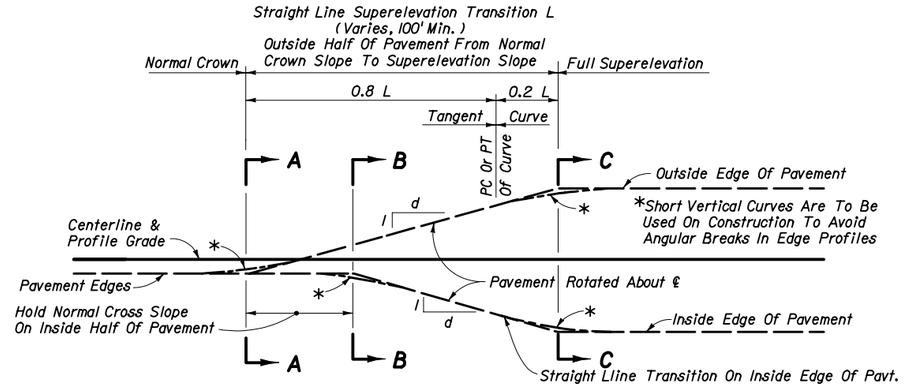
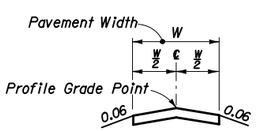


PROFILES

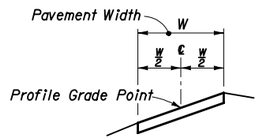
SLOPE RATIOS FOR SUPERELEVATION TRANSITIONS			
SECTION	DESIGN SPEED, MPH		
	45-50	55-60	65-70
	l: d		
2 Lane & 4 Lane	l: 200	l: 225	l: 250
6 Lane	l: 160	l: 180	l: 200
8 Lane	l: 150	l: 170	l: 190

The length of superelevation transition is to be determined by the relative slope between the travel way edge of pavement and the profile grade, except that the minimum length of transition shall be 100 ft.



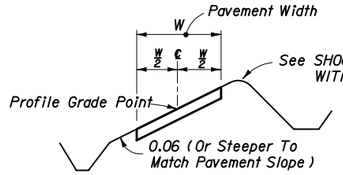
NORMAL CROWN SECTION

SECTION AA



REVERSE CROWN SECTION

SECTION BB



FULLY SUPERELEVATED SECTION

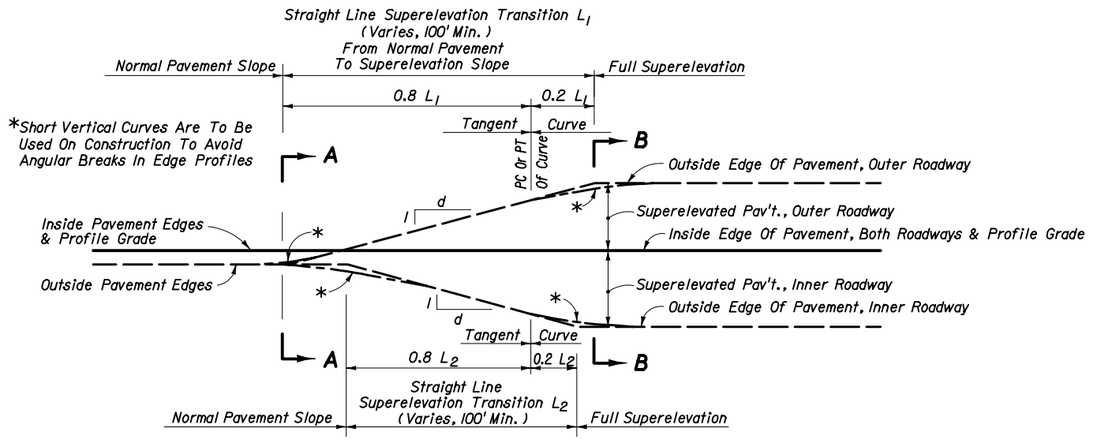
SECTION CC

2-LANE, 4-LANE OR 6-LANE PAVEMENT, NO MEDIAN

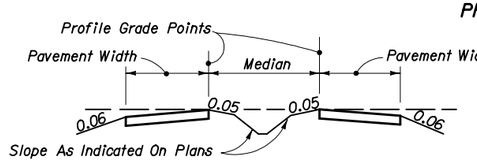
THESE TRANSITION DETAILS ARE TO APPLY IN ALL IN ALL CASES, EXCEPT UNDER THE FOLLOWING CONDITIONS:

1. Curves of insufficient length.
2. Insufficient tangent length between curves.
3. Deficient transition distance between a curve and other control point(s).
4. At PCC's or PRC's (Runoff rates are applicable).

