

No. NHI/Misc/84/78

*Dated the 1st March, 1979*

**To**

The Chief Engineers of States and Union Territories (dealing with National Highways and other Centrally Sponsored works)

**Sub :** Decking of old steel girder bridges

Some time back, an abandoned railway bridge (with steel girders) was taken up for re-decking for the passage of road traffic. The re-decking over the steel girders was done with precast RCC slabs with a view to completing the work quickly. However, soon after opening the bridge to traffic, many of the precast concrete slabs cracked at different places. The cause of this failure was investigated by an expert committee and it was found that many of the precast girders had not made proper contact with the intermediate steel girders, and, therefore, the effective span of the slab was more than double that was assumed in the design. In order to avoid any such failures and the consequent infructuous expenditure in future, it is suggested that whenever redecking of old bridge with steel girders is taken up, it will be desirable not to adopt precast RCC slabs for the decking, but to go in for cast-in-situ decking to ensure its proper seating over the girders and, if possible, make the deck also composite with the girders by the use of shear connectors.