(1) பக்கங்களின் எண்ணிக்கை 22

(2) புதுக்கித் திருப்பிய நாள் 12/88

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

(73)

தமிழ்நாடு அரசு

PWD

துறை

அரசாணை எண்.
~~ஆவணக் கோப்புத் தொடர் எண்.~~ 497 500 501

அச்சகம்
~~பிலவனை~~

நாள் : 19.12.1989

~~198~~

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

11 Sheets

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-ஆவண. கா-1—18,006—15-6-87.

499-501
1

19TH FEBRUARY 1889, No. 499 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following paper: —

From Colonel W. H. BURTON, R.E., Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department (through the Examiner of Public Works Accounts), dated Chepâk, 27th November 1888, No. 3885.

I have the honor to forward herewith a special indent in triplicate on the Home Government for certain works required for Talavasal bridge, Salem district, together with two tracings, a specification and a report furnished by the Superintending Engineer, IV Circle.

Office-note from the Examiner of Public Works Accounts, dated Madras, 14th February 1889, No. 200.

The accompanying letter from the Superintending Engineer, V Circle, to the Chief Engineer, Public Works Department, No. 3885, dated 27th November 1888, with an indent for English stores for transmission to the Secretary of State is forwarded for necessary action with the usual certificate.

Certificate.

I certify that funds to meet the estimated outlay in England in connection with this indent during the year 1889-90 will be provided by the Local Government to the extent of £3,032 in the estimate of the Public Works Department for that year.

(Signed) C. H. P. CHRISTIE, Major, R.E.,
Examiner, Public Works Accounts.

ORDER—dated 19th February 1889, No. 499 W., Public Works.

Ordered that the indent be forwarded to the Director-General of Stores for favor of compliance.

(Here enter Nos. 500-501 W., dated 19th February 1889.)

(True Extract.)

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

To the Superintending Engineers, IV and V Circles.
" Examiner, Public Works Accounts.
" Local and Municipal Department.

3xd. A. D. Xavier.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1889} Madras.

PUBLIC WORKS.

Dated February, 19th.

Recd. *Encl.*

G.O., 19th Feb. 1889, No. 499 W.

FEBRUARY.

Talavasal bridge, Salem district

Ordered that the indent for certain iron works required for the — be forwarded to the Director-General of Stores for compliance.

499-501
2

PUBLIC WORKS DEPARTMENT.

General.
Account.

LETTER—from

COLONEL H. R. MEAD, R.E.,
Ag. Secretary to the Government of Madras,
Public Works Department,

To

THE DIRECTOR-GENERAL OF STORES,
INDIA OFFICE, LONDON.

SIR,

I have the honor to forward, herewith, for favor of compliance, an indent in duplicate, accompanied with two tracings, a specification and a report, for certain iron works required for the Talavasal bridge in the Salem district.

2. The usual certificate in regard to funds will be found embodied in the accompanying Proceedings.*

* No. 499 W., dated 19th February 1889.

I have the honor to be,
Sir,
Your most obedient servant,

Colonel, R.E.,
Ag. Secy. to Govt., P.W.D.

FORT ST. GEORGE,
19th February 1889.

Exd. A. D. Xavier.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1889} Madras.

PUBLIC WORKS.

Dated February, 19*th*.

Read. *Encl.*

19th Feb. 1889, No. 500 W.

FEBRUARY.

Talavasal bridge, Salem district

Forwarding indent for certain iron works required for the —.

1899-501
4

PUBLIC WORKS DEPARTMENT.

General.
Account.

LETTER—from

COLONEL H. R. MEAD, R.E.,
Ag. Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

I am directed to forward, for information, copy of an indent that has been forwarded to the Director-General of Stores for certain iron works required for the Talavasal bridge in the Salem district.

I have the honor to be,
Sir,
Your most obedient servant,

Colonel, R.E.,
Ag. Secy. to Govt., P.W.D.

FORT ST. GEORGE,
19th February 1889.

Exd. A. D. Xavier.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1889} Madras.

PUBLIC WORKS.

Dated February, 19th.

Recd. *Encl.*

19th Feb. 1889, No. 501 W.

FEBRUARY.

Talavasal bridge, Salem district

Forwarding copy of indent for certain iron works required for the —.

499-501
6

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

READ—the following papers :—

From A. A. JOPP, Esq., Director-General of Stores, to the Secretary to the Government of Madras, Public Works Department, dated India office, Whitehall, S.W., 29th March 1889, No. 3817.

