23.D11/OBR

(1) பக்கங்களின் எண்ணிக்கை 14
(2) புதுக்கித் திருப்பிய நாள் May 90
(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் loyo

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P. W துறை

அரசாணை எண்.
மு. கோப்புத் தாள் எண். P.W.D. 512

அச்சகம்
பலவகை

நாள் : 27.2.1893 ~~198~~.

7

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

ஆவண. கா-1—18,006—15-6-87.

1 52/2 -1-

SUPERINTENDING ENGINEER'S OFFICE,
V Circle, Madras,
Chepâk, 20th October 1892

No. 354 M.

From W. Hughes Esquire

SUPERINTENDING ENGINEER, V CIRCLE,

To

THE Chairman, Municipal Commission
Kumbakonam

Enclosures. 4

2 Plans.
1 Estimate
1 Report.

SIR,

I have the honor to return an estimate and two plans for the proposed bridge at Kumbakonam received from you last week.

2. The highest observed flood level at sight site? is approximately 63.0 above the datum to which the levels are referred and if the springing were made 3 ft below this as would be allowable if the arches were elliptical the roadway would be 74.0 or 12½ ft above the level of Chukrapany North street where the right approach would end. The approach road would have a gradient of 1 in 16 which is too steep for a road in the middle of the town and on which there will be much traffic. The approach would be

also

also very expensive as earth of which at least a coating of a couple of feet deep on the outside of the bank would be required ~ would have to be carried a long distance and moreover inorder to avoid taking up houses on either side of the approach would have to be carried for some distance between massive retaining walls. On the north side also the approach would be very expensive. I doubt if the approaches including metalling could be made for less than Rs. 4000 but Mr. Lord has allowed nothing at all for them. There would be but little reduction in level of roadway if the size of arches were reduced as the smaller the arches the less depth below flood level would it be allowable to place the springing.

3. Mr. Lord is quite mistaken in thinking that the existing bridge has no flooring. ~ There is scarcely a main river bridge in the District without a masonry flooring and I believe I am correct in saying that floorings had to be laid under all the

railway

Railway bridges which were first built without them, and that all the bridges now being built on the new line have floorings laid between retaining walls founded at same depth as the piers, whatever doubt there may be as to the necessity for flooring where a bridge is built with solid foundations on hard material there can be none as to the necessity of flooring bridges which are built on shallow wells. Whatever kind of ~ foundation is adopted for the Kumbakonam bridge I consider a flooring necessary as there is a strong set and high flood velocity on the ~ right bank.

4. Well foundations are of course inferior to a solid foundations and are rarely used where it is practicable to put in the latter. As from the pit made in almost the deepest part of the river at the proposed site there is every probability of clay being found right across at such level below the river bed that there should be no difficulty in baling the foundations trenches dry, it will be advisable to estimate for solid foundations. They will

probably cost less than the well foundations which for the piers and abutments above are estimated at Rs 6420. My advice then is, that solid foundations (2 ft of concrete with brickwork above) should be estimated for and that it should be specified that they are to be laid not less than 2 ft in the clay and not less than 6 ft below floor ~~which~~ which may be taken at ~~floor~~ level 52.0. If it is found anywhere that the excavation cannot be laid dry and wells may be used at the discretion of the Engineer responsible for the work. I also advise that a concrete floor 1½ ft thick may be laid between curtain walls in line with cutwaters and founded nearly as deep as the piers. The length of the bridge between abutments should be about 240 ft commencing from about point 223 ft on the cross section of river.

5. As to the style of the super structure I would recommend an iron bridge. If economy is to be chiefly considered the bridge might be similar to the type design for 30 ft span circulated with G.O. No 1479 (Local and Municipal) d/10th August 1888 but it will be advisable to add one girder in order to get 18 ft of roadway and to place all the girders

2702 W d 31.8.88

[illegible]

on the same level so that they may be ~~all~~ accessible for repainting &c. I think the cast iron beds might be omitted and a wooden beam put in place of them. The piers would have to be 4½' wide in order to give sufficient bearing for the beams. The level of under side of beams should be 65.0

6. A bridge of similar type to those for 50 and 60 ft spans circulated with the same Government order would look very much better but would cost a few thousand rupees more. It would have to be made stronger than the type design as you require a ~~roadway~~ width of 18 ft and gravelled roadway, timber being too expensive at Kumbakonam.

7. I regret I cannot get designs made out for you. G.O. No 2806 W d/7th October 1892 forbids my doing so unless under orders from Government.

I have the honor to be
Sir
Your most obdt. Servt.

