M.R.O. 1—10,000—28-2-50

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MADRAS RECORD OFFICE

Government of Madras

Public (Sanitary) DEPARTMENT

G.O. No. 2389 — Press
B.P. No. 431, 432 Mis.

Dated 29 . 9 . 1873 195 .

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 29 th September 1873.

No. 431. Read the following letter from Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Madras, 12th September 1873, No. 482 :—

ADVERTING to my letter dated the 5th instant, No. 468, I have the honour to submit, for the information of Government, Captain Thompson's Report* upon the Neilgherry Branch, together with the detailed results of the girder testing.

* Dated 9th September 1873.

Note on the Neilgherry Branch Railway inspected on the 28th and 31st of August and the 1st of September 1873.

I HAVE the honour to report having inspected the Neilgherry Branch of the South-West Line, Madras Railway, on the 28th and 31st ultimo and on the 1st instant.

2. On the 28th ultimo all the large girder bridges were tested in the presence of Mr. Robinson, Acting Deputy Chief Engineer, Madras Railway, Mr. Boulther, Resident Engineer in charge of the fourth division, South-West Line, Madras Railway, and myself.

3. I enclose a list of the bridges in question, including a statement of the deflections and contra deflections of each pair of girders subjected to the double test of standing and running loads.

4. The test load consisted of two locomotives (Nos. 85 and 89) coupled funnel to funnel. They are engines of the largest and heaviest type in use on the Madras Railway, and with their boilers and tenders filled brought a weight of about 100 tons to bear on each pair of girders of 64 feet clear span.

5. The maximum deflection and contra deflection of girder (amounting, respectively, to $\frac{11}{16}$ths and $\frac{5}{8}$ths of an inch) occurred in the bridge at the 5th mile and 68th chain.

6. In the statement referred to above in paragraph 3 it will be noticed that the contra deflections of the west or left girders of the fourth pair in the bridges at the 5th mile 68th chain and the 11th mile and 7th chain are not entered. The omission is owing to their contra deflections not having been absolutely accurately ascertained, in consequence of the girder beds on the north abutments of the bridges in question being in each case slightly too low. The contra deflections indicated by the registering apparatus were consequently exaggerations of the actual amounts due to the testing load.

7. Even under the circumstances however the contra deflections were inconsiderable and will be greatly reduced by the introduction of a little additional "packing" under the bearings of the girders on the abutments in question.

8. The bridges having been all satisfactorily tested, and the road-way throughout being in excellent order and well ballasted, Mr. Robinson was informed that there appeared to be no objection to the Neilgherry Branch being opened for traffic from Coimbatore up to Mettapollium.

9. On the 31st ultimo I accompanied Mr. Church, Traffic Manager, Madras Railway, over the line when the stations were all thoroughly inspected, the official staff at each duly installed, and all arrangements made for opening the line.

10. On the 1st instant the line was duly opened by a passenger train leaving Pothanore at 8-10 A. M. and reaching Mettapollium at 9-30 A. M. The return train leaving Mettapollium at 2 P. M. and arriving at Pothanore at 3-30 P. M. A large number of passengers of all classes travelled by this train to and from Mettapollium. The first-class passengers appeared to be unanimously of opinion that 9-30 A. M. is a convenient hour to arrive at Mettapollium for visitors

to the Hills, as it admits of a bath and breakfast being leisurely and comfortably disposed of, after the night's journey in the train, before ascending the ghaut.

11. Up to the 4th instant (when I left Pothanore) there had been considerably more passenger traffic on the Neilgherry Branch than had been anticipated, but whether or not it arose from curiosity *and the enjoyment of a novelty* on the part of the natives cannot well be determined yet. The Traffic Manager, however, appears *to think that* there will be a considerable constant third and coolly-class traffic on the line. There is a temple of some importance and *periodical* fêtes held at Karamadi which no doubt attract a good many natives from Coimbatore and Tudialore, and the Railway will in all probability be used by them in future.

(Signed) R. THOMPSON, Captain, R.E.,
Offg. Dy. Consulting Engineer for Railways.

9th September 1873.

Statement showing the deflection of Girders on the Neilgherry Branch, Madras Railway, taken on the 28th August 1873. Engines used were Nos. 85 and 89. Greatest weight on Bridge about 100 Tons.

