

- (1) பக்கங்களின் எண்ணிக்கை 24
 (2) புதுக்கித் திருப்பிய நாள் 3/90
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 10/90

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

(73)

P. M. D. துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	2674	அச்சகம் பலவகை
நாள் : 25 - 9 - 1889 198 .		

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

12.6.1989

10/90

ஆவண, கா-1-18,006-15-6-87.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

Despatch from the Right Honorable Lord CROSS, Her Majesty's Secretary of State for India, to His Excellency the Right Honorable the Governor in Council, Fort St. George, dated India Office, London, 29th August 1889, No. 2, Public Works (Stores).

I have considered in council the letter from your Excellency's Government in the Public Works Department, No. 14/1718 W., dated 28th June 1889, suggesting that a series of type designs of riveted girders be prepared.

2. In reply, I have to refer your Excellency to my Public Works (Stores) despatch No. 1 of 20th June 1889, in which you were informed that such a series of designs for girders of 40, 50, 60, 70 and 80 feet spans would be prepared. The suggestion of your Government that the new series should include girders of from 5 to 150 feet in span will be considered when replies are received from the Governments of India and Bombay, who have also been communicated with on the subject.

ORDER—dated 25th September 1889, No. 2674 W., Public Works.

Recorded, with reference to despatch to the Secretary of State, No. 15-2069 W., dated 1st August 1889.

(True Extract.)

Captain, R.E.,
Under-Secy. to Govt., P.W.D.

Exd. J. Moses.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1889) Madras.

PUBLIC WORKS.

Dated September, 25th.

Recd.

Encl.

G.O., 25th Sept 1889, No. 2874 W.

SEPTEMBER.

Type designs of riveted
girders for bridges

Despatch from the Secretary of State
regarding the preparation of —, recorded.

2674
25TH JUNE 1889, No. 1718 W., PUBLIC WORKS.

PUBLIC WORKS DEPARTMENT.

LETTER—to

THE RIGHT HONORABLE THE SECRETARY OF STATE FOR INDIA.

MY LORD,

We have the honor to forward, for your Lordship's consideration, copy of our Proceedings marginally noted, relative to the type designs for bridge superstructures lately supplied to this Government.

2. Standard designs for the superstructure of iron bridges are necessary for the guidance of officers of the Public Works Department and Local Fund Boards, and as it is doubtful whether the designs for pinned girders already furnished by the Director-General of Stores possess any marked advantage over the riveted girders which are recommended by Sir A. Rendel as being both stronger and cheaper than pinned girders, we beg to recommend that a series of type designs be prepared upon the basis of Sir A. Rendel's remarks.

3. The Chief Engineer, Public Works Department, is of opinion that the list of standard designs should be similar to the one contained in your Lordship's despatch No. 2, Public Works (Stores), of 12th April 1888, and that two hundred copies of each design should be supplied for distribution in the Public Works Department and among Local Fund Boards, and his recommendations have our approval.

We have the honor to be,

My Lord,

Your Lordship's most obedient, humble servants,

(Signed) CONNEMARA.

(„) C. G. ARBUTHNOT.

(„) H. E. STOKES.

(„) J. H. GARSTIN.

OOTACAMUND,
23th June 1889.

Exd. J. Henricus.

2

6. The new standard designs should comprise bridges from 5 to 150 feet span, but in those cases where no decided improvement can be effected upon the existing types, as appears probable in some of the smaller spans, it will be sufficient to omit such spans from the list.

7. Owing to the demand for these standard designs, it is considered that at least 200 copies of each should be supplied for distribution.

(Signed) R. R. E. DRAKE-BROCKMAN, Lieut.-Col., R.E.,
17th June 1889. Acting Chief Engineer, P.W.D.

ORDER—dated 28th June 1889, No. 1718 W., Public Works.

Ordered that the following letter be addressed to the Secretary of State for India.

(Here enter No. of W., dated 28th June 1889.)

(True Extract.)

(Signed) R. R. E. DRAKE-BROCKMAN, Lieut.-Col., R.E.,
Ag. Joint Secy. to Govt., P.W.D.

BUILDINGS AND ROADS
CIVIL WORKS.

Govt. of (1889) Madras.
PUBLIC WORKS.

Dated June, 28th.

Recd.

Encl.

G.O., 28th June 1889, No. 1718 W.

JUNE

Type Designs

Ordered that the Secretary of State be requested to have a series of — for super-structure of girder bridges prepared upon the basis of Sir A. Rendel's remarks, and that two hundred copies may be supplied for distribution in the Public Works Department and among Local Fund Boards.

2674
1st AUGUST 1889, No. 1718 W., PUBLIC WORKS.

PUBLIC WORKS DEPARTMENT.

LETTER—to

THE RIGHT HONORABLE THE SECRETARY OF STATE FOR INDIA.

MY LORD,

We have the honor to acknowledge the receipt of your Lordship's despatch, No. 1, dated 20th June 1889, enclosing copy of a report by Sir A. Rendel recommending that a new series of designs be prepared for riveted bridges for 40 feet, 50 feet, 60 feet, 70 feet and 80 feet spans.

2. In reply, we would invite attention to the proposals made in our despatch, No. 1718 W., dated 28th June 1889, which are similar in character with those put forward by Sir A. Rendel, but embrace a larger series of designs ranging from 5 to 150 feet span. We now desire that the matter may be left to Sir A. Rendel's discretion, not only as regards the designs, but also as regards the number of intermediate spans for which new designs should be prepared. It is, however, important that the series should be as complete as possible.

