(1) Number of pages 40

(2) Date of repair 6/87

(3) Initials of the Referencer Lano

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W.D DEPARTMENT

G.O. No. / B.P. No: 3184	Press. / Mis.
Dated 4-12-1882	19 .

Not to be folded or roughly handled

Archives 1--10,006 1 -80.

3184

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 15.

READ—the following papers:—

From Colonel R. MURRAY, Director-General of Telegraphs in India, to the Secretary to the Government of Madras, Public Works Department, dated Simla, 7th October 1882, No. 1874.

I have the honor to acknowledge the receipt of the Collector of North Arcot's letter, No. B of the 24th August 1882, together with Mr. Winter's estimate * for 22 miles of a telegraph line from Vellore to Chittoor, forwarded with Madras Government Order No. 2276 W. of the 5th September 1882.

* This is returned as requested.

2. The Collector's letter raises the following questions:—

i. the possibility of working a telephone on a line 22 miles long;
ii. the possibility of using cheaply constructed lines for telephones;
iii. the possibility of adopting a local district tariff;

whilst I see that he has, as is only too usual in similar cases, in his estimate of annual expenditure, forgotten the cost of maintenance and depreciation of the line and of the apparatus.

3. In Mr. Winter's estimate also are omitted all charges for—

carriage of material from Madras,
distribution of do. from Vellore to Chittoor, and the
cost of supervising establishment.

4. The line being very short these omissions do certainly not amount to much, but I take this opportunity of noticing them more with reference to future cases.*

5. Reverting to the main question however—

(1.) a telephone works under exactly the same laws as any other electrical instrument;
(2.) the bell which is by no means an unimportant part of the instrument is constructed in exactly the same manner as a Morse sounder, requires the same adjustments, and these adjustments are affected in a precisely similar manner by atmospheric changes altering the condition of the line;
(3.) the shorter any line is the less variation is there on it and *vice versâ*.

6. With men possessing the requisite technical knowledge for adjustment of the instruments at either end of the line telephones have been experimentally worked from Simla to Lahore over 250 miles, but they would certainly not have continued to work for many hours without a fresh adjustment.

* *E.g.*, it will be very evident to any one accustomed to estimating costs of works, that I could not make a mile of line starting from the Rayapuram Telegraph Store Depôt and then take the cost of that one mile as a unit from which to calculate the cost of any line of any length at any distance from a seaport.

7. It may be assumed that on a very good short line any electrical instrument will work for a long time without adjustment, but either an increase in the length or a decrease in the quality of a line increases the certainty of its variations and the consequent variations in the instrument adjustments, and these adjustments again require operators who understand them.

8. In addition to this question of adjustment, which refers principally to the bells, there are certain sounds which the telephone itself will not convey.*

9. Hence the result of the one year's experience this department has had of using telephones for transmitting messages (as contradistinguished to their use for conversational purposes) is that—

> A telephone system worked on a good line starting from a Telegraph office (which ensures an operator at one end of it with some technical acquirements and a thorough knowledge of the routine of message signalling) works fairly well, but never so well as the ordinary telegraph instrument;

whilst attempts which have been made in Bengal to work cheap provincial lines starting from Railway stations and ending in Post offices have caused such extreme dissatisfaction that the Bengal Government has begged that the plan be given up and regular telegraph lines made, and I have only two days ago sent His Honor the Lieutenant-Governor estimates for reconstructing the lines.

10. I can recommend therefore no more experiments of inefficient lines, or of lines worked by any sort of instruments of which at least one terminus is not managed by a skilled operator.

11. With regard to the question of tariff, it will be evident to His Excellency the Governor that there can, in the same country, be no more variations in Telegraph tariffs and systems than there is in Postal charges.

12. If an exceptional tariff were made for any district system it would be impossible to prevent its extension *ad infinitum*, whilst there is no more agreement in favor of a District Telegraph than of a District Postal fee.

13. Respecting the use of cheap poles, I have referred above to the inadvisability of making inefficient lines; by this, I have no intention of saying that the casuarina poles proposed to be used will make an inefficient line. Far from it, they will before decay sets in answer for any single light wire line as well as any other description of supports; and the advisability of using them depends not only on their first cost but on their probable life as compared with that of an iron post.

