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NE RLY HQ
Gorakhpur.
W/29/O/A/Pt. I/2
Jan 17, 1951.

Bridge Circular No. 17/1991.

The Divl. Railway Manager (Engg.),
N.E. Railway,
SPJ, SEE, BSB, LJN, IZN.

Sub : Provision of height gauges at
the approaches of the road-
under-bridge/Subway.

Recently on Northern Railway, a very serious accident has been caused due to an over dimension road consignment having struck against the girder of a road-under-bridge, displaced it out of the alignment and consequently approaching passenger train derailed and capsized. On this Railway also, there are road-under-bridges but there is no practice of providing height gauge. However at some of the road-under-bridges where such cases were suspected, for example, the road-under-bridge near Kasganj on Aligarh-Etah road on Kasganj-Mathura Section had got the height gauge provided. Now after the occurrence of the above accident, as a matter of policy, it has been decided that height gauges should be provided at the road-under-bridges through which the heavy road vehicles ply and/or where there is a possibility of girder/slab getting damaged due to an over dimension road consignment or by the road vehicles, such as road crane etc.

2.0 In terms of the Clause 115.2 to IRC Code of practice for road bridges Section I the maximum height of moving road vehicles is limited to 4.5 M above the crown of the road. There may be some road-under-bridges, particularly those constructed in the distant past where height of the openings above the crown of the road and upto the bottom of the girder/slab is less than 4.5 M, hence there is a greater danger of a loaded road vehicle moving with the over dimension consignments striking the sub-structure in the width and the superstructure in the height.

3.0 The height gauge may be provided at an adequate distance from the face of the bridges on either side say at a distance of 15 M where the railway

∠ (IRC:5-1985), ...2

land is available otherwise at the junction of the railway land with the private/non railway land. This height gauge will be consisting of two vertical posts and a horizontal beam. The structure should be fabricated out of the un-serviceable rails of 50/60/75lbs and it should be erected duly embedded in the concrete foundation. A copy of the sketch plan showing the details of the structure of the height gauge is enclosed herewith for guidance.

- 4.0 As a second line of defence, in case the road vehicle with over dimension consignment does not stop before the first height gauge, damages the first height gauge and continue moving towards bridge, then the 2 rails bolted together should be placed side by side at the face of the opening such that the bottom of the rails is 75 mm from the bottom of the slab/girder.

Please organize the above on priority and communicate the compliance at a very early date.

Please acknowledge.

DA : As above.

CR. Raju
2/10/91
Chief Engineer

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