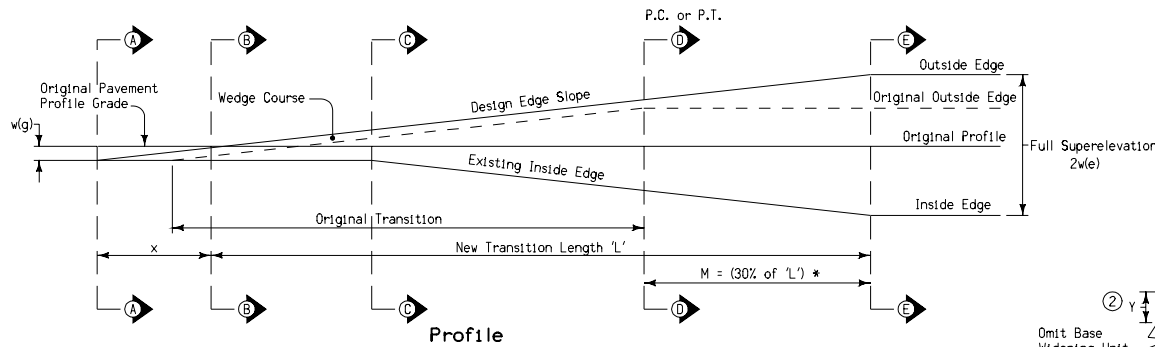


Plan



Profile

Transition lengths for a given design speed should never be less than the minimums indicated in the table, regardless of pavement width. The "x" dimensions given in the tables are based on normal crown cross slope of 2%.

Tabulation: 101-8

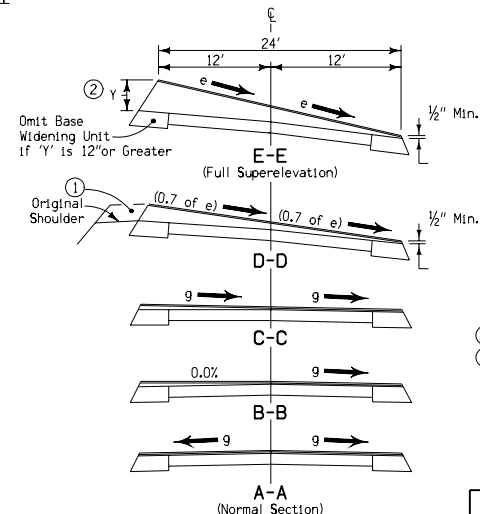
\* If the existing cross slope at the PC/PT exceeds 70% of the proposed "e", the value of "M" shall be determined by the following formula:

$$M = L - \left[ \frac{L(E)}{e} \right]$$

E = Existing Cross Slope at PC/PT (%)

e = Full superelevation (%)

L = Transition length



Typical Sections Through Transition Area

g = Normal cross-slope  
e = Full superelevation (%)

- ① See other drawings for shoulder details
- ② 'Y' = Total Thickness of Wedge and Surface Mat.

		DESIGN SPEED (mph)																							
Degree of Curve	Radius (ft)	40			45			50			55			60			65			70					
		e	L	x	e	L	x	e	L	x	e	L	x	e	L	x	e	L	x	e	L	x			
0°15'	22918	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0
0°30'	11459	NC	0	0	NC	0	0	NC	0	0	RC	48	48	RC	51	51	RC	53	53	RC	56	56	RC	60	60
0°45'	7639	NC	0	0	NC	0	0	RC	48	48	RC	48	48	RC	51	51	RC	53	53	RC	56	56	RC	60	60
1°00'	5730	NC	0	0	RC	44	44	2.1	50	48	2.5	63	51	2.9	76	53	3.2	89	56	3.6	107	60			
1°30'	3820	2.1	43	41	2.5	56	44	3.0	72	48	3.5	90	51	4.1	108	53	4.6	127	56	5.1	153	60			
2°00'	2865	2.7	55	41	3.2	72	44	3.8	92	48	4.5	114	51	5.1	137	53	5.8	161	56	6.5	194	60			
2°30'	2292	3.2	67	41	3.9	87	44	4.6	110	48	5.3	135	51	6.1	162	53	6.8	189	56	7.5	225	60			
3°00'	1910	3.8	78	41	4.5	100	44	5.2	126	48	6.0	154	51	6.8	182	53	7.5	210	56	8.0	239	60			
3°30'	1637	4.3	88	41	5.0	112	44	5.8	140	48	6.6	169	51	7.4	197	53	7.9	221	56	8.0	239	60			
3°45'	1528	4.5	93	41	5.3	117	44	6.1	146	48	6.9	176	51	7.6	203	53	8.0	223	56						
4°00'	1432	4.7	97	41	5.5	122	44	6.3	152	48	7.1	182	51	7.8	207	53									
4°30'	1273	5.1	105	41	5.9	132	44	6.8	162	48	7.5	192	51	8.0	213	53									
4°45'	1206	5.3	109	41	6.1	136	44	7.0	167	48	7.7	196	51	8.0	213	53									
5°00'	1146	5.4	113	41	6.3	140	44	7.1	171	48	7.8	199	51												
5°30'	1042	5.8	119	41	6.6	148	44	7.4	179	48	8.0	203	51												
5°45'	996	5.9	122	41	6.8	151	44	7.6	182	48	8.0	204	51												
6°00'	955	6.1	125	41	6.9	154	44	7.7	184	48															
6°30'	881	6.3	131	41	7.2	160	44	7.9	188	48															
7°00'	819	6.6	136	41	7.4	165	44	8.0	191	48															
7°30'	764	6.8	141	41	7.6	169	44	8.0	192	48															
8°00'	716	7.0	145	41	7.8	173	44																		
8°30'	674	7.2	149	41	7.9	175	44																		
9°00'	637	7.4	153	41	8.0	177	44																		
9°30'	603	7.5	156	41	8.0	178	44																		
10°00'	573	7.7	158	41																					
11°00'	521	7.9	162	41																					
12°00'	477	8.0	165	41																					
12°15'	468	8.0	165	41																					

NC = Normal Crown  
RC = Remove Crown  
'L' and 'x' are given in feet

Dmax. = 12°15'

**Iowa Department of Transportation**  
Highway Division

**STANDARD ROAD PLAN RR-25**

REVISION: NEW. Replaces Road Design Detail Sheet 530-6.	REVISION NO.
<i>William J. Altman</i>	REVISION DATE
APPROVED BY DESIGN METHODS ENGINEER	10-18-05

**HMA WEDGE FOR SUPERELEVATION**