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D.O.No. RW/NH-33044/11/97-S&R

Dated, the 4th Sept., 2000

To

Chief Engineers of States/Union Territories (dealing with National Highways and other Centrally Sponsored Schemes); Director General (Border Roads); Chairman, National Highways Authority of India

Subject : Installation of Traffic Safety Barriers - Wire Rope Safety Fencing System - regarding

Guidelines for installation of Safety Barriers along the Indian road network were issued by this Ministry vide letter no. RW/NH/33022/1/94 - DO III dated 24.06.94. These guidelines dealt with steel barriers and concrete safety barriers. The guidelines bring out the major factor to be considered for the selection of a particular barrier system viz. matching dynamic lateral deflection characteristics of the system to the space available at site so as to mitigate the severity of impact. They also indicate that enhancement of vehicular safety should be given weightage.

2. It has since been reported that at certain locations in our country in situations like high embankment reaches in approaches to bridges and fly-overs, sharp curves where ponds and canals are in close proximity to highways etc. the wire rope safety fencing has been tried and the performance found encouraging. The system has proved to be a very good anti-crash barrier when a vehicle strikes it in high speed. Owing to the capacity of the system to absorb the energy of impact there has been hardly any damages to the hitting vehicle and its occupants. Thus, it is expected that the major requirements of lateral deflection characteristics enhancement of vehicular safety and aesthetic are fulfilled by the system in addition to the other safety and structural requirements which can be evaluated only after the system has been tried on more locations.

3. The application areas of such wire rope fencing could be vulnerable locations involving high risk of traffic safety as stated in para 2 above and recurring accident spots especially in hilly terrain. As per information available, the approximate cost for supply and installation may work out to Rs.45 lakhs to 55 lakhs per km.

4. It is, therefore, suggested that necessary action may please be initiated to identify a few accident prone locations on NHs and to install the wire rope fencing system meeting the cost from plan provisions. Their performance may be kept under observation and this Ministry may be informed of the same alongwith details like cost, efficacy, durability and maintenance requirements and problems etc. in due course.