

(1) Number of pages 6
 (2) Date of repair 30-11-38
 (3) Initials of the Referencer CP

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Cons. 20.3.1860

G.O. No.	534	Press Ms.
39-4,8 Dated	15-3-1860.	

Not to be folded or roughly handled

CP

*Proceedings of the Madras Government, Public Works Department,
for the month of March 1860.*

No. 39. Read the following Proceedings of the Madras Government in the Military Department, dated 16th February 1860, No. 681 :—

Approving for execution an estimate of Rupees 1,340, for re-
building the Staff Sergeant's Quarters of the Sappers and } (Vide Military Proceedings from 11th to 20th
Miners at Dowlaisheram in Rajahmundry. } February 1860, Nos. 148-149.)

No. 40. ORDER THEREON, 15th March 1860, No. 534.

Communicated to the Chief Engineer.

2. Captain Rundall would seem to be to blame for the failure of the building in question. He was doubtless absorbed in the work of repairing the breach in the Anicut; but that fact does not excuse his not postponing the building until he had time to attend to it.

(Signed) J. D. BOURDILLON,
Secretary to Government.

Buildings

(New Works)

Abstract Estimate No.

of 1859/60.

District. Rajahmundry.

Work Rebuilding the Staff Sergeants Quarters of the Sappers
and Miners at Dowlaaseveram.

Quantities C. yds.	Description of Work.	Rate		Amount Rupees	Amount Paisa Pence
		Rs	As. P.		
4913	Cubic feet Rough stone in Chunam per cubic foot.	1	6	435	
3214 1/2	Brickwork in clay D.	1	1	218	
851 1/2	Brickwork in Chunam per cubic foot.	1	6	80	
164 1/4	Flat archwork in Ch. nam - per cubic foot.	2	5 1/2	26	
105 3/4	Circular archwork in D. D.	2	10 1/2	19	
28 1/2	Cornice work in D. D.	2	6	4	
2,451	Roofing with Teakwood, con- ples, rafters, piers, nails flat and pan tiles and chunam borders per sq. ft.	21	6	524	
357	Ridge Ventilators complete per square.	30		107	
6,900	Plastering with 2 coats of Chunam per square.	2	5 1/2	161	
15,38 1/2	Flooring with 4 inch square stone in Chunam and a levelling course of wall bricks beneath per square.	11	9 1/2	178	
Carried Over					1,751

Quantities	Description of Work	Rate		Amount		Amount for each part
		Rs	As	Paisas	Paisas	
Cyts.	Brought Over			1751		
	Excavating the foundation and filling the basement			50		
43 1/2	Cubic feet Teakwood wrought and put up per foot	1	8	65		
	6 Pairs Pannelled Venetian Doors with frames and Locks &c complete each	28		168		
	8 Pairs Venetian Window shutters with frames and iron bars &c complete each	22	1	192		
1100	Green paint one coat			20		
	For taking down the roof and knocking down the walls also collecting the old materials			100		
	Sundry charges and scaffolding &c @ 5 Reper Cent			117		
						24 63
	deduct the value of materials remaining					
118	Cubic Yards of Rough Stone &c	8		59		
3200	Bricks per 1000 Bricks	1		128		
28110	Tiles @ 1/5	1	5	37		
	Rafter			250		
	Carried Over			574		

Quantities	Description of Work	Rate		Amount		Amount for each part
		Rs	As	Paisas	Paisas	
	Brought Over			574		24 63
	Reper			28		
	Sawyers work			7		
	Rafter Nails			11		
	Carpentry			16		
	Flooring stone			62		
	Teakwood			65		
	6 Pairs of Pannelled Venetian Doors			168		
	8 Pairs of Venetian Windows			192		
						1123
	Total Reper					1340

Central Office of P.W.
Sipahkhan
7th February 1860

R. Bell Colonel
Chief Engineer D.P.W.

007487000

Enclosure.

In a letter

From
The Chief Engineer S.P.W.

To The Secretary to Govt S.P.W.

Dated 7 February 1860
Recd.

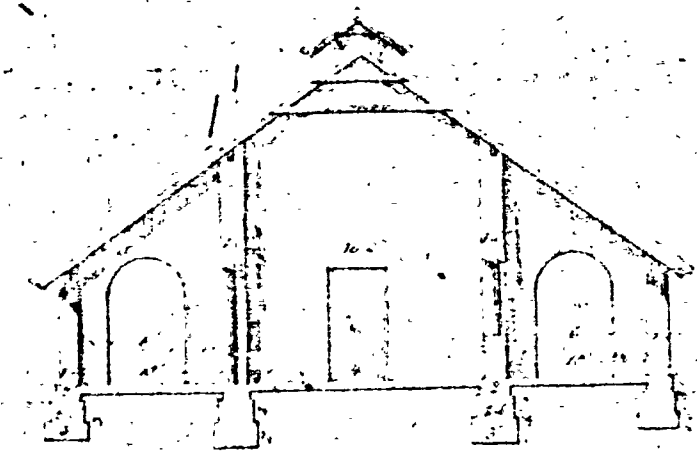
Ref
Letter 762 of 1860.

