To W.

With reference to your order that we should indent for two sets of Messrs Siemens' apparatus for testing lightning conductors, please read the accompanying correspondence—

You will observe that we have already indented for instruments & stores for this purpose, under instructions from the Govt. of India. It is a question whether we should now apply for additional & different apparatus from a private firm. Not, I should say, until the apparatus the Telegraph Depmt. will supply us with have been tested & found wanting.—

CS

30.3.85

I had lost sight of the fact that application had been made to India for sets of testing apparatus.

Reply should be awaited before taking further action.

Possibly the instruments supplied may be those to which Messrs Siemens Bros. & Co. refer.

JJS

30.3.85

2871

Dw.

Siemens Bros & Co's lightning rod testing apparatus.

Draft order submitted in accordance with W's instructions.

Under rule, the apparatus must be obtained through the India Office.

At the same time, please see the papers put up, from which it will be observed that the Govt of India have already circulated a code of instructions for the testing of lightning conductors, & that indents from all Circles in this Presy. for testing apparatus, have been sent on to the Govt of India — It is doubtful whether the G. of I. would approve our obtaining additional & different apparatus from a private firm.

30/3/85

16TH JANUARY 1885, No. 144 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From R. B. BUCKLEY, Esq., Officiating 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 October 1884, No. 410 M.

The Director-General of Telegraphs has brought to the notice of the Government of India, with reference to the order in paragraph 1 of Public Works Department Resolution, No. 427 M., dated 26th October 1883, that the demands made on the Telegraph Department for assistance in the matter of testing lightning conductors are very heavy, and that this supplementary work could not be carried out without undue strain on his present establishment, which already has as much work to do as it can conveniently perform.

2. The Governor-General in Council has therefore decided to relieve the Telegraph Department of this additional duty, as His Excellency considers the work might well be performed by officers of the Public Works Department after they have received some training.

3. With this object in view, I am directed to request that an officer of the Public Works Department establishment belonging to the Madras Presidency may be selected and arrangements made with the Chief Superintendent of Telegraphs, Madras division, for his instruction in the processes of testing lightning conductors, in order that he may be competent to test those of the province, or local administration, &c., and to instruct others in the duty.

4. Should the local head of the Telegraph Department be unable to arrange for imparting such instruction, the officer selected should be deputed to Calcutta to be instructed by the Electrician of the Telegraph Department, who will be able to undertake this duty any time after the 1st January 1885.

From P. V. LUKE, Esq., Chief Superintendent, Madras Division, to the Secretary to Government, Public Works Department, dated Madras, 10th November 1884, No. 5301.

In reply to your No. 1800 C., of 6th November, I have the honor to state that I shall be glad to make arrangement for instructing an officer of the Public Works Department in testing lightning conductors.

2. The officer deputed should attend at the central telegraph office, Madras, daily at a convenient hour between 10 A.M. and 5 P.M.

ORDER—dated 16th January 1885, No. 143 W., Public Works.

The Chief Superintendent of Telegraphs, Madras division, having reported that he is prepared to afford the requisite instruction in testing lightning conductors to an officer of the Public Works Department, Mr. W. B. deWinton, General Superintendent, Public Works Workshops, will attend at the central telegraph office, Madras, at such times as may be fixed by the Chief Superintendent.

2. Mr. deWinton will, without prejudice to his other duties, go through a course of instruction sufficient to enable him to undertake the testing of lightning conductors when called on to do so, and to instruct others in that duty.

(Here enter No. 144 W., dated 16th January 1885.)

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Superintendent of Telegraphs, Madras Division.
" Superintending Engineer, V Circle.
To other Superintending Engineers.
To the Consulting Architect to Government.
" Examiner, Public Works Accounts.

ENDORSEMENT—dated 16th January 1885, No. 144 W.

Copy of the above forwarded to the Government of India for information.

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

Exd. E. Fernandez.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1885) Madra

PUBLIC WORKS.

Dated January, 16th.

Recd.

G.O., 16th Jan. 1885, No. 144 W.

JANUARY.

Lightning Conductors

Forwarding copy of proceedings directin Mr. W. B. deWinton to attend at t central telegraph office, Madras, to recei instructions in testing of —.

B/8

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following

From
Messrs Siemens Bros & Co (H E No– d/ 2nd March /85)

Communicated to the Supt Engineer V Circle who will submit an indent on the Secretary of State for two sets of Siemens Brothers and Cos Lightning Rod Testing Apparatus.

2. On receipt, the apparatus will be issued for trial to the Presidency

Superseded

and Consulting Architects Division, and the results will be reported in due course.

696 C of 1-4-85

S. E. V. Circle
with pamphlet.
Ch. to Govt.:

Cu

SIEMENS BROS. & Co
LIMITED.
TELEPHONE No 3099.

12, Queen Anne's Gate, Westminster,
London, 2nd March 1885.
S.W.

Sir,

We beg to call your attention to an apparatus we have recently designed for the purpose of testing lightning rods attached to public buildings &c, and we send per Book Post, pamphlet No 39, which fully describes it.

We venture to point out that the testing of lightning conductors from time to time is of the utmost importance as their efficiency depends on the electrical resistance being low, a defective conductor of high resistance being a positive danger to a building.

The apparatus we are now bringing to your notice is of a portable form and can be manipulated by a workman of ordinary intelligence as, being of simple construction, no special electrical knowledge is necessary for making the tests.

The price of the magneto-inductor and bridge is £7:0:0, exclusive of packing, delivered in London. The cost of packing a single apparatus will be 5/-.

We have the honor to be,
Sir,
Your obedient Servants,

For SIEMENS BROS. & CO. LIMITED.
R. von F. Treuenfeld

Colonel R. H. Sankey, R.E.
Chief Engineer of the
Public Works Department,
Madras,
India.

G.O. A/452 W a/ 19-2-84.
" 451 W a/ do
No. 117 C a/ 7-1-84
G.O. A 3187 W a/ 12-11-83

P.W.C. No. 2871

Rec: 27-3-85

SECRETARY TO GOVERNMENT
27 MAR 85
P.W. DEPARTMENT MADRAS

To D.W.

It would be highly desirable to get two sets of this apparatus for trial.

If successful, one or more sets should be supplied to every Circle.

27-3-85

Draft

No. 696 C d/ 1st April/85

Recorded, pending receipt of the testing apparatus indented for in Pro. No. 451 W d/ 19.2.84.

C.S.
31.3.85

31-3-85

Vide notes attached

Memo

With reference to G.O. No. 143 W d/ 16 Janry 1885 on the subject of instructing P.W.D. officers in testing lightning conductors, the undersigned is directed to inquire whether the Chief Supt. of Telegraphs, Madras Dn. is prepared to impart the requisite instruction to S. Subbarayachariyar Asstt. Engr. I grade, and what arrangements are necessary in view to the same.

G.O. A No. $\frac{143}{144}$ W of 16-1-85
Memo No. 1800 C of 6-11-84
G.O. A No. 3187 W of 12-11-83
" " " 2156 W of 21-8-82
" B " 1432 W of 7-6.82

Memo.

With reference to G.O.
No 143 W dd 16 Jany 1885
on the subject of instructing
P.W. officers in testing
lightning conductors the
writer is requested to
to enquire whether the Chief
Supdt of Telegraphs, Madras
Divn is prepared to impart
the requisite instruction to
S. Subbarayachar
[illegible]
[illegible]

Ry 2/6
D 1/6

No 977 C of 29th May/85

C

Office Copy

Sir,

With reference to your letter No 5801 of 18th Novr/84 in which Mr De Winton was deputed for undergoing under your orders a course of practical instruction in the testing of lightning conductors, I have the honor to enquire when it will convenient to you to put Mr S. Subbarudriyar Asst Engr, through a similar course, he being now available for the purpose.

CE.

28.5.85

M/29.5

D 29/5.

No 1230.

From

The Offg Chief Superintendent of
Govt. Telegraphs, Madras Division.

To

The Under Secretary to the Government,
Public Works Department

Dated Madras 2nd June 1885

Sir

In reply to your No 977 C. of 29th May 1885, I have the honor to inform you that I am prepared to cause to be instructed in Lightning Conductor Testing, the officer named by you.

2 Mr. S. Subraya Chariar should attend at the Central Telegraph Office Madras, daily at a convenient hour between 10. A.M. and 5 P.M.

3. I beg, however, to draw your attention to the concluding part of para 3 of Public Works Department Resolution× No 410 M. dated 23rd October 1884, as, I regret to inform you, I cannot continue to train Public Works Departmental officers in the process of testing lightning conductors

× Cf. part of Resolu-
tion G.O. No. 143 W
16-1-85.

I have the honor to be,
Sir,
Your most obedient Servant.

Offg. Chief Superintendent

M.D.

Incl. 434

Recd 13/5/86

Comaleeswarenpettah Madras
13th May 1886

rom S. Subroyachariar B.C.E
Asst. Engr. 1st grade on furlough

The Chief Engineer P.W.D
Madras.

S

My furlough expires on 25th August next and I purpose returning to duty fore its close in July next of

d earlier & I beg therefore to

quest yr. kind orders for my

idance.

I have the honor to be

Sir

Yr. most obed Servant

S. Subrayachari

Asst. S. in Telegh

To D.W.

After discussion with E.I. I have decided as the best arrangement that Mr. Manson (now on privilege leave) shall relieve Mr. Bell in charge of Tinnevelly Division when he takes furlough at end of July.

Also that S. Subharachariyar shall be posted to VI Circle to take Mr. Manson's place in Tanjore Division.

WS.
16.5.85

E. to note this carefully for action in due course.

CS.
20.5.85

To W.

Mr. S. Subharachariyar, A.E., who is due from furlough on 25th August, came to see me yesterday and expressed his desire to return to duty at once or as soon as he may rejoin him.—

Mr. Bell will take furlough end of July & it may be desirable to put Mr. S— in his place. I may mention that the latter wishes to be posted to a Southern District if possible. On this point I told him I would let you know of his wishes, but that to meet them would altogether depend on requirements at the time of his rejoining.

However what I particularly wish to bring to notice at once in connection with this is the order of Govt. of India to have officers trained by the Telegraph Deptmt. in the testing of lightning conductors. Mr. De Winton has been so trained, but it would appear desirable to put other officers as well through the same course, when opportunity offers.

If we get Mr. Subharayachariyar back now, he might be told off for instruction as Mr. De Winton was, & posting him to a Division could be settled afterwards.

Mr. S. said something about his being entitled to a step, his juniors being tempy: E.Es. That, I informed him, would be considered in due course.

CS.
14.5.85

C. No. 4349

D.W.

For orders. Mr. Manson does not return from privilege leave till 31st July /85 & his place in the Tanjore Divn is thus vacant. Can Subharayachariyar be posted at once to the Tanjore Divn:?

W.
21.5

977c

E.

I shall await replys to ~~[illegible]~~ d/o's I addressed to W & to S.E. VI before I deal with above.

If Mr. Bell goes on 31 July & Mr. Manson does not return till that date, there will be no time for the handing over.

CS.
22.5

I have not got the file referred to. Possibly it was sent on to Ooty.

At any rate E. should now write to Mr. Subharachariyar to ascertain exactly when he is prepared to rejoin — in which case he is to be told off to undergo a course of instruction as per Chief Supdt. Telegraphs' No 5301 of 10th November. When we learn when Mr. S. will rejoin, the Chief Supdt. shd. be addressed in view to necessary arrangements being made.

CS.
27.5.85

Letter sent to Mr. S.
27/5
Reply recd. Mr. S— is willing to rejoin at once.

Draft memos. & Notifn: sub-mitted for approval.

W.
28.5

E. Letters had better at first be addressed to Chief Supdt. to ask him when it will be convenient to him to take on Mr. S. for training.

CS.
28.5

C. No. 4349

1.

To D.W.

For orders. A note on the posting of this Asst. Engnr. was sent by you to W on the 14th Instant.

M.
16.5

To await reply from W.

CW
16.5

B. No 11,32 W. 7. 6.82
G. O. No. 2156 W. 21. 8. 82
" " 3187 W. 12. 11. 83
No 1800 C. 6. 11. 84
G. O. No $\frac{143}{144}$ W. 16. 1. 85.
No 977 C. 29. 5. 85.

Government Telegraph Departt.

Public Department

Inch 4910

(11)

From.

The Chief Superintendent
Madras Division

To

The Under Secretary to the
Government of Madras
Public Works Depth.

Dated Madras 2nd June 1885
Rev 3
No 1035 C of 11th June/85
No 1230.

[illegible]

Subject

Instructions on Testing Lightning Conductors: —

Gives the time of attendance of the person appointed by him for: -

E

see G.O.'s remarks

A. S. 2076.
C. 5. 6. 85 R. 10. 6. 85.
4

No 1035 C of 11th June/85 P.W. Department.

Memo:

The undersigned is directed to inform the Chief Supt: of Telegraphs, Madras Division, that in accordance with his letter No. ~~5304~~ 1230 d/ ~~10th November/84~~ 2nd June 1885 ~~recorded in G. O. No 143.W of 16th January/85,~~ Mr S. Subharayachariyar, asstt: Engineer 1st grade, has been ordered to attend at the Central Telegraph office Madras, from the ~~8th~~ 15th ~~proximo~~ instant, ~~to receive a course of~~

a

for instruction in the practice of testing Lightning Conductors.

CU.
5.6.85

7.6.85

(11)

1848 W

E
11.6

No. 1035 C of 11th June/85

D 11/6

To
The Chief Supt: Telghs:
Madras Dn

12/6

C 5.6.85 R. 10.6.85

C

No. 1036 C of 11th June 1885

Memo

S. Subbarayachariyar, Asstt Engr Ist grade, will attend at the central Telegraph office, Madras, from the ~~8th~~ 15th June 1885, at such times as may be fixed by the Chief Superintendent, in order to go through a course of instruction sufficient to enable him to undertake the testing of lightning conductors & to instruct others in that duty.

7.6.85

S. E. & Circle
Chief Supdt Telegraphs
Madras Dn
D 11/6/88

(11)

No. 1036 C of 11th June/85

E

M
11.6

C. 5.6.85 R. 10.6.85

12/6

S. a. W.

With reference to the training of Mr. Subbarachariyar in practical testing of lightning conductors, & previous training of Mr. De Winton at the Telegraph Office, it appears to me that to enable these officers to undertake the work they have been instructed in & to admit of their instructing others, a supply of certain instruments — galvanometer, battery &c. will be needed.

Please ask Supdt. to inform us what instruments will be required by them for the purpose. —

CW.
17.6.85

W.

I submit for your approval the accompanying draft of letter to the Supdt. of Telegraphs.

It occurred to me that in order to give practical effect to the training of Mr. De Winton & Mr. Subbarayachariyar in the testing of lightning conductors & to utilise their knowledge, it will be necessary to have available the requisite experimental instruments, &c.

Hence this reference.

Probably it will be desirable to have a set complete at the Hd. Quarters of each Circle, but this point you can decide on by & bye.

The recent accident at Secunderabad shows that it will be desirable to establish a regular system of testing the conductors on such P.W. buildings as are furnished with such protection. It is not unlikely that many of the existing conductors are practically inefficient. Whenever the Telegraph Deptmt. have been called in to test any particular conductor, they have almost invariably found it useless either from bad jointing, bad earth connection, or some such cause.

Mr. De Winton will probably ~~shortly~~ go to Bangalore. He may be able to give some practical lessons in testing to one or two of the subordinates there.

CW.
18.6.85

No. 1087 Cap 23rd June/85

To

The Chief Superintendent
of Telegraphs
Madras &c.

Sir

I am directed to request that you will kindly furnish this Department with a list of the instruments that will be required by Mr. De Winton and Mr. Subbaraya Chariyar for the purposes of undertaking the testing of lightning Conductors and to admit of their instructing other members of the Deptt in the ~~Art~~ same.

Mr. De Winton has recently gone through a

Q. 18. 6. 85.

Q. 18. 6. 85 R. 22. 6. 85

a course of instruction at your office and Mr. Subbaraya Chariyar is, it is believed, at present under instruction –

Cis.
18.6.85

M
19-6-85

Desw/
24/6

S.A.W.

x

On receipt of reply to this reference, please have put up for Dir's information the course with which we sent forward to Calcutta Tel. Store Depot instruments for testing instruments for each circle.

A code was also received from [illegible] in which instruments necessary for testing detailed – Here are [illegible] the Pro. on the subject [illegible]

F.B.

Connote then +

R. [illegible]

Ay. L. 82/6
60-18-6-85

No. 1087 Ca/ 23-6-85

M.
23.6

B

No. 1587 W PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 9th July/8

READ the following

+ D/o letter in file –

The Chief Supdt. of Telegraphs, Madras Division, having expressed his willingness to afford the requisite instruction in testing lightning Conductors to Mr. O'Connell, Asst. Engineer ~~at present~~ in charge of the S. W. Workshops, ~~that~~ the latter officer will attend at the Central Telegraph office, Madras, at such times as may be fixed by the Chief Superintendent.

2. Mr. O'Connell

will

will, without prejudice to his other duties, go through a course of instruction sufficient to enable him to undertake the testing of lightning conductors when called on to do so, and to instruct others in that duty.

CA
4.7.85

M
6.7.85

(9)

No 1587 W a 9-7-85

E

M
1/7

D
9/7

To

The Chief Supdt of Telegraphs.
Madras Dvn.

S.E. V Circle

Exr. S.W. Accts

[illegible] 14/7

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,

No. 1648

Chepauk, 13 July 1885.

From
THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To
THE Chief Engineer
P.W. Department.

Enclosures.

SIR,

I have the honor to report that Assistant Engineer S. Subbaraya Chariyar has completed his course of instruction for testing Lightning Conductors upon your Memorandum No 1036 dated 11th June 1885. The Assistant Engineer asks for orders as to his future employment.

I have the honor to be
Sir
Your Most Obedt Servt

Hew Pendergast
Colonel R.E.
Superintg Engr
5th Circle

No. 1235 Cay 21st July /85

Recorded with reference to Memo: No: 1631 D dated 20th July 1885 transferring Mr S. Subbaraya Chariyar to the I Circle

CW.
20.7.85

No. 1036 Cay 11-6-85

M
21.7

From

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer
P.W.D.

Dated 18th } July 1885.
Recd. 20 }

ENCLOSURES.

No. 1235 Cay 21-7-85

No. 1648.

S. Subbaraya Chariyar
Asst. Engineer

Report that — has completed his course of instruction for testing Lightning Conductors & he asks for orders as to his future employment.

With the approval

---

(9)

W.

Mr Luke being absent in England, I wrote d/o to Mr Dowson, Ag: Chief Supdt. Tel: Dept., who has consented to undertake the training of Mr O'Connell in the testing of lightning Conductors.

I put up for your approval the necessary order on subject.

Also draft letter to S. Es. regarding the buildings within their circles — whether efficiently protected or not, &c.

