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30/5/86 / RH

7993

RH 88

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of {1896} Madras.
PUBLIC WORKS.

Dated June, 1st.

Recd.

Encl.

G.O. No. 1631 W., 1st June 1896.

JUNE.

Light-house at Mangalore

Letter from the Superintending Engineer, IV Circle, on the subject of lightning conductors, communicated to the Marine Department; and the provision of a new lightning conductor for the —, deferred, pending receipt of a reply from the Secretary of State to a reference made to him on the subject.

MARINE G. No. 664

282 mar 27.4.86 Recd 15.6.96
245.46 mar 28.4.86

7122 3/96

7.0.

B
No 477 mar 24. July 1896

Communicated to
the Presidency Secy
Office

5/7/96

The P.P. Office copy of
Inspection order.

A.S.

DESPATCHED
11 JUL. 96

with the order

with 15/7

man C^o. 669

H.C.

Against the Com-
munication to the
marine Dept. in C. O. N.
1631 W 8 1. 6. 96 it is
stated that copy of
the Inspection note of
the Supt. Engineer
IV Circle for April 1896.
will follow. Please expedite
its transmission

H.C.
o

Herewith the
extract referred
to. The Inspection Note
was received
from the S. I. IV Circle,
only today. Rm
30/6

Extract of para 10 of Inspection Notes
of the Superintending Engineer, IV Circle,
for the month of April 1896. — No. 188. W 8
26 April 96. —

10. Mangalore Light House.

An estimate, amounting
to Rs. 3,190, for connecting the lightning
conductor with the Backwater, was
sanctioned i.e. to connect the conductor
with a permanent wet earth plate.
The wire rope provided for the purpose
is of needlessly large section (1 1/2" clear,
1" is ample). But the work was stopped
pending receipt of Mr. Ashpitel's report
on Lighthouses.

11. As now arranged, the present
conductor is worse than useless, being
downright dangerous, the earth con-
nection being in a dry old well. So
I have instructed the Sub Division
Officer to remove the copper lightning
rod above the lantern.

12. Enquiries should be at once
made as to the possibility of finding

a well with a perennial spring, in which or connected with which the earth plate might be fixed, without going all the way down to the Backwater. It seems incredible that no permanently moist situation cannot be found in some of the adjacent radius or are there no perennial wells in the neighbourhood? —

XXXX

Mar 9th / 669/96

No. 1631 W., 1st JUNE 1896.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper:—

From J. C. LARMINIE, Esq., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Ootacamund, 9th May 1896, No. 215 W.

Referring to G.O. No. 1382 W., dated 30th April 1896 (also G.O. No. 282, Marine, dated 27th April 1896), you will doubtless, ere this, have noticed from my inspection notes (copy of which was forwarded for your information) that the condition of the lightning conductor of the Mangalore light-house had not escaped observation and that I had re-opened the question of putting it to right in accordance with our knowledge of the subject as it then stood.

2. But since writing those notes I have received Mr. Ashpitel's report on the Presidency light-houses, printed with G.O. Nos. 245, 246 of 8th April 1896. With that report are printed 41 conclusions,*

* Read also paragraph 10, page 26 of the report. arrived at by Professor Lodge in respect to lightning conductors and the mode of arranging them.

3. Many of these conclusions are so totally at variance with previously-accepted maxims of the subject, that one is irresistibly led to inquire "does any one really know anything for certain about it?"

4. From time to time, various rules have been circulated for the guidance of the department drawn up by eminent experts; the last, I believe, were those decided on by the Lightning Rod Conference, and were looked on as unimpeachable.

5. Now if Professor Lodge's conclusions are to be accepted (and they are the latest in the field), the former rules are quite unreliable.

Paragraph 10, page 26 of report.

6. According to Professor Lodge a conductor of high resistance, e.g., a defective one, may positively be advantageous!

7. Under these circumstances, I would propose to leave the Mangalore light-house conductor as it has been for some years past, and not attempt to improve it in accordance with the sanctioned estimate which provides for $1\frac{1}{2}$ miles of iron wire cable, to connect the conductor with the backwater.

8. In the apparently very uncertain present state of our knowledge of the subject, there are many reasons for supposing that the light-house will be as safe with the old as with the newly-proposed arrangement of the conductor.

So under the circumstances, I beg to submit the question for further consideration and orders.

ORDER—No. 1631 W., dated 1st June 1896.

Communicated to the Marine Department, with reference to G.O. No. 282, Marine, dated 27th April 1896. An extract from the Superintending Engineer's inspection notes for April 1896 will also be furnished to the Marine Department.

In the circumstances stated, the provision of a new lightning conductor for the Mangalore light-house will be deferred pending receipt of a reply from the Secretary of State to the question referred to in paragraph 17 of G.O. No. 245, Marine, dated 8th April 1896.

(True Extract.)

Allen

Under Secy. to Govt., P.W.D.

To the Marine Department. *with extract from the Supt. Engr's*
 „ Superintending Engineer, IV Circle. *Inspection Notes for April 1896.*

Will follow

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(True Extract.)

(Signed) D. McNEIL CAMPBELL, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.

To the Marine Department.
„ Superintending Engineer, IV Circle.

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CIVIL WORKS.

Govt. of {1896} Madras.
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G^o 477 Mar d/4 July 96
Communicated to
the Presidency Port Officer.
Sd/ D. M. C.

W
Marine

The P.O. with copy of
Inspection Notes.