1. Number of pages 12
2. Date of [illegible] 9-9-37

M.R.O. 1—30,000—16-10-29.

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Con. 21-10-57

G.O. No. 2139-40 Press / Mis.

85.66

Dated 24-11- 1957

Not to be folded or roughly handled

No. 65. Read the following Extract from the Proceedings of the Chief Engineer, dated 27th October 1857, No. 4728.

Read the following Minute by the Superintending Engineer, Southern Circle.

With reference to the orders of Government contained in Extract Minutes of Consultation No. 1959, dated 20th October 1857, I beg to lay before the Chief Engineer the information received from the District Engineers of South Arcot, Coimbatore, and Madura on the questions connected with the bridges over the Rivers Pennaur or Ponyaur, Ambrawutty at Caroor (not Darapooram) and Vygay at Madura.

2. Lieutenant Foord has no hesitation in saying that he considers the foundations for the Ponyaur Bridge ample. There is little doubt that the bed of the river is pure sand to a great depth. The wells are intended to be sunk 12 feet below the lowest part of the river bed. There is to be 6 feet of solid foundation resting on 6 feet of wells. The ends of the piers are to be connected by retaining walls, with a substantial flooring between them. The experience of many years has shewn that in this Presidency bridges may with safety be built on such foundations. The waterway is ample.

Extract Minutes Consultation, 7th August 1857, No. 1536. Para. 11. Pennaur (Ponyaur Bridge.)

3. Captain Francis remarks that the foundation allowed to the Ambrawutty Bridge by Captain Ludlow (who had much experience in building on sand foundations in the Carnatic) is 8 feet viz. 3 of solid masonry and 5 feet of wells, and it is now proposed to increase this to 10 feet altogether without any addition to the estimate. The soil is pure sand.

Para. 14.

4. In the Vygay Bridge the depth proposed for foundations is 9 feet viz. 3 feet of solid masonry and 6 feet of wells, with retaining walls and flooring. The soil consists of pure sand resting on stiff blue clay at varying depths.

Para. 14.

5. The experience gained in the past 20 or 30 years shews that an average depth of 9 or 10 feet is sufficient for the foundations of bridges resting on sand provided they are protected by retaining walls and aprons as will be the case with these three works and therefore their foundations may be safely pronounced of sufficient depth.

Central Office of P. W.,
Fort St. George, 23d Oct. 1857.

(Signed) E. LAWFORD, Major,
Supg. Engineer, Southern Circle.

The Government having intimated in para. 10 of the Extract Minutes Consultation of the 20th Instant, No. 1959, that such information as has already been collected in reply to Colonel Baker's requisition of the 11th July 1856, No. 3173, shall now be forwarded to the Government of India. Resolved that the foregoing Memo. from the Superintending Engineer Southern Circle of Public Works, dated the 23d Instant and which contains replies to para. 24 and 33 of the despatch from the Secretary to the Government of India above cited, be transmitted to Government to be incorporated in the reply stated to be under preparation.

2. Resolved also that in soliciting the favorable considertion of the Right Honorable the Governor in Council to the assurances of the sufficiency of the dimensions assigned to the foundation of the projected bridges over the rivers Ponyaur, Vigay and Ambrawutty as stated by the Superintending Engineer, the support of His Lordship in Council be respectfully requested towards the future protection of experienced Officers in the Department Public Works of the Madras Presidency against allegations of improvidence and inadequacy of design, when it can be shewn as in the present instances that the local Professional Officers can appeal to the successful experience of many years in the practical construction of bridges of far greater magnitude than those of whose dimensions the Government of India have placed their doubts on permanent record.

Resolved also in conclusion that the entire concurrence of the Chief Engineer in the opinion expressed by Major Lawford in para. 5 of his Minute of the 23d Instant be respectfully intimated to the Right Honorable the Governor in Council.

(True Extract and Copy.)

(Signed) C. E. FABER, Colonel,
Chief Engineer.

No. 66. ORDER THEREON, No. 2139; dated 21st November 1857.