On return of the file I must make further enquiries regarding the supply of testing apparatus indented for — about which there seems to be some hitch. —

CW.
4.7.85

To D.W.

Noted. & drafts approved.

If there is likely to be further delay in obtaining the testing apparatus from England, would it not be possible to get from Mr Dowson the instruments named in his letter of 25-6-85 No. 1658, — either on loan or on payment.

The matter is of some urgency.

W.
6-7-85

---

(9)

D.W.

Please have an order drafted — similar to that in the case of Mr De Winton — & directing Mr O'Connell to go through a course of practical instruction in the testing of lightning Conductors, under the orders of Supdt. Tel: Deptt., Madras.

CW.
3.7.85

RW
Put up papers relating to Mr de Winton
FB

S. A. W.

Copy of the order herewith. The original & complete file on the subject were put up with C. 5819 and sent to you yesterday.

D.
4-7-85

(9)

GOVERNMENT TELEGRAPH DEPARTMENT.

Central Telegraph Office
Madras 3 July 85.

Dear Sir,

Under the circumstances named I shall be happy to arrange to train Mr O'Connell in testing lightning conductors as soon as Mr Subrayachari has completed his course.

Yrs truly
C. Oorsan

---

to S.E. III

No. 1357 Cd/ 11th Aug 1885

2

Memorandum.

Mr Subbarayachariyar, Asst. Engineer, now posted to Erode Sub-division, having recently gone through a full course of practical instruction in the process of testing lightning conductors, the Chief Engineer desires that his services be availed of as far as possible, without unduly interfering with his ordinary duties, in testing the efficiency of the protection afforded by the lightning rods on the public buildings in the III Circle already provided with same, and in framing wherever necessary estimates for the requisite additions or alterations.

2. Mr Subbarayachariyar having acquired sufficient knowledge of the subject to enable him to impart practical instruction in the process to others, the Supdg Engineer should, when convenient opportunities occur, take advantage of his services to make other officers + subordinates in the Circle practically acquainted with the tests necessary to prove the effic of any protecting conductors they may have to examine, and in view to establishing in the several Divisions systematic periodical inspections of buildings so protected.

C.W.
5. 8. 85

to E.W.

Proposed draft for considerat

C

E

W 11/8

Desp 11/8

05

No. 1357 C of 11th Augt 1885

Id 13/8

C [illegible] 14/8

No 2406

From

The Chief Superintendent of Tels
Madras Division

To

The Secretary to Government of Madras
Public Works Department

Dated, Madras, 10 August 1885.

Sir.

+ G.O. No. 144 W of 16-1-85 —

With reference to Government of India No + 410 M. of 23d October 1884. Public Works Department, on the subject of testing Lightning Rods on Public Buildings, I have the honor to inform You that the Commissary of Ordnance, Madras, has requested this Department to test the Lightning Rod on a magazine at Trichinopoly.

2. As a Special, case and to avoid delay I have given orders for this to be done, but as some Officers of the Public Works Department have now been trained in testing, I shall be glad if orders can

be given for Similar applications to be made in future to the Public Works Department.

I have the honor to be,

Sir,

Your most obedient Servant.

R. V. Luke.

Chief Superintendent.

Madras Division

Ind Tele

B. No 1432 W 7.6.82
G.O. No 2156 W. 21.8.82
" " 3187 W 12.11.83
No 117 C. 17.1.84
G.O. No 452 W 19.2.84
B. No 733 W 18.3.84
No 696 C. 1.4.85
No 1087 C. 23.6.85
G.O. No 144 W. 16.1.85
B. No. 1587 W. 9.7.85
No 1036 C. 11.6.85
No 1235 C. 21.7.85
" 1357 C. 11.8.85

B

No. 1957 W.d. 22nd Augt 1885

Recorded.

CS.
17.8.85

20.8.85

J - BH

19/8

24/8

C.S. 21/8.

R. 22.8.85

Recorded 15.8.85. R 17.8.85.

R. 13.8.85 14.8.85

Government Telegraph Department

From (9) Acct 7090

The Chief Superintendent
Government Telegraphs
Madras Division

To.
The Secretary to Govt of Madras
Public Works Dept.

Dated 10 August/85
Recd 12 "

No. 2606.

No. 1957 W.d. 22nd Augt 1885

Subject.

Lightning Rods

Requests to give orders that applications to test — should be made to the Public Works Department, in future.

No. 2606.

From

The Chief Superintendent
Government Telegraphs
Madras Division

To.

The Under Secretary to the
Government of Madras
Public Works Department

Dated Madras 18th of August 1885.

Sir

With reference to Proceedings under date 9th July No. 1587 W. I have the honor to report that Mr O'Connell has completed a course of instruction in the testing of Lightning Rods.

+ With Acct 7090
Dy. W. 15-8-85 -

I have the honor to be,
Sir,
Your most obedient Servant
R. V. Luke
Chief Superintendent

24.8.85

No. 2021 W a/ 1st Septr/85

B

Recorded.

Recorded.

CS.
25. 8. 85

US
27. 8. 83

CS
27. 8. 85

No. 1952 W a/ 22. 8. 83
.. 1357 C a/ 11. 8. 83
.. 1235 C d/ 21. 7. 83
.. 1036 C a/ 11. 6. 83
G.O. B/ 1587 W a/ 9. 7. 83
.. A/ 144 W a/ 16. 1. 85
No. 1087 C a/ 23. 6. 83
.. 696 C a/ 1. 4. 85
G.O. B/ 733 W a/ 18. 3. 84.
G.O. A/ 452 W a/ 19. 2. 84.
.. 451 W a/ do
No. 117 C a/ 17. 1. 84.
G.O. A/ 3187 W a/ 12. 11. 84.
Rof 2156 W a/ 21. 8. 82
Circ. No. 42 W.
S. E. V Circle

Exr. P.W. Accts

Desp.d
1/9/85

M.
1. 9

Jd
2/9

Oyl 11618
O. 26. 8. 83 R. 31. 5. 55.
O. 15. 8. 83

Government Telegraph Dept.

P. W. D. Inct 7280

From

The Chief Superintendent
Madras Division

To

The Under Secretary
to the Govt of Madras
P. W. Department

Dated Madras 18 August 1885
Recd 19 —

No. 2021 W a/ 1st Septr/85
No. 2606

Subject

Reports Mr O'Connells
completion of his course
of instructions on Lightning
Rods testing.

PRESIDENCY PUBLIC WORKS WORKSHOPS,
Madras, 19th Augt 1885.

No. 813 W.

From

THE GENERAL SUPERINTENDENT,
PUBLIC WORKS WORKSHOPS,

To

THE Superintending Engineer
V Circle
Madras

SIR,

Enclosures. 1

With reference to your Endorsement No. 1537, of the 11th July 1885 on G. O. No. 1587 W dated 9th Idem, I have the honor to forward, copy of certificate as to my being qualified to take all the necessary tests and report on the electrical, conditions of Lightning Rods, from the Superintendent of Government Telegraphs Madras.

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

Hugh. O'Connell
Genl Suptt. P. W. Workshops

24. 8. 85

B. No 1432 W. 7-6-82.
G.O. No 2156 W. 21-8-82
" " 3187 W. 12-11-83
No 117 C. 17-1-84
G.O. No 457 W. 19-2-84
" " 452 W. 19-2-84
B. No 733 W. 18-3-84
No 696 C. 1-4-85
" 1087 C. 23-6-85
G.O. No 144 W. 16-1-85

B. No 1587 W. 9-7-85
No 1036 C. 11-6-85
" 1235 C. 21-7-85
" 1357 C. 11-8-85
G.O. No 1932 W. 22-8-85
" 2021 W. 1-9-85
Enclos: 1

No. 2320

Forwarded to the Chief Engineer P.W. Department.

(Sd.) [illegible] Lt Col. R.E.
Superintg Engr
" 5th Circle
31st Augt 1885

No 1477 C dated 8th Sept/85

Recorded with reference to G.O. No 2021 W dated 1st Septr/83

CS.
2.9.85

4.9.85

Ayl. 1579

C. 3.9.85
C. 26.8.85
C. 15.8.85

Presidency P. W. Workshops.

R.N. 2868
21-8-85

From
Mch 7650
THE GENERAL SUPERINTENDENT,
P. W. WORKSHOPS,
Madras,

To
THE Supdg Engineer
V Circle
Madras.

No. 813 W

Dated 19th
Despd. 20th August 1885.
Recd. 21/9/85

ENCLOSURES. 1

Subject.

Forwards copy of certificate granted by the Supdt of Telegraphs Madras Divn as to his being qualified in testing & reporting on electrical conditions of lightning Rods.

No 1477 C dy 8-9-85

Write as proposed

W.

Bearing in mind the objections of the Telegraph Depmt to our requisitions on them to test lightning conductors, & the consequent desirability of having as many men as possible fit to undertake the duty, I have asked Mr. DeWinton, who has been trained in the process, whether he cannot, when his own work does not press, instruct one or two of our Bangalore subordinates (Sergt. Temple say) in the work. Mr. De Winton is quite ready to do so. I presume R will have no objection, & I have no doubt Mr. Geoghegan will consent, provided it does not interfere with Mr. De W's railway duties. Col: Hunter agrees so, if you approve, I shall see to the supply of the needful instruments on my ~~way~~ return to Head Quarters. I believe two sets have come, but one is out of order.—

The only three officers instructed in the art are Mr. De Winton, Mr. O'Connell, & Mr. Subbarayachariar, and it behoves us to take advantage of their services as far as possible, to extend a knowledge ~~in the~~ of the subject in the Department. As I said above, Mr. DeWinton himself will gladly help, & thinks he can take up the duty in the intervals of short work. Would you kindly obtain R's consent to the arrangement.—

I propose also to get Col: Prendergast to put Mr. Milne through the course under Mr. O'Connell at Madras.

CS.
22-8-85

No. E.

Government of Madras.

PUBLIC WORKS DEPARTMENT.

Ootacamund, 188

OFFICE NOTE.

From

To R.

Please read accompanying note by D.W. and let me know whether you see any objection to some of the P.W. subordinates at Bangalore being instructed by Mr. de Winton in the testing of lightning conductors.

This duty, as you are probably aware, has been transferred under orders from India to this Dept., — and Mr. de Winton, while in charge of the P.W. Workshops, went through a course of instruction from the Tel: Dept., with the intention that he should afterwards instruct & train as many officers & subordinates in the P.W. Dept. as possible.

[illegible]
24.8.85

Government Telegraph Department

Certified that Mr. O'Connell, Temporary Executive Engineer, D.P.W., has been under a course of instructions in testing Lightning conductors and Earths at the Madras office, and that he is qualified to take all the necessary Tests and report on the electrical conditions of Lightning rods.

Madras
14th August 1885 }

Signed/ E. Dowson
Offg Superintendent
Madras office

/ True Copy /

Hugh. O'Connell
Genl Superintendent
P.W. Workshops 20 - 8 - 85

Vide G.O. No. 2021W
1-9-85

PUBLIC WORKS SECRETARIAT,
RAILWAY BRANCH.

OFFICE NOTE.

Station Engr. date 24 1885.

From R

To C.

I have no objection whatever personally. I feel sure Geoffrey will have time, but I think he should be addressed officially before any action is taken; I will do so, with your permission, before recording my assent to the proposal.

24. 8. 5

to R,
Please do so. & ask him to wire reply.

24. 8. 85

P. W. Deptt. Ry. Branch

No 572 (E) d/ 24-8-85.

To

The Engineer in Chief
Madras State Ry Sys.
Bangalore

Sir

I am directed to ask whether you can conveniently allow Mr DeWinton, at present attached to your staff, to undertake, during any spare time that he may have, the instruction of subordinates of the Public Works Departmt at Bangalore in testing of lightning conductors.

2. Mr DeWinton went through a course of instruction from the Telegraph Department with the intention that he should afterwards instruct and train as many officers and

D.
con
qu
sle

and subordinates in the Public Works Department as possible, and it would be convenient if, without prejudice to his other duties, he were allowed to instruct such members of the Department as may present themselves at Bangalore for the purpose.-

3. I am to ask that you will favor the Government with a reply by telegram.-

C.L.S.
24.8.85
R

Despd
24/8/85

No 512 Ed/Augt 24-1885

No 1496 Ed/11th September/85

Memo: to the E. in Chf.

M. S. Ry. Surveys. No 512. E. d 24.8.85.
Telegram from — do — dated d 7.9.85.

The Supg Engr. S. C. will be requested to have the necessary arrangements made by the Executive Engineer, Presidency Divn in communication with Mr de Winton for two selected subordinates stationed at Bangalore being put by the latter officer through a course of instruction in the art of testing

lightning Conductors. ~~by the latter~~
~~office~~ ~~when words and letter~~
~~come after "put".~~

CW.
9.9.85

Class. XS   INDIAN TELEGRAPH.   Local No. 253

To (Station) Ootacamund   From (Station) Bangalore

Words. 23/5   Day. 7   Hour. 12   Minute. 25   Official Instructions. Urgent

To (Person) Works Railway   From (Person) Engr. In Chf Madras State Ry Surveys

Your Number
512 E of 24
August I have
no objection ×

prefer. CS.

H. B. Knox

Recd. from   L. N.   At   Hs.   Mts., By
Sent to   L. N.   At   Hs.   Mts., By

Date 7/9/85

Telegraph Master.

S. P. No.

Supg Engr. V. Circle
C. E. for Rys.
W. B. de Winton Esq.

D 12/9/85
Ims in full

No. 512 Eay 24-8-85

1

No. 1496 Cap -9-85

Issue

Rg. 15/9 Dd 15/9

DW

SUPERINTENDING ENGINEER'S OFFICE,

No. 1369

3rd CIRCLE

Bellary 30th Sept. 1885.

From

Lt Col. H. M. Vibart R.E.
SUPERINTENDING ENGINEER,
IIIRD CIRCLE,

To,

THE Chief Engineer
PWD

SIR,

Enclosures,

I have the honor to report that 4 Sets of Apparatus and stores for Testing Lightning Conductors have been supplied to this Office on Indent submitted agreeably to your Memorandum No. 117 C dated 17th January 1884, but owing to the amalgamation of the Kurnool Division, only 3 sets are now required in this Circle.

2. I therefore solicit instructions whether the extra set can be returned to the Telegraph Store keeper at Madras, or whether it is to be retained here to meet any future requirements.

I have the honor to be
Sir
Your most obdt. servant.
H M Vibart Lt Col R.E.
Superintending Engineer
III Circle

B. No 1432 W. 7. 6. 82.
G. O. No 2156 W. 21. 8. 82.
" " 3187 W. 12–11. 83.
No 117 C. 17. 1. 84.
G. O. No 451 W. 19. 2. 84.
" " 452 W 19. 2. 84
B. No 733 W. 18. 3. 84
No 696 C. 1. 4. 85.
" 1087 C. 23. 6. 85.
G. O. No 144 W. 16. 1. 85
B. No 1589 W. 9. 7. 85.
No 1036 C. 11. 6. 85

No 1235 C. 21. 7. 85
" 1357 C. 11. 8. 85
B. No 1952 W 22. 8. 85
" 2028 W. 1. 9. 85
No 1477 C. 8. 9. 85

~~No 1602 bdf 8-10-85~~

The extra set of apparatus and stores should be forwarded to the Genl Supt P.W. Stores for custody until required for use.

Off
Oct. 1. 85

4. 10. 85

S. E. III Circle
S. E. V Circle

Demi
9/10/85

O. W. 11/10.

(2) Rec No 1542

From
The Supg Engineer
III Circle

To
The Chief Engineer
P.W.D.

Dated 30th September 1885.

Recd. 1/10/85

No 1369

No 1652 bdf 8-10-85

Apparatus & Stores for Testing Lightning Conductors.

Requesting to be informed whether the extra set of — recd from the Supdt of Govt Telegraph Stores Calcutta — can be returned to Madras.

1477 C
5. 9. 85

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,

No. 3001

Bangalore ~~Chepauk~~, 13 October 1885.

From
THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To
THE Chief Engineer
P.W. Department

Enclosures.

SIR,

With reference to your Memorandum No 1440 C dated 1st September 1885 I have the honor to report that Sub Engineer Conductor Lennon has gone through a Course of instruction in testing Lightning Conductors under Executive Engineer Mr O'Connell — Mr O'Connell certifies that he is capable of undertaking the testing himself.

I have the honor to be
Sir
Your most Obdt Servt

Coll R.E.

Offg Superintending Engineer
5 Circle

From (13) [illegible] 9039

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer,
P. W. D.

No. 1671 C a/p 21st October 85

Recorded

[illegible]

19.10.85

21.10

Dated 13th } October 1885.
Recd. 16 }

ENCLOSURES.

No. 1671 C a/p 21-10-85

B. No 1432 W. 7.6.82
G. O. No 2156 W. 21.8.82
" " 3187 W. 12.11.83
No 117 C. 17.1.84
G. O. No 457 W. 19.2.84
" " 452 W. 19.2.84
B. No 733 W. 18.3.84
No 696 C. 1.4.85
" 1087 C. 23.6.85
G. O. No 144 W. 16.1.85
B. No 1587 W. 9.7.85
No 1036 C. 11.6.85
" 1235 C. 21.7.85
" 1357 C. 11.8.85
B. No 1952 W. 22.8.85
" 2021 W. 1.9.85
No 1477 C. 8.9.85
" 1602 C. 8.10.85
" 1440 C. 1.9.85
25/10
Mysore 16.10.85

No. 3001

Conductor R. P. Lennon
Sub Engineer — Reports
that — has gone through a
course of instruction in testing
Lightning conductors.

With disposal

No. 3638

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,
Bangalore ~~Chepauk~~ 24th November 1885.

From

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer
P. W. Department.

SIR,

Enclosures.

I have the honor to request that sanction may be given, under Code para 556, to the Presidency Allowance being drawn by Conductor R. P. Lennon Sub Engineer 1st Grade, posted to the 5th Circle to receive instructions for testing Lightning Conductors, in your Memorandum No. 1440.C. dated 1st September 1885.

I have the honor to be
Sir
Your most obedient Servant

W S Hutton Coll R.E.
Offg. Superintending Engineer
5th Circle

Sanctioned

26/11/85

26·11·85

30.11

From

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer,
P.W.D.

25 N

Dated 24 } November 1885.
Recd. 25 }

ENCLOSURES.

No. 3638

Presidency Allowance—

Requests sanction may be given to the—being drawn by Conductor R. P. Lennon, Sub. Engineer, 1st Grade.

S.E. V Circle
Exr P.W. Accts
27/11/85
9/12

With disposal

31ST MARCH 1886, No. 874 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From P. V. LUKE, Esq., Chief Superintendent, Government Telegraphs, Madras division, to the Secretary to Government, Public Works Department, dated Madras, 10th March 1886, No. 6134 :—

In continuation of my letter, No. 2406, dated 10th August last, on the subject of testing lightning rods, I have the honor to state that another application has just been received from the Executive Engineer, Trichinopoly division, for the Telegraph Department to test a lightning rod at Trichinopoly, and to ask whether arrangements have yet been made for such tests to be carried out by the Public Works Department, as ordered by the Government of India in Public Works Department No. 410 M.,* dated Simla, 23rd October 1884.

