M.R.O. 1—77,006—8-6-37.

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 104,105	2619	Press / Mis.
Dated	7. 11.	1892.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 7th November 1872.

No. 104. Read the following letter from the Officiating Deputy Secretary to the Government of India, Public Works Department, (Railway), to the Secretary to the Government of Madras, Public Works Department, (Railway), dated Simla, 16th October 1872, No. 1,659-G. R:—

I AM directed to acknowledge the receipt of your letter No. 2,230, dated the 20th September 1872, on the subject of renewing with iron sleepers the line between Muddikerry and Beypore on the Madras Railway, and, in reply, to state that the Government of India are unwilling to sanction the proposed outlay until they are furnished with conclusive evidence as to the financial advantages of the change.

2. The Chief Engineer gives Rupees 492 as the annual cost in labour and materials of the renewal and maintenance of a mile of iron road, but it appears to the Government of India that the lowness of this amount may be partly due to the fact that the average amount of renewals of the iron sleepers has not yet been ascertained correctly, owing to sufficient time not having elapsed since they were laid. On the other hand, the cost of labour and materials in the renewal and maintenance of the road laid with cross wooden sleepers is shown to have been Rupees 1,506 per annum, an amount apparently far higher than it ought to have been. The average expenditure on this account on the main line of the East Indian Railway during the past five years has been Rupees 1,280 per mile of single track, exclusive of superintendence, and in this sum is included not only the cost of maintenance of the way in the main line, but also that of the station sidings, of the bridges, and of all the other works on the Railway.

3. Considering the comparatively heavy traffic on the East Indian Railway, the Government of India expected to find that the wooden cross sleeper road would have been maintained for less money in Madras than in Bengal, and they do not at present understand why creosoted sleepers, which last well in the dry climate of Scinde and the Punjab, and have a life of ten or twelve years in the wet climate of Bengal, should not, if equally well prepared, endure as long when laid in the Railways on either side of the Madras Presidency.

4. I am also to ask if full consideration has been given to the great difficulty and expense now attending the purchase of iron in England.

5. A copy of the Reports of the Chief Engineer, East Indian Railway, for the first and second halves of 1871 are enclosed for information.

No. 105. ORDER THEREON, 7th November 1872, No. 2,619.

RAILWAY, No. 25.

COMMUNICATED to the Consulting Engineer for Railways, with reference to G. O., No. 2,229, dated 20th September 1872.

2. The Consulting Engineer's attention is particularly requested to paragraphs 3 and 4, the experience with creosoted sleepers recorded in the former of which, appears to His Excellency the Governor in Council to confirm that

as the annual cost in labour and
materia

Proceedings of the Madras Government, Public Works Department,
7th November 1872.

recorded on the Great Southern of India Line which the Chief Engineer of the Madras Railway is unable to dispute, and to make a trial on the Western Coast of creosote for sleepers advisable.

(True Extract.)

Major, R.E.,
Acting Joint Secretary to Government.

To the Consulting Engineer for Railways.

Exd. S. T. Austin.

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All communications should be addressed to the Secretary.

No. 1659 C–R.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

~~STATE~~ RAILWAYS.

To

The Secretary to the Govt of Madras
Public Works Department (Railway)

Simla, 16th October 1872

Sir,

I am directed to acknowledge the receipt of your letter No. 2230 dated the 20th September 1872, on the subject of renewing with iron sleepers the line between Muddikerry and Beypoor, on the Madras Railway, and in reply to state that the Government of India are unwilling to sanction the proposed outlay, until they are furnished with conclusive evidence as to the financial advantages of the change.

2. The Chief Engineer gives Rs. 492— as the annual cost in labour and [illegible] materials

materials of the renewal and maintenance of a mile of iron road, but it appears to the Government of India that the causes of this amount may lie partly due to the fact that the average amount of renewals of the iron sleepers has not yet been ascertained correctly, owing to sufficient time not having elapsed since they were laid. On the other hand the cost of labour and materials in the renewal and maintenance of the road laid with cross wooden sleepers is shewn to have been Rs. 1506 per annum, an amount apparently far higher than it ought to have been. The average expenditure on this account on the Main Line of the East Indian Railway during the last 5 years has been Rs. 1280 per mile of single track, exclusive of superintendence, and in this sum is included not only the cost of maintenance of the way in the Main Line, but also

that of the Station Sidings of the Bridges and of all the other works on the Railway.

3. Considering the comparatively heavy traffic on the East Indian Railway, the Government of India expected to find that the wooden cross sleeper road would have been maintained for less money in Madras than in Bengal, and they do not at present understand why creosoted sleepers which last well in the dry climate of Scinde and the Punjab, and have a life of 10 or 12 years in the wet climate of Bengal, should not, if equally well prepared, endure as long when laid in the Railways on either side of the Madras Presidency.

4. I am also to ask if full consideration has been given to the great difficulty and expense now attending

the

the purchase of iron in England.

5. A copy of the Reports of the Chief Engineer East Indian Railway for the 1st and 2nd halves of 1871, are enclosed for information.

I have the honor to be,
Sir,
your most Obedt. Servt.

H. Drummond Capt. R.E.
Offg: Dy: Secretary.

Ref.

P.W. 1872 Depart.

No. 5182.

Rec.d 25th October 1872.

From Govt of Madras

No. 1659 G.R.

Dated 16th October 1872.

Encs 2

Requesting further information on the subject of renewing with iron sleepers the line between Muddikerry and Beyapoor on the Madras Railway before according sanction to the work.

