M.R.O. 1—39,000—16-10-29.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1868	Press / Mis.
680-681	
Dated 29th June 19 1869	

Not to be folded or roughly handled

1868 My

Proceedings of the Madras Government, Revenue Department,
29th June 1869.

No. 680. Read the following Proceedings of the Madras Government in the Public Works Department:—

Passing orders on the letter from the Superintending Engineer of the 3rd Division, submitting, with remarks, a letter from the Officer in charge of the Anantapoor Range, Bellary District, reporting a slip in the breach work at the Gootloor tank. } (Here enter 21st June 1869, No. 2,007.)

No. 681. ORDER THEREON, 29th June 1869, No. 1,868.

Irrigation, No. 21. COMMUNICATED to the Revenue Board.

(True Extract.)

(Signed) H. WELLESLEY,
Acting Under-Secretary to Government.

To the Board of Revenue, with Proceedings Public Works Department, No. 2,007.

Exd. F. R. Bantleman.

No. 443. Read the following letter from the Superintending Engineer, 3rd Division, to the Chief Engineer for Irrigation, dated Bellary, 19th May 1869, No. 545 :—

I HAVE the honour to forward, for the information of Government the accompanying original letter* from the Officer in charge Anantapoor Range, Bellary District, reporting a slip in the breach work at the Gootloor tank.

* No. 5, dated 18th April 1869.

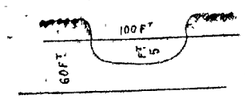
2. On receipt of the above, I sent instructions to prepare a plan with cross sections, and informed that I would myself inspect the tank.

3. On the evening of the 8th, and again on the morning of the 9th, I carefully inspected the work. The slip, as you may observe, is in the deep bed of the Vunka, and on reading Mr. Brosnahan's report it struck me that it was caused by a sand slip; but Mr. Brosnahan assures me that he saw all the sand cleared out of the bed of the nullah before he allowed any of the earth to be put in. My opinion now is that the slip has been caused by the rapidity with which the work has been carried on; that too much water must have been used, and that fresh earth was heaped on before the lower part had thoroughly settled and become compact.

4. You will observe from the sections that nine feet of water was standing against the front of the bank; at the time of my inspection it was over ten feet, but there was no appearance of leakage, and I do not think that any danger is to be apprehended. Mr. Brosnahan has thrown up a bank in front of the slip, as you may see in the sections, which will tend to prevent any further slip, and as the bank has now assumed its own slope and on making cuts into the bank there was no appearance of any fissures, I consider that there need be no anxiety about the work. It has unfortunately, however, delayed the progress.

From J. BROSNAHAN, Esq., Assistant Engineer in charge of Anantapoor Range, No. 5, to the Superintending Engineer, 3rd Division, dated Camp at Gootloor, 18th April 1869, No. 5.

I REGRET having to report that a gloom has been cast over our hitherto good success on this work (Gootloor breach) this morning, and which was as sudden as it was unexpected, a slip occurred in the inner slope, which pushed the revetment completely out of place. I have said unexpected, for up to last evening nothing whatever had been noticed to lead to any such supposition, and even this morning, at day-light, the stone wudders' carts passed over the spot. The length of the slip is about 100 feet, and width five feet in the centre, forming a curve thus:



(Sixty feet top width of filling in progress.)

2. The revetment at this point was raised about ten yards, sloping height, over the deep bed of the Vunka leaving, say, nine yards undone to bring it to the level of the earthwork. The earth work itself is now raised to within five feet of proposed calingulahs, the outer half not yet fully that height, and it was intended to reduce the progress from this day forward to a minimum, with a view to guard against the accident that has occurred, for it was all through believed that the progress was too rapid to ensure solid work.

3. I have carefully considered the whole, and am fully of opinion that the cause of this most unpleasant accident has been the too rapid, but *unavoidable*, raising of the work to its present height (thirty-three feet over deep bed), and when Colonel Anderson considered the work of last

year too much for one season, how much more so is it this year when the breach is very nearly three times as large and the same height attained. I cannot possibly account for this slip in any other way, although I have followed the progress of the work layer by layer from the bottom. I may here remark that a small slip occurred in the outer and lower slope a fortnight ago, but I considered it far too insignificant to make it the subject of a report, both slips are exactly over the deep bed of the Vunka, and just south of the old work that remained after last year's disaster.

4. I deem it now necessary to suspend further work on the breach for about one or two weeks, so as to allow the present work some time to consolidate, and I will provide sufficient work for all hands elsewhere until then, and if there is no falling off amongst the work people towards the second week in May, I see no reason why all should not still be made secure before the early fresh; all will, however, depend on the strength of labour at my disposal, and this too at the proper time, but of this I have serious doubts from my knowledge of the people I have to deal with. The stone wudder party has now gone down to ten bandies, I would require at least forty more. I cannot possibly procure these myself, I have tried all means up to this to increase even my present party, but have failed.

No. 444. ORDER THEREON, 21st June 1869, No. 2,067.

IRRIGATION, No. 19.

THE Superintending Engineer of the 3rd Division reports in this letter a slip at the inferior slope of the work in progress for closing the breach in the Gootloor tank, in the Bellary District.

2. The extent of the slip is but slight, but, taking into consideration the fact that it is in the bed of the nullah, and that a small slip occurred also at the rear slope some little time ago (Mr. Brosnahan's letter, end of paragraph 3), the occurrence seems to point to instability of foundation, which, if not confined to the parts which have shown weakness, might endanger the safety of the embankment.

3. It will probably be the best plan to throw a ring band round the part affected and to ascertain by a close examination what the cause of the disturbance is. Two of the cross sections show that the tail of the rear slope is supported at these points on loose sand, and this would suffice to account for a slip there.

4. At this time of the year the postponement of the raising of the bund (Mr. Brosnahan's paragraph 4) cannot be a safe arrangement; and, if the new earthwork be placed in layers of a few inches in thickness and well punned, there would seem to be no advantage to be gained by proceeding with the work at a less rapid rate, than may be consistent with this regular and systematic way of building up the breach.

5. Nothing is to be found in the papers at present in the Government Office as to the level at which water can be discharged from the tank, until it shall be deemed safe to retain a full supply. As it is clear that the new work is not fully stable at present, and as it appears from previous reports that the freedom from leakage of the old bund is by no means assured, it will be well to arrange for keeping the supply for the current year much below the level at which the water is

Proceedings of the Madras Government, Public Works Department,
21st June 1869.

ultimately intended to stand, and the Government look to Major Moberly to see that no precautionary measures, for ensuring the safety of the work, and for preventing a repetition of the disaster of last year, are lost sight of.

(True Extract.)

Major, R. E.,
Acting Joint-Secretary to Government.

To the Superintending Engineer, 3rd Division.
" Chief Engineer for Irrigation.
" Revenue Department.

A-1868.
Comm^r to the
Revenue Board.
29 June/69

Ex^d. S. T. Augustin.

Revenue Office

No. 2091-

Govt. of Hong Kong.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,

&c, &c, &c

Dated June, 1868.

Recd. 24th — Ans.

Re

JULY.

Nos. 443-444

Contents of Letter.—Passing orders on the letter from the Superintending Engineer of the 3rd Division submitting, with remarks, a letter from the Officer in charge of the Aberdeen Range, Belcher District, reporting a slip in the breech work at the Gentleman Tank.

With Order
24th 1868- 29 June