

**Calculation of MSA for Project Roads for Design Of Overlay On Flexible Pavement**

Design Life in Years (Year 2006-2026) 20  
 Design Life considered for each growth factor 5 years  
 Design Life in Years -overlays 10

SR.NO.	Road No.	Description of Road	No. of proposed Lanes	Commercial Traffic (Both Direction)	Commercial Traffic (each direction)		Traffic Growth Rate		Vehicle Damage Factor	Lane Distribution Factor	MSA
							2006-2011	2011-2016			
1	4		4	4	2	2	0.04	0.03	3.5	0.75	0
2	10	Mutha Chowk to Govardhanghat (with a bridge on Godavari) to Latur Road (thru Kautha)	6	27	13.5	15	0.04	0.03	3.5	0.6	0
3	23	Vazirabad Road to Banda Ghat	2	18	18	19	0.04	0.03	3.5	0.75	0
4	30	Latur Road to Milk Dairy	2	890	890	963	0.04	0.03	4.5	0.75	13
5	34	Pawdewadi Naka to Rest House	2	33	33	36	0.04	0.03	3.5	0.75	0
6	35	Shivajinagar ROB to Nasratpur	2	14	14	15	0.04	0.03	3.5	0.75	0
7	39	Anand Nagar Road	6	659	329.5	356	0.04	0.03	3.5	0.6	3
8	40	Bhagyanagar to Yashwant College to Railway Station	6	218	109	118	0.04	0.03	3.5	0.6	1
9	41	Gakul Dairy to Degloor Road Junction	4	2087	1043.5	1129	0.04	0.03	4.5	0.75	15
10	42	Degloor Road Junction to Old Godawari river bridge	4	4705	2352.5	2544	0.04	0.03	4.5	0.75	34

## Calculation of MSA for Project Roads for Design Of Rigid Pavement

Design Life in Years (Year 2006-2026)

20

Design Life considered for each growth factor

5

SR.NO.	Road No.	Description of Road	No. of proposed Lanes	Commerical Traffic (Both Direction )	Traffic Growth Rate				Vehicle Damage Factor	Lane Distributi on Factor	MSA
					2006-2011	2011-2016	2016-2021	2021-2026			
1	1	Railway Station To Wazirabad Police Station	4	345	0.04	0.03	0.03	0.02	3.5	0.25	2.34
2	2	Wazirabad Pollce Station To Gurudwara Gate No. 1	4	82	0.04	0.03	0.03	0.02	3.5	0.25	0.56
3	3	Keli Market To Berki Chowk	4	232	0.04	0.03	0.03	0.02	3.5	0.25	1.57
4	5		4	5	0.04	0.03	0.03	0.02	3.5	0.25	0.03
5	7	S.T Workshop Road To Mutho Chowk	6	267	0.04	0.03	0.03	0.02	3.5	0.25	1.81
6	8	Mutha- Mahavir -Berki Chowk	6	114	0.04	0.03	0.03	0.02	3.5	0.25	0.77
7	16	Gurudwara Gate No. 4 (Parikrama) to Gurudwara Road (Lohar Galli C.C. Road)	2	Missing Link							
8	17	Gurudwara Gate No. 1 to Dena Bank to Nagina Ghat (Partially pedestrian road)	2	259	0.04	0.03	0.03	0.02	3.5	0.25	1.76
9	18	Gandhi Statue to Mahaveer Chowk	6	105	0.04	0.03	0.03	0.02	3.5	0.25	0.71
10	19	Hingoli Gate (RUB) to Forest Office to Banda Ghat	6	172	0.04	0.03	0.03	0.02	3.5	0.25	1.17
11	28	Bafna Petrol Pump to Old Mondha to New Bridge on Godawari	6	1079	0.04	0.03	0.03	0.02	3.5	0.25	7.32
12	32	Airport (Forest Naka) to Chhatrapati Nagar	4	760	0.04	0.03	0.03	0.02	3.5	0.25	5.16

