I. Number of roll
Date of
M.R.O.1—2-100—21-11-52

MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.

G.O. No.	Press Mis.
Dated	18

Not to be folded or roughly handled

No. 100. Read the following letter from Major E. LAWFORD, Officiating Chief Engineer to the Secretary to Government, dated 6th August 1858, No. 2580.

SIR,

In submitting copies of reports* on the destruction of two Bridges by a flood on the Trunk Road No. 4, I think it necessary to observe that the *Oority* Bridge is at the foot of the Perambady Ghaut and about 7 miles from the Irrity Bridge still incomplete.

* No. 161, dated 27th July 1858, from the District Engineer, Malabar.
No. 98, dated 23rd July 1858, from Assistant Engineer, Do.

2. It will be observed also that the river Irrity has so exceeded its usual height that Lieutenant Tennant considers it necessary to raise the piers 4 feet above the intended height, at an additional expense of Rupees 2,608-12-0.

3. Instructions will be given to the District Engineer, to adopt measures for re-building the fallen Bridges as soon as the season permits and to submit estimates as early as possible.

4. In the mean time I would earnestly solicit attention to my letter No. 2,111, dated the 21st July last, shewing the necessity of having two Extra Assistant Overseers for the Coorg Roads.

Letter from the District Engineer Malabar, to the Officiating Chief Engineer, dated 27th July 1858, No. 161.

SIR,

I have the honor to enclose an original report from Assistant Engineer Lieutenant Tennant, on the state of two Bridges on the Trunk Road No. 4, which have been destroyed by the late unprecedented floods.

No. 98 dated 23rd July 1858.

2. I have sent orders for the sections of the Oority and Kokatodoo Rivers to be taken and forwarded to me when plans and Estimates for the re-construction of the Bridges shall be forwarded to you, though owing to the number of Plans and Estimates already called for from my Office, I cannot hope to submit them so early as I could wish.

3. I beg to notice the 6th Paragraph of Lieutenant Tennants' letter, from which it will be seen that an extra expenditure of Rupees 2,608-12 will be required on the Masonry Work alone of the Irrity Bridge.

4. The floods this year have filled the Irrity River 4 feet higher than has ever yet been known, and in carrying out the foundations it was found that in excavating to the necessary depth rather less rock was encountered and of a softer description than was anticipated. The amount, however, of this latter increase is small, and I am glad to state that the Masonry Piers have as yet withstood the freshes remarkably well.

5. The Bridges referred to above were at the foot of the Perrambady Ghaut and in the Mysore District.

From Lieutenant H. TENNANT, Acting District Engineer; to the District Engineer of Malabar No. 98.

SIR,

I have the honor to inform you that Assistant Overseer Martin has reported to me personally, that on the 13th instant the Rivers at the foot of the Perrambady Ghaut rose to a greater height than has been known since the formation of the ghaut.

2. The waters of the Orrity River rose several feet higher than the platform of the bridge and carried away the entire wood work and centre Pier, leaving nothing but the foundations of the Pier and the 2 abutments standing, the probable cost for renewing this bridge which was built by Captain Ludlow a few years ago will not be under 3,000 Rupees.

3. The Kakatode Bridge situated about 5 miles to the westward of the Oorrity has likewise been carried away, and must be re-built.

4. In consequence of the destruction of these 2 Bridges, and a number of large trees having fallen across the road upon the ghaut, the bandies which up to the 13th were passing both up and down the ghaut, have been stopped and the foot traffic was also stopped for one day. I have issued orders to Assistant Overseer Martin to erect a temporary bridge over the 2 Rivers so as to allow the traffic to pass.

5. Overseer Martin also reports, that the Irrity river rose to such a height that the mile stone situated in the right bank of the river was under water and not visible for some hours.

