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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

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Dated	23 - 1 -	1875
		195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
23rd January 1875.*

No. 418. Read the following letter from Colonel F. J. MOBERLY, R.E., Superintending Engineer, Chingleput District, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Guindy, 6th October 1874, No. 2,343:—

I HAVE the honor to report that the so-called traverse round the Reserve Powder Magazine has slipped down in every direction under the rain; has choked the flow of drainage, and caused the water to lie in pools against the walls of the building.

2. The earth has been put up with a slope of 1 to 1 outside, and of $\frac{1}{2}$ to 1 inside the walls. I fear there is no hope of its remaining at such a slope, or of turf retaining it; or, indeed, anything but a masonry wall holding it; that, I suppose, is out of the question, as the traverse has been ordered with a view to mask it.

3. I have already expressed my opinion regarding the uselessness of this bank. I would again urge that it be abandoned. I have not seen the reasons given by the Inspector-General of Ordnance and Magazines, but with all deference I would observe that this bank would not resist the explosion of a very much smaller magazine than that at the Mount.

From Colonel F. J. MOBERLY, R.E., District Engineer, Chingleput, to the Inspecting Engineer for Civil and Military Buildings, dated Guindy, 10th January 1874, No. 2,741.

I HAVE the honor to reforward the estimate for traverse to the Reserve Powder Magazine, forwarded with your No. 1,323, dated 24th October 1873, revised by Captain A. C. Smith, R.E., who has observed certain omissions—see his letter enclosed.

1 Copy of letter from Mount Range Officer.
1 Revised Estimate.

2. The ground around the magazine is hard and much mixed with rock; its excavation and carriage for some distance, and to so inconveniently situated a work, justifies, in my opinion, the charge of Annas 8 a yard for earth; the material taken out for foundation of buildings will be used in filling in this basement.

3. The wall has been retained, because the value of its material would not cover the cost of removing it and of the stuff to be put in its place.

4. The work will be carried out departmentally.

5. I trust it will not be considered presumptuous in me to offer the following remarks, with view to reconsidering the question as to the necessity for the expensive work. I would, in the first place, observe that the proposed embankment is not a traverse; it is simply an enclosure, and by its slopes renders access more easy than the existing vertical wall.

6. Within the enclosure is a magazine intended to contain 2,000 or 3,000 barrels of powder in complete communication with one another, so that the explosion of one barrel will, I believe, entail the explosion of the whole. I respectfully submit that the bank would not in the smallest degree affect the explosion. The whole building and its site would be torn to pieces.

7. The main part of the cantonment is covered by Saint Thomas' Mount itself; the pensioners' lines and other buildings out of its shelter would be struck by the falling matter, and probably would be thrown by the shock of such an explosion.

8. If the magazines had been placed in separate buildings traverses might possibly be of service in preventing the communication from one to the other, or deadening the concussion. I fully appreciate their value in the Ordnance Factory, but I have considerable doubt as to their utility when placed between two large quantities of gunpowder.

9. I regret that the subject did not occur to me earlier, as it might have saved some trouble; but holding this opinion very strongly now, I think it my duty even at this late period to lay it before you for your consideration.

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23rd January 1875.*

From Captain A. C. SMITH, R.E., Executive Engineer, No. 2 or Mount Range, Chingleput District, to Colonel F. J. MOBERLY, R.E., District Engineer, Chingleput, dated 23rd December 1873, No. 1,652.

Yours No. 2,389, dated 1st instant. I have the honor to resubmit the revised estimate for traverses and other protective works to the Reserve Powder Magazine at Saint Thomas' Mount with the following explanation as to the increase of Rupees 950 :—

- 1st.—I found some discrepancies in the old estimate which have been removed and corrected in the revised estimate.
- 2nd.—The cause of an increased quantity of brickwork in chunam is owing to drains constructed breadthways through the traverses to drain the ground enclosed, which was not provided for in the original estimate.
- 3rd.—The archwork was erroneously included in the original estimate as brickwork in chunam, which has been corrected in the revised estimate.
- 4th.—An extra drain (18' x 8' x 3½') on the east side of the Reserve Powder Magazine is indispensable, which was omitted in the original estimate. The extra rate of Annas 2, which is charged in this item, is owing to the nature of the ground, which is very rocky.
- 5th.—The increased rate for metalling is owing to the present rate of laterite allowed for road works being Annas 6½ per cart.
- 6th.—The excess in the packing shed is due to brickwork and pointing, as the old estimate did not take into consideration the fourth wall. The existing packing shed has only three walls, the compound wall forming the fourth.
- 7th.—The saving in the outer porch is owing to the diminished scantling in the teak-wood.

No. 419. ORDER THEREON, 23rd January 1875, No. 201.

MILITARY WORKS, No. 10.