14. Now, for a line of this sort ten 22 feet iron posts would cost Rs. 312, on which the depreciation charge would be Rs. 7-8-0 a year, whilst on sixteen casuarina poles costing Rs. 24 I estimate the depreciation at Rs. 6 a year, in addition to interest charges in either case, so that in any localities where they can be procured at this cheap rate I should be very glad to use them for this or any other short branch guaranteed line.

15. Taking all the circumstances into consideration, I recommend that an office be established at Chittoor on the limited guarantee system, on terms exactly similar to those lately sanctioned for Kótagiri.

16. That is to say, that Chittoor be worked as a branch from the Telegraph Department office at Vellore, preferably by a Morse instrument worked by a non-department signaller, *i.e.*, one of the Collector's or Sub-Collector's clerks, who can, if opportunity be given him, be instructed in the Vellore signal office or (if no man can be found willing to learn Morse signals) by a telephone. It being noted that in either case the signaller's fees would be paid by this Department, but whereas for Morse signalling he could receive up to a maximum of Rs. 1-4-0 a day, for telephoning he would only receive a maximum of Re. 0-8-0 a day.

17. For a limited guarantee for a line to, and an office at, Chittoor, I attach an estimate, amounting to Rs. 700 *per annum*, based on the assumption that the Collector

* *E.g.*, it would not convey the words "Sidney Sussex's feelings are excessively susceptible," although by constant repetition and trial guessing the sense might be arrived at.

can supply suitable casuarina poles of not less than 20 feet in length and 12 inches girth at the smaller end for the sum named, viz., Rs. 1-8-0 each delivered, and if this amount can be guaranteed I will apply to the Government of India for the needful sanction to make the line.

ENCLOSURES.

ESTIMATE for erecting 22 miles telegraph wire for Telephone circuit.

Particulars.	No.	Rate. Rs.	A.	P.	Amount. Rs.	A.	P.	Total. Rs.	A.	P.
For one mile.										
Posts, wooden	24	1	8	0	36	0	0			
Insulators, iron arms and bolts	24	1	1	0	25	8	0			
Gald iron wire No. 9/2, lb.	300	0	2	5	45	5	0			
Do. „ 15	3	0	3	6	0	10	6			
Labor for erecting posts, &c.	1	10	0	0	10	0	0			
Contingencies at 10 per cent.	...		...		11	8	6			
Total for 1 mile ...	...		...		129	0	0			
Total for 22 miles ...	...		...		...			2,838	0	0
Instruments.										
Telephones	2		...		...			300	0	0
Shackles	4	1	0	0	4	0	0	8	0	0
Leading wires stations	2	15	0	0	30	0	0	60	0	0
Total ...	...		...		...			3,206	0	0

(Signed) A. J. STUART,
Collector and President.

ESTIMATE of the amount of a Limited Guarantee necessary for establishing a Telegraph Office at Chittoor as a branch from Vellore.

		Rs.	A.	P.
To be paid by Government Telegraph Department.				
Estimated cost of the line		3,600	0	0(*a*)
Of which cost of the wooden poles		540	0	0(*b*)
To be guaranteed.				
Interest at 5 per cent. on ... ... Rs. 3,600(*a*)	=	180	0	0
Depreciation 25 per cent. on ... ... „ 540(*b*)	=	135	0	0
Do. 2½ per cent. on ... ... „ 3,060(*a-b*)	=	76	8	0
Ordinary maintenance charges	=	110	0	0
Interest maintenance, depreciation, &c., on apparatus ...		200	0	0
		701	8	0
	say	700	0	0

Note.—The above being in addition to free suitable accommodation.

(Signed) R. MURRAY, Colonel,
Director-General of Telegraphs in India.

No. 933.

No. 15-A. MEMORANDUM.

Referred through the Financial Department to the Collector of North Arcot for any further remarks he may desire to offer.

2. The Government would prefer the adoption of the proposals in paragraph 15 of the Director-General's letter, and the Collector will report whether the amount mentioned, Rs. 700 per annum, might safely be guaranteed, and whether free suitable

accommodation for working the proposed telegraph line is available. He should also report whether he is quite certain of obtaining the requisite casuarina poles at Rs. 1-8-0 each. Arrangements will apparently have to be made for collecting them before the Forest Department take possession of the Jungle Conservancy Plantations.

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

23rd October 1882.

To the Financial Department.

No. 15-B.

From A. J. STUART, Esq., Collector of North Arcot, to the Chief Secretary to Government, dated Chittoor, 7th November 1882, No. 109.