N^o 10016.

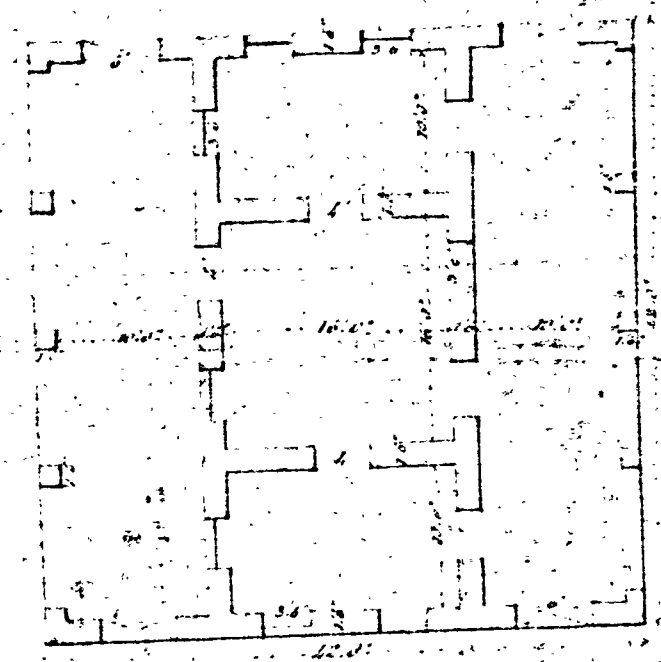
Abstract Estimate
for rebuilding the Staff
Serjants Quarters of the
Chappera and Miners at
Dowlaisveram in the
District of Rajahmundry
amounting to Rs 1350.

Plan and Section
of the
Staff Serjants Quarters at Dowlaisveram
Rajahmundry District.

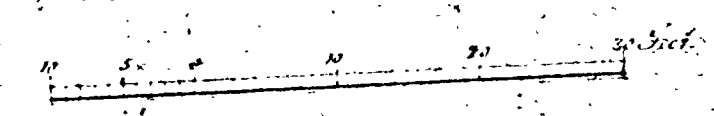
Section thro' A.B.



Plan.



Central Office S.P.W.
Rajahmundry
7 February 1860.



True copy
Chief Engineer

MILITARY DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following letters:—

From the Chief Engineer, *Sepakkam*, 7th February 1860, No. 10016; to the Secretary to Government, Public Works Department.

Military buildings, No. 287, dated 5th November 1859.

Enclosures 3.

- 1 Plan.
- 1 Abstract Estimate.
- 1 Letter from District Engineer Godavery No. and date as above.

I have the honor to forward a letter from the District Engineer Godavery, reporting that in consequence of serious cracks having occurred in the walls of one of the Staff Sergeants Quarters of the Sappers and Miners at Dowlaishweram, he has been obliged to take the building down.

2. Captain Randall reports the cause of the failure in this building to be as follows:—

The buildings are situated on the slope of a rising ground composed generally of gravel and rock. The gravel is in layers from two to several feet in thickness but veins of a treacherous kind of clay run through it. Since removing the building he found a vein of this soil, traversing it obliquely and where it occurred the walls resting on it had sunk, and the consequent settlement created cracks which made the building untenable. The District Engineer adds that the foundations of the building were laid at a time when both he and Sub Engineer Veerannah (who was in executive charge of the buildings) were employed day and night in closing a breach in the Anicut, and so this treacherous soil passed undiscovered. The nature of this soil is, he remarks, such that in the dry weather great difficulty is experienced in cutting it out with a Mamoty, but when saturated with water a stick may be pushed into it to a great depth.

3. A Plan of the building is enclosed, and an Estimate amounting to Rupees 2,463, from which deducting the value of the materials saved Rupees 1,123, leaves Rupees 1,340, for which sanction is required.

