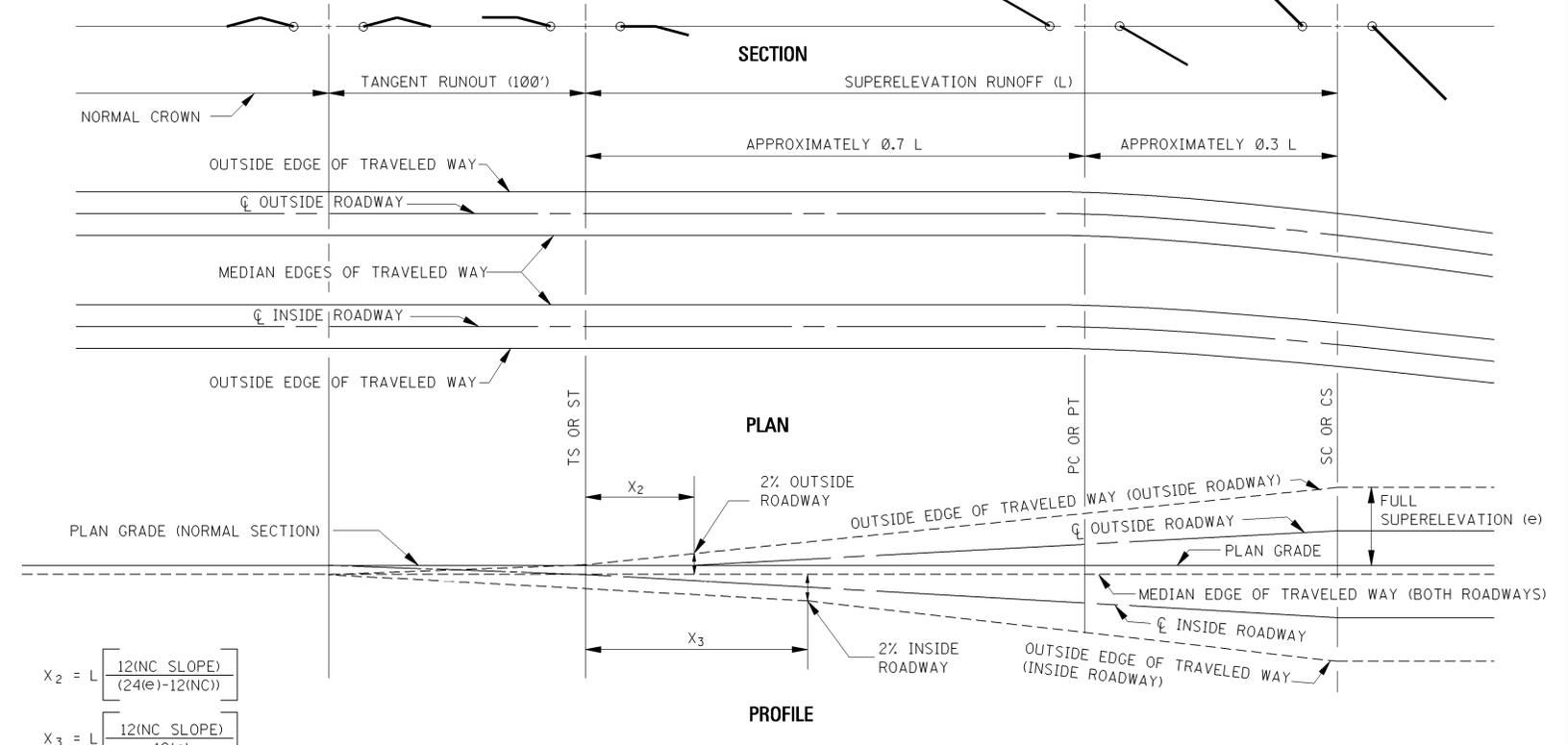


NOTE: THE STRUCTURE THICKNESS UNDER THE MEDIAN EDGE WILL TRANSITION FROM ITS DEPTH IN THE NORMAL SECTION TO THE AMOUNT SHOWN AT THE CENTERLINE IN THE NORMAL SECTION. THIS TRANSITION WILL ONLY OCCUR WHEN THE SE EQUALS OR EXCEEDS 3%.

NOTE: TYPICAL, OR AS SHOWN ELSEWHERE ON THE PLANS.

- GENERAL NOTES:
- "L" IN THE TABLE IS FOR ROTATION ABOUT THE CENTERLINE OF 2 LANES ("A") AND 4 LANES ("B") OF TRAVELED WAYS (1 LANE AND 2 LANES EACH SIDE OF THE ROTATION POINT RESPECTIVELY). MINIMUM LENGTH OF RUNOFF FOR VARIOUS WIDTHS OF ROTATION ARE AS FOLLOWS:
FOR ROTATING A WIDTH OF 3 TRAVEL LANES: L = (1.33)L IN COLUMN B)
FOR ROTATING A WIDTH OF 4 TRAVEL LANES: L = (1.67)L IN COLUMN B)
 - SPIRAL TRANSITION CURVES SHOULD BE USED FOR THE LENGTH OF SUPERELEVATION RUNOFF FOR ALL CURVES IN THE TABLE BELOW THE HEAVY LINE (e > 5%).
 - A VERTICAL CURVE WITH A LENGTH (IN FEET) EQUAL TO THE DESIGN SPEED (IN MPH) SHOULD BE PLACED AT EXCESSIVE ANGULAR BREAKS.



