M.R.O. 1—4,002—16 9-48.

(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. / ~~B.P. No.~~ 361 - 362	1157	Press / ~~Mis.~~
Dated	22 4	1843.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
22nd April 1873.

No. 331. 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, 4th April 1873, No. 202:—

Vide G. O., No. 1,003, dated 4th April 1873.

REFERRING to my endorsement dated the 1st instant, No. 195, I have the honour to report that the new passenger terminus of the Madras Railway Company and the line leading to it were inspected by me upon the 31st ultimo.

2. The line leading to the new terminus joins the old main line at the Veyasarpaudy junction, from which point it has been made a double line. Between Veyasarpaudy and Royapooram, over which engines will run without a time table to and from the stables at the latter place, the line is protected by the block system, but on the double line this protection has been considered unnecessary. At the level crossing near the Elephant Gate Bridge the gateman is communicated with from either side by means of a bell worked by electricity, to warn him of a train approaching in either direction. By this it is hoped that the interruption to the heavy traffic passing over the bridge will be reduced to a minimum; but, in spite of this precaution, I anticipate that the inconvenience to the public at this point will be so great as to call for some change in the mode in which the road is carried across the railway.

3. The girder bridge over Cochrane's Canal was tested on the occasion. It consists of four 64 feet openings, and from the accompanying report it will be seen that the result was satisfactory; the greatest deflection being ·75 of an inch.

4. Everything connected with the terminus and line was in a satisfactory state; and I have already reported that authority was given to open the terminus to the public from the 7th instant.

No. 362. ORDER THEREON, 22nd April 1873, No. 1,157.

RAILWAY, No. 40.

ORDERED to be recorded.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the Consulting Engineer for Railways.

Exd. S. T. Austin.

Results obtained from testing the girders in the bridge over Cochrane's Canal.

The girders are in continuous lengths of 140 feet; each girder spanning two openings of 64 feet in the clear.

The girders were tested with a weight of more than 78 tons, in motion.

Western pair of Girders

Left Girder Direct deflection		Contrary flexure		1st Opening Direct deflection		Right Girder Contrary flexure.	
4/8		5/16			5/8	1/8	
4/8		1/8		2d Opening	5/8	2/8	
6/8		1/16		3d Opening	5/8	2/8	
4/8	Average 36/64 inch	1/8	Average 8/64 inch	4th Opening	4/8	2/16 1/8	Average 12/64

Eastern pair of Girders

Left Girder Direct deflection		Contrary flexure		1st Opening Direct deflection		Right Girder Contrary flexure.	
9/16		3/16			11/16	1/8 2/16	
9/16		3/16		2d Opening	6/8	4/8 4/16	
9/16		3/16		3d Opening	11/16	3/16	
5/8 12/16	Average 37/64 inch	1/8 2/16	Average 11/64 inch	4th Opening	6/8 12/16	1/8 2/16	Average 11/64.

Average 46/64

M. Macdonald Lieut Col. R.E.
Con Engineer for Railways

F. Ass.

Railway Department. CONSULTING ENGINEER'S OFFICE,

No. 202

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,

Referring to my endorsement No. 196 dated the 1st instant, I have the honour to report that the new passenger terminus of the Madras Railway Company, and the line leading to it, were inspected by me upon the 31st ultimo.

2. The line leading to the new terminus joins the old main line at the Vepasarpaudy junction, from which point it has been made a double line. Between Vepasarpaudy and Royapooram, over which engines

P. W. 2218/73.
Rg. 22 April/73 38.
361.

engines will now without a time table to and from the stables at the latter place, the line is protected by the block system: but on the double line this protection has been considered unnecessary. At the level crossing near the Elephant Gate Bridge, the gatemen is communicated with from either side by means of a bell worked by electricity, to warn him of a train approaching in either direction.

By this it is hoped that the interruption to the heavy traffic passing over the bridge will be reduced to a minimum; but, in spite of this precaution, I anticipate that the inconvenience to the public at this point will be so great as to call for some change in the mode in which the road is carried across the railway.

The

3 The girder bridge over Cochrane's Canal was tested on this occasion. It consists of two 64. feet openings, and from the accompanying report it will be seen that the result was satisfactory; the greatest deflection being .75 of an inch.

4 Everything connected with the terminus and line was in a satisfactory state; and I have already reported that authority was given to open the terminus to the public from the 1st instant.

I have the honour to be
Sir
Your most obedient servant
Lieutenant Lieut Col RE.
Consulting Engineer for Railways

Madras
4 April 1853

Recd 4th April 73 No 10-11-
& 11th 2113/73.

P. W. 1873 Depart-

RAILWAY DEPARTMENT.

1872.

From No. 2213.

The Consulting Engineer
for Railways,

To

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

Dated 4 } October 1872.
Recd. 5 }

Encl.

No. 202.

Submitting
new section for Road
& the new Cantonment
Station

With order.

C.E. for Rys
Draft 8-5-73

No. 1157
Ordered to be recorded.
Sd/-

No. 361.62

9 Aug 73

No 2213

Govt. of {1873} Madras.

PUBLIC WORKS.

To The Secretary Govt.
for Railways

Dated

Read. Encl.

G. O. 22nd April 1873. 1157.

Nos. 361 & 362

New Passengers Terminus
of the Madras Railway.

Inspection report of the
Engineer of the new
Terminus & the line
leading to it, recorded.