	No. of Opening.	Deflection of Girders in 10ths of an inch.				Contra deflection of Girders in 10ths of an inch.			
		Running.		Standing.		Running.		Standing.	
		East or right Girder.	West or left Girder.	East or right Girder.	West or left Girder.	East or right Girder.	West or left Girder.	East or right Girder.	West or left Girder.
Two 64 feet Girder Bridge at 5 miles 29 chains—									
Do. do. do. ...	1	10	8	10	8	1	2	3	3
Do. do. do. ...	2	7	7	8	8	4	3	3	3
Four 64 feet Girder Bridge at 5 miles 68 chains—									
Do. do. do. ...	1	11	10	11	11	2	1	4	4
Do. do. do. ...	2	11	13	12	13	4	4	4	4
Do. do. do. ...	3	13	14	13	14	2	2	4	4
Do. do. do. ...	4	11	11	12	12	5	...	5	...
Two 64 feet Girder Bridge at 10 miles 11 chains—									
Do. do. do. ...	1	9	8	9	8	2	2	3	4
Do. do. do. ...	2	10	10	10	11	4	4	4	3
Four 64 feet Girder Bridge at 11 miles 7 chains—									
Do. do. do. ...	1	11	11	11	11	2	1	4	5
Do. do. do. ...	2	9	12	11	13	5	4	4	5
Do. do. do. ...	3	12	12	12	12	2	2	4	5
Do. do. do. ...	4	10	11	11	12	5	...	4	...
Two 64 feet Girder Bridge at 12 miles 3 chains—									
Do. do. do. ...	1	9	10	9	10	2	1	3	3
Do. do. do. ...	2	9	8	9	8	4	4	3	3
Four 64 feet Girder Bridge at 19 miles 4 chains—									
Do. do. do. ...	1	10	10	10	9	1	1	4	4
Do. do. do. ...	2	10	12	10	13	5	4	3	4
Do. do. do. ...	3	11	11	11	11	1	2	4	4
Do. do. do. ...	4	10	10	10	11	4	3	4	4

(Signed) W. BOULTHER,
Resident Engineer, N. B. L.

Proceedings of the Madras Government, Public Works Department,
29th September 1873.

No. 432. ORDER THEREON, 29th September 1873, No. 2,389.

RAILWAY, No. 57. ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

Railway Department. CONSULTING ENGINEER'S OFFICE.

No. 482

From

LIEUT.-COLONEL J. H. M. SHAW STEWART, R.E.,
Consulting Engineer for Railways,

To

COLONEL G. W. WALKER, R.E.,
Secretary to Government,
Public Works Department,
Fort Saint George.

SIR,

dated 9 Sept. 73

Adverting to my letter dated the 5th instant No. 468, I have the honour to submit, for the information of Government, Captain Thompson's report upon the Veilgherry branch, together with the detailed results of the girder testing.

I have the honour to be
Sir
Your most obedient Servant
Lt.-Col. R.E.
Cons. Engineer for Railways

Madras
12 September 1873

Sort on the Peilstorz Branch
Railway, Projected on the 28th
and 31st August and the 1st
of September 1843 ——

(1) That the Powers of
Extraordinary Projected
for Peilstorz Branch
of the South Vistula
Madras Railways on
the 28th and 31st ultimo
and on the 1st Inst.

(2) As the 28th ultimo all
the Lands under Proceedings
were ordered on the
Petition of Mr Robinson
Acting Chief Engineer
Madras Railway)
Mr Bartlett (Assistant
Engineer in Charge of the
1st Division. S. P.
Line Madras Railway)
and Mr Ryall.

(3) And whereas a Sub-Ag
Under Agreement
including a Statement
of the Objections and
Counter Objections of Each

Packing" under the
Carriage of the Goods
in the Act-Book in
Duplicate —

(8)

The Cargo having
been all Satisfactorily
Tested and the Load-
-way Remaining
in Excellent-
Order and well
Calculated? The
Vessel was
Cleared? Then
Opened the Re
depechin of the
Sailors Bunch
ing Opened for
Taffre from-
Combaim upo 4-
Pulapallim.

(9)

The 31st Telinio
Accompanied the
Church (Rajpic Ramya
Madras Railway)
Near Durtin, Tirun-

The Sailors were
All Strangers Engaged.
and the Official Stay
in Each Place Calculated.
and all Arrangements
made for Opening
the Cir.