Ordered that a copy of the above Proceedings and of the Minute annexed thereto be forwarded to the Government of India with reference to paras. 11 and 15 of the letter to that Government dated 20th Ultimo, No. 1960.

2. Adverting to para. 2 of the Chief Engineer's Proceedings, the Right Honorable the Governor in Council observes that superior authority must always be free to offer any suggestions that may occur in respect to the Projects submitted for consideration, and that it is the duty of the Chief Engineer and the local Officers, either to adopt those suggestions, or to submit further explanation as the case may call for.

(Signed) H. FORBES,
Acting Secretary to Government.

No. 67. Ordered in consequence that the following letter be despatched.

From H. FORBES, Esq., Acting Secretary to the Government of Fort Saint George; to the Secretary to the Government of India, D. P. W., dated 21st November 1857, No. 2140.

SIR,

With reference to paras. 11 and 15 of my letter of the 20th Ultimo, No. 1960, I am directed by the Right Honorable the Governor in Council, to forward copy of a communication* recently received from the Chief Engineer, and of a Minute annexed thereto, by the Superintending Engineer of the Southern Circle, furnishing explanation in respect to the remarks made in your Despatch† of the 11th July 1856, No. 3173, regarding the insufficiency of the foundations of the Bridges over the Pennaur, the Vigay, and the Ambrawutty rivers in the Districts of South Arcot, Madura, and Coimbatore, which were included in the Budget‡ of this Presidency for the year 1856-57.

* Dated 27th October 1857, No. 4728.

† Paras. 24 and 33.

‡ Items Nos. 34, 43 and 48 of Statement No. 1.

PUBLIC WORKS DEPARTMENT.
Public.
Fort Saint George,
21st November 1857.

No. 2140.

From

H. FORBES, Esq.,
Acting Secretary to the Government of Fort St. George.

To

The Secretary to the Government of India, D. P. W.

SIR,

With reference to paras. 11 and 15 of my letter of the 20th Ultimo, No. 1960, I am directed by the Right Honorable the Governor in Council, to forward copy of a communication* recently received from the Chief Engineer, and of a Minute annexed thereto, by the Superintending Engineer of the Southern Circle, furnishing explanation in respect to the remarks made in your Despatch† of the 11th July 1856, No. 3173, regarding the insufficiency of the foundations of the Bridges over the Pennaur, the Vigay, and the Ambrawutty rivers in the Districts of South Arcot, Madura, and Coimbatore, which were included in the Budget‡ of this Presidency for the year 1856-57.

* Dated 27th October 1857, No. 4728.

† Paras. 24 and 33.

‡ Items Nos. 34, 43 and 48 of Statement No. 1.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) H. FORBES,
Acting Secretary to Government.

No 4728

Extract from the Proceedings of the Chief Engineer in the Department of Public Works.

Under date the 27 Oct 185?

Read the following Minute by the Superintending Engineer Southern Circle.

With reference to the orders of Government contained in Extract Minutes of Consultation No 1959 dated 20th October 57. I beg to lay before the Chief Engineer the information received from the District Engineers of South Arcot Coimbatore and Madura on the questions connected with the bridges over the Rivers Pennaur or Pongaur, Amburnutty at Karoor (not Dara-pooram) and Vyday at Madura.-

Ex: Numerical 157. No 1536. Para 11. 129 Pennaur (Pongaur) Bridge

2 Lieutenant Foord has no hesitation in saying that he considers the foundations for the Pongaur Bridge ample. There is little doubt that the bed of the river is pure sand to a great depth. The wells are intended to be sunk 12 feet below the lowest part of the river bed. There is to be 6 feet of solid foundation resting on 6 feet of wells. The ends of the piers are to be connected by retaining walls with a substantial floorin

between them. The experience of many years has shewn that in this Presidency bridges may with safety be built on such foundations. The waterway is ample.