* G.O., No. 144 W., dated 16th Jan. 1885.

From Colonel J. SHAW-STEWART, R.E., Secretary to Government, Public Works Department, to the Chief Superintendent, Government Telegraphs, Madras division, dated 23rd March 1886, No. 1188 C.

In reply to your letter, No. 6134, dated 10th March 1886, I have the honor to state that copies of the code of instructions and apparata for testing lightning conductors have been procured and distributed to the various Public Works Circles in the presidency, but it has not yet been found practicable to depute a sufficient number of officers to be instructed in the use of the instruments. Up to date only three officers and one subordinate have been instructed by the Telegraph Department, and one of these is now employed outside the regular Public Works Department. At present there is no officer in the VI Circle who has been instructed and who can carry out the test required at Trichinopoly. If, however, that test has not already been made by the Telegraph Department, an instructed officer from the IV Circle will be deputed to proceed to Trichinopoly to carry it out.

2. In the meanwhile, I have the honor to inquire whether there are any convenient centres in the various Public Works Circles of the presidency where instruction in testing lightning conductors can be imparted to selected officers of the Public Works Department by the Telegraph Department. Officers so instructed would be in a position to instruct others, and the knowledge could gradually be made general in the Public Works Department.

Memorandum to Suptg. Engineer, IV Circle, dated 23rd March 1886, No. 1189 C.

From P. V. LUKE, Esq., Chief Superintendent, Government Telegraphs, Madras division, to the Secretary to Government, Public Works Department, dated Madras, 26th March 1886, No. 6525.

In reply to your No. 1188 C., of 22nd instant, I have the honor to state, with reference to paragraph 1, that the test has not yet been made by the Telegraph Department.

2. As regards paragraph 2, in my division, Public Works officers can be trained at the Central telegraph office, Madras, at Bangalore, and Trichinopoly; and I have no doubt that, on application, arrangements can be made by the Chief Superintendents of Telegraphs of the Bellary, Ganjam and Malabar divisions to have officers taught at Bellary, Cocanada and Calicut.

Order—dated 31st March 1886, No. 874 W., Public Works.

The Superintending Engineer, IV Circle, has already been requested to depute Mr. S. Subharachariyar to test the lightning rod requiring examination at Trichinopoly.

2. This correspondence will be communicated to all Superintending Engineers, in continuation of G.O., No. 144 W., dated 16th January 1885. Arrangements should be made, in communication with the Chief Superintendent of the Telegraph division, whenever it is convenient, to have selected officers of the Public Works Circle trained in the use of the instruments for testing lightning conductors. Such officers should then be directed, as opportunities offer, to impart instruction to other officers and subordinates of the Public Works Department.

(True Extract.)

~~[illegible]~~ Major, R.E.,
Under Secy. to Govt., P.W.D.

To Superintending Engineers.
To the Examiner, Public Works Accounts.
,, Chief Superintendent of Telegraphs, Madras Division.
,, ,, ,, Bellary ,,
,, ,, ,, Ganjam ,,
,, ,, ,, Malabar ,,

Exd. E. Fernandez.
Spare Copies

RATES OF CHARGE FOR INLAND TELEGRAMS.

Recd. 7/9/2

The address (including name of Sender, and name and residence of Addressee,) is transmitted free.

512 Ed/ 24-8-85

	First 8 words	Each additional word.
Deferred Message	... 8 Annas	... 1 Anna
Ordinary ,,	... 1 Rupee	... 2 Annas
Urgent ,,	... 2 Rupees	... 4 Annas

A group of 3, or less figures, is reckoned as one word.

No charge for delivery within a distance of 3 miles.

Dw 9/9/85.

No. 1496 Cal/11-9-85

Dw

Please take necessary action with reference to your note of 22.8.85

7.9.85
W

Ord. 30/9.

1496 c

D.W.

With refce to the accompanying telegram which is sent to you for necessary action by W. one set of testing apparatus is with Mr. O'Connell at the P.W. Stores and a note was sent yesterday Enquiring about the other set, regarding which we have no information.

FB

S. E. T. to be requested to have the necessary arrangements made by Col. Hunter in communication with Mr. De Winton for two selected subordinates at Bangalore being put through a course of instruction by the latter officer.

C.A.

9.9.85

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated March, 31st.

Recd. Encl.

G.O., 31st Mar. 1886, No. 874 W.

MARCH.

Lightning Conductors

Training of selected officers of the Public Works Department in the use of the instruments for testing —.

No. 6134.

k1

From,
The Chief Superintendent,
Government Telegraphs,
Madras Division.

To.
The Secretary to the,
Government of Madras,
Public Works Department.

Dated Madras 10th March 1886.

Sir,

7090

In continuation of my letter No. 2406 dated 10th August last on the subject of testing Lightning Rods, I have the honor to state that another application has just been received from the Executive Engineer Trichinopoly Division for the Telegraph Department to test a Lightning Rod at Trichinopoly, and to ask whether arrangements have yet been made for such tests to be carried out by the Public Works Department as ordered by the Government of India in Public Works Department No. +410 dated Simla 23rd October 1884.

+ G.O. No. 144 W dated 16.1.85.

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

P.V. Luke

Chief Superintendent.

Government Telegraph Department

Arch 1870

P. W. D.

From

The Chief Superintendent

Madras Division

11 MAR 86

To

The Secretary to the

Government of Madras

Public Works Dept.

Dated Madras 10 March 1886

Received. 11

No. 6134.

No. $\frac{1188}{1189}$ Cay 23-3-86

Subject

Lightning Conductors Testing

Continuing No. 2406 of 10th August 85 asks whether arrangements have yet been made for — by the P. W. D.

---

p 3

No. 1188 Cay 23rd March 86 PWD

To

The Chief Supt of Telegraphs

Madras Divn

Sir,

In reply to your letter No 6134 dated 10th March 1886, I have the honor to state that copies of the Code of instructions & apparatus for testing lightning conductors have been procured & distributed to the various P. W. Circles in the Presidency, but it has not yet been found practicable to depute a sufficient number of officers to be instructed in the use of the instruments. Up to date only three officers & one subordinate have been instructed by the Telegraph Dept. & one of these is now employed outside the regular P.W. Dept. At present there is no officer in the VI Circle who has been instructed & who can carry out the test required at Trichinopoly — If however that test has not already been made by the Telegraph dept. an instructed officer from the IV Circle will be

3½

deputed to proceed to Trichinopoly to carry it out.

2. In the meanwhile I have the honor to inquire whether there are any convenient centers in the various P.W. Circles of the Presidency where instruction in testing lightning conductors can be imparted to selected officers of the P.W. Dept by the Telegraph Dept. Officers so instructed would be in a position to instruct others, & the knowledge could gradually be made general in the PW Dept.

20/3/86

WS

20.3

1

No. 1188/1189 Cap 23-3-86

Dw/W

PWD

No. 1189 Cap 23rd March 86

Memo.

Letter from the Ch. Supt. of Tels. M. Divn. No. 6134 dy. 10-3-86.

Copy of the above forwarded to the S.E. IV Circle, with request that Mr. S. Subbarachariar may be directed to proceed to Trichinopoly to test the lighting rod in question, if it has not already been tested by the Telegraph Dept. On this point the S.E. VI Circle should be consulted.

20/3/86

S.E. IV Circle

Copy to the S.E. VI Circle

20-3-86

G.O. A 324 W d/ 6-2-86
" B 2848 W d/ 30-11-85
" B 2841 W d/ 27-11-85
No. 1671 C d/ 21-10-85
" 1602 C d/ 8-10-85
" 1477 C d/ 8-9-85
G.O. B 2066 W d/ 5-9-85
G.O. 2021 W d/ 1-9-85
No. 1941 D d/ 27-8-85
G.O. B 1952 W d/ 22-8-85
No. 1357 C d/ 11-8-85
" 1235 C d/ 21-7-85
" 1595 D d/ 14-7-85
" 1171 C d/ 9-7-85
G.O. B 1587 W d/ 9-7-85
Nos. 1035 C 1036 C d/ 11-6-85
" A 1087 C d/ 23-6-85
G.O. A 144 W d/ 16-1-85
1433 W
No. 696 C d/ 1-4-85
G.O. A B 1441 W d/ 9-6-84
G.O. B 733 W d/ 18-3-84
" A 452 W d/ 19-2-84
" 451 W d/ do
No. 117 C d/ 17-1-84
G.O. A 3187 W d/ 12-11-83
" 2156 W d/ 21-8-82
" A 1432 W d/ 7-6-82
No. 1800 C d/ 6-11-84
G.O. A 3187 W d/ 12-11-83
" 2156 W d/ 21-8-82
" 1432 W d/ 7-6-82
No. 481 C d/ 26-2-83
" 977 C d/ 29-5-85

Nos. 1188/1189 C d/ 23-3-86

23.3

874 W

No. 6525.

From

The Chief Superintendent
Government Telegraphs
Madras Division.

To

The Secretary to the
Government of Madras
Public Works Department

Dated Madras 26th March 1886

Sir,

In reply to your No. 1188 C of 22nd instant, I have the honor to state with reference to para 1 that the test has not yet been made by the Telegraph Department.

2. As regards para 2, in my division Public Works officers can be trained at the Central Telegraph Office Madras, at Bangalore, and Trichinopoly, and I have no doubt that, on application, arrangements can be made by the Chief Superintendents of Telegraphs, of the Bellary, Ganjam and Malabar Divisions to have officers taught

at

at Bellary, Cocanada and Calicut

I have the honor to be,

Sir,

Your most obedient Servant.

R. P. Luke

Chief Superintendent.

Prel: 2400

Government Telegraph Department

P. W. D.

From.

The Chief Superintendent

Madras Division

Government Telegraphs.

28 MAR 86

To

The Secretary to the

Government of Madras

Public Works Dept.

Dated the 26 March 1886.

No 6525.

Recd 29/3/86

Abstract

Precis.

His No 1188C of 22nd inst. states that the test has not yet been made by Tele Dept and adds the officers can be trained in, herein noted places.

Nos 1188-9C. 23.3.86.
1174C. 9.7.85.
1848W. 30-11. "
2066W. 5.9.85.
324W, 6.2.86.
1035C. 11.6.85.

~~Genl Establt~~
B & R works

No 874 W. PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 31st March/86

READ the following

Letter from the Chief Supt: of Telghs, Madras Dn	No 6134 d/ 10th March/86
Letter to — Do —	" " 1188C d/ 23rd March/86
Memo: to S. E. IV circle	" " 1189C d/ 23rd — Do —
Letter from the Chief Supt: of Telghs, Madras Dn	" " 6525 d/ 26th March/86.

The Suptg: Engineer IV circle has already been requested to depute Mr S. Subbharachariyar to test the lightning rod requiring examination at Trichinopoly.

2. This correspondence will be communicated to all Suptg: Engineers, in continuation of G.O. No 144 W d/ 16th January 1885. Arrangements should be

Gov

Fr

To

D

made, in communication with the Chief Supt: of the Telegraph division, whenever it is convenient, to have selected officers of the P.W. Circle trained in the use of the instruments for testing lightning conductors. Such officers should then ~~seek~~ be directed, as opportunities offer, to impart instruction to other officers and Subordinates of the P.W. Department.

30/3/1886

31-3-86

M.
31.3

Despd

Suptg: Engrs: ✓ [illegible]/86
Exr: P.W. Accts ✓ 12/4/86
Chief Supt: of Telghs, Madras Dn
——— Do ——— Bellary Dn
——— Do ——— Ganjam Dn
——— Do ——— Malabar Dn

2841W. 27.11.85.

D.W.

In the papers recorded in G.O. No 3187 W of 12: Novr 1883, the G of I pointed out that the duty of testing lighting Conductors should be performed by officers of the P.W. Dept, & it was suggested that one officer should be instructed by the Telegraph Dept in the use of the testing instruments &c.

A Code of instructions has been issued to the Dept, & testing apparatus has been supplied to each Circle, but since the date of the orders one

—

tests by the P.W. Dept.

No officer or subordinate in the VI Circle has been instructed in the use of the instruments, & if the wishes of the Tel. Dept are to be complied with, it seems necessary that one officer in each Circle should be instructed, & that he in turn should instruct others.

It seems difficult to suggest how such an arrangement can be carried out within a reasonable time.

The Ch. Supt might perhaps be asked if

there are any convenient centers in various parts of the Presy. where the requisite instructions can be imparted to selected P.W. officers by the Tel. dept.

For orders.

Ch
19.3.86.

Yes, the Ch. Supt might be asked the above question.

In the meantime perhaps S.E. IV might be able to spare Subbarachariyar to test the rod at Trichy. It is believed that this officer is at Erode & the journey will be a short one.

20/3/86

---

four officers have been instructed by the Telegraph Dept, viz:

Mr W. B. de Winton
Mr H. O'Connell
Mr S. Subbarayachariyar
Mr R. P. Lemon.

The idea was that certain of our officers & subordinates should be instructed, & they in their turn should instruct others.

The Supt of Telegraphs now brings to notice that the Ex. Engr Trichinopoly division has applied to the Telegraph dept to test a lightning conductor at Trichinopoly, & he inquires whether arrangements have been made to carry out such

2841W. 27.11.85.

1870

Govt. of (1886) Madras.

PUBLIC WORKS.

Dated 21/4/86

Recd: Encl.

G.O., 31st March 1886, No. 874 W.

Lightning Conductors

Training of selected Officers of the P.W.D. in the use of the instruments for testing —

170/12

21st April 1886, No. 1031 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following letter from P. V. LUKE, Esq., Chief Superintendent, Government Telegraphs, Madras Division, to the Secretary to Government, Public Works Department, dated Madras, 15th April 1886, No. 311:—

Referring to G.O., dated 31st March, No. 874 W., Public Works, I have the honor to remind you that in letter from the Government of India, Public Works Department, No. 410 M., of 23rd October 1884, it was only intended that one officer of the Public Works Department in the Madras presidency should be trained, and that he should instruct others.

2. While willing, as stated in paragraph 2 of my No. 6525, of 26th March, to afford all reasonable facilities for Public Works Department officers to acquire a knowledge of testing lightning rods by attending telegraph offices, I hope that the services of the Public Works Department officers already trained will be utilised for the purpose of instruction as much as possible, and that the Telegraph Department will only be called upon when the officers already trained cannot be made available.

Order—dated 21st April 1886, No. 1031 W., Public Works.

Communicated to officers concerned, in continuation of G.O., No. 874 W., dated 31st March 1886.

2. It is, and has been, the intention of the Government that the services of officers of the Public Works Department who have been trained in the use of instruments for testing lightning conductors should be utilised so far as practicable for instructing other officers of the department. The Telegraph Department should be asked to instruct officers only when the services of a trained officer of the Public Works Department cannot be made available for the purpose.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Examiner, Public Works Accounts.
„ Chief Superintendent of Telegraphs, Madras Division.
„ Superintendent of Telegraphs, Bellary Division.
„ „ „ Ganjam „
„ „ „ Malabar „

Exd. E. Fernandez.
Spare Copies

7

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated April, 21st.

Recd. *Encl.*

G.O., 21st April 1886, No. 1031 W.

APRIL.

Lightning Conductors

Ordering that the Telegraph Department be asked to instruct Public Works officers in the use of instruments for testing — only when a trained officer of the department is not available for the purpose.

No. 2789

Superintending Engineer's Office,
V Circle, Madras,
Chepâk, 10th September 1886.

From

The SUPERINTENDING ENGINEER,
V Circle,

To

The Chief Engineer
P. W. Department.

Sir,

Enclosures.

With reference to your Memorandum No. 1496 C dated 11th September 1885, I have the honor to inform you that Sub Engineer Sergeant Temple and Supervisor Sergeant Green have passed the required training in testing lightning conductors after having been instructed by Mr. W. B. de Winton who has also given them Certificates of efficiency.

2 Whilst giving instructions to Sergts. Temple & Green, Mr de Winton purchased for reference from Messrs Higginbotham & Co a copy of "Elementary Lessons in Electricity and Magnetism by S Thompson." for Rs 3-9-0. This book has been sent by Mr de Winton to the Executive Engineer Presidency with other books instruments &c of which he had had the use lent by the Presidcy Division. As the Book will be of use to members of the Department receiving instruction in testing lightning Conductors, I request that sanction may be given to its being purchased for Rs 3-9-0.

I have the honor to be
Sir
Your Most Obedt Servt
W H Burton
Coll. R.E.
Supg Engr 3 Circle

1496 c. 11.9.85
5122. 24.8.85

B. No. 2409 W a/21st Septr/86

The purchase of the book for Rs 3-9-0- is sanctioned

2 The two upper subordinates who have been instructed by Mr De Winton should instruct other sub-ordinates in the method of testing lightning Conductors as opportunity offers

C.B.
10.9.86

20/9/86

after desp

22.9

S.E. V. C.
Exr.

21/9/86

23/9/

P.W.C. No. 7108

From

THE SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE Chief Engineer
P.W. Deptt.

Dated 10th September 1886
Recd. 13

ENCLOSURES.

B. No. 2409 W a/21-9-86.

No. 2789.

Lightning Conductors —

Informs that Sub Engr. Temple & Sergt. Green have passed the required training in testing — after having been instructed by Mr. W. B. de Winton

---

No. 6473

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Chepâk, 29th March 1887.

From Col. W. H. Burton R.E.
~~THE~~ SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE Chief Engineer
P. W. Department.

Enclosures.

SIR,

I have the honor to state that Supervisor Serjeant Green at ~~B~~ Bangalore was ordered to Madras on Special duty for testing the Lightning Conductors of the Gun Powder Factory, but he brought ~~down~~ no horse with him as allowed in G. O. No. 2984 W dated 13th November 1882. He halted 19 days at Madras from 17th November to 5th December 1886, for this Special duty & employed a Special Conveyance.

According to Travelling Allowance

Allowance Code Section 30, the halting allowance that can be passed to him is Rs 20 for 10 days & not more; whereas he has been put to more expense on account of Special Conveyance.

Had he brought down his own horse it would not have cost him so much, but would cost Government Rs 41-2-0 on account of Railway fare from Bangalore to Madras & back, plus the halting allowance of Rs 20-0-0. I therefore recommend that full halting allowance for the number of days he halted at Madras may be sanctioned under Section 30 of Travelling Allowance Code.

I have the honor to be
Sir,
Your most Obdt. Servt.

W H Hinton. Col. R.E.

Superintending Engineer

1887

P. W. DEPARTMENT.

Current No. 2570

From The Supdg. Engr. V Circle

ENCLOS.—

No. 6473
Dated 29th March 1887
Received 30th — " —

SUBJECT.

Supervisor Sergt Green — Recommends that the full halting allowances may be sanctioned for the number of days — halted at Madras on special duty.