No. 1074

No. 2819-7 "Nov/72

Copied to Govt 25 Oct/72 P. Barlow

To

The Secretary to the Government of India P.W.D.

P.W.D. 9

Sir

I have the honor with reference to Govt of India letter No. 1659 GR 16 Oct. 72 to forward a letter from the Govt of Madras and its enclosure from the Madras Railway officers on the subject of renewing with iron sleepers the line between Muddikerry & Beyapoor on the Madras Railway with the Opinion of this Govt thereon & I am directed to request that the Govt of India will address to the Secretary of State recommending the sanction of the Secretary of State to the expenditure & the open line may be maintained. I am to urge most strongly the advisability of renewing with Iron

for creosoted sleepers that system of the line situated near the sea. for a distance of at least 10 miles a and that through the Peat ground a distance of 7 miles in the former that the success of this as compared with Country wood sleepers is not a sufficient reason for declining to try a discipline of sleepers of which the success has been abundantly proved and which therefore is by no means to be believed until at least 6 years

6 13 Sept 72

91

Mr Scott in the Opinion in connection with the Engineers in Railways in the opinion that the success of the sleepers is sufficient reason for withholding a fair trial for creosoted Baltic fir sleepers. of which the success elsewhere is admitted. and in the Irish Railways at least, highly probable, Mr Scott says that the renewals of the latter would be the same at least 10 miles each year at least 6 years

I am unable to see the advantage of making this experiment.

Taking wooden sleepers under adverse the best circumstances they have to be entirely renewed in 12 or 13 years.

Their maintenance is three times as expensive as the iron pot sleepers.

The iron pot sleepers at the end of 10 years are described as being in perfect order.

The experience and advice of the Chief Engineer is dead against the experiment

The experiment is to be tried in a part of the country most unfavorable to wooden sleepers.

I have the

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Mr Scott in the Opinion in connection with the Engineers in Railways in the opinion that the success of the sleepers is sufficient reason for withholding a fair trial for creosoted Baltic fir sleepers. of which the success elsewhere is admitted. and in the Irish Railways at least, highly probable, Mr Scott says that the renewals of the latter would be the same at least 10 miles each year at least 6 years

to be made, as soon as a supply can be procured for Baltic fir sleepers. and the Co. by this call upon the Legislature to sanction the experiment.

medium; the Govt Engineer will be requested to state whether the existing stock of existing stock of sleepers will be sufficient for the proposed, but the Engineers will in the meantime ascertain what the stock there will be sufficient for the proposed line and as to bearing to the interest on the capital thereby to be necessarily incurred.

Govt

lines - The first cost of wooden sleepers is said to be R 547.552. This chargeable is not distributed by the Subsequent - The annual interest at 5% of this = R 27.388. The annual cost of maintenance is set down as R 150 per mile - The cost of Indian Railway this is taken at 1280 as the average on the East Indian Rail - Taking the rate the annual charge will be R 129.280 for 101 m. the apparent of these sleepers R 157 668.

Iron Bridges

The Iron Bridge line will cost R 12.67840 the interest at which = R 63.392.. The maintenance is R 492 per m. = R 49.692 - Total R 113.084 - Saving by using iron instead

498 - 1 - 6

of wood R 44.584 per an.

Mr Elsom submits the objection on the score of the increased cost of iron at present.

If the spikes are bored & tied on - and they do not object to be generally taken up &c. trying the bridges & thoroughly disconnected as it is by all the Engineer officers of the Railway. However I do not see the utility of trying it now - when the last 75 miles of the lines N.W. - S.W. and Bangalore & Kolar are made or are finished with Iron Bridges. We must wait for

Rd.

Rec'd. 1872

Rec'd. of the Madras govt.

2619 Read the 4th Novr.

from the govt. of India - (H.L. No 1659 f.R. 9/10 Oct 72)

Communicated to the
Consulting Engineer for
Railways with reference
to G.O. No. 2229 dated
20th September 1872.

The Consulting Engr.
-gineer's attention is
particularly requested
to paragraphs 3 and 4,
the experience with
creosoted sleepers
recorded in the former

for the result of the experiment
and the lesson it teaches will
come to late!

J. B.S.

I should like to know (when)
the letter in here been read &c.
stating our views in
the letter the subject of a bell.
Engineer and Examiner to see
Also in the Annual Blue
Book letter of Engineering, it
would have to go to Europe &
Letter also for work.

J. B.S.

I agree in the views taken by Mr. Simm
and Mr. Ellis.

of which, appears to His
Excellency the Governor
in Council to confirm
that recorded on the
Great Southern of
India line which the
Chief Engineer of the
Madras Railway is
unable to dispute, and
to make a trial on the
western coast of Cro-
-omandel for a deeper advisable.

C.J.
Gmm

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To
The Consulting Engineer
for Railways
Through
Despr 8/11/72

Rd 2nd Dec 21/11/72

No. 5782

Govt. of {1872} Madras.

PUBLIC WORKS.

To The Consulting Engineer for Railways.

Dated

Recd. Encl.

G. O. 7th Novr 1872. No. 2619.

Nos. 104 & 105

Iron Sleepers (Rainbow) Letter

From Transport Dept Re Experiments
Further information in the
subject of renewing with iron
sleepers the line between Mud-
dikerry and Beypore on the
Madras Ry before answering
question Who work, Comp
Whether any Engr with in-
structions.