



RW/NH-33044/22/2020-S&R(P&B)
GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
S&R(P&B) Section

Transport Bhavan, No. 1, Parliament Street, New Delhi-110001.

Dated: 17th July, 2020

To

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-110 010.
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
7. All CE-ROs, ROs and ELOs of the Ministry

Subject: Width of shoulder (Paved and Earthen) for two laning of National Highways

Ministry vide circular no. RW/NH-33054/20/88-DII dated 10.05.1989 had stipulated to provide 1.5 m paved shoulder and 1.0 m earthen/granular shoulder for plain and rolling terrain. Shoulders are an important element of Highway system and serve as lateral structural support for the layers of the pavement. They also provide space for emergency stops, recovery space for errant vehicles, clearance to signs & guiderails, overtaking maneuvers, movement of slow moving vehicles and other functions.

2. As per Manual of Standards and Specifications for two laning of Highways with paved shoulder (IRC: SP: 73 - 2018), width of shoulder (paved and earthen) has been specified for different type of road section in plain & rolling terrain as well as mountainous & steep terrain (hilly areas). The shoulder width for plain and rolling terrain specified in IRC: SP: 73 - 2018 (Second Revision) is more than the width specified in the first revision i.e. IRC: SP: 73 - 2015 as mentioned below:

| Type of Section | Width of Shoulder (m) on either side as per IRC : SP :73 - 2018 | | | Width of Shoulder (m) on either side as per IRC : SP :73 - 2015 | | |
|--|---|---------|-------|---|---------|-------|
| | Paved | Earthen | Total | Paved | Earthen | Total |
| Open Country with isolated built up area | 2.5 | 1.5 | 4.0 | 1.5 | 2.0 | 3.5 |
| Built up area (2-lane section) | 2.5 | - | 2.5 | 2.5 | - | 2.5 |
| Built up area (4-lane section) | - | - | - | - | - | - |
| Approaches to grade separated structures | 2.5 | - | 2.5 | 2.0 | - | 2.0 |
| Approaches to bridges | 2.5 | 1.5 | 4.0 | 1.5 | 2.0 | 3.5 |

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3. In the second revision of Manual of Standards and Specifications for two laning of Highways with paved shoulder (IRC: SP: 73 - 2018), the rationality and justification for the increased shoulder width has not been adequately demonstrated and supported by international practices/standards. This would also not be appropriate from safety consideration, since such extra widened paved shoulder would provide more space to travel on opposite direction and may tempt overtaking simultaneously from both the directions leading to increase in head on collision and fatalities.

4. It is also relevant to mention that development of two lane with paved shoulder is generally done within the available ROW/or with minimum acquisition of land. Providing wider shoulder would lead to increase in the cost of the project including additional cost towards acquisition of land. Furthermore, when 4-laning requirement would arise, provision of extra wide paved shoulder as per IRC: SP: 73 - 2018 will lead to infructuous expenditure.

5. It has therefore been decided by the Competent Authority that while preparing the estimate/schedule etc. for two laning of National Highways with paved shoulder, the total width of the shoulder on either side in plain and rolling terrain shall be followed as mentioned below:

| Type of Section | Width of Shoulder (m) on either side | | |
|--|--------------------------------------|---------|-------|
| | Paved | Earthen | Total |
| Open Country with isolated built up area | 1.5 | 1.0 | 2.5 |
| Built up area (2-lane section) | 2.5 | - | 2.5 |
| Built up area (4-lane section)* | - | - | - |
| Approaches to grade separated structures | 1.5 | - | 1.5 |
| Approaches to bridges | 1.5 | 1.0 | 2.5 |

* (The stretch in built up area shall be provided with facilities such as footpath etc. for vulnerable road users to segregate them).

6. In order to prevent the motorized vehicle on the shoulders, the estimate/schedule shall categorically include the provision of continuous raised profile edge line marking (as per Section 7.7 of IRC: 35-2015) using thermoplastic paint/marking.

Yours faithfully,

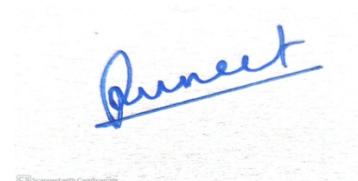
(Puneet Garg)
Assistant Executive Engineer (S&R)
For Director General (Road Development) & SS

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