DISPOSAL.

No. 1239 C Dated 31st March 1887

To C

For favour of remarks.

(Sd) W. L. C. W.
30.3.87
D.W.

De
31/3/87

R No 4
1-4-87

No. 1239 C of 31st March 1887.

To C

For favour of remarks.

30.3.87

D.W.

P.W.C. No ~~25~~705

No 6473

From

The Supg Engineer
5th Circle

To

The Chief Engineer
P.W. Deptt.

Dated 29th March 1887
Recd 30

Supervisor Sergt. Green -

Recommends that the full halting allowance may be sanctioned for the number of days halted at Madras on Special duty -

---

2

Keep-with Genl. No.

dated 188 .

Admitted.

* Railway fare from Bangalore to Madras, double 2nd. class and back...........	Rs. 32
Halting allowance for 10 days..............	Rs. 20
Total	Rs. 52.

Yes he does. "He has been put to more expense on acct. of special conveyance."

[C. No. 8.]

GOVT. OF MADRAS. 1887. P. W. DEPT.

EXAMINER, P. W. ACCOUNTS.

Madras, 6th April 1887.

Office Note No. 16

To

Ens: on

W.

Your O. N. No. 1239 C. dated 31st. March 1887.

Please see Civil Travelling Allowance Code Section 30 and Rule I. If Government is satisfied that Sergeant Green incurred for locomotion only greater expense than was covered by the whole allowance (Rs. 52) passed as per margin, they may exempt him from the 10 days ristriction as regards halting allowance and permit him to draw halting allowance for a further period not exceeding the total period of his halt in Madras. The Supg. Engineer does not say that Sergeant Green was put to any greater expense. He only says that he might have brought a horse, but events seem to have proved that a horse was not necessary.

5
C.

G. O. 2984 W 13-11.82
" 2471 W 23.9.82
No 1239 C. 31.3.87

~~The Secy P.W. Accts~~

B

The Govt consider that the allowances passed to Sergt Green were sufficient to cover all necessary expenses for locomotion ~~[illegible]~~ and they therefore decline to exempt him from the 10 days restriction as regards halting allowance.

McW
14.4.87

Joll
15/4/87

I think he is fairly entitled. The S.E. does say he was put to greater expense than Rs 20 on acct of special conveyance. The Rail fare is merely to cover the journey. If a man is brought down specially & detained, not by his own desire, for 19 days he ought not to be ~~treated~~ as if it were his own fault that the detention exceeded 10 days.

To
The S.E. V Circle
" Ex. P.W. Accts.

17 April

Order accordingly

Jocc
18/4/87

O.L.S. 54/IV.

Con 16-4-87 R 18-4-87

PWC No 2886

(8)

Sergt Green received at Cuddapah Rs 64. His return second class ticket from Bangalore to Madras cost him Rs 12 leaving Rs 40 for his halt expenses while in Madras. He stayed in Madras from 17th Nov to 5th Dec 1886 or 19 days but 3 days were travelling so that he had only 16 working days. Rs 40 for 16 days gives Rs 2/8 per diem for halt expenses which is higher than the [illegible] for a [illegible]

R 13.4.87

With order

No. 1107 W

B.
Remarks

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 22 April 1887

READ the following

From the S. E. V Circle No 6473 d/ 29.3.87
" " ~~Ex. P.W.A.~~ " 16 d/ 6.4.87

The Supdg Engr states that Sergt. Green was put to greater expense for locomotion than the allowance passed to him on the occasion in question, & the Govt. are therefore pleased to exempt the Serjeant from the operation of Sec 30, C. T. A. Code, and to

permit him to draw
halting allowance
for the full period
of his halt at Madras.

JGS
19/4/87

WCR
21.4.87

B. No 1107 Wd/ 22 April 1887

JM
22.4

S.E.V Circle ✓ Dev 22/4

Exe Mad ✓

Cr

11 19.4.87

Cr 20/4 JG 9/5

11.4.87 Cr 16.4.87 11 18.4.87

Chief Engineer, Madras.

I have &c
(sd) A. S. Russell
Executive Engineer

No. 445

To
The Executive Engineer
Tinnevelly Division

Dated Trichinopoly 7th of June 1887.

Sir,

Referring to your No. 650 of 28th ultimo, to the address of the Telegraph Master Tuticorin, I have the honor to inform you that the lightning conductors on buildings are not now tested by the Officers of this Department.

I have &c
(sd) E. Hand
Asstt. Superintendent
Trichinopoly Sub Dn.
Govt. Telegraphs.

(True Copies)

A. S. Russell

Executive Engineer
Tinnevelly Dn.

W.
4/7

to say that the Govt consider Sergt Green recd sufficient allowances to pay all his expenses for locomotion, and they must therefore decline to sanction his ~~Sup~~ exemption from the 10 days halting rule.

A horse does not seem to have been necessary, and his not having brought one (probably he has not one) does not affect the facts of the case.

FB
14/4/7

Reg. No. 1/379 [illegible]/87

D. P. W.

From A. S. Russell Esqr.
Executive Engineer
Tinnevelly Division.

To The Telegraph Master
Tuticorin

SUPERINTENDING ENGINEER
7 JUL 87

Station

No. 650

Dated 28 } May 1887
Despatched 30 }
Received

ENCLOSURES

Reference.

Sir, I have the honor to request you will be good enough to arrange for testing the Lightning conductor attached to the Tuticorin Light House on Hare Island, and to report to me the result for communication to the

---

No. 232 T.W.

Palamcottah
11th July/87

D/13:

Letter from A. S. Russell Esqr. Executive Engineer Tinnevelly Dn. to the Superintending Engineer, Circle, dated Palamcottah 4th July 1887. No. 1068.

With reference to para 2 of your Endorsement No 361 T.J. dated 21st May 1887, on G.O. No 1301 W dated 12th May 1887, and in confirmation of this office No 777 dated 8th ultimo, I have the honor to report that I am not able to arrange for the testing of the lightning Conductor at the Tuticorin Light House; Mr Baker, the Sub-Dn. officer, reports that he is not acquainted with the method of testing lightning Conductors, while, from the copy of the correspondence enclosed, it would appear that the Telegraph Master at Tuticorin cannot be spared for the purpose —

Letter No. 650/28-5-87 to Telegraph Master, Tuticorin.
Do. 445/7-6-87 from Asstt. Supdt. Telegraphs, Trichinopoly [illegible] Dn. —

Forwarded

Forwarded to the Chief Engineer for Irrigation, with a request that, if possible, Rai Bahadur S. Subbaraya Chariar B.C.E, Executive Engineer may be instructed to test the lightning conductor attached to the Tuticorin Light House on Hare Island, and to communicate the result to the undersigned—

Enclos 1.

John Carey

4.10.87

Supᵈᵗ Engineer, Southⁿ.

1107W

In Cir. 16/4/87

2886

D.W.

Sergeant Green received altogether Rs: 62. His return second class ticket from Bangalore to Madras cost him Rs: 12 - leaving Rs: 40 for his hack expenses while in Madras. He was in Madras from 17th Nov: to 5th Dec: 1886 or 19 days. but 3 days were Sundays so that he had only 16 working days. Rs: 40 for 16 days gives Rs: 2/8 per day for hack expenses which should be ample for a Supervisor.

Proposed

Enclos

No. 39. E. W.

Forwarded to the Chief Engineer, P. W. D with the request that some one in the Presidency division who is acquainted with the method of testing lightning conductors may be deputed to test the lightning conductor of the Tuticorin light house as the services of — Executive Engr. Rai Bahadur S. Subbaraya Chariar, B. C. E. cannot be spared from the Tank restoration Survey party at Kurnool

R Davidson

for Chief Engineer for Irr.

Chepak
15th July 87

BR. 15-7-87

PWC No. 5462
R 36 I.N

From,

The Supg. Engineer
6 Circle.

To,

The Chief Engineer
for Irrigation

No. 232 I.N

Dated 11. July 1887
R 16-7-87

enclos 1

Light House on Hare Island at Tuticorin.

Requests for reasons given that Rai Bahadur S. Subbaraya Chariar B.C.E., Exec. Engineer, may be instructed to test the lightning conductor of the —

P.T.O

2420C

Note.

All the Military Upper Subordinates in the Presidency Division have been taught to test Lightning Conductors -

E.M.
19.7

B. No. 1301W - 12-5-87
G.O. 2868W - 2-11-86
B - 2349W - 16-9-86
No. 2920C - 26-8-86
" 2776C - 13-8-86
G.O. 1031W - 21-4-86
" 874W - 31-3-86
B - 2841W - 27-11-85
No. 1671C - 21-10-85
B. - 2021W - 1-9-85
" - 1952W - 22-8-85
No. 1357C - 11-8-85
" 1235C - 21-7-85
B - 1587W - 9-7-85
" 1087C - 23-6-85
" 1036C - 11-6-85
" 1035C - 11-6-85
" 977C - 29-5-85
" 696C - 1-4-85
G.O. - 144W - 16-1-85

No. 2420 C.

Government of Madras.

PUBLIC WORKS DEPARTMENT,

Chepâk, 20" July 1887.

OFFICE NOTE.

From

W

To

S. E. V circle

Can you spare the services of a qualified upper Subordinate for deputation to Tuticorin to test the Lightning Conductor of the Lighthouse there.

(Sd) W. L. C. B.
19-7-87
D.W.

20/7

20.7

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, ~~MADRAS~~,
No. 1980. Bangalore ~~Chepâk~~, 8th August 1887.

From Colonel H. M. Vibart R.E.
~~The~~ SUPERINTENDING ENGINEER,
V CIRCLE,

To
THE Chief Engineer,
P. W. Department.

Enclosures.

SIR,

With reference to your Office Note No. 2420C dated 20th July 1887, I have the honor to inform you that Serjeant Green, Supervisor in the Presidency Division has been ordered to proceed to Tuticorin for the purpose of testing Lightning Conductor at that place.

I have the honor to be
Sir,
Your most Obedient Servant
H. M. Vibart Col. R.E.
Supt: Engineer, V Circle.

C/ No. 2679 C of 11-8-87

Communicated

to the Supg: Engineer
VI Circle with
reference to his
endorsement No 232 T.N
of 11th July 1887.

MCB
10.8.87

P.W.C. No 6226 R

From

THE SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE Chief Engineer
P. W. Department

No 2420 C of 20-7-87 & this file

Dated 8th
Recd. 10th } August 1887.

ENCLOSURES.

No 2679 C of 11-8-87

M.

13/8/87

No. 1980

E M
11.8

Testing Lightning
Conductor at Tuticorin

Informing that
Serjeant Green has been
Ordered to proceed
for the purpose of —

w. after spec—

To S.E. VI C
S.S. VI C.
Exr. Pb. Accts

11/8

11/8
17/8

with dis posal

Inspection and Tests of Lightning Rods made by Supervisor T. Green Serjt: R.E, 16th to 18th August 1887

No. of Items	Locality and Name of Building	When last tested	Description of Conductor, material, length, shape, sectional area, nature and number of upper terminals, number & kind of joints, soldered or not. How attached to Building, nature of earth connections.	Electrical Resistance		Remarks including suggestions for improvements if necessary.
				From Summit to Ground line	Of the Earth connection	
1.	Tuticorin Light House	Not known	Copper wire rope to base of Light-House (Sectional area ·4417"), from base of Light-House to earth connection 1½" copper band (Sectional area ·1875") attached to a copper earth plate, one upper terminal, a brass tube, the point covered with copper 92 ft. high, with 3 soldered points attached to Light-House with copper staples.	B. A. U. From top of Dome to ground line 1 From terminal to ground line no connection	B. A. U. 1	Earth connection very good. Conductivity from top of Dome to base very good. The vane on Light House which forms the upper terminal is in no way connected with the conductor I would recommend that the present centre tube of vane which is a brass tube tipped with copper, be removed, and replaced by a copper rod (1" Dr) with a copper band running from wire at foot of turret over dome (outside) and well jointed to the proposed new copper rod. Nothing could be run up alongside of present tube as it would prevent the vane turning. It would then be a thorough good Conductor.

(Sigd) Ross Thompson. Col. R.E.
Ex: Engr: Presy: Dn:

No 3244 C d/ 24-9-87

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Bangalore ~~Chepauk~~, 10th September 1887.

No. 2414.

From
Coll. H. M. Vibart. R.E.
~~THE~~ SUPERINTENDING ENGINEER,
V CIRCLE,

To
THE Chief Engineer
P. W. Department.

SIR,

Enclosures.

~~Report for copy: 7090 dated 11/9~~
No 2679 C of 11/8/87

With reference to my letter No 1980 dated 7th August 1887, I have the honor to forward copy of the Report on the testing by Sergeant Green, of the Lightning Conductor attached to the Light House at Tuticorin.

I have the honor to be
Sir
Your Most Obedient Servt
H. M. Vibart Coll. R.E.
Superintending Engineer
5th Circle

No 3123C. 16. 9. 87
" 2679C. 11. 8. 87
" 2420C. 20. 7. 87
B. No 1301W. 12. 5. 87

No C 3244 Cd/24th Sept 1887

Communicated
to the S. E. VI Circle
in continuation of
No 2679C, dated
11th August 1887.

2. The suggestion made
in the report should receive
attention.

21/9/87.

D
24/9

S. E. VI Circle

(Statement [illegible] S. E. VI

R. 23. 9. 87

P.W.C. No 7188

From

THE SUPERINTENDING ENGINEER,
V CIRCLE,

(6)

To

THE Chief Engineer
P. W. Department

Dated } September 1887.
Recd. 13

ENCLOSURES.

No 3244 Cd/

No. 2414.

Light House at
Tuticorin.

—

Forwards copy
of the report on the
testing of the Lightning
Conductor attached
to the ——

No. 3035

SUPERINTENDING ENGINEER'S OFFICE,
V Circle, Madras,
Camp Ossettat ~~Bangalore~~
~~Chepauk~~, 26th October 1887.

From

Colonel H. M. Vibart R.E.,
SUPERINTENDING ENGINEER, V CIRCLE,

To

THE Chief Engineer P. W. Deptt
Thro' The Examiner of P. W. Acts.

Enclosures.

SIR,

I have the honor to state that Supervisor Sergeant Green brings to notice that on the two occasions that he was deputed for the duty of testing Lightning Conductor on the first occasion, the Lightning Conductors at the Gun Powder Factory at Madras, under the Superintending Engineer's Orders, in December 1886 and on the second occasion, the Lightning Conductor at Tuticorin, under your Memo No. 2420C dated 20th July 1887 he became liable to the loss of Rupees 20 on the first and of Rs 7 on the second occasion.

Sergeant Green draws double

hou

horse allowance Rs 30= and when ordered on Special duty out of his Head Quarters drew the Daily allowance of Rs 2, instead – When ordered on duty to Madras from Bangalore in December 1886 he was allowed under G.O. No 1107 dated 22nd April 1887, daily allowance for the whole period of his stay in Madras – the restriction to ten days being relaxed in his case. He then drew only one Rupee a day extra – while he had to keep himself in Madras, maintain his horse in Bangalore and pay Rupees 2–8–0 per day for Carriage hire to go to his work in Madras. I recommend that in these [illegible] and similar cases daily allowance be given to Sergeant Green while absent on Special duty from his Head Quarters in addition to his fixed Horse allowance of Rupees 30 a month as I consider the allowance he was granted insufficient to meet his actual expenses.

I have the honor to be
Sir
Your Most Obedient Servt

Col. R.E.
Superintending Engineer
5th Circle.

No 3244C 424-9-87 No 1357C " 11-8-85
" 2679C " 11-8-87 " 1235C " 21-7-85
" 2420C " 20-7-87 " 1587W " 9-7-85
B " 1107W " 22-4-87 " 1087C " 23-6-85
" 2409W " 21-9-86 " 1036C " 11-6-85
G.O. 1031W " 21-4-86 " 1035C " 11-6-85
" 874W " 31-3-86 " 977C " 29-5-85
B. No 2841W " 27-11-85 " 696C " 1-4-85
No 1671C " 21-10-85
" 1602C " 8-10-85
" 1496C " 11-9-85
" 512E " 24-8-85
" 1477C " 8-9-85
" 2021W " 1-9-85

G: 13.9.87 B.

No. 3816 ca/ 2 November 1887.

To C/

For remarks.

1.11.87

D.W.

28 NOV 87

805
28.11.87.

To W.

Sergeant Green cannot get conveyance or horse allowance in addition to daily allowance or mileage, vide Section 29 Rule 6 of Civil Travelling Allowance Code, last clause.

2. The case may I think be dealt with under Section 57(1) of the Pay and Acting Allowance Code, if Government is disposed to grant a deputation allowance when the subordinate in question is deputed to test lightning conductors at a distant station.

C.

21/11

25/11

9658

P. W. C. No ~~8625~~

EXAMINER
544

From,

The Superintending Engr.
5th Circle

To,

The Chief Engineer
P. W. Department

No. 3308 W d/ 3rd Decr/87

Dated. 26 October 1887

Received ~~31-10-87~~
28-11-87

No. 3035.

Supervisor Serjeant Green.

Requesting sanction to daily allowance in addition to the fixed Horse allowance, when absent from Head Quarters on special duty.

No. 3308 W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 3rd Decr/87

READ the following

From the Supdg Engineer V Circle	H. E. No. 3035 d/26th Oct 1887
Endorsement by the Examiner P.W. Accounts	H. E. No. 805 d/28th Nov/87

The proposal of the Superintending Engineer to grant Sergt. Green, for the periods in question, daily allowance in addition to horse allowance is inadmissible under Section 29 Rule 6 of the Travelling Allowance Code. He will, however, be permitted to draw deputation allowance at the rate of one-fifth of salary under Section 57 ~~(1)~~ V. of the Pay and Acting Allowance Code; such allowance to be in addition to his fixed horse allowance.

29.11.87

P.T.H.
1 Dec

1/5 of Rs 150 = Rs 30.

D
3/12

Supdg Engr V Circle
Exr P.W. Accts

C.S.

29/11/87.

B No 3308 W d/ 3rd Decr/87

25/11

absent from Head Quarters
on special duty. J

9658

1887.

P. W. DEPARTMENT.

Current No. 8695

From The Supdg: Engr: V Circle

ENCLOS.—

No. 3035
Dated 26th October 1887
Received 31st — " —

SUBJECT.

Supervisor Serjeant Green — Requesting sanction to daily allowance in addition to the fixed Horse allowance, when absent from Head Quarters on special duty —

DISPOSAL.

No. 3816 Dated 2nd November 1887

To C

For remarks

(Sd) W. L. C. B.
1. 11. 87
A W

Despd 2-11-87

3/11.

No. 1107 Wa/ 22-4-87

- 3244c - 24-9-87

- 2679c - 11-8-87

- 2420c - 20-7-87

- 1301 & - 12-5-87

& Quarter

To W.

