

(1) Number of pages 18
 (2) Date of repair 18.8.88
 (3) Initials of the Referencer lous

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

PW DEPARTMENT

G.O. No.	3247 W	Press.
B.P. No.		Mis.
Dated	14.8.1978	197 .

1009

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

14th August 1878, No. 3,247 W.

Buildings and Roads.
Civil Works.

Read the following paper:—

No. 173. From Colonel E. J. MOBERLY, R.E., District Engineer, Bangalore, to the Chief Engineer, Buildings and Roads, dated Bangalore, 2nd August 1878. No. 91.

I have the honor to bring to your notice that the estimate sanctioned in G.O., No. 2,588, dated 27th September 1876, for a lightning conductor to St. John's Church at this station provides for a copper band from the top of the spire to the ground, and for bands along the ridge, eaves, and gables of the building at a cost of Rupees 1,700.

2. The spires, both of St. John's and of Trinity, are so much higher than any building or tree near that they must run great risk from lightning, but I believe that about half the quantity of copper estimated for would suffice; and in this opinion I find I am supported by the instructions issued with Public Works Department Circular No. 74, page 5, paragraph 32. I have also reduced the dimensions of copper from 3 to $1\frac{1}{2}$ in width as laid down in paragraph 13.

3. St. John's Church is 78 feet long with a tower 18 feet thick at base, on which stands a spire, the top of which is 113 feet from the ground.

4. I propose to carry the conductor down the spire to the ridge, down the gable, and into the ground near the foot of the tower by the most direct line, and another line along the ridge to the eastern gable, and thence again to the earth.

5. At the spire and at the gable pointed conductors will stand 5 feet above the building. There is no metal in the roof, and the quantities in hinges, locks, and bolts of doors and windows are so small that I believe they may be neglected, particularly as there would be none very near the line of the conductors.

6. Trinity Church has a steeple in three stories; its roof is 120 feet long, and the nave and sides being all vaulted the copper required to cover all the turns will be 485 feet long.

7. At St. John's there is very great difficulty in finding water; the wells in adjacent premises are dry at 80 feet below ground. I was sanguine as to finding water near the surface at Trinity Church, which is only 34 feet above Hisor tank, but some of the wells have no water at 50 feet; I propose, therefore, to lay the ends of the conductor in iron and charcoal, and to lead water from the roofs of the churches and any adjacent road drain into the terminal pits, so that the earliest rain will probably saturate the conducting material.

8. If the principles on which I have drawn up these estimates are approved (and I believe that they are in accordance with Circular No. 74), I hope that the amounts may be sanctioned for execution with reference to statement of original minor works recommended for execution from the Reserve of 1878-79, dated 10th June 1878.

No. 174. ORDER THEREON, 14th August 1878, No. 3,247 W.

The estimates, amounting to Rupees 730 and 570, for providing conductors to Trinity and St. John's Churches at Bangalore, are sanctioned for execution when funds are available; the second of the sanctions now given cancelling that accorded in G.O., No. 2,588, of the 27th September 1876.

2. This sanction has been registered as Provincial and numbered as shown below:—

Estimate Rupees 730	...	...	...	...	...	Register No. 81	B of 1878-79.
" " 570	...	...	...	...	...	85	

(True Extract.)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Govt., P.W.D.

(True Copy.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the District Engineer, Bangalore.
" Examiner of Public Works Accounts.
" Ecclesiastical Department.

BUILDINGS AND ROADS.
CIVIL WORKS.

Sess. of 1876-77
PUBLIC WORKS.

THE DISTRICT ENGINEER
BANGALORE
1876-77

Date August 1st

Amount

Rs.

Paise

G. R. No. 100 of 1876, No. 100 of 1877.

AUGUST

No. 170-174

Printed and Published by
Lal Bahadur Shastri, at the
Government Press, Bangalore.

Public Buildings.

From

The District Engineer,
Bangalore.

The Chief Engineer
S. D. Dept.
Madras.

Dated 23 August 1898.

Estimate No. 109 of 1898-99.

Work—Providing Light-
ning Conductors to Trinity
and St. John's Churches at
Bangalore.

Amount Rs. 1500—0—0.

Head of Service. _____ Pro
Fund. _____
Class. _____ Original
Main Head. _____ Civil
Sub Head. _____ Ecclesi
To be Carried out by the D. P.
District Bangalore.

