MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT

G.O. No. Proc. No.

Dated 19

Not to be folded or roughly handled.

Read again letter from the Government of India, dated 16th July and recorded in Diary to Consultation 24th August 1858, No. 1861.

No. 35. Read also the following letter from Major E. LAWFORD, Officiating Chief Engineer; to the Secretary to Government, dated 6th July 1858, No. 1719.

SIR,

In obedience to the orders of Government under date 4th June 1858, No. 1060, I have the honor to submit a report on the construction of the Palaur Bridge at Vellore, shewing as far as circumstances permit, the causes of those errors which have led to such very heavy and unexpected demands for increased expenditure, and the parties who are mainly responsible for them.

2. The Bridge was estimated by Captain Collyer in 1854, and though some of the items are certainly scanty, and the approaches are almost altogether omitted, yet I believe the amount. (Rupees 72,673*) would have proved sufficient if the original dimensions had been adhered to, and the work had been efficiently superintended. Lieutenant Rideout who commenced the work in March 1855, was very soon succeeded by Lieutenant Mayne, the District being under the charge of Lieutenant A. S. Moberly till August. The bridge was under Lieutenant Mayne until November 1856, while Captain Johnston was District Engineer, during which time, the expenditure was Rupees 35,144-8, or about half of the estimate, but as Captain Collyer had in the mean time directed an increased width of 1½ foot of roadway, and a greater length of cutwater, the expenditure did not bear its proper proportion to the progress of the work, and for the excess thus caused of, not 20, but probably 12 per cent on the Original Estimate; Captain Collyer appears to be responsible, as he likewise is for the omission of those works, for securing the foundations which experience shews to be highly expedient, if not essential in such situations.

* Sanction of the Government of India communicated in Extract Minutes Consultation No. 64 dated 10th February 1855.

3. The records of the operations are not complete enough to shew what serious errors, productive of excessive expense took place under Lieutenant Mayne's management, although it was the first large work he had Superintended, and the same remark may apply to the period during the year 1857, when the bridge was Superintended by the late Lieutenant Boyd, an officer who arrived in India in 1856, but under whom Overseer Howard a good practical subordinate was employed.

4. In July 1857 I visited the bridge on my way from Salem to Madras, and recorded the following remarks. "The workmanship and materials appeared to me unexceptionable, but the "cost will certainly exceed the estimate, and I desired Lieutenant Boyd to lose no time in sub-"mitting a comparative statement of estimate and expenditure to the 30th June, and an estimate "of the expense of completing the bridge." This estimate was prepared by Lieutenant Boyd, but was not sent in by Lieutenant Mayne until 1st November, and it omitted the flooring, the want of that defence not having then been manifested. It is thus perfectly clear that such excess of expenditure took place prior to 1st July 1857, as should have led the Acting District Engineer to scrutinize the accounts but this duty certainly was not performed.

5. During the remainder of the year 1857, the work proceeded under Lieutenant Boyd, whose death from the fall of a centering took place on the 31st December, on which Lieutenant Mayne again took Executive charge till appointed to Bangalore, when he was relieved by Lieutenant Clay, who was almost immediately succeeded by Assistant Engineer Horgan, an experienced Officer, under whom the work has been carried forward with an efficiency and vigour which certainly did not attend the earlier operations.

6. On the whole it appears to me that the excess of cost in the bridge construction, is due first, to the inadequacy of the Estimate, and the subsequent change of plan, Secondly to insufficiency of control and neglect to check the accounts as the work proceeded, thirdly to the increase of prices and rates of labour, and last but not least, to the weakness of part of the foundation which rendered necessary a perfect flooring under the bridge.

7. It is impossible for me to assign to each cause, or each Officer a proportionate share of effect or responsibility, nor, considering the inexperience of the two Officers chiefly concerned (Lieutenant Mayne and Boyd) do I regard the result with much surprise. The attention of Captain Johnston, when District Engineer, was so occupied with the introduction of the new system of general Executive management, that he probably could not afford much time for leaving his residence at Arcot to attend to the bridge, but aware as he must have been of Captain Collyer's alterations, it was certainly his duty to have scrutinized the estimate and accounts.

8. The papers forwarded with this letter are marginally stated, and I would particularly call attention to the statement drawn up by Mr. Horgan.

1 Letter No. 47 dated 19th June 1858, from the Executive Engineer at Bangalore.
1 Do. No. 305, dated 22nd June 1858, from the District Engineer of North Arcot with 3 Enclosures.
1 Do. No. 115, dated 28th June 1858, from the Officiating Consulting Engineer for Railways
1 Extract from Captain Johnston's Diaries.

Letter from Lieutenant J. O. MAYNE, Executive Engineer Bangalore; to Colonel C. E. FABER, Chief Engineer, dated 19th June 1858, No. 47.