With reference to your order that we should indent for two sets of Messrs Siemens' apparatus for testing lightning conductors, please read the accompanying correspondence —

You will observe that we have already indented for instruments & stores for this purpose, under instructions from the Govt of India. It is a question whether we should now apply for additional & different apparatus from a private firm. Not, I should say, until the apparatus the Telegraph Depmt will supply us with have been tested & found wanting. —

Cls.

30 · 3 · 85

I had lost sight of the fact that application had been made to India for sets of testing apparatus.

Reply should be awaited before taking further action

Possibly the instruments supplied may be those to which Messrs Siemens Bros. & Co. refer.

W.S.

30 · 3 · 85

2871

Dw.

Sieman Bros & Co's lightning rod testing apparatus.

Draft order submitted in accordance with W's instructions.

Under rule, the apparatus must be obtained through the India Office.

At the same time, please see the papers put up, from which it will be observed that the Govt of India have already circulated a code of instructions for the testing of lighting conductors, & that indents from all Circles in this Presy. for testing apparatus, have been sent on to the Govt of India — It is doubtful whether the G. of I. would approve our obtaining additional & different apparatus from a private firm.

30/3/85

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers:—

From R. B. BUCKLEY, Esq., Officiating 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 October 1884, No. 410 M.

The Director-General of Telegraphs has brought to the notice of the Government of India, with reference to the order in paragraph 1 of Public Works Department Resolution, No. 427 M., dated 26th October 1883, that the demands made on the Telegraph Department for assistance in the matter of testing lightning conductors are very heavy, and that this supplementary work could not be carried out without undue strain on his present establishment, which already has as much work to do as it can conveniently perform.

2. The Governor-General in Council has therefore decided to relieve the Telegraph Department of this additional duty, as His Excellency considers the work might well be performed by officers of the Public Works Department after they have received some training.

3. With this object in view, I am directed to request that an officer of the Public Works Department establishment belonging to the Madras Presidency may be selected and arrangements made with the Chief Superintendent of Telegraphs, Madras division, for his instruction in the processes of testing lightning conductors, in order that he may be competent to test those of the province, or local administration, &c., and to instruct others in the duty.

4. Should the local head of the Telegraph Department be unable to arrange for imparting such instruction, the officer selected should be deputed to Calcutta to be instructed by the Electrician of the Telegraph Department, who will be able to undertake this duty any time after the 1st January 1885.

From P. V. LUKE, Esq., Chief Superintendent, Madras Division, to the Secretary to Government, Public Works Department, dated Madras, 10th November 1884, No. 5301.

In reply to your No. 1800 C., of 6th November, I have the honor to state that I shall be glad to make arrangement for instructing an officer of the Public Works Department in testing lightning conductors.

2. The officer deputed should attend at the central telegraph office, Madras, daily at a convenient hour between 10 A.M. and 5 P.M.

ORDER—dated 16th January 1885, No. 143 W., Public Works.

The Chief Superintendent of Telegraphs, Madras division, having reported that he is prepared to afford the requisite instruction in testing lightning conductors to an officer of the Public Works Department, Mr. W. B. deWinton, General Superintendent, Public Works Workshops, will attend at the central telegraph office, Madras, at such times as may be fixed by the Chief Superintendent.

2. Mr. deWinton will, without prejudice to his other duties, go through a course of instruction sufficient to enable him to undertake the testing of lightning conductors when called on to do so, and to instruct others in that duty.

(Here enter No. 144 W., dated 16th January 1885.)

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Chief Superintendent of Telegraphs, Madras Division.
" Superintending Engineer, V Circle.
To other Superintending Engineers.
To the Consulting Architect to Government.
" Examiner, Public Works Accounts.

ENDORSEMENT—dated 16th January 1885, No. 144 W.

Copy of the above forwarded to the Government of India for information.

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

Exd. E. Fernandez.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1885) Madra

PUBLIC WORKS.

Dated January, 16th.

Recd.

G.O., 16th Jan. 1885, No. 144 W.

JANUARY.

Lightning Conductors

Forwarding copy of proceedings directin Mr. W. B. deWinton to attend at t central telegraph office, Madras, to recei instructions in testing of —.

B/8

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

READ the following

From
Messrs. Siemens Bros & Co (H.E. No.— of 2nd March /85)

Superseded

Communicated to the Supdt Engineer V Circle who will submit an indent on the Secretary of State for two sets of Siemens Brothers and Co's Lightning Rod Testing Apparatus.

2. On receipt, the apparatus will be issued for trial to the Presidency

and Consulting
Architects Divisions,
and the results
will be reported
in due course.

696 C of 1-4-85

S.E. V Circle
with pamphlet.
Ch to Govt.

Cu

SIEMENS BROS & Co
LIMITED.
TELEPHONE No 3099.

12, Queen Anne's Gate, Westminster,
London, 2nd March 1885.
S.W.

Sir,

We beg to call your attention to an apparatus we have recently designed for the purpose of testing lightning rods attached to public buildings &c, and we send per Book Post, pamphlet No 39, which fully describes it.

We venture to point out that the testing of lightning conductors from time to time is of the utmost importance as their efficiency depends on the electrical resistance being low, a defective conductor of high resistance being a positive danger to a building.

The apparatus we are now bringing to your notice is of a portable form and can be manipulated by a workman of ordinary intelligence as, being of simple construction, no special electrical knowledge is necessary for making the tests.

The price of the magneto-inductor and bridge is £7.0.0, exclusive of packing, delivered in London. The cost of packing a single apparatus will be 5/-

We have the honor to be,
Sir,
Your obedient Servants,

For SIEMENS BROS. & CO. LIMITED.
R. von F. Fronenfeld

Colonel R. H. Sankey, R.E.
Chief Engineer of the
Public Works Department,
Madras,
India.

G.O. A/452 W a/ 19-2-84
" 451 W a/ do
No 117 C a/ 7-1-84
G.O. A/ 3187 W a/ 12-11-83

P.W.C. No 2871

Rec: 27-3-85

SECRETARY TO GOVERNMENT
27 MAR 85
P.W. DEPARTMENT MADRAS

To D.W.

It would be highly desirable to get two sets of this apparatus for trial.

If successful, one or more sets should be supplied to every Circle.

27-3-85

Draft issue
No 696 W d/ 1st April/85

Recorded, pending receipt of the testing apparatus indented for in Pro. No 451 W d/ 19.2.84.

CS
31.3.85

31-3-85

Vide notes attached

Memo

With reference to G.O No 143 W d/ 16 Jany 1885 on the subject of instructing P.W.D officers in testing lightning conductors, the undersigned is directed to inquire whether the Chief Supt of Telegraphs, Madras Dn is prepared to impart the requisite instruction to S. Subbarayachariyar Asstt Engr I grade, and what arrangements are necessary in view to the same.

G.O. A No. $\frac{143}{144}$ W of 16-1-85
Memo No. 1800 C of 6-11-84
G.O. A No. 3187 W of 12-11-83
" " " 2156 W of 21-8-82
" B " 1432 W of 7-6-82

No. 977 C of 29th May /85

C

Office Copy

Sir,

With reference to your letter No 5901 of 10th Nov/84 in which Mr De Winton was deputed for undergoing under your orders a course of practical instruction in the testing of lightning conductors, I have the honor to enquire when it will convenient to you to put Mr S. Subrachariar Asst Engr, through a similar course, he being now available for the purpose.

CU.

28.5.85

D
29/5

M/29.5

Ry
2/6

D 1/6

No 1230.

From

The Offg. Chief Superintendent of
Govt. Telegraphs, Madras Division.

To

The Under Secretary to the Government,
Public Works Department

Dated Madras 2nd June 1885

Sir

In reply to your No 977 C. of 29th May 1885, I have the honor to inform you that I am prepared to cause to be instructed in Lightning Conductor Testing, the officer named by you.

2 Mr. S. Subraya Chariar should attend at the Central Telegraph Office Madras, daily at a convenient hour between 10. A.M. and 5 P.M.

3. I beg, however, to draw your attention to the concluding part of para 3 of Public Works Department Resolution ×No 410 M. dated 23rd October 1884, as, I regret to inform you, I cannot continue to train Public Works Departmental officers in the process of testing lightning conductors

× cf. part of Govt. of India G.O. No. 143 W 16-1-85.

I have the honor to be,
Sir,
Your most obedient Servant.

Offg. Chief Superintendent CWS

M.D.

Incl. 434

Recd 13/5/86

Comaleeswaranpettah Madras
13th May 1886

From S. Subroyachariar B.C.E.
Asst. Engr. 1st grade on furlough

To
The Chief Engineer P.W.D.
Madras.

Sir,

My furlough expires on 25th August next and I purpose returning to duty fore its close in July next of

d Earlier & I beg therefore to

quest ys. kind orders for my

idance.

I have the honor to be

Sir

Yr. most obed. Servant

T. Shrynachari

Asst. G. in Telegh

To D. W.

After discussion with E I I have decided as the best arrangement that Mr Manson (now on privilege leave) shall relieve Mr Bell in charge of Tinnevelly Division when he takes furlough at end of July.

Also that S. Subharachariyar shall be posted to VI Circle to take Mr Manson's place in Tanjore Division.

WS.
16.5.85

E. to note this carefully for action in due course.

CS.
20.5.85

To W.

Mr S. Subharachariyar, A.E., who is due from furlough on 25th August, came to see me yesterday and expressed his desire to return to duty at once or as soon as he may rejoin him.—

Mr Bell will take furlough end of July & it may be desirable to put Mr S— in his place. I may mention that the latter wishes to be posted to a Southern District if possible. On this point I told him I would let you know of his wishes, but that to meet them would altogether depend on requirements at the time of his rejoining.

However what I particularly wish to bring to notice at once in connection with this is the order of Govt of India to have officers trained by the Telegraph Deptt in the testing of lightning conductors. Mr De Winton has been so trained, but it would appear desirable to put other officers as well through the same course, when opportunity offers.

If we get Mr Subharayachariyar back now, he might be told off for instruction as Mr De Winton was, & posting him to a Division could be settled afterwards.

Mr S. said something about his being entitled to a step, his juniors being tempy: E.Es. That, I informed him, would be considered in due course.

CS.
14.5.85

C. No. 4349

D.W.

For orders. Mr Manson does not return from privilege leave till 31st July /85 & his place in the Tanjore Division is thus vacant. Can Subharayachariyar be posted at once to the Tanjore Division: ?

W.
21.5

977c

E.

I shall await replies to D/o's I addressed to W & to S.E. VI before I deal with above.

If Mr Bell goes on 31 July & Mr Manson does not return till that date, there will be no time for the handing over.

CS.
22.5

I have not got the file referred to. Possibly it was sent on to Ooty.

At any rate E. should now write to Mr Subharachariyar to ascertain exactly when he is prepared to rejoin — in which case he is to be told off to undergo a course of instruction as per Chief Supdt Telegraphs' No 5301 of 10th November. When we learn when Mr S. will rejoin, the Chief Supdt shd be addressed in view to necessary arrangements being made.

CS.
27.5.85

Letter sent to Mr S.
27/5

Reply recd. Mr S— is willing to rejoin at once.

Draft memos. & Notifn: submitted for approval.

W.
28.5

E. Letters had better at first be addressed to Chief Supdt to ask him when it will be convenient to him to take on Mr S. for training.

CS.
28.5

Draft memos submitted

C. No. 4349

1.

To D.W.

For orders. A note on the posting of this Asst. Engnr. was sent by you to W on the 14th Instant.

M.
16.5

To await reply from W.

CW
16.5

B. No 11,32 W. 7. 6.82
G. O. No 2156 W. 21. 8. 82
" " 3187 W. 12. 11. 83
No 1800 C. 6. 11. 84
G. O. No $\frac{143}{144}$ W. 16. 1. 85.
No 977 C. 29. 5. 85.

Government Telegraph Departt.

Public Department

Inch 4910

(11)

From.

The Chief Superintendent
Madras Division

To

The Under Secretary to the
Government of Madras
Public Works Depth.

Dated Madras 2nd June 1885
Rev 3
No 1035 C of 11th June/85
No 1230.

Subject

Instructions on Testing Lightning Conductors: —

Gives the time of attendance of the person appointed by him for: -

E

see [illegible] remarks

Noted in G
[illegible] (a)

O.S. 2016.
C. 5. 6. 85 R. 10. 6. 85.
4

No 1035 C of 11th June/85. P.W. Department.

Memo:

The undersigned is directed to inform the Chief Supt: of Telegraphs, Madras Division, that in accordance with his letter No ~~5304~~ 1230 of ~~10th November/84~~ 2nd June 1885 ~~recorded in G. O. No 143.W of 16th January/85,~~ Mr. S. Subharayachariyar, Asstt: Engineer 1st grade, has been ordered to attend at the Central Telegraph office Madras, from the ~~8th~~ 15th ~~proximo~~ instant, ~~to receive a course of~~

a

for instruction in the practice of testing Lightning Conductors.

CU.
5.6.85

7.6.85

(11)

1848 W

E
11.6

No. 1035 C a/11th June/85

D 11/6

To
The Chief Supt: Telghs:
Madras Dn

11/6

C. 5.6.85 R. 10.6.85

C

No. 1036 C a/11th June 1885

Memo

S. Subbarayachariyar, Asstt Engr 1st grade, will attend at the central Telegraph office, Madras, from the ~~8th~~ 15th June 1885, at such times as may be fixed by the Chief Superintendent, in order to go through a course of instruction sufficient to enable him to undertake the testing of lightning conductors & to instruct others in that duty.

7.6.85

S. E. Circle
Chief Supdt Telegraphs Madras Dn

D 11/6/85

1885

[illegible] Superintendent
Government Telegraphs
Madras

S. Subbarayacharya

Draftg. [illegible] 1st grade
will attend at the central
Telegraph office, Madras
from the 3rd June 1885
at such times as may
be fixed by the Chief
Superintendent, in order
to go through a course
of instruction sufficient
to enable him to under-
take the testing of
lightning conductors &
to instruct others in
that duty.

(11)

No. 1036 C of 11th June 85

E

W
11.6

C. 5.6.85 - R. 10.6.85

12/6

S. & W.

With reference to the training of Mr. Subbarachariyar in practical testing of lightning conductors, & previous training of Mr. De Winton at the Telegraph office, it appears to me that to enable these officers to undertake the work they have been instructed in & to admit of their instructing others, a supply of certain instruments — galvanometer, battery &c. will be needed.

Please ask Supdt. to inform us what instruments will be required by them for the purpose. —

CW.
17.6.85

W.

I submit for your approval the accompanying draft of letter to the Supdt. of Telegraphs.

It occurred to me that in order to give practical effect to the training of Mr. De Winton & Mr. Subarayachariyar in the testing of lightning conductors & to utilise their knowledge, it will be necessary to have available the requisite experimental instruments, &c.

Hence this reference.

Probably it will be desirable to have a set complete at the Hd. Quarters of each Circle, but this point you can decide on by & bye.

The recent accident at Secunderabad shows that it will be desirable to establish a regular system of testing the conductors on such P.W. buildings as are furnished with such protection. It is not unlikely that many of the existing conductors are practically inefficient. Whenever the Telegraph Deptmt. have been called in to test any particular conductor, they have almost invariably found it useless either from bad jointing, bad earth connection, or some such cause.

Mr. De Winton will probably ~~shortly~~ go to Bangalore. He may be able to give some practical lessons in testing to one or two of the subordinates there.

CW.
18.6.85

No. 1087 C.A/ 23rd June/85

To

The Chief Superintendent
of Telegraphs
Madras &c.

Sir

I am directed to request that you will kindly furnish this Department with a list of the instruments that will be required by Mr. De Winton and Mr. Subbaraya Chariyar for the purposes of undertaking the testing of lightning conductors and to admit of their instructing other members of the Deptt. in the ~~art~~ same.

Mr. De Winton has recently gone through a

Q. 18. 6. 85

Q. 18. 6. 85 R. 22. 6. 85

a course of instruction at your office and Mr. Subharaya Chariyar is, it is believed, at present under instruction –

CS
18.6.85

M
19.6.85

Desd
24/6

S.A.W.

On receipt of reply to this reference, please have put up for our information the course with which we sent forward to Calcutta Tel. Store Dept. indents for testing instruments for each circle. A code was also received from G of I in which instruments necessary for testing are detailed – Here are [illegible] the Pro. on the subject [illegible]

F.B.

Connote these +

R. [illegible]

Ay. S. 82/
60 – 18.6.85

No. 1087 Cay 23-6-85

M.
23.6

B

No. 1587 W **PUBLIC WORKS DEPARTMENT.**

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 9th July/8

READ the following

+ D/o letter in file –

The Chief Supdt. of Telegraphs, Madras Division, having expressed his willingness to afford the requisite instruction in testing lightning conductors to Mr. O'Connell, Asst. Engineer ~~at present~~ in charge of the P. W. Workshops, ~~that~~ the latter officer will attend at the Central Telegraph office, Madras, at such times as may be fixed by the Chief Superintendent.

2. Mr. O'Connell

will

will, without prejudice to his other duties, go through a course of instruction sufficient to enable him to undertake the testing of lightning conductors when called on to do so, and to instruct others in that duty.

CA
4.7.85

MS
6.7.85

[illegible]

---

(9)

No. 1587 W a/19-7-85

E

M
1/7

D
9/7

To

The Chief Supdt. of Telegraphs.
Madras Dn.

S.E. V Circle

Exr. S.W. Accts.

No. 1648

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,
Chepauk, 13 July 1885.

From

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer
P.W. Department.

Enclosures.

SIR,

I have the honor to report that Assistant Engineer S. Subbaraya Chariyar has completed his course of instruction for testing Lightning Conductors upon your Memorandum No. 1036 dated 11 June 1885. The Assistant Engineer asks for orders as to his future employment.

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

Hew Pendergast
Coll. R.E.
Superintg. Engr.
5 Circle

Recorded with reference to Memo: No: 1631D dated 20th July 1885 transferring Mr S. Subbaraya Charriyar ~~to the~~ I Circle

CU.
20.7.85

No: 1036 Cay 11-6-85

M
21.7

From

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer
P.W.D.

Dated 18th } July 1885.
Recd. 20 }

ENCLOSURES.

No: 1235 Cay 21-7-85

No. 1648.

S. Subbaraya Chariyar
Asst. Engineer

Report that has completed his course of instruction for testing Lightning Conductors & he asks for orders as to his future employment.—

Write disapproval

23/7

W.—

Mr Luke being absent in England, I wrote d/o to Mr Dowson, Ag: Chief Supdt. Tel: Depart, who has consented to undertake the training of Mr O'Connell in the testing of lightning Conductors.

I put up for your approval the necessary order on subject.

Also draft letter to S. Es. regarding the buildings within their Circles — whether efficiently protected or not, &c.

On return of the file I must make further enquiries regarding the supply of testing apparatus indented for — about which there seems to be some hitch. —

CU.
4.7.85

To D.W.

Noted. & drafts approved.

