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GOVERNMENT OF INDIA MINISTRY OF ROAD TRANSPORT & HIGHWAYS

Parivahan Bhavan, 1, Sansad Marg New Delhi-110001



Date: the 17th June, 2015

- 1. The Chief Secretaries of all the State Governments/ UTs
- 2. The Principal Secretaries/ Secretaries of all States/ UTs Public Works Department dealing with National Highways, other centrally sponsored schemes.
- 3. All Engineers-in-Chief and Chief Engineers of Public Works Department of States/ UTs dealing with National Highways, other centrally sponsored schemes.
- 4. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-
- 5. The Chairman, National Highways Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi-110 075.

6. The Managing Director, NHIDCL, PTI Building, New Delhi-110001

Guidelines for Pedestrian Facilities on National Highways for Persons with Subject: Disabilities

The Pedestrian facilities are a critical element in producing a pedestrian-friendly environment on roads. Accessible design is the foundation and primary concern for all pedestrian facilities which need to be planned, designed, operated and maintained such that these are freely used by everyone, including the persons with disabilities or using mobility aids. The basic aim should be to reduce pedestrian conflicts with the vehicular traffic to the extent possible. Accordingly, the convenience of pedestrians, especially those with reduced mobility, should be a paramount consideration in ensuring full utilization of these facilities.

The guidelines for the provision of pedestrian facilities on roads, with special reference 2. to the persons with disabilities, are specified in IRC:103-"Guidelines for Pedestrian Facilities". However with regard to persons with disabilities, footpaths in urban areas on National Highways should be consistently provided on both sides of the road and above the level of the carriageway, separated by kerbs. In the natural landscape, the minimum width of a clear unobstructed footpath should be atleast 1800mm wide so as to allow two wheel chair using persons to pass each other comfortably. If existing paths are less than 1800mm wide, provision of passing places 1800mm wide and 2500mm long shall be made at a reasonable frequency, depending upon the intensity of use. A clear height of 2200mm is required above the surface of the footpath such that there should be no trees, utility poles or signages etc. to obstruct the persons with vision impairment and using walking aids.

3. Kerbs are the best indicators for persons with vision impairment to detect the edge of the footpath. The height of the kerb at the edge shall not exceed the height of a standard public step riser i.e. 150mm. Crossing of highways passing through urban areas is one of the major deterrents for persons with reduced mobility. Accordingly, at main crossing points, kerb ramps at a gradient not greater than 1:10 should be provided with flared sides to overcome changes in level between the footpath and the carriageway.



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Kerb ramps should be 1200mm wide and be located away from corners or on both sides of the intersections. Usually, persons with vision impairment need guidance in using the pedestrian areas especially at places where the footpath crosses large open spaces or where normal guidance given by the edge of the footpath is not available. This guidance is provided by fixing tactile pavers on the surface of the footpath, in the line of travel, avoiding obstructions. A distance of 600mm is to be maintained from the edge of the footpath to navigate persons with vision impairment, so that they do not accidently stray on to the road. Refer Fig. 1. The different texture of the tactile pavers can be followed by people using a cane and can also be detected by persons with low vision. Regular maintenance of these pavers is essential and cracked or uneven blocks need be replaced, so that these may not become tripping hazards.

Zebra crossings, on highways in urban areas, should be provided across the entire 4. carriageway width, delineated with the help of alternate black and white stripes, which should have embossed texture for easy detection by the visually disabled persons. Thermoplastic paint with +5mm embossed texture can be used for painting the black and white stripes. The width of the Zebra crossing should generally be in the range of 2m to 4m. For divided carriageways, the crossing should, as far as possible, continue uninterrupted through the median. Refer Fig. 2. In addition to above, audible crossing signals at intersections are essential for visually impaired persons. Pedestrian traffic lights should be provided with audible signals to facilitate safe and independent crossing of the road for such persons.

The contents of this Circular may be brought to the notice of all concerned in your 5. organization.

This issues with the approval of Competent Authority. 6.

Ami yorshu (Amin 17/06/2015

(Amiyanshu) Asst. Executive Engineer (S, R&T) (Roads) For Director General (Road Development) & SS

Copy to:

- 1. All Technical Officers in the Ministry of Road Transport & Highways
- 2. All ROs and ELOs of the Ministry
- 3. The Secretary General, Indian Roads Congress
- 4. The Director, IAHE
- 5. Technical circular file of S&R (R) Section
- 6. NIC-for uploading on Ministry's website under "What's new"

Copy for kind information to:

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- 2. PS to Hon'ble MOS (RTH&S)
- 3. Sr. PPS to Secretary (RT&H)
- 4. PPS to DG (RD) & SS
- 5. PPS to SS&FA
- 6. PS to ADG-I/ ADG-II
- 7. PS to JS (T)/ JS (H)/ JS (LA&C)/ JS (EIC)

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Fig. 2 Dropped Kerb with Zebra Crossings