4. Captain Randall remarks that there are some cracks in other buildings belonging to the Sappers at Dowlaishweram which will have to be watched, and as a precautionary measure, he has suggested to Captain Greenaway to dig a ditch 6 feet deep around them so as to cut off all drainage from passing under the buildings, and, to secure a good foundation for the re-construction of the one which has failed, he has recommended an excavation 6 feet broad and 6 to 9 feet if requisite deep, to be filled up to 6 feet deep, with rubble stone and sand upon which he thinks the foundations may be safely laid.

5. I much regret the failure above reported. The responsibility for it is with Captain Randall, since he mentions no one as specially in charge of the work. There can be no doubt that that Officer's time was so wholly engrossed by the work of repairing the Anicut breach, that he had none to attend to the building in question—but under these circumstances he ought to have postponed the building.

6. The Estimate has been examined in this Office and is suitable, I therefore recommend it for sanction to be defrayed out of the Repair Funds of the District.

From the District Engineer Godavery Division, Camp Dowlaishweram, 5th November 1859, No. 287; to the Deputy Chief Engineer, Northern Circle.

I regret to have to report that one of the new buildings for the accommodation of the Europeans attached to the Sappers and Miners has failed—and the walls cracked so badly that I have thought it expedient to pull the whole building down.

2. The cause of its failure is as follows.

3. The buildings are situated on the slope of a rising ground, the soil of which is chiefly composed of hard gravel interspersed with rock.

4. The gravel lies in layers varying from 2 to several feet in thickness, but through this gravel there are at intervals, veins of a treacherous kind of clay, a mixture apparently of clay and fullers earth—Since removing the building, I have found a vein of this soil traversing it obliquely. The parts of the walls which rest on it consequently have sunk, and the settlement continuing to increase, the building became untenable.

1/10/60

Please send the
of the Staff Sergeant's
Quarters at Dowlaishweram
to the Deputy Chief Engineer
for examination and sanction.

1/10/60

Enclosed is a letter from
the Chief Engineer to the
Deputy Chief Engineer
dated 7th February 1860
No. 10016.

5. The foundations of the building were laid at a time when both Sub Engineer Veerannah and myself were occupied night and day in closing the breach in the Muddoor branch of the Anni-cut, and consequently this soil was not discovered. In the dry season it becomes so hard that great difficulty is found in cutting it out with a Mamoty, but after it has become saturated with water it becomes a perfect slush and a stick may be pushed down it to a great depth.

6. In the foundation of all the buildings which were examined by me, this soil was detected, and remedies taken against it which in all instances but one have succeeded.

7. There is a small settlement in the bath rooms of the European Barrack, but I do not think this will extend further, as it does not appear to have altered for some months—but there is one in the Hospital which will have to be watched. I think however an expedient which I have suggested to Captain Greenaway will probably prevent any further settlement, and that is the excavation of a ditch 6 feet deep round the building, so as to isolate it from under drainage, and allow all the rain water and springs on the ground to be carried off before these reach the foundation of the part of the building affected.

8. I beg to submit an Estimate of the cost of renewing the building which is one of the Staff Serjeants Quarters, amounting to Rupees 1,310-0-0, the principal part of the old materials together with the woodwork of the roof, doors, windows &c., will of course be used again.

9. The precaution I have recommended to be taken is to dig the foundation 6 feet deep and 6 feet wide, and if the vein of bad earth extends to a greater depth, to fill up 3 feet in depth with rubble stone, filling the interstices with sand well wetted. On this stratum I think the foundation of the building may be safely laid.

10. I beg therefore the Estimate may be submitted for sanction.

ORDER, No. 681, 16th February 1860.

Approved for execution as proposed in the concluding para. of the letter from the Chief Engineer; the question of the responsibility in this matter, being considered in the Department Public Works.

(True Extract.)

Macmillan
Acting Dy. Secretary to Government.

To the Dept. Public Works, with a Plan & an Estimate. 820 4/1000

„ Chief Engineer.

„ Quarter Master General,

1860-1861
of Good Hope, etc.
1861-1862

May 8th
1860
Geo. N. Bailey No 1478

Proceedings of the
Board of Trustees of the
University of the
State of New York
for the year 1881.

May 21.0.

Applying for
execution on the
writ of Habeas Corpus for
releasing the
said Edward of
the Virginia & Minor
at San Francisco
in California

Q. J. Mumford

Ensign.

Communicated to the Chief

92-534
5-04

Captain Standish
 would seem to be to blame for the
 failure of the building in question.
 He was doubtless absorbed in
 the work of repairing the break
 in the dam.

*M^r. = Morning the Fairing will be
and time to attend to it.*

Chas. W. Jones
150 French St



Ms. A. 9.2.15.1. Minuto
Nato an Ordo

10 Copying
to the Chief Clerk, for
Capt. F. Remondet of
1861