If there is likely to be further delay in obtaining the testing apparatus from England, would it not be possible to get from Mr Dowson the instruments named in his letter of 25-6-85 No. 1656, — either on loan or on payment.

The matter is of some urgency.

W.
6-7-85

A.W.

Please have an order drafted — similar to that in the case of Mr De Winton — directing Mr O'Connell to go through a course of practical instruction in the testing of lightning Conductors, under the orders of Supdt. Tel: Deptt, Madras.

CU.
3.7.85

D.W.

Put up papers relating to Mr de Winton

FB

S.A.W.—

Copy of the order herewith. The original & complete file on the subject were put up with C.No. 5819 and sent to you yesterday.—

D.P.
4-7-85—

(9)

GOVERNMENT TELEGRAPH DEPARTMENT.

Central Telegraph Office
Madras 3 July 85.

Dear Sir,

Under the circumstances named I shall be happy to arrange to train Mr O'Connell in testing lightning conductors as soon as Mr Subrayachari has completed his course

Yrs truly

---

to S. E. III

No. 1357 Cd, 11th Aug 1885

Memorandum.

2

Mr Subbarayachariyar, Asst. Engineer, now posted to Erode Sub-division, having recently gone through a full course of practical instruction in the process of testing lightning conductors, the Chief Engineer desires that his services be availed of as far as possible, without unduly interfering with his ordinary duties, in testing the efficiency of the protection afforded by the lightning rods on the public buildings in the III Circle already provided with same, and in framing wherever necessary estimates for the requisite additions or alterations.

2. Mr Subbarayachariyar having acquired sufficient knowledge of the subject to enable him to impart practical instruction in the process to others, the Supdg Engineer should, when convenient opportunities occur, take advantage of his services to make other officers & subordinates in the Circle practically acquainted with the tests necessary to prove the effici of any protecting conductors they m have to examine, and in view establishing in the several Divisio systematic periodical inspections of buildings so protected.

CS
5. 8. 85

to E.W.

Proposed draft for considerati

Desptd 11/8/85

No. 1357 C of 11th Augt 1885

Jd 13/8

C / 14/8

No. 2406

From

The Chief Superintendent of Tels
Madras Division

To

The Secretary to Government of Madras
Public Works Department

Dated, Madras, 10 August 1885.

Sir.

With reference to Government of India No 410 M. of 23d October 1884. Public Works Department, on the subject of testing Lightning Rods on Public Buildings, I have the honor to inform you that the Commissary of Ordnance, Madras, has requested this Department to test the Lightning Rod on a Magazine at Trichinopoly.

+ G.O. No 146 W of 16-1-85 —

2. As a special case and to avoid delay I have given orders for this to be done, but as some Officers of the Public Works Department have now been trained in testing, I shall be glad if orders can

be given for Similar applications to be made in future to the Public Works Department.

I have the honor to be,
Sir,
Your most obedient Servant.

R. V. Luke.

Chief Superintendent.
Madras Division
[illegible]

B. No 1432 W 7.6.82
G.O. No 2156 W. 21.8.82
" " 3187 W 12.11.83
No 117 C. 17.1.84
G.O. No 452 W. 19.2.84
B. No 733 W 18.3.84
No 696 C. 1.4.85
No 1087 C. 23.6.85
G.O. No 144 W. 26.1.85
B. No. 1587 W. 9.7.85
No 1036 C. 11.6.85
No 1235 C. 21.7.85
" 1357 C. 11.8.85

B

No. 1952 W.d. 22nd Augt 1885

Recorded.

CS.
17.8.85

20.8.85

Cu
20/8/85

J - BH

2/9

24/8

Cl.S. 21/8.
R. 22.8.85
Recorded 15.8.85. R 17.8.85
R. 13.8.85 R 14-8-85
R. 15.8.85

Government Telegraph Department.

From (9) Rcd 7090

The Chief Superintendent
Government Telegraphs
Madras Division

To.
The Secretary to Govt of Madras
Public Works Dept.

Dated 10 August/85
Recd 12 "

No 2606.

No. 1952 W.d. 22nd Augt 1885

Subject.

Lightning Rods

Requests to give orders that applications to test — should be made to the Public Works Department, in future.

W

No 2606.

From

The Chief Superintendent
Government Telegraphs
Madras Division

To.

The Under Secretary to the
Government of Madras
Public Works Department

Dated Madras 18th of August 1885.

Sir

With reference to Proceedings under date 9th July No 1587 W. I have the honor to report that Mr O'Connell has completed a course of instruction in the testing of Lightning Rods.

+With C No 7090
Dy: W. 15-8-85-

I have the honor to be,
Sir,
Your most obedient Servant.
P. V. Luke.
Chief Superintendent.

CWl

24.8.85

No. 2021 W a/ 1st Septr/85

B

Recorded.
Recorded.

C.S.
25.8.85

US
27.8.85

Cu
27.8.85

No. 1952 W a/ 22.8.85
" 1357 C a/ 11.8.85
" 1235 C a/ 21.7.85
" 1036 C a/ 11.6.85
G.O. B/ 1587 W a/ 9.7.85
" A/ 144 W a/ 16.1.85
No. 1087 C a/ 23.6.85
" 696 C a/ 1.4.85
G.O. B/ 733 W a/ 18.3.84
G.O. A/ 452 W a/ 19.2.84
" 451 W a/ do
No. 117 C a/ 17.1.84
G.O. A/ 3187 W a/ 12.11.84
Rof 2156 W a/ 21.8.82
S.E. Circ. No. 42 W
S. E. V Circle

Ex. P.W. Accts

Dd
1/9/85

M.
1.9

Jd
2/9

Ogl. 11/8
C. 26.8./83 C.R. 31.5.85
C. 15-8-83

Government Telegraph Dept.

P. W. D. Inct 7280

From

The Chief Superintendent
Madras Division

To

The Under Secretary
to the Govt of Madras
P. W. Department

Dated Madras 18 August 1885
Recd 19 —

No. 2021 W a/ 1st Septr/85
No. 2606.

Subject

Reports Mr O'Connells completion of his course of instructions on Lightning Rods testing.

PRESIDENCY PUBLIC WORKS WORKSHOPS,
Madras, 19th Augt 1885.

No. 813 W.

From
THE GENERAL SUPERINTENDENT,
PUBLIC WORKS WORKSHOPS,

To
THE Superintending Engineer
V Circle
Madras

SIR,

Enclosures. 1

With reference to your Endorsement No 1537, of the 11th July 1885 on G. O. No 1587 W dated 9th Idem, I have the honor to forward, copy of certificate as to my being qualified to take all the necessary tests and report on the electrical, conditions of Lightning Rods, from the Superintendent of Government Telegraphs Madras.

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

Hugh. O'Connell
Genl Suptt P. W. Workshops

24.8.85

B. No 1432 W. 7-6-82.
G.O. No 2156 W. 21-8-82
" " 3187 W. 12-11-83
No 117 C. 17-1-84.
G.O. No 457 W. 19-2-84
" " 452 W. 19-2-84
B. No 733 W. 18-3-84
No 696 C. 1-4-85
" 1087 C. 23-6-85
G.O. No 146 W. 16-1-85

B. No 1587 W. 9-7-85
No 1036 C. 11-6-85.
" 1235 C. 21-7-85.
" 1357 C. 11-8-85
B. No 1952 W. 22-8-85
" 2021 W. 1-9-85
Enclos. 1

No 2320

Forwarded to the Chief Engineer P.W. Department.

[illegible] Col. R.E.
Superintg Engr
5th Circle

31st Augt 1885

No 1477 Cay 8th Septr /85

Recorded with reference to G.O. No 2021 W dated 1st Septr /85

CW.
2.9.85

W
4.9.85

Ays. 1579

3.9.85
26.8.1885
15-8.85

Presidency P. W. Workshops.

Rt. 2868
21-8-85

Mch 7650

From

THE GENERAL SUPERINTENDENT,
P. W. WORKSHOPS,
Madras,

To

THE Supdg Engineer
V Circle
Madras,

No. 813 W

Dated 19th
Despd. 20th August 1885.
Recd. 1/9/85

ENCLOSURES. 1

Subject.

Forwards copy of certificate granted by the Supdt of Telegraphs Madras Divn as to his being qualified in testing & reporting on electrical conditions of lightning Rods.

No 1477 Cay 8-9-85

Write dispose

W.

Bearing in mind the objections of the Telegraph Depmt to our requisitions on them to test lightning conductors, & the consequent desirability of having as many men as possible fit to undertake the duty, I have asked Mr De Winton, who has been trained in the process, whether he cannot, when his own work does not press, instruct one or two of our Bangalore subordinates (Sergt. Temple say) in the work. Mr De Winton is quite ready to do so. I presume R will have no objection, & I have no doubt Mr Geoghegan will consent, provided it does not interfere with Mr De W's railway duties. Col: Hinton agrees, so, if you approve, I shall see to the supply of the needful instruments on my ~~way~~ return to Head Quarters. I believe two sets have come, but one is out of order. — The only three officers instructed in the art are Mr De Winton, Mr O'Connell, & Mr Subbarayachariar, and it behoves us to take advantage of their services as far as possible, to extend a knowledge of the subject in the Department. As I said above, Mr DeWinton himself will gladly help, & thinks he can take up the duty in the intervals of other work. Would you kindly obtain R's consent to the arrangement. —

I propose also to get Col: Prendergast to put Mr Milne through the course under Mr O'Connell at Madras.

CW.
22-8-85

No. E.

Government of Madras.

PUBLIC WORKS DEPARTMENT.

Ootacamund, 188

OFFICE NOTE.

From

To R,

Please read accompanying note by D.W. and let me know whether you see any objection to some of the P.W. Subordinates at Bangalore being instructed by Mr de Winton in the testing of lightning Conductors.

This duty, as you are probably aware, has been transferred under orders from India to this Dept, — and Mr de Winton, while in charge of the P.W. Workshops, went through a course of instruction from the Tel: Dept, with the intention that he should afterwards instruct & train as many officers & subordinates in the P.W. Dept as possible.

W
24.8.85

Government Telegraph Department

Certified that Mr. O'Connell, Temporary Executive Engineer, D.P.W., has been under a course of instructions in testing Lightning conductors and Earths at the Madras office, and that he is qualified to take all the necessary Tests and report on the electrical conditions of Lightning rods.

Signed/ E. Dowson
Offg Superintendent
Madras office

Madras
14th August 1885

/ True Copy /

Hugh. O'Connell
Genl Superintendent
P.W. Workshops 20-8-85

Vide G.O. No. 2021 W
1-9-85

PUBLIC WORKS SECRETARIAT,
RAILWAY BRANCH.

OFFICE NOTE.

Station Ooty date 24 1885.

From R

To C.

I have no objection whatever personally. I feel sure Geoffrey will have time, but I think he should be addressed officially before any action is taken; I will do so, with your permission, before recording my assent to the proposal.

24.8.85

To R,
Please do so. & ask him to wire reply.

24.8.85

P.W. Deptt. Ry. Branch

No 572 E d/24-8-85.

To
The Engineer-in-Chief
Madras State Ry Sys.
Bangalore

Sir

I am directed to ask whether you can conveniently allow Mr DeWinton, at present attached to your staff, to undertake, during any spare time that he may have, the instruction of subordinates of the Public Works Departmt at Bangalore in testing of lightning conductors.–

2. Mr DeWinton went through a course of instruction from the Telegraph Department with the intention that he should afterwards instruct and train as many officers and

and subordinates in the Public Works Department as possible, and it would be convenient if, without prejudice to his other duties, he were allowed to instruct such members of the Department as may present themselves at Bangalore for the purpose.-

3. I am to ask that you will favor the Government with a reply by telegram.-

C.L.S.
24.8.85
R

Despd
24/8/85

No. 512 Ed/ Augt. 24-1885

No. 1496 Ed/ 11th September/85

Memo: to the E. in Chf.

M. S. Ry. Surveys. No. 512. E. § 24.8.85.

Telegram from — do — dated § 7.9.85.

The Supg. Engr. V. C. will be requested to have the necessary arrangements made by the Executive Engineer, Presidency Divn. in communication with Mr. de Winton for two selected subordinates stationed at Bangalore being put by the latter officer through a course of instruction in the art of testing

lightning Conduc-
-tors. ~~to the latter~~
~~office~~ ~~these words and letter~~
~~after "put".~~

CW.
9.9.85

Class. XS   INDIAN TELEGRAPH.   Local No. 253

To (Station) Ootacamund   From (Station) Bangalore

Words. 22/5   Day. 7   Hour. 12   Minute. 25

Official Instructions. Urgent

To (Person) Works Railway   From (Person) Engr. In Chf Madras state Ry Surveys

Your Number
512 E of 24
August I have
no objection ×

p.s. CW.

Recd. from   L. N.   At   Hrs.   Mts., By
Sent to   L. N.   At   Hrs.   Mts., By

Date 7/9/85

S. P. No.   Telegraph Master.

Supg Engr. V. Circle √
C. E. for Rys. √
W. B. de Winton Esq.

D 12/9/85
[illegible] in full.

No. 512 Eay 24-8-85

1

No. 1496 Cap -9-85

Issue

Hy. 15/9
Ld 15/9

SUPERINTENDING ENGINEER'S OFFICE,
3RD CIRCLE

No. 1369

Bellary 30th Sept. 1885

From

Lt Col H. M. Vibart R.E.
SUPERINTENDING ENGINEER,
IIIRD CIRCLE,

To,

THE Chief Engineer
P.W.D.

SIR,

Enclosures,

I have the honor to report that 4 Sets of Apparatus and stores for Testing Lightning Conductors have been supplied to this Office on Indent submitted agreeably to your Memorandum No. 117 C. dated 17th January 1884; but owing to the amalgamation of the Kurnool Division, only 3 sets are now required in this Circle.

2. I therefore solicit instructions whether the extra set can be returned to the Telegraph Storekeeper at Madras. or whether it is to be retained here to meet any future requirements.

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

H. M. Vibart Lt Col R.E.
Superintending Engineer
III Circle

B. No 1432 W. 7. 6. 82.
G. O. No 2156 W. 21. 8. 82.
" " 3187 W. 12-11. 83.
No 117 C. 17. 1. 84.
G. O. No 457 W. 19. 2. 84.
" " 452 W 19. 2. 84
B. No 733 W. 18. 3. 84
No 696 C. 1. 4. 85.
" 1087 C. 23. 6. 85
G. O. No 144 W. 16. 1. 85
B. No 1589 W. 9. 7. 85.
No 1036 C. 11. 6. 85

No 1235 C. 21. 7. 85
" 1357 C. 11. 8. 85
B. No 1952 W. 22. 8. 85
" 2028 W. 1. 9. 85.
No 1477 C. 8. 9. 85

No 1602 dd 8-10-85

The extra set of apparatus and stores should be forwarded to the Genl Supt P.W. Stores for custody until required for use.

Ott
Oct. 1. 85

4. 10. 85

S. E., III Circle
S. E. V Circle

9/10/85

O. W. 11/10.

---

(2) Recd 1542

From
The Supdg Engineer
III Circle

To
The Chief Engineer
PWD

Dated 30th September 1885.

Recd. 1/10/85

No 1369

No 1602 dd 8-10-85

Apparatus & Stores for Testing Lightning Conductors

Requesting to be informed whether the extra set of — recd from the Supdt of Govt Telegraph Stores Calcutta — can be returned to Madras.

1477 C
8. 9. 85

No. 3001

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,
Bangalore ~~Chepauk~~, 13th October 1885.

From
THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To
THE Chief Engineer
P.W. Department

SIR,

Enclosures.

With reference to your Memorandum No. 1440 C dated 1st September 1885 I have the honor to report that Sub Engineer Conductor Lennon has gone through a course of instruction in testing Lightning Conductors under Executive Engineer Mr. O'Connell. Mr. O'Connell certifies that he is capable of undertaking the testing himself.

I have the honor to be
Sir
Your most Obdt. Servt.
W H Hutton Coll R.E.
Offg Superintending Engineer
5 Circle

No. 1671 C a/21st [illegible]
C

Recorded

Cott

19.10.85

21.10

From (13) Dely 9039

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer,
P. W. D.

Dated 13th } October 1885.
Recd. 16 }

ENCLOSURES.

No. 1671 C a/21-10-85

B. No 1432 W. 7.6.82
G. O. No 2156 W. 21.8.82
" " 3187 W. 12.11.83
No 117 C. 17.1.84
G. O. No 457 W. 19.2.84
" " 452 W. 19.2.84
B. No 733 W. 18.3.84
No 696 C. 1.4.85
" 1087 C. 23.6.85
G. O. No 144 W 16.1.85
B. No 1587 W. 9.7.85
No 1036 C. 11.6.85
" 1235 C. 21.7.85
" 1357 C. 11.8.85
B. No 1952 W. 22.8.85
" 2021 W. 1.9.85
No 1477 C. 8.9.85
" 1602 C. 8.10.85
" 1440 C. 1.9.85
25/10.
Myhone 16.10.85

No. 3001

Conductor R. P. Lennon Sub Engineer — Reports that — has gone through a course of instruction in testing Lightning conductors.

With disposal

SUPERINTENDING ENGINEER'S OFFICE,
5TH CIRCLE, MADRAS,
Bangalore ~~Chepauk~~ 24th November 1885.

No. 3638

From

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer
P. W. Department.

Enclosures.

SIR,

I have the honor to request that sanction may be given, under Code para 556, to the Presidency Allowance being drawn by Conductor R. P. Lennon Scale Engineer 1st Grade, posted to the 5th Circle to receive instructions for testing Lightning Conductors, in your Memorandum No. 1440 C. dated 1st September 1885.

I have the honor to be
Sir
Your most obedient Servant
W. S. Hutton Coll. R. E.
Offg. Superintending Engineer
5th Circle

Sanctioned

From

THE SUPERINTENDING ENGINEER,
5TH CIRCLE,

To

THE Chief Engineer,
P.W.D.

26/11/85

26.11.85

Dated 24 November 1885.
Recd. 25

30.11

ENCLOSURES.

No. 1841 Wd/ Novr 27 1885

No. 3638

Presidency Allowance—
Requests sanction may be given to the — being drawn by Conductor R. P. Lennon, Sub. Engineer, 1st Grade.

S. E. V Circle
Exr P.W. Accts

To
S. E. V Circle
Exr. P. W. Accts
De
27/11/85

With disposal

31st March 1886, No. 874 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers :—

From P. V. LUKE, Esq., Chief Superintendent, Government Telegraphs, Madras division, to the Secretary to Government, Public Works Department, dated Madras, 10th March 1886, No. 6134 :—

In continuation of my letter, No. 2406, dated 10th August last, on the subject of testing lightning rods, I have the honor to state that another application has just been received from the Executive Engineer, Trichinopoly division, for the Telegraph Department to test a lightning rod at Trichinopoly, and to ask whether arrangements have yet been made for such tests to be carried out by the Public Works Department, as ordered by the Government of India in Public Works Department No. 410 M.,* dated Simla, 23rd October 1884.

