

**OFFICE OF THE ENGINEER-IN-CHIEF:  
P.W.D.:M:P:SATPURA BHAWAN::BHOPAL:462004:**

Memo No. 1859 / cir / sanchar 1859  
To,

Bhopal, dtd. 04/06/2005

All Executive Engineer,  
Public Works Department,  
Madhya Pradesh

SUB:- Abstract Particulars for the maintenance of roads.

In the past the detail estimates were prepared for maintenance of roads as per norms prevalent in P.W.D. and these were called as road scheme allowance.

Ministry of Shipping, Road Transport & Highways, Govt. of India has issued norms for maintenance of National Highways, State Highways, M.D.R., O.D.R. and Village roads vide their letter, dated 04.05.2001. These norms have been made applicable for national highways since 01.04.2001, and the detailed estimates for maintenance of national highways are being prepared for each NH division as per these norms.

The Ministry's detailed report of the committee on norms for maintenance of roads in India - 2001 are available on sale in I.R.C. The Abstract copy of these norms applicable in Madhya Pradesh is enclosed herewith for ready reference. The E.E.'s should prepare the abstract particular of each type of roads within their jurisdiction as per these norms every year and submit to the Chief Engineer of their Zone and with a copy to this office. The Abstract Particulars should be prepared for all the Kms. whether they have been covered under any scheme or not.

Generally the allotment placed under ordinary repairs of roads is less than the requirement as per norms. Please note that the expenditure to be incurred for maintenance must be within the allotment placed at your disposal.

Encl: As above.

*[Signature]*  
02/06/2005  
ENGINEER-IN-CHIEF,  
M..P. P.W.D. BHOPAL

Endt. No. 1859 / circular sanchar

Bhopal, dtd. 04/06/2005

Copy to :

5. The Principal Secretary, Govt. of M.P. P.W.D. Bhopal.
  6. The Secretary, Govt. of M.P. P.W.D. Bhopal.
  7. The Chief Engineer, P.W.D. Zone .....
  8. The Superintending Engineer, PWD Circle .....
- for information.

Encl: As above.

*[Signature]*  
02/06/2005  
ENGINEER-IN-CHIEF,  
M..P. P.W.D. BHOPAL

MORT&H, GOVT. OF INDIA UPDATED NORMS FOR MAINTENANCE OF ROADS

APPLICABLE FOR ALL NATIONAL HIGHWAYS W.E.F. 01.04.2001 VIDE  
MORT&H LETTER NO.RW/NH-11038/2/97-DOI DATED 04.05.2001

- A] ORDINARY REPAIRS COST IN RS. PER KM. DOUBLE LANE 7.0 M.  
WITH PAVED SHOULDER PER YEAR FOR N.H. & S.H. ZONE III  
(M.P. Falls under Zone-III)

(Amount in Rs.)

Category of road	Traffic <450 CVD	450 to 1500 CVD	1500 to 4500 CVD
	B.T. Surface	B.T. Surface	B.T. Surface
NHs & SH	80,271	85,907	95,057

ORDINARY REPAIRS COST IN RS. PER KM. DOUBLE LANE 7.0 M. PER  
YEAR FOR MDR/ODR/VR ZONE III

Category of road	Traffic <150 CVD		Traffic <150 to 450 CVD	Traffic <450 to 1500CVD	Traffic >1500 CVD
	B.T.	W.B.M.	B.T.	B.T.	B.T.
MDR/ODR/V.R.	37,340	34,475	38,076	40,612	43,548

CONVERSION FACTORS FOR NH & SH (ORDINARY REPAIRS)

S.No.	Items	Factor
1.	Two lane without shoulders	0.90
2.	Single lane without paved shoulders	0.56
3.	Single lane with paved shoulders	0.625
4.	Intermediate lane 5.5 M. without paved shoulders	0.68
5.	Intermediate lane 5.5 M. with paved shoulders	0.75

CONVERSION FACTORS FOR MDR/ODR/VR (ORDINARY REPAIRS)

S.No.	Items	Factor
1.	Single lane without paved shoulders	0.625
2.	Single lane with paved shoulders	0.70
4.	Intermediate lane 5.5 M. without paved shoulders	0.75
5.	Intermediate lane 5.5 M. with paved shoulders	0.83

NOTE:- CVD : Commercial vehicles per day .

## B) PERIODICAL RENEWAL

### 1. Specifications & Life cycle for National Highway/ State Highways.

Type of treatment/ category of road.	traffic intensity in CVD	MR-I	SD-II	PC-SC	20mm MSS	25mm SDBC	25mm BC	@ 40mm BC
NH/SH Normal	> 4500	-	-	-	-	-	5/4*	5/4*
	1500-4500	-	-	-	-	5/4*	5/4*	-
	450-1500	-	-	-	5/4*	5/4*	-	-
	<450	-	-	5/4*	5/4*	-	-	-
NH/SH Urban	> 4500	-	-	-	-	-	4/3*	4/3*
	1500-4500	-	-	-	-	4/3*	4/3*	-
	450-1500	-	-	4/3*	4/3*	4/3*	-	-
	<450	-	-	4/3*	4/3*	-	-	-
NH/SH Hills	>1500	-	-	-	-	4/3**	4/3*	4/3**
	450-1500	-	-	-	4/3**	4/3**	4/3**	-
	<450	-	-	5/4*	5/4**	-	-	-

### 2. Life cycle for MDR/ODR/Village Road.

Type of treatment/ category of road.	traffic intensity in CVD	MR-I	**SD-I/ SD-II	PC-SC	20mm MSS	25mm SDBC	25mm BC
MDR/ODR/Vr Normal	>1500	-	-	-	-	5/4*	5/4*
	450-1500	-	-	-	-	5/4*	5/4*
	150-450	-	-	-	-	5/4*	5/4*
	<150	5/4*	5/4*	5/4*	-	-	-
MDR/ODR/Vr Urban	>1500	-	-	-	-	4/3*	4/3*
	450-1500	-	-	-	4/3*	4/3*	-
	150-450	-	3	4/3*	4/3*	-	-
	<150	3	4/3*	5/4*	5/4*	-	-
MDR/ODR/Vr Hills	>1500	-	-	-	-	4/3**	4/3**
	450-1500	-	-	-	-	5/4**	5/4**
	150-450	-	3	5/4*	5/4**	-	-
	<150	4/3*	4/3*	5/4*	-	-	-

Notes : \* Indicates reduced life of treatment due to high rainfall i.e. >3000mm

+ Indicates reduced life due to higher altitude i.e. >2000 Mts.

\*\* This treatment of SD-I is to be used under condition of severe resource crunch only.

Hill Road : Hill roads are where cross slope of terrain is greater than 25% and the ruling gradient of road is generally 1.20 and gradients upto 1 in 12 have been adopted.

### 3. Percentage of Labour, Material and Machinery.

Category	Ordinary Repairs			Periodical Renewal.		
	Labour	Material	Machinery	Labour	Material	Machinery
NH/SH	28	66	6	5	70	25
MDR/ODR/ VR.	30	67	3	10	72	18

### C) Special Repair (S.R.)

15% of the total amount of (OR+PR) should be earmarked for special repair in plain/rolling terrain and urban areas and 20 percent in hilly areas.

### D) Flood Damage Repairs (FDR)

Every year some part of the road network is affected by floods and provision of 15% of the total amount of (OR+PR) should be earmarked for special repair in plain/rolling terrain and urban areas and 20 percent in hilly areas.