Transitions for these exceptions are to be as detailed in the plans.

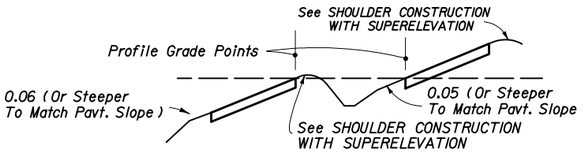


PROFILES



NORMAL SECTION

SECTION AA

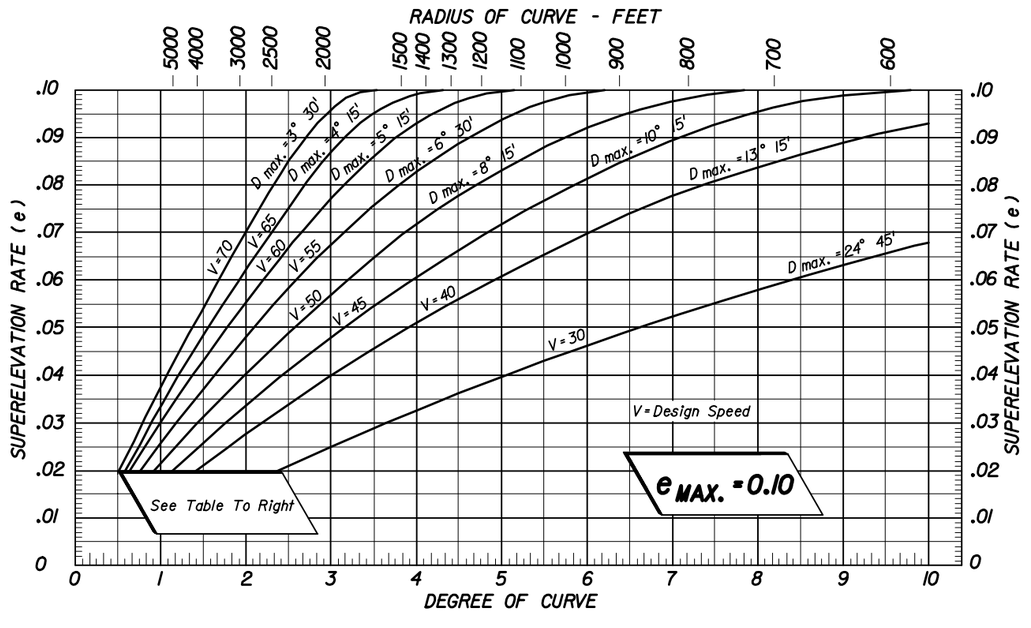


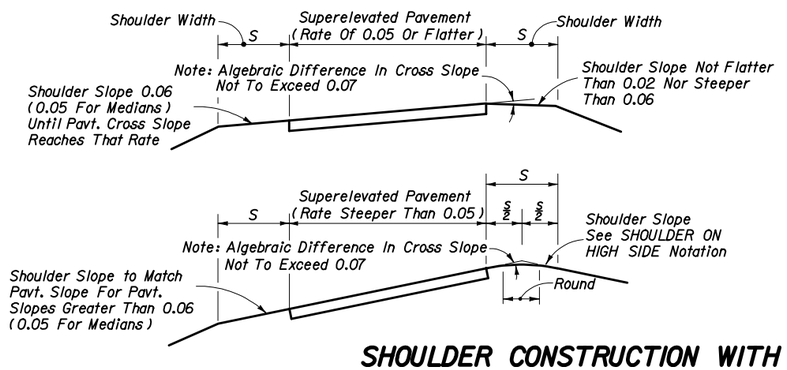
FULLY SUPERELEVATED

SECTION BB

4-LANE OR 6-LANE PAVEMENT WITH MEDIAN

SUPERELEVATION TRANSITIONS





SHOULDER ON HIGH SIDE: A shoulder slope of 0.06 downward from the edge of pavement will be maintained until a 0.07 break in slope at the pavement edge is reached due to superelevation of the pavement. As the pavement superelevation increases, the 0.07 break in slope will be maintained and the shoulder flattened until the shoulder slope reaches the minimum of 0.02 downward from the edge of pavement. Any further increase in pavement superelevation will necessitate sloping the inside half of the shoulder toward the pavement and the outer half outward, both at 0.02 for superelevations 0.06-0.09 and both at 0.03 for superelevation 0.10.