* G.O., No. 144 W., dated 16th Jan. 1885.

From Colonel J. SHAW-STEWART, R.E., Secretary to Government, Public Works Department, to the Chief Superintendent, Government Telegraphs, Madras division, dated 23rd March 1886, No. 1188 C.

In reply to your letter, No. 6134, dated 10th March 1886, I have the honor to state that copies of the code of instructions and apparata for testing lightning conductors have been procured and distributed to the various Public Works Circles in the presidency, but it has not yet been found practicable to depute a sufficient number of officers to be instructed in the use of the instruments. Up to date only three officers and one subordinate have been instructed by the Telegraph Department, and one of these is now employed outside the regular Public Works Department. At present there is no officer in the VI Circle who has been instructed and who can carry out the test required at Trichinopoly. If, however, that test has not already been made by the Telegraph Department, an instructed officer from the IV Circle will be deputed to proceed to Trichinopoly to carry it out.

2. In the meanwhile, I have the honor to inquire whether there are any convenient centres in the various Public Works Circles of the presidency where instruction in testing lightning conductors can be imparted to selected officers of the Public Works Department by the Telegraph Department. Officers so instructed would be in a position to instruct others, and the knowledge could gradually be made general in the Public Works Department.

Memorandum to Suptg. Engineer, IV Circle, dated 23rd March 1886, No. 1189 C.

From P. V. LUKE, Esq., Chief Superintendent, Government Telegraphs, Madras division, to the Secretary to Government, Public Works Department, dated Madras, 26th March 1886, No. 6525.

In reply to your No. 1188 C., of 22nd instant, I have the honor to state, with reference to paragraph 1, that the test has not yet been made by the Telegraph Department.

2. As regards paragraph 2, in my division, Public Works officers can be trained at the Central telegraph office, Madras, at Bangalore, and Trichinopoly; and I have no doubt that, on application, arrangements can be made by the Chief Superintendents of Telegraphs of the Bellary, Ganjam and Malabar divisions to have officers taught at Bellary, Cocanada and Calicut.

Order—dated 31st March 1886, No. 874 W., Public Works.

The Superintending Engineer, IV Circle, has already been requested to depute Mr. S. Subharachariyar to test the lightning rod requiring examination at Trichinopoly.

2. This correspondence will be communicated to all Superintending Engineers, in continuation of G.O., No. 144 W., dated 16th January 1885. Arrangements should be made, in communication with the Chief Superintendent of the Telegraph division, whenever it is convenient, to have selected officers of the Public Works Circle trained in the use of the instruments for testing lightning conductors. Such officers should then be directed, as opportunities offer, to impart instruction to other officers and subordinates of the Public Works Department.

(True Extract.)

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

To Superintending Engineers.
To the Examiner, Public Works Accounts.
" Chief Superintendent of Telegraphs, Madras Division.
" " " Bellary "
" " " Ganjam "
" " " Malabar "

Exd. E. Fernandez.
Spare Copies

RATES OF CHARGE FOR INLAND TELEGRAMS.

Dvl 7/9/12

The address (including name of Sender, and name and residence of Addressee) is transmitted free.

512 Ed/24-8-85

	First 8 words	Each additional word
Deferred Message	... 8 Annas	... 1 Anna
Ordinary "	... 1 Rupee	... 2 Annas
Urgent "	... 2 Rupees	... 4 Annas

A group of 3, or less figures, is reckoned as one word.

C

No charge for delivery within a distance of 5 miles.

Dvl 9/9/85.

No. 1496 Ca/11-9-85

Dvl

Please take necessary action, with advertence to your note of 22.8.85

7.9.85
W

A/L 30/9.

1496 c

D.W.

With refce to the accompanying telegram which is sent to you for necessary action by W. one set of testing apparatus is with Mr. O'Connell at the P.W. Stores. and a note was sent yesterday Enquiring about the other set, regarding which we have no information.

FB

S. E. V. to be requested to have the necessary arrangements made by Cl. Hunter in communication with Mr. de Winton for two selected individuals at Bangalore being put through a course of instruction by the latter officer.

CL
9.9.85

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated March, 31st.

Recd. *Encl.*

G.O., 31st Mar. 1886, No. 874 W.

MARCH.

Lightning Conductors

Training of selected officers of the Public Works Department in the use of the instruments for testing —.

No. 6134.

From,
The Chief Superintendent,
Government Telegraphs,
Madras Division.

To.
The Secretary to the,
Government of Madras,
Public Works Department.

Dated Madras 10th March 1886.

Sir,

7090..

In continuation of my letter No. 2406 dated 10th August last on the subject of testing Lightning Rods, I have the honor to state that another application has just been received from the Executive Engineer Trichinopoly Division for the Telegraph Department to test a Lightning Rod at Trichinopoly, and to ask whether arrangements have yet been made for such tests to be carried out by the Public Works Department as ordered by the Government of India in Public Works Department No. +410 dated Simla 23rd October 1884.

+ G.O. No 144 W d/ 16.1.85.

I have the honor to be,
Sir,
Your most obedient Servant,
R. V. Luke
Chief Superintendent.

Government Telegraph Department

Arch 1870

P. W. D.

From

The Chief Superintendent
Madras Division

11 MAR 86

To

The Secretary to the
Government of Madras
Public Works Dept.

Dated Madras 10 March 1886

Received 11

No 6134.

No $\frac{1188}{1189}$ C ay 23-3-86

Subject

Lightning Conductors Testing

Continuing No 2406 of 10th August 85 asks whether arrangements have yet been made for — by the P.W.D.

No 1188 C ay 23rd March 86 P.W.D

To

The Chief Supt of Telegraphs
Madras Divn

Sir,

In reply to your letter No 6134 dated 10th March 1886, I have the honor to state that copies of the Code of instructions & apparatus for testing lightning conductors have been procured & distributed to the various P.W. Circles in the Presidency, but it has not yet been found practicable to depute a sufficient number of officers to be instructed in the use of the instruments. Up to date only three officers & one subordinate have been instructed by the Telegraph Dept. & one of these is now employed outside the regular P.W. Dept. At present there is no officer in the VI Circle who has been instructed & who can carry out the test required at Trichinopoly — If however that test has not already been made by the Telegraph Dept. an instructed officer from the IV Circle will be deputed to proceed to Trichinopoly to carry it out.

2. In the meanwhile I have the honor to inquire whether there are any convenient centers in the various P.W. Circles of the Presidency where instruction in testing lightning conductors can be imparted to selected officers of the P.W. Dept by the Telegraph Dept. Officers so instructed would be in a position to instruct others, & the knowledge could gradually be made general in the P.W. Dept.

20.3

20/3/86

1

No. 1188/1189 Cap 23-3-86

PWD

No. 1189 Cap 23rd March 86

Memo.

Letter from the Ch. Supt of Tels. M. Divn No 6134 in. d/ 10. 3. 86.

Copy of the above forwarded to the S. E. IV Circle, with request that Mr S. Subbarachariar may be directed to proceed to Trichinopoly to test the lighting rod in question, if it has not already been tested by the Telegraph Dept. On this point the S. E. VI Circle should be consulted.

20/3/86

S. E. IV Circle

Copy to the S. E. VI Circle

d 21/3

G.O. A 324 W d/ 6-2-86
" B 2848 W d/ 30-11-85
" B 2841 W d/ 27-11-85
No. 1671 C d/ 21-10-85
" 1602 C d/ 8-10-85
" 1477 C d/ 8-9-85
G.O. B 2066 W d/ 5-9-85
G.O. 2021 W d/ 1-9-85
No. 1941 D d/ 27-8-85
G.O. B 1952 W d/ 22-8-85
No. 1357 C d/ 11-8-85
" 1235 C d/ 21-7-85
" 1595 D d/ 14-7-85
" 1171 C d/ 9-7-85
G.O. B 1587 W d/ 9-7-85
Nos. 1035 C 1036 C d/ 11-6-85
" A 1087 C d/ 23-6-85
G.O. 1447 W d/ 16-1-85
1433 W
No. 696 C d/ 1-4-85
G.O. A 1441 W d/ 9-6-84
G.O. B 733 W d/ 18-3-84
" A 452 W d/ 19-2-84
" 451 W d/ do
No. 117 C d/ 17-1-84
G.O. A 3187 W d/ 12-11-83
" 2156 W d/ 21-8-82
" A 1432 W d/ 7-6-82
No. 1800 C d/ 6-11-84
G.O. A 3187 W d/ 12-11-83
" 2156 W d/ 21-8-82
" 1432 W d/ 7-6-82
No. 481 C d/ 26-2-83
" 977 C d/ 29-5-85

No. 1188/1189 C d/ 23-3-86

W 23.3

874 W

J 27/3

No. 6525.

From

The Chief Superintendent
Government Telegraphs
Madras Division.

To

The Secretary to the
Government of Madras
Public Works Department

Dated Madras 26th March 1886

Sir,

In reply to your No. 1188 C of 22nd instant, I have the honor to state with reference to para 1 that the test has not yet been made by the Telegraph Department.

2. As regards para 2, in my division Public Works officers can be trained at the Central Telegraph Office Madras, at Bangalore, and Trichinopoly, and I have no doubt that, on application, arrangements can be made by the Chief Superintendents of Telegraphs, of the Bellary, Ganjam and Malabar Divisions to have officers taught at

C. A

at Bellary, Cocanada and Calicut

I have the honor to be,

Sir,

Your most obedient Servant.

R. T. Luke

Chief Superintendent.

Precis 2400

Government Telegraph Department

P. W. D.

From.

The Chief Superintendent

Madras Division

Government Telegraphs.

28 MAR 86

Recd 29/3/86

To

The Secretary to the

Government of Madras

Public Works Dept.

Dated the 26 March 1886.

No 6525.

Abstract

Precis.

His No 1188 C of 22nd inst.

states that the test has not yet been made by Tele Dept and adds the officers can be trained in, herein noted places.

Nos 1188-9 C. 23.3.86.
1174 C - 9-7.85-
1848 W. 30-11. "
2066 W. 5.9.85.
324 W, 6.2.86.
1035 C. 11.6.85.

~~Genl Estabt~~ B&R works

No 874 W. d PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 31st March/86

READ the following

Letter from the Chief Supt: of Telghs, Madras Dn. H.E. No 6134 d/ 10th March/86
Letter to — Do — " " 1188 C d/ 23rd March/86
Memo: to S.E. IV circle " " 1189 C d/ 23rd — Do —
Letter from the Chief Supt: of Telghs, Madras Dn } " " 6525 d/ 26th March/86.

The Suptg: Engineer IV circle has already been requested to depute Mr S. Subharachariyar to test the lightning rod requiring examination at Trichinopoly.

2. This correspondence will be communicated to all Suptg: Engineers, in continuation of G.O. No 144 W d/ 16th January 1885. Arrangements should be

made, in communication with the Chief Supt: of the Telegraph division, whenever it is convenient, to have selected officers of the P.W. Circle trained in the use of the instruments for testing lightning conductors. Such officers should then ~~seek~~ be directed, as opportunities offer, to impart instruction to other officers and Subordinates of the P.W. Department.

30/3/86

31·3-86

M.
31.3

Despd

Suptg: Engrs: ✓ [illegible]/86
Exc: P.W. Accts ✓ 12/4/86
Chief Supt: of Telghs, Madras Dn
——— Do ——— Bellary Dn
——— Do ——— Ganjam Dn
——— Do ——— Malabar Dn

2841 W. 27.11.85.

D.W.

In the papers recorded in G.O. No 3187 W of 12: Nov. 1883, the G of I pointed out that the duty of testing lighting Conductors should be performed by officers of the P.W. Dept, & it was suggested that one officer should be instructed by the Telegraph Dept in the use of the testing instruments &c.

A Code of in:structions has been issued to the Dept, & testing apparatus has been supplied to each Circle, but since the date of the orders one — tests by the P.W. Dept.

No officer or subordinate in the VI Circle has been instructed in the use of the instruments, & if the wishes of the Tel. Dept are to be complied with, it seems necessary that one officer in each Circle should be instructed, & that he in turn should instruct others.

It seems difficult to suggest how such an arrangement can be carried out within a reasonable time.

The Ch. Supt might perhaps be asked if

there are any convenient centers in various parts of the Presy. where the requisite instructions can be imparted to selected P.W. officers by the Tel. dept.

For orders.

Ch
19.3.86.

Yes, the Ch. Supt might be asked the above question.
In the meantime perhaps S.I.R. might be able to spare Subbarachariar to test the rod at Trichy. I believe that this officer is at Erode & the journey will be a short one.

20/3/86

four officers have been instructed by the Telegraph Dept, viz.

Mr W. B. de Winton
Mr H. O'Connell
Mr S. Subbarayachariyar
Mr R. P. Lemon.

The idea was that certain of our officers & subordinates should be instructed, & they in their turn should instruct others.

The Supdt of Telegraphs now brings to notice that the Ex. Engr Trichinopoly division has applied to the Telegraph dept to test a lightning conductor at Trichinopoly, & he inquires whether arrangements have been made to carry out such

1870

Govt. of 1886 Madras.

PUBLIC WORKS.

Dated 2/4/86

Recd: Encl.

G.O., 31st March 1886, No. 874 W.

Lightning Conductors

Training of selected Officers of the P.W.D. in the use of the instruments for testing —

170/12

21st April 1886, No. 1031 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following letter from P. V. LUKE, Esq., Chief Superintendent, Government Telegraphs, Madras Division, to the Secretary to Government, Public Works Department, dated Madras, 15th April 1886, No. 311:—

Referring to G.O., dated 31st March, No. 874 W., Public Works, I have the honor to remind you that in letter from the Government of India, Public Works Department, No. 410 M., of 23rd October 1884, it was only intended that one officer of the Public Works Department in the Madras presidency should be trained, and that he should instruct others.

2. While willing, as stated in paragraph 2 of my No. 6525, of 26th March, to afford all reasonable facilities for Public Works Department officers to acquire a knowledge of testing lightning rods by attending telegraph offices, I hope that the services of the Public Works Department officers already trained will be utilised for the purpose of instruction as much as possible, and that the Telegraph Department will only be called upon when the officers already trained cannot be made available.

Order—dated 21st April 1886, No. 1031 W., Public Works.

Communicated to officers concerned, in continuation of G.O., No. 874 W., dated 31st March 1886.

2. It is, and has been, the intention of the Government that the services of officers of the Public Works Department who have been trained in the use of instruments for testing lightning conductors should be utilised so far as practicable for instructing other officers of the department. The Telegraph Department should be asked to instruct officers only when the services of a trained officer of the Public Works Department cannot be made available for the purpose.

(True Extract.)

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Examiner, Public Works Accounts.
„ Chief Superintendent of Telegraphs, Madras Division.
„ Superintendent of Telegraphs, Bellary Division.
„ „ „ Ganjam „
„ „ „ Malabar „

Exd. E. Fernandez.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated April, 21st.

Recd. *Encl.*

G.O., 21st April 1886, No. 1031 W.

APRIL.

Lightning Conductors

Ordering that the Telegraph Department be asked to instruct Public Works officers in the use of instruments for testing — only when a trained officer of the department is not available for the purpose.

No. 2789

Superintending Engineer's Office,
V Circle, Madras,
Chepâk, 10th September 1886.

From
The Superintending Engineer,
V Circle,

To
The Chief Engineer
P. W. Department.

Sir,

Enclosures.

With reference to your Memorandum No. 1496 C dated 11th September 1885, I have the honor to inform you that Sub Engineer Sergeant Temple and Supervisor Sergeant Green have passed the required training in testing lightning Conductors after having been instructed by Mr. W. B. de Winton who has also given them Certificates of efficiency.

2 Whilst giving instructions to Sergts. Temple & Green, Mr. de Winton purchased for reference from Messrs. Higgenbotham & Co a copy of "Elementary Lessons in Electricity and Magnetism by S Thompson. for Rs. 3-9-0. This book has been sent by Mr. de Winton to the Executive Engineer Presidency with other books instruments &c. of which he had had the use lent by the Presidency Division. As the Book will be of use to members of the Department receiving instruction in testing Lightning Conductors, I request that sanction may be given to its being purchased for Rs. 3-9-0.

I have the honor to be
Sir
Your Most Obedt Servt
WH Burton
Coll. R.E.
Supg Engr 3 Circle

1496 C. 11.9.85
5122. 24.8.85

B. No. 2409 W a/21st Septr/86

The purchase of the book for Rs 3-9-0- is sanctioned

2 The two upper subordinates who have been instructed by Mr De Winton should instruct other sub-ordinates in the method of testing lightning Conductors as opportunity offers

CB.
10.9.86

20/9/86

after desp

22.9

S.E. V. C.
Exr.
D
21/9/86

23/9/86

P.W.C. No. 7108

From

THE SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE Chief Engineer
P.W. Deptt

Dated 10th September 1886
Recd. 13

ENCLOSURES.

B. No. 2409 W a/21-9-86.

No. 2789.

Lightning Conductors —

Informs that Sub Engr Temple & Sergt Green have passed the required training in testing — after having been instructed by Mr W. B de Winton

---

No. 6473

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Chepâk, 29th March 1887.

From Col. W. H. Burton R.E.
~~The~~ SUPERINTENDING ENGINEER,
V CIRCLE,

To

THE Chief Engineer
P. W. Department.

Enclosures.

SIR,

I have the honor to state that Supervisor Sergeant Green at Bangalore was ordered to Madras on Special duty for testing the Lightning Conductors of the Gun Powder Factory, but he brought ~~down~~ no horse with him as allowed in G. O. No. 2984 W dated 13th November 1882. He halted 19 days at Madras from 17th November to 5th December 1886, for this Special duty & employed a Special Conveyance.

According to Travelling Allowance

Allowance Code Section 30, the halting allowance that can be passed to him is Rs 20 for 10 days & not more; whereas he has been put to more expense on account of Special Conveyance.

Had he brought down his own horse it would not have cost him so much, but would cost Government Rs 41-2-0 on account of Railway fare from Bangalore to Madras & back, plus the halting allowance of Rs 20-0-0. I therefore recommend that full halting allowance for the number of days he halted at Madras may be sanctioned under Section 30 of Travelling Allowance Code.

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

W H Burton Col RE.

Superintending Engineer

1887

P. W. DEPARTMENT.

Current No. 2570

From The Supdg. Engr. V Circle

ENCLOS.—

No. 6473
Dated 29th March 1887
Received 30th — " —

SUBJECT.

Supervisor Sergt Green — Recommends that the full halting allowances may be sanctioned for the number of days — halted at Madras on special duty —

DISPOSAL.

No. 1239 C Dated 31st March 1887

To C

For favour of remarks.

(Sd) W. L. C. W.
30.3.87
D. W.

De
31/3/87

R No 4
1-4-87

No. 1239 C of 31st March 1887

To C

For favour of remarks.