W Hughes
Suptg Engineer V Circle

From 6

THE SUPERINTENDING ENGINEER,

26.10.92

V CIRCLE,

SS To

THE Chairman

Municipal Commission

Madras

Dated 20 }
Recd. } October 1892

ENCLOSURES. 4

PW 5.1
1642/93

No. 354 M.

Bridge at Nungambakkam

Returns two plans and Estimate for the proposed — as per reasons stated within —

7

51½
4

KUMBAKONAM MUNICIPALITY.

Enclosure No. I **to letter**

FROM

THE CHAIRMAN
MUNICIPAL COUNCIL
KUMBAKONAM.

To

THE CHIEF SECRETARY TO GOVERNMENT
Local and Municipal Department
Through the Sub-Collector and the
Collector of Tanjore.

Dated 31st
Despatched } January 1893.
Received

Ro 1140/93 No. 490

SUBJECT.

Requesting instructions to the Supdg Engineer V Circle for the preparation of a plan and Estimate for the proposed bridge across the Cauvery at Kumba-

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372 M/93

No. 490.

57½
5

8

MUNICIPAL REGISTER.
No. 100 OF 1893.

MUNICIPAL COUNCILLORS' OFFICE

KUMBAKONAM 31st January 1893.

CURRENT No. 372/M

FROM

S. Seshayyar, Rao Bahadur
CHAIRMAN, MUNICIPAL COUNCIL
KUMBAKONAM.

To

The Chief Secretary to Government
Local & Municipal Department
Thro' the Sub Collector and the
Collector of Tanjore.

Sir,

In obedience to instructions contained in para 3 of G. O. No. $\frac{\text{706 Pub (Genl)}}{\text{13. 4. 92}}$, I have the honor to report that I requested Conductor A. C. Lord of the Drainage Works to prepare a plan and Estimate for the proposed bridge across the Cauvery, and was favored by him accordingly with a plan and Estimate. These were submitted for the approval of the Superintending Engineer of the V Circle, who was pleased to visit the locality of the bridge in October last, and to send his views

and

and Suggestions 51²/90 original plan. I beg to submit herewith his letter to me on the subject. Conductor A. C. Lord has since been transferred from this town. I think it would be well for many reasons if a fresh plan and Estimate in accordance with the Suggestions of W. Hughes Esqr. were prepared in his office under his instructions; and I beg to solicit orders for the same.

I have the honor to be
Sir
Your most obedt. Servant
Chairman

MU[illegible] REGISTER
№ 100 of 1893

COLLECTOR
3 FEB. 93
TANJORE

2806 W 7-10-92
1479 L 10-8-88
706 L 13-4-92

FROM
THE CHAIRMAN
372 M
MUNICIPAL COUNCIL
KUMBAKONAM.

512/8

P. W. C. No. 1643/52

To
The Chief Secy to Govt
Local & Mun. Dept.
Thro' The Sub Collector
& The Collector of
Tanjore.

No 104 Ind. Ein: Ord.

Dated 31st
Despatched
Received
January 1893.

ENCLOSURES. one

Rd 12-2-93

No. 4790
14 FEB 93
GOVERNMENT MADRAS

Tanjore Collector's office
Vallam. 12th Feby 1893

SUBJECT.

Requesting instructions to the Supt. Engineer Trichy for the preparation of a plan & Estimate for the proposed bridge across the Cauvery at Kumbakonam

R275 — Ind.

Forwarded
3/2/93

No 96
Transferred to the Public works Departt. with the request that a plan & estimate may be prepared.

Assistant Secretary

Fort St. George
20th Feby 1893

17/2

To The Public works Departt.

17/2 a/M12

5/2
6

11

Government of Madras.

1893.

P. W. DEPARTMENT.

CURRENT No. 1643

From

The Local & Municipal Dept.

ENCLOS.—1

No. 96

Dated 20.2.93

Received 21.2.93

SUBJECT.

Proposed bridge across the Cauvery at Kumbaconum:

Transferring letter from the Chairman Municipal Council Kumbakonam & requesting that a plan & estimate for the ―― may be prepared.

DISPOSAL.

No.	dated
No. 269W	1-2-86
" $\frac{2}{269W}$	1-2-86
" 1525W	16-6-86
" 1387W	11-5-88
" 2474-5W	14-8-88
" 2702W	31-8-88
" 180W	23-1-87
" 1802W	6-7-87
" 2487W	7-9-87
" 248C	18-1-89
" 754C	12-2-91

J. C. 28

512/7

No. 512 W d/27th Feby 1893

Communicated to the Suptg: Engineer V circle who will arrange for the preparation of the required plan and estimate.

22/2/93

OVB
22.2.93

S.E. V circle
L and M Depts.

24/2

J 7/3