SIR,

I have the honor to acknowledge the receipt of your Memo No. 973, dated 9th Instant, with Extract Minutes of Consultation No. 1060 under date 4th Idem, and with reference to para. 2 of the memo, to give the following history of my connection with the Palaur Bridge works.

2. On the 20th May 1855, I arrived at Vellore and took over charge of the work from Lieutenant Rideout.

3. At that time the work had hardly commenced, The line of bridge was marked out and the foundations of North abutment and two piers half dug.

4. Before entering further on the history of the nature of the work, I would observe that this was the 1st work as an Engineer that I ever commenced, and therefore had little or no practical experience whatever; and on my taking charge, there was no Overseer or any one to assist me, except an old Maistry temporarily employed. Captain Collyer left the District the day I oined, and from that time to the arrival of Captain Johnston as Disirict Engineer in August, with the exception of once when I wrote and asked the advice of Lieutenant Moberly, Acting District Engineer, I received no advice or assistance whatever, and for two months had no Overjseer but was on the works from morning till night nearly every day.

5. During this time the foundations of about 18 or 19 piers and north abutment were put down.

6. The North abutment and wing-walls rested principally on clay, two cut-waters being on wells about 4 feet deep.

7. No. 1 and 2 Piers from North end are on hard soil about 5 feet down.

8. It was on No. 3 or 4 I cannot now remember correctly, I wrote and requested the advice of Lieutenant Moberly, on coming, in one, to a kind of decomposed rock the other being on wells.

9. From No. 4 to 16 the depth of the wells varied on every occasion from about 4 to 7 feet deep, resting on a bed of clay which the well-sinkers declared they could not get through. I doubted them at first but as they persisted in it, and moreover as they were paid according to the depth they sunk the wells, it was an object for them to go as deep as they could, and so feeling satisfied it was a good foundation I had them filled up.

10. Mr. Howard, Overseer joined me when we were sinking the wells of the 14th or 15th pier and he found the same with them, but from No. 17 to the South bank every well went down the full depth of 8 feet.

11. It occured to me that probably the river had worked its way towards the North, and the clay I came on might have been originally terra-firma, and this idea gave me more confidence in the foundations.

Central Office of P.W.
Fort Saint George
6th August 1858

No 2581

From
The Officiating Chief Engineer

To
The Secretary to Government
P.W.D.

Public

Sir,

I close pro tempore in acknowledging the receipt of Ex. Mins Cons. No 1513 dated 2nd August 1858 and in obedience to the orders of Government that I should offer any observations I may think proper on Major Selby's reply to the charge of serious neglect brought against him in connection with the constructive management of the Chetwye Dam, I beg to point out that the actual state of the accounts of that work affords conclusive evidence which no general vindication can refute

2. The mere fact that the settlement of those accounts occupied an intelligent Officer like Lieutenant Jennant for six weeks to the exclusive of other business" aided though he was by the able Head Accountant of the Collectorate

Collectors Department is an indisputable proof of the confusion and entanglement they had fallen into, while the ascertained result of an unaccounted for Sum of Rupees 8378. 10. 6 or nearly one fourth of the aggregate disbursements is an equally overwhelming evidence of serious neglect on Major Selby's part and a fair ground of presumption that dishonesty had been practised by some parties although it is by no means intended to throw any doubt on that Officers personal integrity.-

3. That there were considerable difficulties to be encountered in the operations, and that the failure of the works is due in part to other causes may be admitted without relieving Major Selby from his responsibility as the Officer in Executive Charge.-

4. As to para IV of Major Selby's letter I can find no report of the insufficiency of the second estimate.-

5. I fail to perceive the value of the opinion quoted in Para V as the freight subsidy did not belong to the Revenue Officers.-

6. The Acting Civil Engineer did I believe visit the Lakhta Quarry but could not know the quality of the stone so well as the Executive Officer who should have reported it.-

7. As to recoveries from Contractors noticed in Para VIII, Lieutenant Tennants report shows that with one exception no vouchers have been discovered to show if the Several Contractors have or have not fulfilled their contracts.-

8. Paras IX. X. XI. relate to the accounts and although it is true that payments were made by Tahsildars to contractors according to the Executive Officers orders yet as shewn above the value of work done does not correspond to the payments, and for this the Tahsildars were not responsible.-

9. As to para XI. Major Selby has written without actual reference to the accounts and may be held excused for the error it contains as I find Lieutenant Tennant reports that Overseer Adams' Account opens with the charge of Rupees 459. 15. 7. for work done in the months of April 1856 by Mr. Clarke but no accounts are forthcoming by which the charge can be tested. Now there could all the payments be entered in Major Selby's own hand?