3 Captain Prance remarks that the foundation allowed to the Ambraurutty Bridge by Captain Tudor who had much experience in building on sand foundations in the Carnatic is 8 feet or 5 of solid masonry and 5 feet of wells, and it is now proposed to increase this to 10 feet altogether, without any addition to the Estimate The soil is pure sand. Para 14

4 In the Vyaur Bridge the depth proposed for foundations is 9 feet or 3 feet of solid masonry and 6 feet of wells, with retaining walls and flooring. The soil consist of pure sand resting on stiff blue clay at varying depths. Para 14

5 The experience gained in the last 20 or 30 years shews that an average depth of 9 or 10 feet is sufficient for the foundations of bridges resting on sand provided they are protected by retaining walls and aprons as will be the case in the three bridges in question, and therefore their foundations may be safely pronounced of sufficient depth.

Chief Office of Wks. Feb. the 23rd 1857

(Signed) D. Ashford Majr. Asst. Engr. in Charge

* The Government having intimated in Para 12 of the Extract Con. of the 2 Instant No. 1959 that such information as has already been collected in reply to Colonel Baker's requisition of the 11 July 1856 No 3 shall now be forwarded to the Govt of India Resolved that the foregoing Memo from the Superintending Engineer S.C. of W. dated the 23 Instant and which contains replies to para 24 and 33 of the despatch from the Secretary to the Government of India above cited, be transmitted to Government to be incorporated in the reply stated to be under preparation.

2 Resolved also that in soliciting the favorable consideration of the Right Honble the Governor in Council to the assurances of the sufficiency of the dimensions assigned to the foundation of the projected bridges over the river Ponyaur Vigay and Ambraurutty as stated by the Superintending Engineer the support of His Lordship in Council be respectfully requested towards the future protection of experienced officers in the P.W. of the Madras Presidency against allegations of improvidence and inadequacy of design, when it can be shewn as in the present instances that the local Professional Officers can appeal to the successful experience of many

between them. The experience of many years has shewn that in this Presidency bridges may with safety be built on such foundations. The waterway is ample.

3 Captain Prance remarks that the foundation allowed to the Ambraurutty Bridge by Captain Tudor who had much experience in building on sand foundations in the Carnatic is 8 feet or 5 of solid masonry and 5 feet of wells, and it is now proposed to increase this to 10 feet altogether, without any addition to the Estimate The soil is pure sand. Para 14

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Chief Office of Wks. Feb. the 23rd 1857

(Signed) D. Ashford Majr. Asst. Engr. in Charge

* The Government having intimated in Para 12 of the Extract Con. of the 2 Instant No. 1959 that such information as has already been collected in reply to Colonel Baker's requisition of the 11 July 1856 No 3 shall now be forwarded to the Govt of India Resolved that the foregoing Memo from the Superintending Engineer S.C. of W. dated the 23 Instant and which contains replies to para 24 and 33 of the despatch from the Secretary to the Government of India above cited, be transmitted to Government to be incorporated in the reply stated to be under preparation.

2 Resolved also that in soliciting the favorable consideration of the Right Honble the Governor in Council to the assurances of the sufficiency of the dimensions assigned to the foundation of the projected bridges over the river Ponyaur Vigay and Ambraurutty as stated by the Superintending Engineer the support of His Lordship in Council be respectfully requested towards the future protection of experienced officers in the P.W. of the Madras Presidency against allegations of improvidence and inadequacy of design, when it can be shewn as in the present instances that the local Professional Officers can appeal to the successful experience of many

years in the practical construction of Bridges of far greater magnitude than those of whose dimensions the Government of India have placed their doubts on permanent record.

Resolved also in conclusion that the entire concurrence of the Chief Engineer in the opinion expressed by Major Laidlaw in para 5 of his Minute of the 23d instant be respectfully intimated to the Right Honble the Governor in Council.

(True Extract)

A.R. Sutherland Colonel
Chief Engineer

To The Secretary to Govt P.W.D.

275

Q 1

Public Works Dept

No 2139.

Extract from the Minutes of Council Calcutta
Under date the 21st November 1857.