SHOULDER ON LOW SIDE: Maintain 0.06 drop across inside shoulder until pavement cross slope reaches 0.06. For pavement cross slopes greater than 0.06, shoulder to have same slope as pavement.

These slopes are the same as those shown pictorially on sheet 2.

NOTE: These details apply to both paved and grassed shoulders. For median shoulders use 0.05 in lieu of 0.06.

SHOULDER CONSTRUCTION WITH SUPERELEVATION

DEGREE OF CURVE (D)	DESIGN SPEED, V MPH						
	30	40	45/50	55	60	65	70
0° 15'	NC	NC	NC	NC	NC	NC	NC
0° 30'	NC	NC	NC	NC	RC	RC	RC
0° 45'	NC	NC	RC	RC	0.023	0.025	0.028
1° 00'	NC	NC	0.021	0.025			
1° 30'	NC	0.021	SEE DESIGN SUPERELEVATION RATE TO LEFT				
2° 00'	RC						

GENERAL NOTES

1. For curves in urban highways and high speed urban streets, see Index No. 511.

DESIGN SUPERELEVATION RATES FOR RURAL HIGHWAYS, URBAN FREEWAYS AND HIGH SPEED URBAN HIGHWAYS

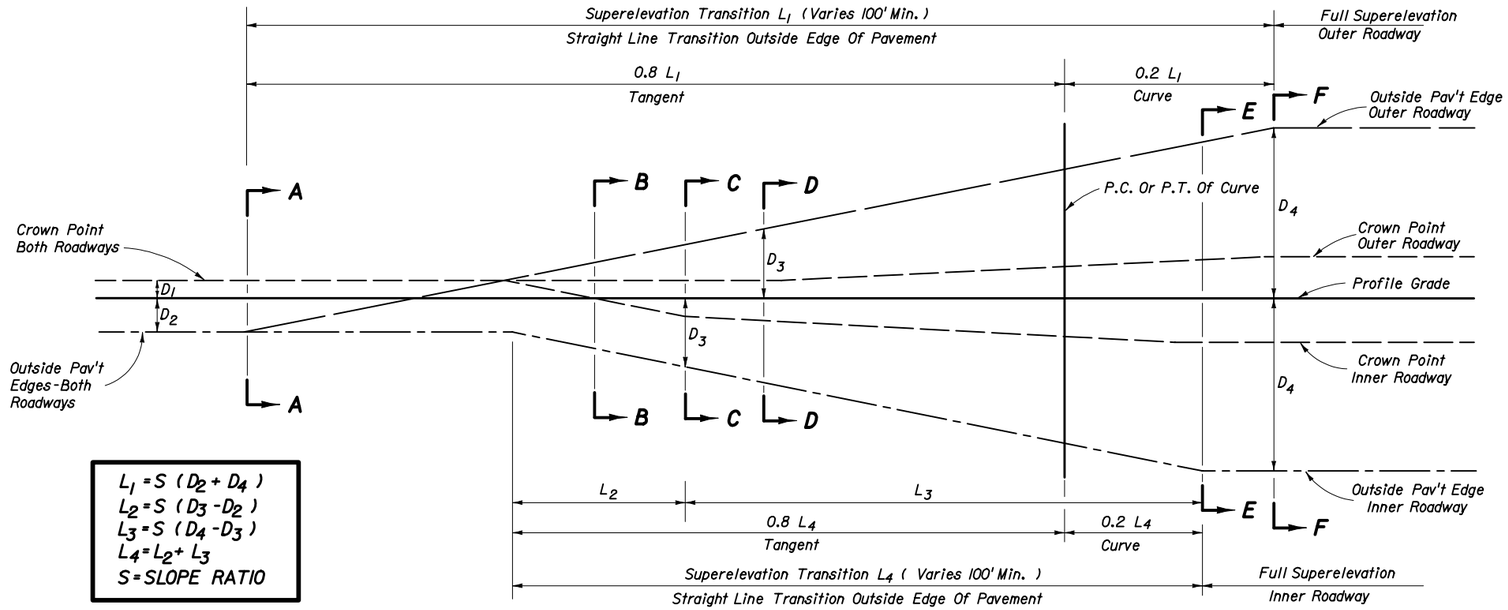
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