10. It can answer no useful purpose for me to enter into the last two paras of Major Selby's letter. The extreme disorder of the accounts which is the main charge against that Officer is certified by Mr Robinson

late

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late Acting Collector and by Lieutenants Brown and Tennant, and the general inefficiency of the arrangements is established by their unfortunate result.-

11. Referring to Para XIV I would remark that no objection has been raised to the use of large blocks of laterite in the Foundations, but to the quality of the stone forming those blocks and to the use of mud instead of Chunam in cementing them, though for this mode of construction Major Selby is not solely responsible.-

12. When Major Selby returns to India he will I presume be allowed free access to the papers connected with this subject but it will be a mere waste of time for the Government to suffer any long discussion on points of details unless the main charge of "serious neglect" can be refuted.-

Central Office of Wks
Fort St George
6 Augt 1850.

I have the honor to be
Sir,
Your most Obedt Servant

Lawrence Major
Offg Chief Engineer

To
The Secretary to Government
P.W.D.

Compd S.D.S.

For Orders

Public Works Department 1771.

From the Offg. Chief Engineer of 16th August 1858.

Offering with reference to Extract Minutes Counc. dated 2d Instant observations on Major Selby's Report to the charge of serious neglect brought against that Officer in connection with the constructive management of the Chetauga Dams.—

The Chief Engr. when he has to point on which Major Selby has offered no explanation beyond a flat declaration that he is to see what when he made them up finally — Major Selby pd Coy monthly Lawpd days Rep. pd Coy monthly at 4/ & Libert. & Superintt at 5000 Todd Rs 8000 Todd Rs

I am not prepared to express an opinion — on Major S.'s Accts in his absence. He will soon be back when free access to him & his Accts will be given to final answer could

There seems no doubt that Selby was entitled to

W. Bro. R. Augt 16th 1858.

Dft Wm. Todd Esq. Chief Engr. &c. &c. &c. Public Works Department

No 1771

Sir

I am directed by the Hon. the Chief Inspector of Public Works to forward to you the accompanying Extract from the Minutes of Council of the 2d Instant, and to request that you will favor him with your observations on the Report of Major Selby, therein referred to.

I have the honor to be Sir Your most obedient Servant

Wm. Bro.

Extract from the Minutes of Council, dated 2d August 1858.

Read a Report from Major Selby, dated 28th July 1858, on the Chetauga Dams, and the Management of the Public Works Department in connection therewith.

Ordered that the Chief Engineer be requested to favor this Board with his observations on Major Selby's Report.

Certified

Wm. Bro.

No 76.

Eng. Dep. 1858. 25th Aug. Rec.

Jr. 1816 P.W.D.

Extract from the Minutes of Consultation
Under date the 6th September, 1858.

Read the following
Letter from the Officiating
Chief Engineer.

Here enter 6th August 1858. N2581

In this letter
the Officiating Chief Engineer
offers, in reference to Extract
Minutes Consultation 2nd
August 1858, observations on
Major Selby's explanations
respecting the charge of serious
neglect imputed to him in
the matter of the accounts
and constructive agency of
the Chetwye Dam.

2. The Officiating Chief
Engineer refers principally to

or

a point on which Major Selby has offered no explanation beyond a general declaration that his accounts were right when he made them up finally. Major Lawford says that those accounts required six months to adjust, and that they exhibit a deficit of 8000 and odd rupees unaccounted for. The Government are however not prepared to pass an opinion on Major Selby's proceedings in his absence, that Officer will soon return to India & they resolve accordingly to await his arrival, and after affording him free access to the accounts and sufficient time for the preparation and submission of his answer, they will consider the circumstances he may bring forward and record their ultimate

continue of opinion that the remarks in the Extract Minutes of Consultation dated 4th June 1858 N° 1060 are fully [illegible]

[illegible] leaving however [illegible]
and 2d Miss Hamilton
May 26 to Mr Dopper
It is best just to that
Gentleman to mention
that he had nothing
to do with the original
or first Supplemental
Estimate and that
he only assumed charge
of the District in July
1858.

10 Observe the Offg Chief Engr Dist &c

Pub. Cons: 8th June/58. 25th

Public Works 1858 Departt.
Dft & Cons: 7th Septr.

No 1798.

Extract Mins of Cons:
Dated 2d Septr/58.

From the Dy. Chief Engr. Dated 10th Augt
1859 & Rec. 20th in Cons. 16th Septr.
109 & 110

Do not consider the explanation submitted by Major Sandford in reference to the deficiency in the original estimate for the Palaver Bridge to be satisfactory. But think it due to Mr Dossing whose name was even remotely connected in connection to say that he had nothing to do

Nos 35 & 36.