(10)

On the 1st Instant the
Cir was Closed Opened
for Passengers Cargo
Luggage Etc
At 8.10 am and
Reaching Pulapallim
at 9.30 am. The
Return Train leaving
Pulapallim at
2 pm and arriving
at Nellore at
3.30 pm. As
Cargo Number of
Passengers and all
Class Travelled
this Train Have
Form Pulapallim
The first-Class Passengers
Opened the Luggage
of Opinion that
9.30 am is a Convenient
Hour to arrive at
Pulapallim for Riders

of the Mills, as it
admits of an Early
and Breakfast-Room
Lecture, and Comfortably
disposed of, after the
Night's Journey in
the Train, before
proceeding the Short (11)
Up of the Mail
(Town & Up Pattern)
Train had been
Considered Some
passenger Traffic
on the Neilston
Branch Train had
been anticipated,
but the Mr Watson or Just
the Arran former
Curiosity on the Mr
Engagement of a
Journey on the part-
of the Railway Company
will be determined
Yet. The Traffic
Managers Powers
Especially the Night
Train Arrangements
at Crookedholm
Corner) 3rd & Corks
Class Traffic on Mr

Civil Time is a
Certain of Some important
and Periodical Yearly
Festival Parameter which
has to Month attract
a Good Many Readers
from Country and
Suburban and
the Railway will
in the Month,
be used 3 Train in
Order.

Engr
Capt RE

Offs. R3 Com. Engr / re
Railways

9th September 1873

PW.5030/73.

10. Sept. 73.
JHS.

Statement shewing the Deflection of Girders on the Neilgherry Branch Madras Railway taken on the 28th August 1873.
Engines used were Nos. 85 and 89 Greatest weight on Bridge about 100 Tons.

	No. of Spans	Deflection of Girders in 16ths of an inch				Camber (Rise) of Girders in 16ths of an inch			
		Running		Standing		Running		Standing	
		Centre of right girder	Centre of left girder	Centre of right girder	Centre of left girder	Centre of right girder	Centre of left girder	Centre of right girder	Centre of left girder
Two 64 feet Girder Bridge at 5 Miles 29 chains									
do do do	1	12	8	10	8	1	2	3	3
do do do	2	7	7	8	6	4	3	3	3
Four 64 feet Girder Bridge at 5 Miles 68 chains									
do do do	1	11	10	11	11	4	1	4	4
do do do	2	11	13	12	13	4	4	4	4
do do do	3	12	12	12	11	2	2	4	4
do do do	4	9	11	12	12	5		5	
Two 64 feet Girder Bridge at 10 Miles 11 chains									
do do do	1	9	8	9	9	2	2	3	4
do do do	2	10	11	[illegible]	9	2	4	4	3
Four 64 feet Girder Bridge at 11 Miles 7 chains									
do do do	1	11	11	11	11	2	1	4	5
do do do	2	9	12	11	12	5	4	4	5
do do do	3	12	12	12	12	2	2	4	5
do do do	4	10	11	11	12	5		4	
Two 64 feet Girder Bridge at 12 Miles 3 chains									
do do do	1	9	10	9	10	2	1	3	3
do do do	2	9	8	9	8	4	4	3	3
Four 64 feet Girder Bridge at 19 Miles 4 chains									
do do do	1	10	10	10	9	1	1	4	4
do do do	2	10	12	10	13	5	4	3	4
do do do	3	11	11	11	11	1	2	4	4
do do do	4	10	10	10	11	4	3	4	4

Ross Thompson Capt R.E.
Offg. Dy. Cons. Engr. Railways

Wm. [illegible]
Resident Engineer M.R.

Gd Explanation [illegible]

P.W. 1873 Department

Railway Department.

1873.

From No. 5030.

The Consulting Engineer
for Railways,

To

The Secretary to Government,
P. W. Department,
Fort Saint George.

Dated 12th September 1873.
Recd. 13th September 1873.

Encl. 2. No. 482

Submitting for the information of Govt, Captain Thompson's report upon the Nellcherry Gravels together with the detailed results of the girder testing.

Galle Fraser

Rly Dept Nellcherry Gravels Report on Testing Girders

Rly Dept 1873 Nellcherry Gravels Report on Testing Girders

P.W. 631-32

Girder testing Nellcherry

Ck 5030

Govt. of Madras.

PUBLIC WORKS.

To Superintending Engr
for Railways

Dated
Recd. Encl. 2

G. O. 29 Sept. 1873 2389

Rs. 3 Sd.

Rs. 1,81,242

Railway Branch

Letter from the Engineer
& Surveyor in charge
Railways to the
Govt. of Madras Pub
Works dtd