6. In my letter No. 68 of the 31st of May, in which I recommended an increase of 12 or 16 inches in height to the masonry work, I took the base of the mile-stone as my bench mark for the water line of the highest fresh and calculated that 2490 cubic feet of masonry would be required for every extra foot in height. The freshes of this year have shown the necessity of raising the entire work not less than 4 feet, and in my opinion 23-6″ ought to be the minimum height of the piers above the basements, this extra height of work will require about 11,000 cubic feet, which at the rate of 2 annas 6 pie per foot will amount to Rupees 1,718-12, to this must be added the extra depth of foundations viz. 5696 cubic feet= 890 Rupees making an aggregate of 16,696 cubic feet of masonry = Rupees 2,608-12 in excess of the sum entered in the estimate.

7. In an interview with Mr. T. X. D'Cruz the Contractor, he informed me that one half of the Timber for the bridge has been delivered or is waiting at Irrity for Assistant Overseer Martin to examine and pass it and that the remainder will be delivered at Irrity in the course of a few weeks.

8. It will be of a great advantage if 15 or 20 Carpenters can be employed, as the number of coolies now employed to turn and move the timbers and banks will be lessened and the Carpenters having once prepared the timbers for one bay will work quicker at the remaining bays, understanding the scarfing and mortices and general plan of the bridge.

No. 101. ORDER THEREON, No. 1892; dated 7th September 1858.

Ordered that the foregoing letter be recorded.

(Signed) T. PYCROFT.

Chief Secretary.

No. 161.

From The District Engineer

Malabar

To The Offg Chief Engineer &c &c

Sir

I have the honor to enclose an original report from Assistant Engineer Lieut Tennant on the state of two Bridges on the Trunk Road No 4, which have been destroyed by the late unprecedented floods.

Rs 989/2 3rd Sept 1858.

2. I have sent orders for the erection of the Irrity and Nakarakoo Rivers to be taken and forwarded to me when Plans and Estimates for the reconstruction of the Bridges shall be forwarded to you, though owing to the number of Plans and Estimates already called for from my office I cannot hope to submit them so early as I could wish.

3. I beg to notice the 6th paragraph of Lieut Tennants letter, from which it will be seen that an extra expenditure of Rs 2608-12 will be required on the masonry work

work alone of the Irrity Bridge.

4. The floods this year have filled the Irrity River 4 feet higher than has ever yet been known, and in carrying on the foundations it was found that in excavating to the necessary depth rather less rock was encountered and of a softer description than was anticipated. The amount, however, of this latter increase is small, and I am glad to state that the Masonry piers have also yet withstood the freshes remarkably well.

5. The Bridges referred to above were at the fork of the Perumbady Thank and on the Ingoor District.

Dr Engrs Office
Malabar 27th July/88.
Colombo

I have &c
Sd/ D Baird
Dr Engr

No 498.

To
The District Engineer of
Malabar

Sir,

I have the honor to inform you that

that Assistant Overseer Martin has reported to me personally that on the 13th inst the Rivers at the fork of the Perumbady Thank rose to a greater height than has been known since the formation of the Thank

2 The waters of the Irrity River rose several feet higher than the platform of the Bridge, and carried away the entire wood work and centre pier leaving nothing but the foundations of the pier and the 2 abutments standing, the probable cost for renewing this bridge which was built by Captain Ludlow a few years ago will not be under 3000 Rupees.

3 The Nakadira Bridge situated about 5 miles to the westward of the town has also been carried away, and must be rebuilt.

4 In consequence of the destruction of these 2 Bridges, and a number of large trees having fallen across the road upon the Thank the bandies which up to the 13th used passing both up and down the Thank have been stopped and

and the fork traffic was also stopped.
for one day. I have issued orders to Assistant
Overseer Martin to erect a temporary bridge
over the 2 weirs so as to allow the traffic
to pass.-

5 Overseer Martin also reports
that the Trinity River rose to such a height
that the Railway situated on the right
bank of the river was under water
and each trestle for some hours.-

6 In my letter No 68 of the 21st of
May, in which I recommended an increase
of 12 or 16 inches in height to the masonry
work, I took the base of the Sluiceway
as my lowest mark for the water line
of the highest freshes and calculated that
21/90 Cubic feet of masonry would be re-
quired for every extra foot in height.
The freshes of this year have shown the
necessity of raising the entire work not
less than 4 feet and in my opinion 2 3/4 6
ought to be the minimum height of the weirs
above the basements this extra height
of work will require about 11,000 Cubic
metres

which at the rate of 2 Annas 6 pie per foot
will amount to Rupees 1718. 12.. to this
must be added the extra depth of
foundations viz 5696 Cubic ft. 890 Rs.
making an aggregate of 16,696 Cubic ft
of masonry = Rs. 2608-12.. in excess of the
sum entered in the estimate.-