With reference to your letter No. 500 W. of 19th February 1889, transmitting an indent for ironwork required for the Talavasal bridge in the Salem district, I have the honor to forward herewith a copy of a report on the subject by the Consulting Engineer to this office.

2. You will observe that Sir A. Rendel suggests that a plate girder riveted bridge, as originally contemplated for this work, would be preferable to the type design for a pinned bridge demanded in the indent, and he appends to his report a sketch of the pattern of bridge recommended, the cost of which, for the nine spans required, is estimated at about £1,250 delivered in England, whereas the cost of the pinned bridge demanded in the indent would be about £2,000, to which must be added the cost of the timber for planking and curbs to be provided in India.

3. In these circumstances, designs will be prepared for a plate girder riveted bridge as shown in Sir A. Rendel's drawing, and also for a pinned bridge in accordance with the type design ; and I shall await your decision as to the type to be supplied, which might be communicated by telegraph.

ENCLOSURE.

COPY report by Consulting Engineer, dated 16th March 1889.

There is a considerable resemblance between this case and that of the Gadilam bridge on which I reported under date of 16th November 1888. The Engineer on the spot prepared in this case a design for riveted girders for which he was afterwards told by head-quarters to substitute a type design apparently simply because it was the type, and his own design has been condemned and is not even sent home with the papers.

2. I consider, however, that the course originally intended, viz., to have a plate or lattice riveted girder bridge, was undoubtedly the right one. The type design with a wooden roadway is 20 per cent. heavier than a plate girder bridge would be with an iron roadway and the work it involves is of a much more costly character, so that I think the cost of a plate girder bridge with iron roadway equal in strength to the type design with a wooden would be less than half the cost of the latter.

3. The saving of weight above estimated assumes that the main girders would be put under the roadway so as to save the weight of cross girders and trimmers. The levels of the piers and roadway, respectively, shown on the drawings sent home admit of this; and, if need be, the level of the roadway might be raised a little. I should then cover the main girders transversely with corrugated iron plates which form (when ballasted) a much better and more durable roadway for traffic and probably a cheaper one than planking, and at the same time contribute to the structural strength of the bridge. I should place the main girders 10 feet apart and let the corrugated plates overhang on each side by 2 feet 6 inches or 3 feet, thus giving a roadway width of 14 feet clear (which is that of the type) or 15 feet if desired. This class of roadway has been asked for in preference to planking and asphalt in two recent communications from different parts of India

and might have been in this case if the loads provided for in the type drawings did not seem to forbid it. The bridge I am recommending is of the same pattern as the smaller bridges on the Toungoo-Mandalay Railway, but of course lighter. I append a sketch. The weight of material in one span is as follows approximately :—

	TONS.
Main girders	6
Ironwork for roadway	6
Handrailing and bracings	1
Total ...	13

It will be well if the main girders could go out complete in one piece. They would weigh under 3 tons each. I should say there would be no difficulty.

4. The cost of nine spans of such girders delivered in England would be about £1,250.

5. The cost of ironwork in nine spans built according to the type drawings I estimate at about £2,000 delivered in England. Besides this there would be, according to those designs, 2,450 cubic feet of timber for planking and curbs which would cost, I suppose, Rs. 9,800 and which would not be required with my design.

Copy of telegram despatched on the 22nd April 1889 to the Director-General of Stores through the Right Honorable the Secretary of State for India.

"Your letter 29th March last. Proposed design for plate girder riveted bridge at Talavasal approved."

From A. A. JOPP, Esq., Director-General of Stores, to the Secretary to the Government of Madras, Public Works Department, dated India office, Whitehall, S.W., 3rd May 1889, No. S. 6310.

With reference to my letter No. 3817, dated 29th March 1889, and the telegram from His Excellency the Governor of Madras of 22nd April 1889, I forward herewith a drawing of the proposed Talavasal bridge to assist the Engineer in charge in the erection of the piers and abutments.

ORDER—dated 29th May 1889, No. 1429 W., Public Works.

Communicated to the Superintending Engineers, IV and V Circles, for information and guidance.

(True Extract.)

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

To the Superintending Engineer, IV Circle, with plan.
" " " V Circle.

Exd. J. Henriques.
Spare Copies

499-501
7

GENERAL.
ACCOUNT.

Cobt. of {1889} Madras.

PUBLIC WORKS.

Dated May, 29th.

Recd.

Encs.

G.O., 29th May 1889, No. 1429 W.

MAY.