30.3.87

D.W.

P.W.C. No 25705

No 6473

From

The Supdg Engineer
5th Circle

To

The Chief Engineer
P.W. Deptt.

Dated 29th March 1887
Recd 30

Supervisor Sergt. Green –

Recommends that the full halting allowance may be sanctioned for the number of days halted at Madras on Special duty

(90)

[C. No. 8.]

GOVT. OF MADRAS. 1887. P. W. DEPT.

EXAMINER, P. W. ACCOUNTS.

Madras, 6th April 1887.

Office Note No. 16

To
Engineer in charge
W.

Keep-with Genl. No.
dated 188 .

Your O. N. No. 1239 C. dated 31st. March 1887.

Please see Civil Travelling Allowance Code Section 30 and Rule I. If Government is satisfied that Sergeant Green incurred for locomotion only greater expense than was covered by the whole allowance (Rs. 52) passed as per margin, they may exempt him from the 10 days ristriction as regards halting allowance and permit him to draw halting allowance for a further period not exceeding the total period of his halt in Madras. The Supg. Engineer does not say that Sergeant Green was put to any greater expense. He only says that he might have brought a horse, but events seem to have proved that a horse was not necessary.

5
C.

Admitted.

Railway fare from Bangalore to Madras, double 2nd. Class and back...........	Rs. 32
Halting allowance for 10 days..............	Rs. 20
Total	Rs. 52.

Yes he does. "He has been put to more expense on acct. of special conveyance"

G. O. 2984 W 13-11-82
" 2471 W 23.9.82
No 1239 C. 31.3.87

~~The Hon. P. P. Hutchins~~

B

The Govt consider that the allowances passed to Sergt Green were sufficient to cover all necessary expenses for locomotion ~~return~~ and they therefore decline to exempt him from the 10 days restriction as regards halting allowance.

Wcw
14.4.87.

Joll
15/4/87

I think he is fairly entitled. The S.E. does say he was put to greater expense than Rs 20 on acct of special conveyance. The Rail fare is merely to cover the journey. If a man is brought down specially & detained, not by his own desire, for 19 days he ought not to be treated as if it were his own fault that the detention exceeded 10 days.

PM
17 April

To
The S.E. V Circle
" Exr P.W. Accts.

Order accordingly

Jree
18/4/87

O.L.S. 54/IV.

Con 16-4-87 R 18.4.87

P.W.C. No. 2886

(8)

Sergeant Green received at Cappatur Rs. 52. His return second class ticket from Bangalore to Madras cost him Rs. 12 leaving Rs. 40 for his halt expenses while in Madras. He was in Madras from 17th Nov. to 5th Dec. 1886 or 19 days but 3 days were travelling so that he had only 16 working days Rs. 40 for 16 days gives Rs. 2/8 per diem for halt expenses which is [illegible]

R 13.4.87

With order

No. 1107 W

B
Reminders

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 22 April 1887

READ the following

From the S. E. V Circle No 6473 dy 29.3.87
" " Exr P.W.A. " 16 dy 6.4.87

The Supdg Engr states that Sergt. Green was put to greater expense for locomotion than the allowance passed to him on the occasion in question, & the Govt. are therefore pleased to exempt the Serjeant from the operation of Sec 30, C. T. A. Code, and to

permit him to draw
halting allowance
for the full period
of his halt at Madras.

19/4/87.

21.4.87

B. No 1107 Wd/ 22 April 1887

22.4

S. E. V Circle
Exe Mom

Dcr
22/4

Cn

19.4.87

20/4

9/5

11.4.87

Cw 16.4.87

18.4.87

Chief Engineer, Madras.

I have &c
(Sd) A. S. Russell
Executive Engineer

No 445

To
The Executive Engineer
Tinnevelly Division

Dated Trichinopoly 7th of June 1887.

Sir,

Referring to your No 650 of 28th Ultimo, to the address of the Telegraph Master Tuticorin, I have the honor to inform you that the lightning conductors on buildings are not now tested by the Officers of this Department.

I have &c
(Sd) E. Hand
Asstt Superintendent
Trichinopoly Sub Dn
Govt Telegraphs.

(True Copies)

A. S. Russell

Executive Engineer
Tinnevelly Dn

W.
4/7

to say that the Govt consider Sergt Green recd sufficient allowances to pay all his expenses for locomotion, and they must therefore decline to sanction his ~~ex~~ exemption from the 10 days halting rule.

A horse does not seem to have been necessary, and his not having brought one (probably he has not one) does not affect the facts of the case.

FB 14/4/7

REG. No. 1/379 of 7/87

D. P. W.

From A. S. Russell Esqr
Executive Engineer
Tinnevelly Division.

To The Telegraph Master
Tuticorin

SUPERINTENDING ENGINEER
7 JUL 87

Station

No. 650

Dated 28 } May 1887
Despatched 30 }
Received }

ENCLOSURES

Reference.

Sir, I have the honor to request you will be good enough to arrange for testing the Lightning conductor attached to the Tuticorin Light House on Hare Island, and to report to me the result for com-munication to the

---

No 232 T.N

Palamcottah
11th July [87
D/13:

Letter from A. S. Russell Esqr Executive Engineer Tinnevelly Dn to the Superintending Engineer, Circle dated Palamcottah 4th July 1887. No 1068.

With reference to para 2 of your Endorsement No 361 T.J dated 21st May 1887, on G.O. No 1301 W dated 12th May 1887, and in continuation of this office No 777 dated 8th Ultimo, I have the honor to report that I am not able to arrange for the testing of the lightning Conductor at the Tuticorin Light House; Mr Baker, the Sub-Dn officer, reports that he is not acquainted with the method of testing lightning Conductors, while, from the copy of the correspondence enclosed, it would appear that the Telegraph Master at Tuticorin cannot be spared for the purpose —

Letter No 650/28-5-87 to Telegraph Master, Tuticorin.
Do 445/7-6-87 from Asstt Supdt Telegraphs, Trichinopoly Dn —

Forwarded

Forwarded to the Chief Engineer for Irrigation, with a request that, if possible, Rai Bahadur S. Subbaraya Chariar B.C.E, Executive Engineer may be instructed to test the lightning conductor attached to the Tuticorin Light House on Hare Island, and to communicate the result to the undersigned—

Encl. 1.

John Carey
[illegible]
Supg. Engineer, [illegible]

1107 W

In Cur. 16/4/87

2886

D.W.

Sergeant Green received altogether Rs: 52. His return second class ticket from Bangalore to Madras cost him Rs: 12 - leaving Rs: 40 for his hack Expenses while in Madras. He was in Madras from 17th Nov: to 5th Dec: 1886 or 19 days. but 3 days were Sundays so that he had only 16 working days. Rs: 40 for 16 days gives Rs: 2/8 per day for hack Expenses which should be ample for a Supervisor.

Proposed

Enclos

No. 39. E. W.

Forwarded to the Chief Engineer, P. W. D with the request that some one in the Presidency division who is acquainted with the method of testing lightning conductors may be deputed to test the lightning conductor of the Tuticorin light house as the services of — Executive Engr. Rai Bahadur S. Subbaraya Chariar, B. C. E. cannot be spared from the Tank restoration Survey party at Kurnool.

R Davidson
for
B.W.R.E.
Chief Engineer for Irrn.

Chepauk
15th July 87

B.R. 15-7-87.

PWC No. 5462
R 36 I.N

From,

The Supg. Engineer
6th Circle.

To,

The Chief Engineer
for Irrigation

No. 232 I.N

Dated 11th July 1887
R/16-7-87

enclos 1

Light-House on
Hare Island at
Tuticorin.

Requests for reasons given that Rai Bahadur, S. Subrayachariar B.C.E., Exe: Engineer, may be instructed to test the Lightning conductor of the —

P.T.O

2420 C

Note.

All the Military Upper Subordinates in the Presidency Division have been taught to test Lightning Conductors -

I.M.
19.7

No. 2420 C.

Government of Madras.

B. No. 1301W - 12-5-87
G.O. 2868W - 2-11-86
B - 2349W - 16-9-86
No. 2920C - 26-8-86
" 2776C - 13-8-86
G.O. 1031W - 21-4-86
" 874W - 31-3-86
B - 2841W - 27-11-85
No. 1671C - 21-10-85
B. - 2021W - 1-9-85
" - 1952W - 22-8-85
No. 1357C - 11-8-85
" 1235C - 21-7-85
B - 1587W - 9-7-85
" 1087C - 23-6-85
" 1036C - 11-6-85
" 1035C - 11-6-85
" 977C - 29-5-85
" 696C - 1-4-85
G.O. - 144W - 16-1-85

PUBLIC WORKS DEPARTMENT,

Chepâk, 20th July 1887.

OFFICE NOTE.

From

W

To

S. E. V circle

Can you spare the services of a qualified upper Subordinate for deputation to Tuticorin to test the Lightning Conductor of the Lighthouse there.

(Sd) W. L. C. B.

19-7-87

D.W.

de 20/7

20.7

SUPERINTENDING ENGINEER'S OFFICE,

V CIRCLE, ~~MADRAS~~,

No. 1980. Bangalore ~~Chepâk~~, 8th August 1887.

From Colonel H. M. Vibart R.E.

~~THE~~ SUPERINTENDING ENGINEER,

V CIRCLE,

To

THE Chief Engineer,

P. W. Department.

Enclosures.

SIR,

With reference to your Office Note No. 2420C dated 20th July 1887, I have the honor to inform you that Serjeant Green, Supervisor in the Presidency Division has been ordered to proceed to Tuticorin for the purpose of testing Lightning Conductor at that place.

I have the honor to be

Sir,

Your most Obedient Servant

H. M. Vibart Col. R.E.

Supdg: Engineer, V Circle.

C/ No. 2679 C of 11-8-87

Communicated

~~Communicated~~

to the Supg: Engineer
~~to the Supg Engineer~~
VI Circle with
~~VI Circle with ref or~~
reference to his ~~-~~
~~to his endorsement~~
endorsement No 232 T.N.
~~No 232 T N of 11th July 87~~
of 11th July 1887.

MCB
10.8.87

M.

JLL
13/8/87

E M
11.8

To S.E. VI C. S
S. S. VI C. S
Exr. Pb. Accts

10/8

11/8
17/8

P.W.C. No. 6226 R

From

THE SUPERINTENDING ENGINEER,

V CIRCLE,

To

THE Chief Engineer

P. W. Department

No. 2420 C of 20-7-87 & this file

Dated 8th }
Recd. 10 } August 1887.

ENCLOSURES.

No. 2679 C of 11-8-87

No. 1980.

Testing Lightning Conductor at Tuticorin

Informing that Serjeant Green has been Ordered to proceed for the purpose of —

to afterwards

with dis posal

Inspection and Tests of Lightning Rods made by Supervisor T. Green Serjt: R.E, 16th to 18th August 1887

No. of Items	Locality and Name of Building	When last tested	Description of Conductor, material, length, shape, sectional area, nature and number of upper terminals, number & kind of joints, soldered or not. How attached to Building, nature of earth connections.	Electrical Resistance		Remarks including suggestions for improvements if necessary.
				From Summit to Ground line	Of the Earth connection	
1.	Tuticorin Light House	Not known	Copper wire rope to base of Light-House (Sectional area ·4417"), from base of Light-House to earth connection 1½" copper band (Sectional area ·1875") attached to a copper earth plate, one upper terminal, a brass tube, the point covered with copper 92 ft. high, with 3 soldered points attached to Light-House with copper staples.	B. A. U. From top of Dome to ground line 1 From terminal to ground line no connection	B. A. U. 1	Earth connection very good. Conductivity from top of Dome to base very good. The vane on Light House which forms the upper terminal is in no way connected with the conductor I would recommend that the present centre tube of vane which is a brass tube tipped with copper, be removed, and replaced by a copper rod (1" Dr) with a copper band running from wire at foot of turret over dome (outside), and well jointed to the proposed new copper rod. Nothing could be run up alongside of present tube as it would prevent the vane turning. It would then be a thorough good Conductor.

(Sigd) Ross Thompson. Col. R.E.
Ex: Engr: Presy: Dn

No 3244 C d/ 24-9-87

SUPERINTENDING ENGINEER'S OFFICE,
V CIRCLE, MADRAS,
Bangalore ~~Chepauk~~, 10th September 1887.

No. 2414.

From
Colⁿ H. M. Vibart. R.E.
~~THE~~ SUPERINTENDING ENGINEER,
V CIRCLE,

To
THE Chief Engineer
P. W. Department.

Enclosures.

~~Put up for C.E.'s 7090 dated 11/9~~

No 2679 C of 11/8/87

SIR,

With reference to my letter No 1980 dated 7th August 1887, I have the honor to forward copy of the Report on the testing by Sergeant Green, of the Lightning Conductor attached to the Light House at Tuticorin.

I have the honor to be
Sir
Your Most Obedient Servt
H. M. Vibart Colⁿ R.E.
Superintending Engineer
5th Circle

No 3123 C. 16.9.87
" 2679 C. 11.8.87
" 2420 C. 20.7.87
B. No 1301 W. 12.5.87

No C 3244 Ca/24th Sept 1887

Communicated to the S.E. VI Circle in continuation of No 2679 C, dated 11th August 1887.

2. The suggestion made in the report should receive attention.

[illegible]
21/9/87.

D 24.9

S.E. VI Circle

(Statement to S.E. VI [illegible])

[illegible] 19.9.87 R. 23.9.87

From
P.W.C. No 7188
THE SUPERINTENDING ENGINEER,
V CIRCLE,
(6)

To
THE Chief Engineer P.W. Department

Dated } September 1887.
Recd. }

ENCLOSURES.
No 3244 Ca/

No. 2414.

Light House at Tuticorin.

—

Forwards copy of the report on the testing of the Lightning Conductor attached to the ——

SUPERINTENDING ENGINEER'S OFFICE,
No. 3035 ~~Bangalore~~ Camp Ooscottah V Circle, Madras,
~~Chepauk~~, 26th October 1887.

From
Colonel H. M. Vibart R.E.,
SUPERINTENDING ENGINEER, V CIRCLE,

To
THE Chief Engineer P.W. Dept.
Thro' The Examiner of P.W. Accts.

Enclosures.

SIR,

I have the honor to state that Supervisor Sergeant Green brings to notice that on the two occasions that he was deputed for the purpose of testing Lightning Conductor—on the first occasion, the Lightning Conductors at the Gun Powder Factory at Madras, under the Superintending Engineer's Orders, in December 1886—and on the second occasion, the Lightning Conductor at Tuticorin, under your Memo No 2420 C dated 20th July 1887—he became liable to the loss of Rupees 20 on the first and of Rs 7 on the second occasion. Sergeant Green draws double

[illegible]

horse allowance Rs 30 - and when ordered on Special duty out of his Head Quarters drew the Daily allowance of Rs 2, instead - When ordered on duty to Madras from Bangalore in December 1886 he was allowed under G.O. No 1107 dated 22d April 1887, daily allowance for the whole period of his stay in Madras - the restriction to ten days being relaxed in his case. He then drew only one Rupee a day extra - while he had to keep himself in Madras, maintain his horse in Bangalore and pay Rupees 2 - 8 - 0 per day for Carriage hire to go to his work in Madras. I recommend that in these ~~[illegible]~~ and similar cases daily allowance be given to Sergeant Green while absent on Special duty from his Head Quarters in addition to his fixed Horse allowance of Rupees 30 a month as I consider the allowance he was granted insufficient to meet his actual expenses.

I have the honor to be
Sir
Your Most Obedient Servt
Coll R.E.,
Superintending Engineer
5th Circle.

No. 3244C d/ 24-9-87
" 2679C " 11-8-87
" 2420C " 20-7-87
B " 1107W " 22-4-87
" 2409W " 21-9-86
G.O. 1031W " 21-4-86
" 874W " 31-3-86
B. No. 2841W " 27-11-85
No. 1671C " 21-10-85
" 1602C " 8-10-85
" 1496C " 11-9-85
" 512E " 24-8-85
" 1477C " 8-9-85
" 2021W " 1-9-85

No. 1357C " 11-8-85
" 1235C " 21-7-85
" 1587W " 9-7-85
" 1087C " 23-6-85
" 1036C " 11-6-85
" 1035C " 11-6-85
" 977C " 29-5-85
" 696C " 1-4-85

No. 3816 ca/ 2d November 1887.

To C/

For remarks.

1.11.87

D.W.

28 NOV 87

805
28.11.87.

To W.

Sergeant Green cannot get conveyance or horse allowance in addition to daily allowance or mileage, vide Section 29 Rule 6 of Civil Travelling Allowance Code, last clause.

2. The case may I think be dealt with under Section 57(1) of the Pay and Acting Allowance Code, if Government is disposed to grant a deputation allowance when the subordinate in question is deputed to test lightning conductors at a distant station.

C.

25/11

P. W. C. No. ~~8625~~ 9658

544

From,

The Superintending Engr.

5th Circle

To,

The Chief Engineer

P. W. Department

No. 3308 W d/3rd Decr/87

Dated. 26th October 1887

Received ~~31-10-87~~
28-11-87

No. 3035.

Supervisor Serjeant Green.

Requesting sanction to daily allowance in addition to the fixed Horse allowance, when absent from Head Quarters on special duty.

No. 3308 W

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF [illegible] MADRAS GOVERNMENT.

UNDER date the 3rd Decr/87

READ the following

From the Supdg Engineer V Circle — } H. E. No. 3035 d/26th Oct 1887

Endorsement by the Examiner P.W. Accounts — } H. E. No. 805 d/28th Nov/87

The proposal of the Superintending Engineer to grant Sergt. Green, for the periods in question, daily allowance in addition to horse allowance is inadmissible under Section 29 Rule 6 of the Travelling Allowance Code. He will, however, be permitted to draw deputation allowance at the rate of one-fifth of salary under Section 57 (1) V. of the Pay and Acting Allowance Code; such allowance to be in addition to his fixed horse allowance.

29.11.87

P.T.T.
1 Dec

1/5 of Rs 150 = Rs 30.

D 3/12

Supdg Engr V Circle
Exr P.W. Accts

29/11/87

658

g Engr

B/No 3308 W d/ 3rd Decr/87

25/11

absent from Head Quarters
on special duty. 3

9658

1887.

P. W. DEPARTMENT.

Current No. 8695

From The Supdg: Engr: V Circle

ENCLOS.—

No. 3035
Dated 26th October 1887
Received 31st — " —

SUBJECT.

Supervisor Serjeant Green — Requesting sanction to Daily allowance in addition to the fixed Horse allowance, when absent from Head Quarters on special duty —

DISPOSAL.

No. 3816 Dated 2nd November 1887

Fol 6

For remarks

(Sd) W. L. C. B.
1. 11. 87
D.W.

Despd 2-11-87

3/11.

No. 1107 Wa/ 22-4-87

– 3244c – 24-9-87

– 2679c – 11-8-87

– 2420c – 20-7-87

– 1301 & – 12-5-87