In reply to your memorandum, No. 1196, dated 26th ultimo, I have the honor to state that the amount, 700 rupees per annum, may, I think, without doubt be safely guaranteed; free and suitable accommodation can also be provided in the Collector's office, and the casuarina poles required will be provided at the cost proposed, Rs. 1-8-0 each. For this purpose orders will be at once issued. I will also arrange for one of my clerks learning the Morse system.

2. I have only to add that I think the arrangement proposed and approved by Government will be in every way suitable.

No. 15-C.

From the Collector of North Arcot, dated 21st November 1882, No. A.

No. 1419, Financial.

Transferred to the Public Works Department.

(Signed) C. G. MASTER,
Chief Secretary.

27th November 1882.

No. 16.

ORDER—dated 4th December 1882, No. 3184 W., Public Works.

The Government approve the construction of a line of telegraph from Vellore to Chittoor on the limited guarantee system, the cost of which, according to the estimate framed by the Director-General of Telegraphs, will be Rs. 700 per annum.

2. The Collector of North Arcot is prepared to provide free suitable accommodation in his office and a non-departmental signaller, whose fees will be paid by the Telegraph Department, and to supply casuarina posts at Rs. 1-8-0 each.

3. Subject to the sanction of the Government of India, which the Director-General of Telegraphs will be good enough to obtain, the requisite arrangements may accordingly be made for the erection and working of the line.

(True Extract.)

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

To the Director-General of Telegraphs in India.
" Collector of North Arcot.
" Superintending Engineer, Fourth Circle.
" Examiner, Public Works Accounts.
" Financial Department.
" Superintendent of Telegraphs, Madras Division.

Exd. S. T. Austin.

Spare Copies

3184/3

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1882} Madras.

PUBLIC WORKS.

Dated December, 4th.

Recd. *Encl.*

G.O. 4th Dec. 1882, No. 3184 W.

DECEMBER.

Nos. 15-16.

Telegraph.

Approving of the construction of a line of — from Vellore to Chittoor, and requesting the Director-General to obtain the sanction of the Government of India.

No. 15
Public Works Department
Telegraph Branch

No. 1874

3184

FROM

THE DIRECTOR GENERAL OF TELEGRAPHS IN INDIA,

To

The Secretary to the Government of Madras
Public Works Department

Simla, the 7th of October 1882.

SIR,

I have the honour to acknowledge the receipt of the Collector of North Arcot's letter No. B of the 24th August 1882, together with an Winter's Estimate* for 22 miles of a Telegraph Line from Vellore to Chittoor forwarded with Madras Government Order No. 2276 W of the 5th September 1882.

*This is returned as requested

2. The Collector's letter raises the following questions.

I The possibility of working a Telephone on a line 22 miles long

II The possibility of using Cheaply constructed lines for Telephones.

III The possibility of adopting a Local District Tariff

whilst I see that he has, as is only too usual in similar cases, in his Estimate of annual expenditure

expenditure forgotten the cost of maintenance and depreciation of the Line and of the Apparatus.

3. In the United Estimate also are omitted all charges for

Carriage of material from Madras

Distribution of do. from Vellore to Chittoor

and the Cost of Supervising Establishment.

4. The line being very short these omissions do certainly not amount to much, but I take this opportunity of noticing them more with reference to future cases."

5. Reverting to the main question however

I A Telephone works under exactly the same laws as any other Electrical Instrument.

II The Bell which is by no means an unimportant part of the Instrument is constructed in exactly the same manner as a Morse Sounder, requires the same adjustments and these adjustments are affected in a precisely similar manner by atmospheric changes altering the condition of the line.

III.

F.N. e.g. It will be very evident to any one accustomed to estimating costs of works that I could not make a mile of line starting from the Rozapoorum Telegraph Store yard and then take the cost of that one mile as a Unit from which to calculate the cost of any line of any length at any distance from a Seaport

III The shorter any line is the less variation is there on it and vice versâ.

6. With men possessing the requisite Technical knowledge for adjustment of the Instruments at either end of the line Telephones have been experimentally worked from Simla to Lahore over 250 miles but they would certainly not have continued to work for many hours without a fresh adjustment.

7. It may be assumed that on a very good short line any Electrical Instrument will work for a long time without adjustment but either an increase in the length or a decrease in the quality of a line increases the certainty of its variations and the consequent variations in the Instrument Adjustments, and these adjustments again require Operators who understand them.

