Service
 in the first instance the clearly defined
 and settled and respecting the
 Chief Engineer to state his opinion
 as to the charges to be respectively
 assigned to each officer and the
 limits within which they should
 exercise their functions, as also
 the establishment which he is
 would propose for each.

14/4/78