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No. RW/11064/1/87-NHIII/DI *Dated the 23rd September, 1987*

To,

1. Secretaries of all States/Union Territories Public Works Departments dealing with National Highways
2. Director General, Border Roads
3. Director General (Works), CPWD

Subject : Construction of speed breakers on National Highways — Policy regarding.

I am directed to draw your attention to this Ministry's letters No. PL-50(8)/72 dated 6.6.76 and 25.4.78, conveying the policy of the Government of India that speed breakers should not be constructed on National Highways. It is for the reason that the National Highways have the essential function to facilitate quick movement of through long-distance traffic and that any obstruction in the vehicle path like speed breakers which cause inconvenience or safety hazard to traffic should not be constructed thereon. Further, the Government of India are making sizeable investments on the National Highways to ensure unhindered movement of vehicles at reasonably good speed for satisfying the objectives of reduced vehicle operation costs and savings in fuel consumption, and in this context, any impediments in the form of speed breakers will prove to be counter productive.

2. However, there may be locations along National Highways where safe and orderly movement of traffic is to be ensured, or control on speed is regarded necessary for specific reasons. For such cases, a number of engineering measures which do not compromise on the safety and convenience of long distance traffic are available, and this Ministry have been stressing all these from time to time. Some of these are :

(i) Taking measures to prevent ribbon development along the National Highways and prompt removal of encroachments;

(ii) construction of parallel service roads for segregating local and slow traffic from the through traffic;

(iii) posting of speed limit signs and strict enforcement;

(iv) provision of flashing signals to alert drivers;

(v) removal of sight obstructions for improving visibility; and

(vi) ensuring orderly movement of traffic at intersections through appropriate design measures including control on the entry speed of vehicles from the crossing roads.

3. Yet, there may be cases where control on speed breakers through physical means may be necessary, such as approaches to manned/unmanned level crossing, approaches to sharp curves, congested and accident-prone sections, etc. For such cases, provision of rumble strips may be considered to alert the drivers through audible/visual stimuli as described in this Ministry's Circular No. PL-50(8)/72 dated 4th June 1972. A common application of rumble strips is the placement of intermittent raised bituminous overlays across the roadway. Raised sections can be 15-25 mm high, 200-300 mm wide, and spaced about one metre centre to centre. A series of such strips, roughly 15-20 at one location, can caution the motorists sufficiently through combination of vibrations and rumbling noise. Since coarse-textured overlays are more effective, the raised sections should consist of premixed bituminous carpet. A better alternative can be to have suitably designed precast cement rumble strips laid with proper embediment into the subgrade to cover the full width of the roadway (carriageway and the shoulders). As a rule, the decision about design and placement of rumble strips should be preceded by a careful examination of the circumstances obtaining in each case.

4. It has come to the notice of this Ministry that despite the repeated instructions to the contrary, speed breakers have been constructed at some locations on National Highways. Some of these are so high that they themselves may prove to be a source of serious accidents. Keeping in view the functional requirement of National Highways, it is necessary that the speed breakers already constructed on these should be removed early.

5. However, speed breakers can have a useful role to play as a speed control device on minor roads, roads in residential colonies, etc. The Indian Roads Congress is in the process of developing a standard on speed breakers for application at such locations. Broad features of the design as abstracted from the draft standard are shown in the enclosed figures. Broadly, the design comprises a circular hump having a radius

of 17m and a maximum height of 10 cm at the centre, extending to the full width of the roadway (i.e. both on the carriageway and shoulders). This design may be adopted on minor roads till such time the finalised standard of the IRC becomes available.

6. It is requested that the instructions contained in this circular may please be given wide publicity among the concerned officers in your department.

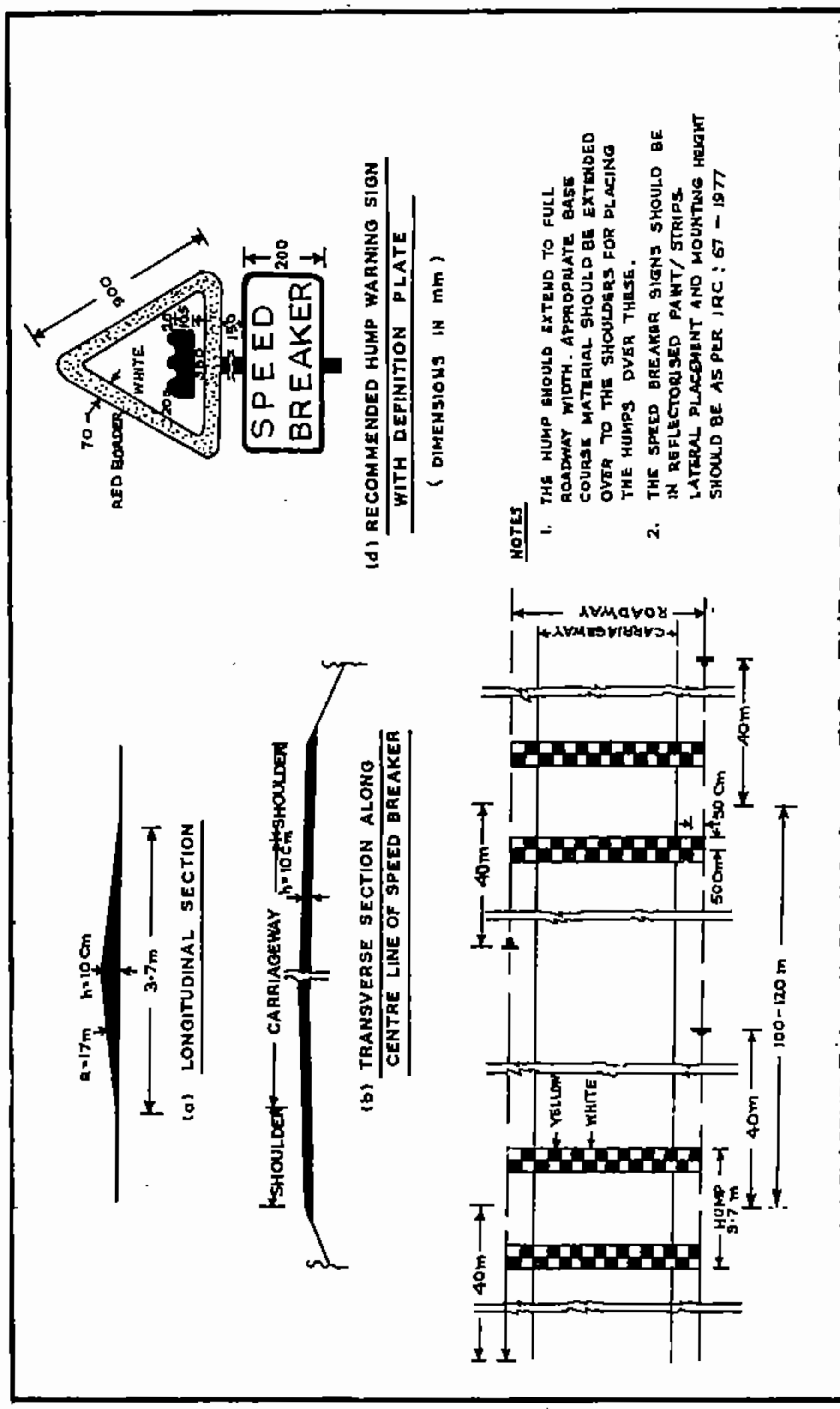

FIG. TYPE DESIGN FOR SPEED BREAKERS