8. In addition to this question of adjustment which refers principally to the Bells there are certain sounds which the Telephone itself will not convey.

9. Hence the result of the one years experience this Department has had of using Telephones for transmitting

F.N. e.g. it would not convey the words "Sidney" "Sussex's feelings are excessively susceptible" although by constant repetition and trial guessing the sense might be arrived at.

transmitting messages (as contradistinguished to their use for conversational purposes) is that

A Telephone system worked on a good line starting from a Telegraph Office (which ensures an Operator at one end of it with some technical acquirements and a thorough knowledge of the routine of message Signalling) works fairly well but never so well as the ordinary telegraph instrument.

whilst attempts which have been made in Bengal to work cheap provincial lines starting from Railway Stations and ending in Post Offices have caused such extreme dissatisfaction that the Bengal Government has begged that the plan be given up and regular telegraph lines made and I have only two days ago sent His Honor the Lieutenant Governor Estimates for reconstructing the lines.

10. I can recommend therefore no more experiments of inefficient lines or of lines worked by any sort of instruments of which at least one terminus is not managed by a skilled Operator.

11. With regard to the question of Tariffs it will be evident to His Excellency the Governor that there can, in the same Country, be no more variations in Telegraph Tariffs and Systems than there is in Postal

Postal charges. 3184/6 173.

12. If an exceptional Tariff were made for any district System it would be impossible to prevent its extension ad infinitum whilst there is no more Agreement in favour of a District Telegraph than of a District Postal fee.

13. Respecting the use of Cheap Poles I have referred above to the inadvisability of making inefficient lines, by this I have no intention of saying that the Casuarina Poles proposed to be used will make an inefficient line. Far from it. they will before decay set in answer for any single light wire line as well as any other description of supports and the advisability of using them depends not only on their first cost but on their probable life as compared with that of an Iron Post.

14. Now for a line of this sort ten 22 feet iron posts would cost Rs 312/- on which the depreciation charge would be Rs 7.8 a year whilst on sixteen Casuarina Poles costing Rs 24/- I estimate the depreciation at Rs 6/- a year, in addition to interest charges in either case, so that in any localities where they can be procured at this cheap rate I should be very glad to use them for this or any other short branch

branch guaranteed line.

15. Taking all the circumstances into consideration, I recommend that an Office be established at Chittoor on the limited guarantee system on terms exactly similar to those lately sanctioned for Kotagiri.

16. That is to say that Chittoor be worked as a Branch from the Telegraph Department Office at Vellore, preferably by a Morse Instrument worked by a non-departmental Signaller i.e. One of the Collector's or Sub-Collector's Clerks who can, if opportunity be given him, be instructed in the Vellore Signal Office or (if no man can be found willing to learn Morse Signals) by a Tele-phone. It being noted that in either case the Signallers fees would be paid by this Department, but whereas for Morse Signalling he could receive up to a maximum of ~~Rs~~ 1-4-0 a day, for telephoning he would only receive a maximum of ~~Rs~~ 0/8/0 a day.

17. For a limited guarantee for a line to, and an Office at, Chittoor, I attach an Estimate amounting to ~~Rs~~ 700/- per annum based on the assumption that the Collector can supply suitable Casuarina Poles of not less than

20 feet

20 feet in length and 12 inches girth at the smaller end for the sum named viz ~~Rs~~ 1/8/0 each delivered, and if this amount can be guaranteed I will apply to the Government of India for the needful sanction to make the line.

I have the honour to be
Sir,
Your Most obed^t Servant,

R Murray Colonel
Director General of Telegraphs in India

G 28 = 1791 W
of 15/7/82 & 30
22 & W. of 22/5/82

Estimate for erecting 22 miles Telegraph wire for Telephone circuit.