SUPERELEVATION
RURAL HIGHWAYS, URBAN FREEWAYS AND HIGH SPEED URBAN HIGHWAYS

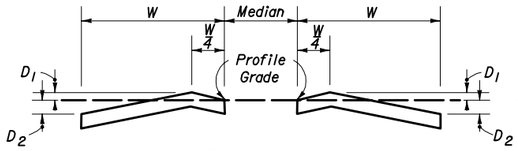
	Names	Dates
Designed By	HFW	5/65
Drawn By	LMF	10/74
Checked By		

Approved By _____
Roadway Design Engineer

Revision	Sheet No.	Index No.
00	1 of 2	510

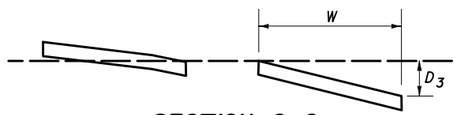


$L_1 = S\ (D_2 + D_4)$
$L_2 = S\ (D_3 - D_2)$
$L_3 = S\ (D_4 - D_3)$
$L_4 = L_2 + L_3$
S = SLOPE RATIO

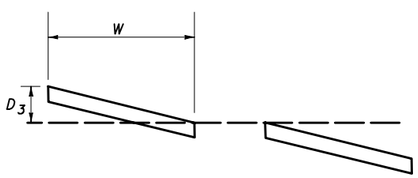


SECTION A-A
NORMAL CROWNED SECTION

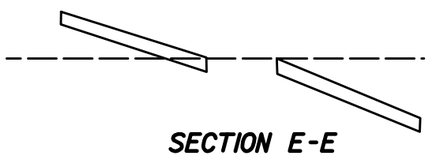
SECTION B-B
SUPERELEVATION SECTION LT. & RT.



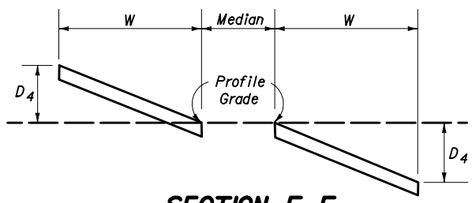
SECTION C-C
SUPERELEVATION SECTION LT.
PLANE INCLINED SECTION RT.



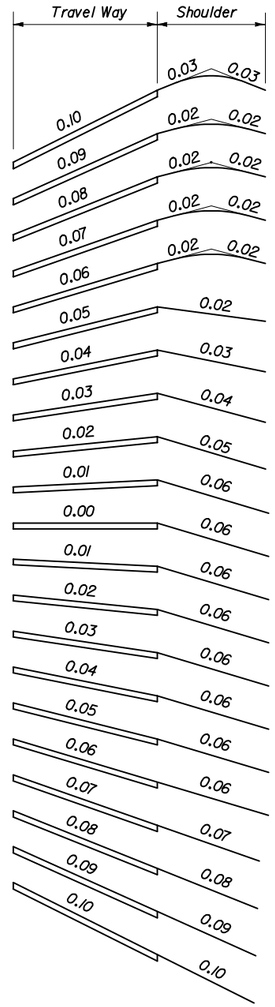
SECTION D-D
PLANE INCLINED SECTION LT.
SUPERELEVATION TRANSITION RT.



SECTION E-E
SUPERELEVATION TRANSITION LT.
FULL SUPERLEVATION RT.



SECTION F-F
FULL SUPERELEVATION LT. & RT.



SLOPES OF TRAVELED WAY
AND ABUTTING SHOULDERS

SHOULDER SLOPES ON SUPERELEVATION SECTIONS

8-LANE PAVEMENT WITH ONE LANE SLOPED TO MEDIAN

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

SUPERELEVATION
RURAL HIGHWAYS, URBAN FREEWAYS AND HIGH SPEED URBAN HIGHWAYS

	Names	Dates
Designed By	WAL	8/77
Drawn By	LMF	8/77
Checked By	WAL	8/77

Approved By
Roadway Design Engineer

Revision	Sheet No.	Index No.
00	2 of 2	510