$$X_2 = L \left[\frac{12(NC \text{ SLOPE})}{24(e) - 12(NC)} \right]$$

$$X_3 = L \left[\frac{12(NC \text{ SLOPE})}{12(e)} \right]$$

DIAGRAMMATIC PLAN AND PROFILE

*D	V = 30 mph			V = 40 mph			V = 50 mph			V = 55 mph			V = 60 mph			V = 65 mph			V = 70 mph		
	e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)	
		A	B		A	B		A	B		A	B		A	B		A	B		A	B
0°15'	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0
0°30'	NC	0	0	NC	0	0	NC	0	0	NC	0	0	RC	175	175	RC	190	190	RC	200	200
0°45'	NC	0	0	NC	0	0	RC	150	150	RC	160	160	.025	175	175	.025	190	190	.028	200	200
1°00'	NC	0	0	NC	0	0	RC	150	150	.025	160	160	.030	175	175	.033	190	190	.037	200	200
1°30'	NC	0	0	.021	125	125	.031	150	150	.037	160	160	.043	175	175	.048	190	220	.054	200	260
2°00'	RC	100	100	.028	125	125	.040	150	150	.048	160	180	.055	175	230	.062	190	290	.070	220	330
2°30'	.021	100	100	.034	125	125	.049	150	180	.056	160	210	.067	190	280	.075	220	330	.085	260	390
3°00'	.025	100	100	.040	125	125	.057	150	210	.067	170	250	.077	210	320	.087	250	380	.096	280	420
3°30'	.029	100	100	.046	125	140	.065	160	240	.075	190	290	.086	230	350	.095	270	400	.100	300	450
4°00'	.033	100	100	.051	125	160	.072	180	260	.083	210	320	.093	250	380	.099	280	420			
5°00'	.040	100	110	.061	130	190	.083	200	300	.094	240	360	.098	270	400	D _{max} = 4°15'			D _{max} = 3°30'		
6°00'	.046	100	120	.070	150	220	.092	220	330	.099	250	380	D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
7°00'	.053	100	140	.078	160	240	.098	240	350	D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
8°00'	.058	110	160	.084	180	260	.100	240	360	D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
9°00'	.063	120	170	.089	190	280	D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
10°00'	.068	120	180	.094	200	290	D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
11°00'	.072	130	200	.097	200	310	D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
12°00'	.076	140	210	.099	210	310	D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
13°00'	.080	140	220	.100	210	320	D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
14°00'	.083	150	220	D _{max} = 13°15'			D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
16°00'	.089	160	240	D _{max} = 13°15'			D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
18°00'	.093	170	250	D _{max} = 13°15'			D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
20°00'	.097	170	260	D _{max} = 13°15'			D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
22°00'	.099	180	270	D _{max} = 13°15'			D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		
24°00'	.100	180	270	D _{max} = 13°15'			D _{max} = 8°15'			D _{max} = 6°30'			D _{max} = 5°15'			D _{max} = 4°15'			D _{max} = 3°30'		

* NOTE: FOR DEGREES OF CURVE INTERMEDIATE BETWEEN TABLE VALUES, USE A STRAIGHT-LINE INTERPOLATION TO DETERMINE THE SUPERELEVATION RATE.

△** THE 0.24 DIFFERENCE IN ELEVATION FROM PLAN GRADE LINE TO EDGE OF TRAVELED WAY IS BASED ON 12' TRAVEL LANES, 2% NORMAL CROWN SLOPE, AND THE LOCATION OF PLAN GRADE AT THE CENTERLINE OF ROADWAY. ALTHOUGH THE HORIZONTAL LOCATION OF PLAN GRADE AT THE CENTERLINE IS PREFERRED AND ILLUSTRATED ON THIS STANDARD DRAWING, PLAN GRADE LOCATION IS VARIABLE (I.E. PLAN GRADE AT THE MEDIAN EDGE OF TRAVEL LANE) AND SHOULD BE VERIFIED ON THE TYPICAL SECTION(S).

- KEY:
- D = DEGREE OF CURVE
 - V = DESIGN SPEED (mph)
 - e = FULL SUPERELEVATION RATE (%)
 - L = MINIMUM LENGTH OF SUPERELEVATION RUNOFF (FROM ADVERSE CROWN REMOVED TO FULL SUPER) (ft)
 - A = "L" FOR 1-LANE WIDTH OF ROTATION
 - B = "L" FOR 2-LANE WIDTH OF ROTATION
 - NC = NORMAL CROWN; SUPERELEVATE AT NORMAL CROWN SLOPE (2%)
 - RC = REVERSE CROWN; SUPERELEVATE AT NORMAL CROWN SLOPE (2%)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**SUPERELEVATION
TRANSITION
CASE II
ROTATION ABOUT EDGE
OF TRAVELED WAY
(3% NORMAL SUBGRADE)**

WORKING NUMBER SE-2D
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