7 In an interview with Mr. P. X. De Cruz
the Contractor, he informed me that one
half of the timber for the Bridge has been
delivered or is waiting at Trichy for
Assistant Overseer Martin to examine
and pass it and that the remainder will
be delivered at Trichy in the course of
a few weeks.-

8 It will be of a great
advantage if 15 or 20 Carpenters
can be employed, as the number
of Coolies now employed to turn
and round the timbers and planks
will be dispensed and the Carpenters
having once prepared the Timbers
for one bay will work quicker
as

of the remaining bays underneath
the roadway and practice and general
plan of the bridge.-

Thanking you
Yours truly
Geo. H. Pegram

Wm. Barclay

Lewis Clark
Asst. Engineer

Louis H.

Central Office of Mile
Fort St George
6 August 1858

No 2370
From The Offg Chief Engineer
To The Secretary to Government Mile

Public

Sir,

I am directed to forward herewith for the information of Government a report on the construction of two bridges by Colonel Orr on the Trunk Road No 13, from the Chittoor Bridge to the 4th mile to be executed under the Superintendence of Lieutenant Cumming.

2. The Chittoor Bridge is out the first of the Perambadoor Ghaut and about 7 miles from the Chittoor Bridge will accompli-
mile to be removed also that the River Chittoor has to be crossed like wise Lieutenant Cumming requires it necessary to raise the piers considerably the intended height above the present level.

3. The additional expense of 2 Arches 20ft. 12-0 is Rupees 2608-12-0.

4. The estimate will be given to the District Engineer to be adopted executed

Copy in a G L to E
D/ 3rd Febl 1859 No 1
Para 4

Enclosure in a letter from the Offg Chief Engineer
To The Secy to Govt Mile

O M 1768/58

Dated 5 Aug 1858
Recd 8

No 2500

Copy of a Letter from the Dy Asst Qr Mr Cuddapah.
Submitting a Report from Lt Cumming Executive Engineer that the Bridges at Perambadoor & Kattacadoo on Trunk Road No 4 have been destroyed by the late unprecedented flood.

for rebuilding the fallen bridges as soon as the season permits and to submit estimates as early as possible.-

4. In the mean time I would earnestly solicit attention to my letter No 2111 dated the 21st July last shewing the necessity of having two Extra Assistant Overseers for the Corps Roads.-

I have the honor to be,
Fort St George
6 August 1818.
Sir,
Your most obdt Servt
L Lawford Major
Offg: Chief Engineer

To
The Secretary to Government
P.W.D

Canal: 13th Sept. 58 No. 58457.
From the Chief Engr. 29th Sept.
Duly 58 No. 16211 in C. 17th Sept.
Cons: 8th Dec. 57 No. 12813.

Copy in a G. L. to E.
of 3rd Feb. 1859 No. 1
Para 4.

No. 1879

Job Recorded

7th Sept.
1858.

From the Chief Engineer
of 6th Sept. 58 C. 26th 2647 in Cons.
7th Dec. 58 No. 18-19.

No 100 & 107.

C 25th Aug. to 14th Sept.

P. Nov. 1838 Department of Canals, To 1768
From The Chief Engineer
To The Secy. to Govt. P.W.D.

Date 6 Aug. 1858
Rec. 7th

Enclosed No. 2586

Submits copies of reports on the destruction by flood of two bridges on Trunk Road No. 4 in Hoshiarpore district that Dr. Fennant considers it necessary to raise the piers of the Trinity bridge & the abutments which at an additional cost of Rs. 3698-12, Mr. Slater that the machine will be issued to the District Engineer to rebuild the fallen bridges, and solicits attention to this letter shewing the necessity of having two extra Assistant Engineers for the Canal Service.

Job Recorded