3182/8

Particulars	No	Rate	Amount			Total		
For one mile								
Posts wooden	24	1-8--	36	--				
Insulators iron arms & bolts	24	1-1--	25	8	--			
Galv iron wire No 9/2 lbs	300	-- 2-5	45	5	-			
Do — Do — No 15	3	-- 3-6	--	10	6			
Labor for erecting posts &c	1	10--	10	--	-			
Contingencies at 10 per cent	--	--	11	8	6			
Total for one mile			129	--	-			
Total for 22 miles						2838	--	-
Instruments								
Telephones	2					300	--	-
Shackles	4	1	4	--	-	8	--	-
Leading wires stations	2	15--	30	--	-	60	--	-
Total						3206	--	-

A C Ward
Collector
President

Telegraph
Jl 31/3/82

Ex No 2

No 13/10/12

Ch 22.10
Cir 18/10 Rs 10
rel 16/10

Estimate of the Amount of a Limited Guarantee necessary for establishing a Telegraph Office at Chellore as a branch from Vellore

The part of cost of Apparatus not included	Estimated cost of the Line	₨ 3600 (a)
	Of which cost of the Wooden Poles	" 540 (b)

To be provided	Interest at 5 p/c on ₨ 3600 (a)	=	₨ 180
	Depreciation 25 p/c on " 540 (b)	=	" 135
	& 2½ p/c on " 3060 (a-b)	=	" 76 - 8
	Ordinary Maintenance Charges	=	" 110
	Interest Maintenance, Depreciation & on Apparatus		" 200
			₨ 701 - 8
		Say	₨ 700

Note

The above being in addition to free suitable accommodation

A Murray Colonel
Director General of Tele: in India.

Pub 31/3/52
~~Pub 28/9/52~~
P 24/5/52

nabw 6/10

S. W. D.

No. 933 Ed. 23rd Octr. 1882

Memorandum

Letter from the Director General of Telegraphs in India No. 1874 d. 7th Octr. 1882.

—

Referred through the Financial Dept. to the Collector of North Arcot, for any further remarks he may desire to offer.

2. The Government would prefer the adoption of the proposals in para 15 of the Director General's letter, and the Collector will report whether the amount mentioned, Rs. 700-/ per annum, might

safely be guaranteed, and whether free suitable accommodation for working the proposed Telegraph line is available.

He should also report whether he is quite certain of obtaining the required Cassarina poles at Rs 1/8 each. Arrangements will apparently have to be made for collecting them before the Forest Dept take possession of the Jungle Conservancy Plantations.

Ex. 1791 to 4/15/12
4576 " 4/15/12
2622 to 4/9/12

No 933 Ex. 23rd Oct/12

The Financial Sept

Dec 23. 23/10

Ans: 18/10 R 10/6

North Arcot, Collector's Office.

No. 109. Chittoor, 7 November 1882.

From

THE COLLECTOR OF

North Arcot.

To

THE Chief Secretary to Government.

Sir,

In reply to your Memo No. 1196 dated 26 Ultimo, I have the honor to state that the amount 700 Rupees per annum may I think without doubt be safely guaranteed; suitable accommodation can also be provided in the Collector's Office, and the Casuarina poles required will be provided at the cost proposed, Rs 1-8-0 each. For this purpose orders will be passed once issued. I will also arrange for one of my Clerks learning the morse system.

2. I have only to add that I think the arrangement proposed and approved by Government will be in every way suitable.

I have the honor to be,
Sir,
Your most obedient Servant,
[signature]
Collector.

P. W. No 13 10 of 14/11/82

The Collector of Accrat is requested to return the Proceedings of the PWD forwarded to him with Memo from this office No 1936 of 26th October 1882 vide his letter No 109 of 7th Nov 1882

Pay of Supervisor of Under Secy
14th Nov 1882

To the Collector of Accrat

DESPATCHED
NOV 17
IN MS

Public (1882) Dept
(Telegraphs)

From,

THE COLLECTOR OF
North Arcot.

To,

THE Chief Secretary to Government

No. 3088

Dated 7th November 1882.
Received

No. 109

ENCLOSURE.

Subject.

Informing that speedy arrangements will be made for the proposed line of telegraph between Salem & Vellore

To Agw Civil Wks

Sanction of the attached draft contains an expression of the opinion of Government which it might be thought desirable to circulate before issue. In this case the draft will have to be recopied, leaving half margin.

R.S.
18-10

Draft approved - with slight alterations but it should be recopied for circulation

18.10.82

P. W. DEPARTMENT—1881-82.

MEMORANDUM.

Current No. 6971

Letter Number 1874

dated the 7th Octr 1882

from the ~~Supt. Engineer of~~ Dir Genl of Telegraphs in India

1. Referred through the Financial Dept. to the Collector of ~~Vellore~~ North Arcot, for any further remarks he may desire to offer.