Abstract Estimates No. _____ of 1898/99.
Name of Work. _____ Providing Lightning
to Trinity and Saint John's
at Bangalore.

in view, I find, I am supported by the
instructions

Road & Buildings

From

The District

Board

To

Chief Engineer

Road & Buildings

No. 91.

DISTRICT ENGINEERS OFFICE

Bangalore 2nd August 1878

From

The District Engineer

Bangalore

To

The Chief Engineer
Buildings & Roads
Madras

Sir,

I have the honor to bring to your notice, that the estimate, sanctioned in G. O. No. 2588, of 24th September 1876, for a lightning Conductor, to St. John's Church, at this station, provides for a copper band from the top of the spire to the ground, and for bands along the ridge, eaves, and gables of the building, at a cost of Rs. 1700/-

2. The spires, both of St. John's and of Trinity, are so much higher than any building or tree near, that they must run great risk from lightning; but, I believe, that about half the quantity of copper estimated for would suffice - and in this opinion, I find, I am supported by the instructions

Approved & Signed

Instructions issued with P.W.D. Circular No. 74, page 5, para 32. I have also reduced the dimensions of Copper from 3 to $1\frac{1}{2}$ in width, as laid down in para 13.

St. John's Church is 78 feet long, with a tower 18 ft. thick at base, on which stands a spire, the top of which is 113 ft. from the ground.

4 I propose to carry the conductor ~~from~~ the spire to the ridge, down the gable, and into the ground, near the foot of the tower, by the most direct line, and another line along the ridge to the Eastern gable, and thence again to the earth.

5 At the spire, and at the gable, pointed Conductors will stand 5 ft. above the building. There is no metal in the roof, and the quantities in hinges, locks, and bolts of doors and windows, are so small, that, I believe, they may be neglected, particularly as there would be none very near the line of the Conductors.

6 Trinity Church has a steeple in 3 stories; its roof is 120 ft. long, the nave and aisles being all covered with copper.

required to cover all the turns will be 485 feet long.

7 At St. John's, there is very great difficulty in finding water; the wells in adjacent premises are dry at 80 feet below ground. I was sanguine as to finding water near the surface at Trinity Church, which is only 34 ft. above Ulster Tank, but some of the wells have no water at 50 ft.; I propose, therefore, to lay the ends of the Conductor in iron, and charcoal, and to lead water from the roofs of the Churches, and any adjacent road drain, into the terminal pits, so that, the earliest rain will probably saturate the conducting material.

8 If the principles on which I have drawn up these estimates are approved, (and I believe that they are in accordance with Circular No. 74), I hope that the amounts may be sanctioned for execution, with reference to Statement of Original Minor Works recommended for execution from the Reserve.

of 1870-79. 10th June 1870

I have the honor to be

Sir

Your most obedt servant

J. H. B. Colmel R.E.
District Engineer.

1870-79
10th June 1870

G.O. 2328 d/27-9-76.
" - 1454 - 2-3-78.

Road & Buildings.

From No 8578

The District Engineer
Bangalore.

The Chief Engineer
P. W. Dept
Madras.

Chgo 71.

Dated 22nd }
Recd } August 1878.

~~Under sanction~~

L.H.
+ 2 Sdus. Feb 15 S.D. 240.
(vide L.O. 2900 of 17-12-78).
Lighting Conductors.

Forwarded for sanction
2 estimates aggregating
Rs. 1700 for providing
to St. John's and Trinity
Churches at this station
and requests allotment
of funds for the execution
of the work, if approved.

Cir. 12-8-78. Dtd 14-8-78
To Secy. to Govt. P. W. Dept. Madras.

B.R.
Works.

Public Works Department.

No 3247
PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 14th Aug/78.

Read the following:-

From
The Dist. Engr. Bangalore (L.O. No 91 d/2nd August 1878)

The estimates amount-
ing to Rs. 730 and 570,
for providing conductors
to Trinity and St. John's
Churches at Bangalore,
are sanctioned for ex-
ecution when funds
are available; the second
of the sanctions now
given cancelling that
accorded in G.O. No 2588
of the 27th September 1876.

Dist. Engr. Bangalore
Per. P. W. Accounts
Registered Dept
1007-23-8-78

12/78
This sanction has been
registered as Provincial & numbered
as shown below:-
L.O. No 730. Register No. 84. Refd 11/78
" " 570 " " 85.

1034

Dr. Baughman

1/2 Page 324/36

Trinity and St John's
Churches at Mangalore
Sanction the Estimate
for providing conductors
to —

Ernstine Herr