THE recommendation of the Superintending Engineer in charge of Chingleput District, that the traverse round three sides of the Reserve Powder Magazine at the Mount be dispensed with, was urged in his letter to the Inspecting Engineer for Buildings, No. 2,741, of 10th January, referred to in letter from the latter officer, recorded with G. O., No. 599, of 7th March, and which will now be printed in extenso. It was then overruled by the Inspecting Engineer for precautionary reasons given in letter of the Inspector-General of Ordnance and Magazines, recorded with Military Department Order, No. 1,315, of 19th April 1872, in which the magazine at Fultah in Bengal was brought forward as a precedent. The Superintending Engineer's assertion that the bank of earth proposed to be thrown up "would not in the smallest degree affect an explosion" of the contents of the magazine, did not then carry conviction to the mind of Government, nor does it now.

2. And it is certainly no reason for dispensing with what was deliberately affirmed to be a precaution worth the money proposed to be put on it, that the work was carried out on so bad a plan as to ensure its partial failure. A reference to the original plans for yard, for the opinion of His Excellency the Commander-in-Chief with Military Department Order, No. 1,315, of 19th April 1872, shows that the traverse was planned with an inner as well as an outer, of 1 to 1. But that for various reasons given by the Inspector-General of Ordnance and Magazines in a letter to the address of the Superintending Engineer, of which

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23rd January 1875.*

the chief practical one was to afford space all round the magazine for circulation and drainage, the inner slope was increased to ½ base to 1 height. Unfortunately the estimate made no provision for any expedient, such as turfing, whereby the earth should be retained at that steep slope, and the result is not surprising. The traverse at the Fultah Magazine shows a masonry backing on one side and a slope of 1½ to 1 on the other, and the Superintending Engineer would have done well to have been guided by this example. He will now propose some similar expedient to realize the successful execution of the work as approved by Government; still utilizing, if possible, the old enclosure wall.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,

Secretary to Government.

To the Superintending Engineer, Chingleput.
Military Department.

Ld. S. T. Austin.
Spare Copies

No. 2343. District Engineer's Office
Sunday 6th October 1874

From The District Engineer
Chief Supt. Distt.
To The Secretary to Government
Public Works Department
Sir.

I have the honor to report that the so called traverse round the Reserve Powder Magazine has slipped down in every direction under the rain, has choked the flow of drainage and caused the water to lie in pools against the walls of the building.

The earth has been put up with a slope of 1 to 1 outside, and of $\frac{1}{2}$ to 1 inside the walls. I fear there is no hope of its remaining at such a slope or of turf retaining it; or indeed any thing but a masonry wall holding it. That I suppose is out of the question as the traverse has been ordered with a view to mast it.

I have already expressed my opinion regarding the uselessness of this bank. I would again urge that it be abandoned. I have not seen the reasons given by the Inspector General of Ordnance
27/29 9/1/72

and Magazines but with all deference I would observe that this bomb would not resist the explosion of a very much smaller magazine than that at the Mount.

I have the honor to be

Your Most Obedt. Servt.

Robert C. Col.
Col. R. C.
District Engineer Chingleput

Dec 18-12-74 23 Oct 75
D. O. No. 101 23-1-95

Ch 418

23 Oct 75
No 2343

The Secretary to Govt
Chingleput

23 Oct 75
D. O. No. 101 23-1-95

Report that the
Magazine at the
Mount has been
destroyed by recent rain and
that it may be
abandoned.

W. P. K. Repts.
Proceedings of the Madras Government
Read the following.

From The District Engineer
Chingleput (No. 2343 of 6 Oct 75)

201

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of the Superintending En-
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of the Reserve Powder Maga-
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dispensed with, was urged
in his letter to the Superin-
tending Engineer for Buildings
No. 2741 of 10 January re-
ferred to in letter from the
latter officer recorded with
No. 599 of 7 March;
and

DA

18/12

and which will now be
printed in extenso. It
was then overruled by
the Inspecting Engineer
for precautionary reasons
given in letter of the Insp^t
General of Ordnance and
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Military Dept. Order No
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A reference to the original
plans forwarded for the
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with Military Dept Order

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CAN

H. J. [unclear] [unclear]
[unclear] [unclear] [unclear]
1912-13

Lake S. C. Chingfent ✓
Military kept ✓
Set to both 25/1/75.

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Govt. of 1875 ~~India~~
PUBLIC WORKS.

To

The Supergr.
Chengelpet
W. K. S.

Dated

Recd.

Encl.

G. O. 23 Jan. 201

Nos. 418-419

Traverse round the Powder
Magazine at the Mount

Papery orders in letter
from the ~~to~~ Mr Chengelpet
reporting that the slopes
for the traverse have
been destroyed by the
recent rains & recom-
mending the abandon-
ment of its construction.