Talavasal Bridge

Letter from the Director-General of Stores, India office, forwarding report by Sir A. Rendel on the subject of the iron-work required for the —, and requesting that the decision as to the type design may be communicated by telegraph, communicated to the Superintending Engineers, IV and V Circles.

1P

No. 3885 — 1429-501/89

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Chepâk, 27th November 1888.

From *Colo W H Burton R.E.*
SUPERINTENDING ENGINEER,
V CIRCLE,

To
THE *Chief Engineer*
P.W. Department
thro' the Examiner of
P. W Accounts

SIR,

Enclosures.
1 Indent in triplicate
2 Tracings
1 Specification
1 Report.

I have the honor to forward herewith a special Indent in triplicate on the Home Government for certain works required for Talavasal Bridge, Salem District, together with two tracings, a specification and a report furnished by the Superintending Engineer 4° Circle.

I have the honor
to be Sir,
Your Most Obedt Servt

W H Burton Colo R.E.

Supdg Engineer V Circle

From

THE SUPERINTENDING ENGINEER,

V CIRCLE,

To

THE



Dated

Recd. .. } 188

ENCLOSURES.

No.

153

[O. No. 8.]

499-501/9

GOVT. OF MADRAS. } 1889. { P.W. DEPT.

EXAMINER, P. W. ACCOUNTS.

Madras, 14 February 1889.

OFFICE NOTE No. 200.

To E. W

The accompanying letter from the Superintending Engineer, 5th Circle, to the Chief Engineer P.W.D. Secretariat No. 3885 dated 27 [illegible] 1889 with an [illegible] for transfer of [illegible] a/c for work.

KEEP-WITH Genl. No.

188

dated

3 Gp

Certificate

I certify that funds to meet the estimated outlay in England in connection with this Indent during the year 1889-90 will be provided by the Local Government to the extent of Rs. [illegible] equivalent to £ [illegible] in the estimates sent to the [illegible] Department of the [illegible] for that year.

Enclosures 5

1,000—7-2-88.

25—23-8-86.

310-W dy 4.2.89
4969-E dy 11.12.88
33-C dy 7.1.89
5043-C dy 13.12.88
4895-6-C dy 6.12.88
3395-W dy 24.10.88 Depty
383-E dy 30.7.85
358-E dy 11.7.85
294-E dy 30.6.85
764-C dy 11.4.85
572-C dy 19.3.85
213-E dy 30.5.84
200-E dy 29.5.84
168-E dy 21.6.84
[illegible]-C dy 20.3.84
[illegible] 28-4-84
[illegible]-C 9.83
10.0.84
C.E. dy 23-4-81
732-C.E. dy 2.3.81
177 dy 15.3.81

Public Works Department.

496-501/10 No 499 W

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 19th July 1889

Read the following

From the Supdg. Engineer V Circle. H.E. No: 3885 dy 27th November 1888.
Office note from the Examiner P.W. Accounts. H.E. No: 200 dy 14th February 1889.

Ordered that the indent be forwarded to the Director General of Stores for favor of compliance.

H.E. No: 500 W dy 19th July 1889

To
The Supdg. Engrs. III & VI Circles
" Examiner P.W. Accounts.
" Local and Municipal Deptt.

To
The Director General of Stores
India Office
London.

Sir,

I have the honor to forward herewith, for favor of compliance, an indent in duplicate, accompanied with two tracings, a specification and a report, for certain iron works required for the Talavasal Bridge in the Salem District

2. The usual certificate in regard to funds will be found embodied in the accompanying Proceedings.

SP

No: 499 W dy 19th February 1889

H. E. No: 501 Wat 19 Feby: 1889

To

The Secy to the Govt. of India.
P. W. Department.

Sir,

I am directed to forward for information copy of an indent that has been forwarded to the Director General of Stores for certain iron works required for the Talavasal Bridge in the Salem District.

16.2.89

16/2/89

passed with ref.
Govt no 499 W. Indent
in duplicate.
2 tracings. Report
and a Specification
20/2/89

499-50
11.

Govt. of [1889] Madras.

PUBLIC WORKS.

Dated 2/12/89

Read Rect

G.O. 19 Pst 1889 No. 499

570

Jalakanda Bridge,

=

Salem Dt

=

Send that the instant
for certain iron works
req^d for the — bridge
ended to the Dt Secl
Stores for compliance

—

Jalakanda Bridge,

=

Salem Dt

=

Forward indent for
certain iron works re-
quired for the —