3. Two hundred lithographed copies of each of the new types will be required for distribution here.

4. We would further invite attention to the accompanying copy of a note by Mr. Anderson, Engineer to the Malabar Local Board, and of the letter of the President of the Board, recorded with our Proceedings, No. 1964 W., dated 20th July 1889. It will be seen that these officers consider that existing types provide for much greater loads than are usual in the localities where the bridges are to be placed, and that their adoption thus entails unnecessary cost on Local Boards. We are aware that the adoption of the type designs is not incumbent on the authorities in this country, but it seems worthy of consideration whether lighter designs more suited to local circumstances should not be provided for.

We have the honor to be,

My Lord,

Your Lordship's most obedient, humble servants,

(Signed) CONNEMARA.

(") C. G. ARBUTHNOT.

(") H. E. STOKES.

(") J. H. GARSTIN.

OORACAMUND,
1st August 1889.

Exd. P. L. Pereira.

6

GOVT. OF MADRAS.

PUBLIC WORKS DEPARTMENT.

(Copy.)

LETTER to the Right Honorable
the Secretary of State for
India.

No. ¹⁵ 2069 W., dated 1st Aug. 1889.

Acknowledging receipt of despatch forwarding report by Sir A. Roadel recommending preparation of a new series of designs for riveted bridges and inviting attention to despatch, No. ¹⁴ 1718 W., dated 28th June 1889, from the Madras Government, containing proposals of a similar character.

2674
1st AUGUST 1889, No. 2069 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

Despatch from the Right Honorable Lord CROSS, Her Majesty's Secretary of State for India, to His Excellency the Right Honorable the Governor in Council, Fort St. George, dated India Office, London, 20th June 1889, No. 1, Public Works (Stores).

With reference to my despatch in this department, No. 2, dated 12th April 1889, regarding the supply of type designs for road bridges, I forward, for your Lordship's information, a copy of a report* by the Consulting Engineer to this office, recommending that a new series of designs be

* Dated 1st May 1889.
prepared for riveted bridges for 40 feet, 50 feet, 60 feet, 70 feet and 80 feet spans.

2. The three indents referred to in the report as having been received for bridge work in accordance with the existing type designs, are quoted in the margin. In each of these cases the Consulting Engineer suggested that plate girder riveted bridges would be cheaper and better than the pinned trusses shown in the type designs; and, on further reference being made to indenting officers, they eventually agreed to the Consulting Engineer's suggestions.

Indent for Gadilam bridge, South Arcot, forwarded with letter from the Secretary to the Government of Madras in the Public Works Department, No. 3132, of 6th October 1888.
Indent for a bridge in Berar, forwarded with letter from the Secretary to the Resident, Hyderabad, Public Works Department, No. 54 G.A., of 13th February 1889.
Indent for the Talavasal bridge, forwarded with letter from the Secretary to the Government of Madras in the Public Works Department, No. 500 W., of 19th February 1889.

3. It does not appear desirable that Engineers in India should be too rigidly bound to indent for bridge work in accordance with the existing designs, and

it is thought that, with the assistance of the proposed new designs, they will be in a better position to decide what kind of bridge is most suitable for their several requirements. With this view, instructions have been given for the preparation of the designs, and I request that I may be informed how many lithographed copies will be required.

ENCLOSURE.

REPORT by Consulting Engineer, dated 1st May 1889.

Many of the type drawings seem more suited to special and therefore rare cases than to ordinary and therefore common cases. We have now had indents for three road bridges in which simple plate girders riveted up were evidently cheaper and better than the pinned trusses shown on the types, and which have been preferred to the types by the authorities in India when their attention has been called to the matter. Moreover, all the types above the span of 30 feet provide timber floorings, whereas India evidently, and I think rightly, prefers iron floorings in all ordinary cases.

8

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of Madras.

PUBLIC WORKS.

Dated August, 1st.

Recd.

Encl.

G.O., 1st Aug. 1889, No. 2069 W.

AUGUST.

Bridges

Ordered that the Secretary of State for India be addressed in reply to his Lordship's despatch forwarding report by Sir A. Rendel recommending that a new series of designs be prepared for riveted — for 40, 50, 60, 70 and 80 feet spans.

1315.

Public Works (Stores).

No. 2.

2671

110

India Office.

London, 29th August 1889.

My Lord,

I have considered in Council the letter from Your Excellency's Government in the Public Works Department, No. 14/7/8 W., dated 28th June 1889, suggesting that a series of type designs of riveted girders be prepared. 2. In reply, I have to refer your Excellency to my Public Works (Stores) despatch No. 1 of 20th June 1889, in which you were informed that a series of designs, for girders of 40, 50, 60, 70 and 80 feet spans would be prepared. The suggestion of your Government that the new series should include girders of from 5 to 150 feet in span will be considered when

replies

His Excellency,

The Right Honorable

The Governor in Council,
Fort St. George.

2674

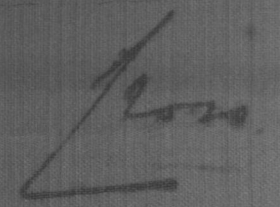
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replies are received from the
Governments of India and
Bombay, who have also been
communicated with on the
subject

I have the honor to be,

My Lord,

Your Lordship's most obedient,
humble servant,

 Lord.

17

Dec. 2nd 1889 1.8.89
1963 21.7.89
Dec. 14 28.6.89

N^o 5

Public Works
(Stores)

29th August 1889

The
Letter to Lord St. George

N^o 2

3rd P. R.
Lancaster

N^o 2674 Wd Sept 25, 1889

Recorded, with
Reference to dispatch
to the Secretary of State
N^o 115 dated 1st
2069
August 1889

W. H. G.
14.9.89

J. H. G.
14.9.89

Received 18th Sept 1889

2674
12