Read the following
Colonel Jervis, the Secretary
to the Government
(Circulated 27 Oct 1857 p 4728)

Ordered that
copy of the above Proceedings
with the minute annexed
thereto be forwarded to the
Court of India with expe-
dition to have it and the
letter to that Court dated
the 20th Instant.

2 Adverting to para 2
of the Chief Engineer's
Proceedings of the 13th Oct
Ordered that the
Civil Engineer
Superior Authority must
always be free to offer any
suggestions that may
occur to him
to the Superior Authority

Com 20th Oct 57 No 66287
" 11th Aug 43 & 44
" 12th " 55 87 & 90

P Works 1857 Dept
5 to Comm 24th Nov.
No 2121.

Extract from the Proceedings
of the Chief Engineer
to the Secy to Govt NWP.

Dated 21st October 57
Rec'd 28th "

No 4728.
No 2139. 21st Nov.

Transmitting copy of
a Memo from the Engr
Engr Circle containing
replies to para 24 and 33
of the despatch from the
Secy to the Govt of India cited
in E. Mis. C No 1959 of the 2 inst.
for incorporation in the
reply stated to be under
preparation, with an expression
of the Chief Engr's entire concurrence
in the opinions of Major Lawson.

Copy to the Comm of Rev
31st Oct 57.

No 65.

6th Nov No 17

for ~~the~~ consideration,
and that it is the
duty of the Chief Engr.
and the local Officers,
either to adopt those
suggestions, or to submit
further explanation as the
case may call for.

Ordered that the
following letter be despatched

To Col. W. C. Baker
Secy to the Govt of India Mily Dept.

(Here Enter
21st Nov 1857 No. 2140.

Short 2nd Copy
21st Nov 57

Copied
Dis No 23
per Steamer

Mily Dept.

No. 2140

To
Col. W. C. Baker
Secy to the Govt of India Mily Dept.

Sir,

With reference to paras
11 and 15 of my letter of the
20th Ultimo No. 1960, I am
directed by the C. G. the
G. in C. to forward copy
of a communication recent-
ly received from the Chief
Engineer, and of a Minute
annexed thereto, by the Supg.
Engineer of the Southern
Circle, furnishing explan-
ation in respect to the
remarks made in your
Despatch of the 11th July
1856 No. 3173, regarding the
insufficiency of the
foundations of the Bridges
over the Pennaur, the Vigay,
and the Ambrawutty rivers
in the Districts of North
Arcot, Madura, and
Combatore

× dated 27th October 1857.
No 4728.

× paras 24 and 33.

Contractors, which were included in the Budget of this Presidency for the year 1856/57.

* Items Nos 35, 43 and 48 of Statement No 1.

Jno Wm Ogrey
21st Nov. 1857

J. Copies to the Chief Engr
Dispr 23

Public Works 1857 Sept.
Dy. to Cons 24th Nov.

No. 2140.

To
The Secretary to the
Govt. of India
D. P. W.

Dated 21st Nov. 57.

Forwarding copy of a communication from the Chief Engineer and of a Minute annexed thereto by the Superintending Engineer of the Southern circle furnishing explanation in respect to the remarks made by the Government of India regarding the insufficiency of the foundations of the Bridges over the Vaimar the Vigay and the Ambravaty rivers in the Districts

Districts of South Arcot, Madura and Coimbatore which were included in the Budget of 1856/57 of this Presidency.

No 67.

&

Cons 9 Nov 57 #

Public Works 1857 Dept.
Dr. to Cons 24th Nov.

No. 2139. — 2140.

Extract Mins of Cons:
of 21st Nov: 57.

From the Govt of India 27 Aug 58
C No 259. in Cons: 9 Dec 1858.

Observing on the information afforded regarding the insufficiency of the Bridges over the Pennaur, the Vigay, and the Ambrawantty rivers in South Arcot, Madura, and Coimbatore that Superior authority must always be free to offer any suggestions on Projects submitted for consideration and that

that it is the duty of the Chief Engineer and the local Officers to submit further explanation:—

No. 65866.