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SR.NO.	Road No.	Description of Road	No. of proposed Lanes	Commer cial Traffic (Both Direction )	Commer cial Traffic (each direction )		Traffic Growth Rate				Vehicle Damage Factor	Lane Distributi on Factor	MSA
							2006-2011	2011-2016	2016-2021	2021-2026			
1	4		4	4	2	2	0.04	0.03	0.03	0.02	3.5	0.75	0
2	6		2	2	2	2	0.04	0.03	0.03	0.02	3.5	0.75	0
3	9	Deglur Naka to Hingoli Road	6	2489	1244.5	1346	0.04	0.03	0.03	0.02	4.5	0.6	28
4	10	Mutha Chowk to Govardhanghat (with a bridge on Godavari) to Latur Road (thru Kautha)	6	27	13.5	15	0.04	0.03	0.03	0.02	3.5	0.6	0
5	11	Gurudwara Parikrama-II	2	Missing Link									
6	12	Baryam Singh Wine shop Gurudwara Gate No. 2 to Yatri Niwas	2	58	58	63	0.04	0.03	0.03	0.02	3.5	0.75	1
7	13	Chikhalwadi Road to Bhagat Singh Road	2	307	307	332	0.04	0.03	0.03	0.02	3.5	0.75	7
8	14	Chikalwadi Road to Bhagat Singh Road to Crusher Road	2	350	350	379	0.04	0.03	0.03	0.02	3.5	0.75	8
9	15	Gurudwara Gate No. 3/4 to Bhagat Singh Road	2	Missing Link									
10	22	Nagina Ghat to Banda Ghat	2	155	155	168	0.04	0.03	0.03	0.02	3.5	0.75	3

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							2006-2011	2011-2016	2016-2021	2021-2026			
11	23	Vazirabad Road to Banda Ghat	2	18	18	19	0.04	0.03	0.03	0.02	3.5	0.75	0
12	24	Degloor Road through C.R.C. to Gyanamata School (with an RUB or ROB Crossing Railway)	4	5472	2736	2959	0.04	0.03	0.03	0.02	4.5	0.75	77
13	26	Mahadeo Dalmill to Gorakshan Chikalwadi Road	2		0	0	0.04	0.03	0.03	0.02			
14	27	Dr Savrikar Building to Navghat	2	549	549	594	0.04	0.03	0.03	0.02	3.5	0.75	12
15	28a	Khalsa RUB Approaches	4	1079	539.5	584	0.04	0.03	0.03	0.02	3.5	0.75	12
16	29	Crusher Road (from Degloor Road) to Keli Market (Ambedkar Chowk)	2	44	44	48	0.04	0.03	0.03	0.02	3.5	0.75	1
17	30	Latur Road to Milk Dairy	2	890	890	963	0.04	0.03	0.03	0.02	4.5	0.75	25
18	31	Navghat Bridge to Milk Dairy (Latur Road)	2	26	26	28	0.04	0.03	0.03	0.02	4.5	0.75	1
19	34	Pawdewadi Naka to Rest House	2	33	33	36	0.04	0.03	0.03	0.02	3.5	0.75	1
20	35	Shivajinagar ROB to Nasratpur	2	14	14	15	0.04	0.03	0.03	0.02	3.5	0.75	0
21	37	Shivaji Statue (Thru Z.P. Girls School) to Degloor Road	4	1045	522.5	565	0.04	0.03	0.03	0.02	3.5	0.4	6
22	38a	Part of Western bypass (Southern Part inclu. Bridge)			0	0	0.04	0.03	0.03	0.02			
23	39	Anand Nagar Road	6	659	329.5	356	0.04	0.03	0.03	0.02	3.5	0.6	6

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							2006-2011	2011-2016	2016-2021	2021-2026			
24	40	Bhagyanagar to Yashwant College to Railway Station	6	218	109	118	0.04	0.03	0.03	0.02	3.5	0.6	2
25	41	Gakul Dairy to Degloor Road Junction	4	2087	1043.5	1129	0.04	0.03	0.03	0.02	4.5	0.75	30
26	42	Degloor Road Junction to Old Godawari river bridge	4	4705	2352.5	2544	0.04	0.03	0.03	0.02	4.5	0.75	67