

- (1) பக்கங்களின் எண்ணிக்கை 10
 (2) புதுக்கித் திருப்பிய நாள் 24.8.89
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 10/9

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P.W.D துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	<u>1982-W</u>	அச்சகம் பலவகை
நாள் :	<u>19.7.1890</u>	<u>198</u>

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From C. VINCENT, Esq., Under-Secretary to the Government of India, Public Works Department (Civil Works—Miscellaneous), to the Secretary to the Government of Madras, Public Works Department, dated Simla, 23rd June 1890, No. 181 M.

I am directed to forward, herewith, for information and guidance, the accompanying copy of a letter from the Director-General of Stores, India Office, to the address of the Government of Bengal, Public Works Department, and of its enclosure, drawing attention to the instructions contained in rule XIII of appendix II to the Army Circulars, dated 1st November 1887, as to the application of lightning conductors for the protection of powder magazines and other buildings.

ENCLOSURE.

From A. A. JOFF, Esq., Director-General of Stores, to the Secretary to the Government of Bengal, Public Works Department, dated India Office, London, 2nd May 1890, No. 5708 S.

With reference to the demands contained in Public Works Indent No. 11, forwarded with your letter, No. 524 A., dated 1st February 1890, for two copper earth plates and 260 feet of copper tape, required for remedying defects in the lightning conductors of Durbhunga Jail, I have to inform you that, instead of supplying two copper earth plates, the quantity of copper tape to be provided will be increased from 260 to 400 feet.

It will be seen from appendix II of the enclosed copy of Army Circulars, dated 1st November 1887 ("instructions as to the application of lightning conductors, &c."), that the above alteration in the demand is in accordance with the present practice of the War Department, as indicated in rule XIII attached to the "Instruction."

Extract from appendix II of the Army Circulars, dated 1st November 1887, containing instructions as to the application of lightning conductors for the protection of powder magazines and other buildings.

"Rule XIII.—When the level of water or permanently wet soil lies within a few feet of the surface, the conductors should terminate in earths offering each about 18 square feet of external surface. These may consist of copper plates about 3' x 3' x $\frac{1}{8}$ " rivetted to the ends of the conductors and buried in water or wet soil from 15 to 25 feet from the building. A better plan, however, is to coil the end of the conductor spirally on a wooden frame, the external diameter of the coil being 4 feet, with 6-inch intervals between the turns. About 33 feet of tape are required for this earth connection; it obviates the necessity of any underground joint, taps a larger surface of earth, and, the tape being twice the thickness of the plate, it is more durable, besides being a cheaper arrangement."

ORDER—dated 19th July 1890, No. 1982 W., Public Works.

Communicated to officers of the Public Works Department for information and guidance.

(True Extract.)

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

To Superintending Engineers.
To the Consulting Architect to Government.

Exd. A. Aubert.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1890} Madras.
PUBLIC WORKS.

Dated July, 19th.

Recd.

Encl.

G.O., 19th July 1890, No. 1982 W.

JULY.

Lightning Conductors

Letter from the Government of India forwarding, for information and guidance, copy of a letter from the Director-General of Stores, to the Government of Bengal, drawing attention to the instructions contained in rule XIII of appendix II to the Army Circulars of 1st November 1887 as to the application of — for the protection of powder magazines and other buildings, communicated to the officers of the Public Works Department.

No. 181 M.

GOVERNMENT OF INDIA
PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.
Miscellaneous.

To

THE GOVERNMENTS OF MADRAS, BOMBAY, NORTH-WESTERN PROVINCES AND
ODDH AND THE PUNJAB.
THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES, BURMA, ASSAM AND
COORG.
THE RESIDENTS AT HYDERABAD AND IN MYSORE.
THE AGENTS TO THE GOVERNOR GENERAL IN CENTRAL INDIA, RAJPUTANA AND
BALUCHISTAN.
THE DIRECTORS GENERAL OF RAILWAYS AND TELEGRAPHS.
THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS,
CALCUTTA, CENTRAL DIVISION AND LUCKNOW.

Simla, the 23rd June 1890.

SIR,

I am directed to forward, herewith, for information and guidance, the accompanying copy of a letter from the Director General of Stores, India Office, to the address of the Government of Bengal, Public Works Department, and of its enclosure, drawing attention to the instructions contained in Rule XIII of Appendix II to the Army Circulars, dated 1st November 1887, as to the application of lightning-conductors for the protection of Powder Magazines and other buildings.

I have the honour to be,

SIR,

Your most obedient Servant,

C. Vincent

Under Secy. to the Govt. of India.

Documents accompanying.

Letter No. 5708 S., dated the 2nd May 1890, from the Director-General of Stores, India Office, to the Government of Bengal, Public Works Department, and enclosure.

To the Secy to the Govt of Madras.
P.W. Department.

G. C. Press, Simla. — No. 486 P. W. D. — 25-6-90. — 300.

Enclosure

220

4
1982

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To—The Secretary to the Government of Bengal, P. W. Dept.

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I.W. No. 6816

G.O. No. 84514 of 4-3-88
3187W - 12-14-83
2156W - 21-8-82

3P bsc
x Ireland
at 10

Recd 4 VII-90

19-7-90 BHP

comb with
No. 1982 w d 19 July 1890

Wm

A

LHP 15/7/90

Communicated to
officers of the R.W. Dept
for information &
guidance.

Recd

14-7-90

Supl. Engr

C.A. to Port.

Recd

30/7

Obt. 11. VII
H. in 11. VII in 17. VII

5
1982

48c 2/17