2. The Govt would prefer the adoption of the proposals in paras 15 et seq of the Dir. Genl's letter, & the Collector will report whether the amount mentioned, Rs 200 per annum, might safely be guaranteed, & whether suitable accommodation for working the proposed Telegraph line is available.

[illegible]

16.10.82

Sh. 370

No. 933 E.

P. W. D.

Ootacamund, 2nd Octr. 1882.

No. 22214

3181

Memorandum

Letter from the Director General of Telegraphs in India No. 1874 d/ 7th Octr. 1882.

—

Referred through the Financial Department to the Collector of North Arcot, for any further remarks he may desire to offer.

2. The Government would prefer the adoption of the proposals in para 15 of the Director General's letter, and the Collector will report whether the amount mentioned, Rs 700-/ per annum, might safely be guaranteed, and whether free suitable accommodation for working the proposed telegraph

line is available. He should also report whether he is quite certain of obtaining the requisite Casuarina poles at Rs 1/8 each. Arrangements will apparently have to be made for collecting them before the Forest Department take possession of the Jungle Conservancy Plantations

V Muncherjee
Col RE
Ag Secretary to Govt MD

To,
The Financial Secy

3189
H

1150 - 15-9-82 [illegible]

Financial
~~Public~~ Dept

Telegraphs

Forwarded to the Collector of North Arcot.

[illegible]
Chief Secretary

Inn
P.W. Dept.

3135

D/23
R/ — } Oct. 1882

Attn Secy
[illegible]

No 80 mentioned in para 15.

[illegible]

North Arcot, Collector's Office

No. A. Camp Vellore, 27 November 1882.

From,

THE COLLECTOR OF
North Arcot,

3135/17

To,

THE Ag Under Secretary
to Government, Public Department,
Madras

Sir,

With reference to your Official Memo No. 1310 dated 14th Instant, I have the honor to return herewith the Proceedings of the Public Works Department No. 933 E. dated 23rd October 1882 forwarded with the indorsement No. 1196 dated 26th Idem.

I have the honor to be,
Sir
Your Most Obedt. Servant

[illegible]
Collector

Public (Works) Dept
(Telegraphs)

No 1419

Transferred to the Public Works Department.

Chandler
27/11/82 Chief Secretary.

From
The Collector of North Arcot

To
The Acting Under Secretary to Government

Dated 21st November 1882.

Dep 21.
Rec 22.
No A. 3465

Ex. 17916 of 15.7.82
22044 28.8.82
22622 9.11.82
22764 5.9.82
9356 23.10.82

Returns the Proceedings of the Public Works Deptt No 930 dt. 7/20 October 1882

25/11.
Cir 30/11. 12/4/12

No 3184 w.

B & C
Cash

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 4th December

Read the following:—

3184/5

From,
The Director General of Telegraphs in India (H.E. No 1874 of 7 Octr 1882)

Memo: by the Secy to Govt PWD (" " 933 of 23rd " ")

From the Collector of N. Arcot (" " 109 of 7th Nov ")

Do do (" " A of 21st " ")

Endorsement. Financial Dept (" " 1419 of 27th " ")

The Government approve the construction of a line of telegraph from Vellore to Chittoor on the limited guarantee system, the cost of which according to the estimate framed by the Director General of Telegraphs

will be Rs 700/- per annum.

2. The Collector of North Arcot is prepared to provide free suitable accommodation in his office, and a non departmental signaller, whose fees will be paid by the Telegraph Deptt, and to supply Casudrma posts at Rs 1/8 each.

3. Subject to the sanction of the Govt of India, which the Director Genl of Telegraphs will be good enough to obtain, the requisite arrangements may accordingly be made for the erection and working of the line.

Cus 29/11/82 29.11.82

Cu 30/11 & 4/12

Ins H E Sullivan

61

Dg 10 4/12

Director Genl of Tels in India

Collr of N. Arcot &

Sd. South Circle U.

Examiner W Accounts

Financial Deptt

Supt. of Tels, Madras Dn.

8/11

Govt. of (1882) Madras.

PUBLIC WORKS.

3/12

Dated

Rec'd. Encl.

G. O., 4th Dec: 1882, No. 5184-R.

Nos. 15-16

Telegraph

Approving of the construction of a line of — from Vellore to Chittoor and requesting the Director General to obtain the Sanction of the Govt. of India

81

Entd in Receipt Register

Dec 4/12