## $e_{max} = 0.05$ TABULATED VALUES CHARTED VALUES Degree Of Radius Design Speed (mph) (R)Curve (Ft.) 35 45 (D) 30 40 50 2° 00' NC NC 2,865 NC NC NC 2° 15′ 2,546 RC2° 45′ 2,083 NC 3° 00' 1,910 RC DEGREE OF CURVE (D) .3° 45′ 1,528 NC 1.25 2.5 3.0 3.5 4 5 6 7 4° 00' 1,432 RC+0.05 <u>+0.0</u>5 RC 4° 45' 1,206 5° 00' 1,146 NC 0.023 5° 15' 1,091 0.027 5° 30' 1,042 0.030 +0.0 +0.02 K 5° 45′ 996 0.035 6° 00' 955 0.040 0.022 6° 15' 917 0.045 6° 30' 0.024 881 0.050 6° 45′ 0.027 <u>-0.0</u>2 849 -0.0 )max.= 7° 00' 819 NC 0.030 6° 30′ 7° 15' RC0.033 790 c-7° 30' 0.037 764 0.041 7° 45' 739 5500 0.045 5000 4500 4000 *3000 2500* 2000 1500 8° 00' RC3500 716 RADIUS (R) (Ft.) 8° 15' 0.050 694 8° 30' Dmax.: 674 0.025 8° 45' 8° 15′ 655 a: When the speed curves and the degree of curve or radius lines intersect above this 9° 00' 637 0.030 line, the pavement is to be superelevated (positive slope) at the rates indicated at 9° 30′ 603 0.034 the lines intersecting points. 10° 00' 573 0.040 b: When the speed curves and the degree of curve or radius lines intersect between these 10° 30' 546 0.047 limits, the pavement is to be superelevated at the rate of 0.02 (positive slope). 11° 00′ 521 0.023 Dmax.= 11° 30′ 10° 45′ 0.026 498 C: When the speed curves and the degree of curve or radius lines intersect below this line. 12° 00' 0.030 477 The pavement is to have normal crown (typically 0.02 and 0.03 downward slopes). 13° 00' 0.036 441 14° 00' 409 0.045 382 0.023 Dmax.= 16° 00' 358 0.027 14°15′ 17° 00' *337* 0.032 18° 00' 318 0.038 NC = Normal Crown19° 00′ 302 0.043 RC = Reverse Crown 20° 00' 286 0.050 (+0.02 Superelevation) Dmax. 20°00

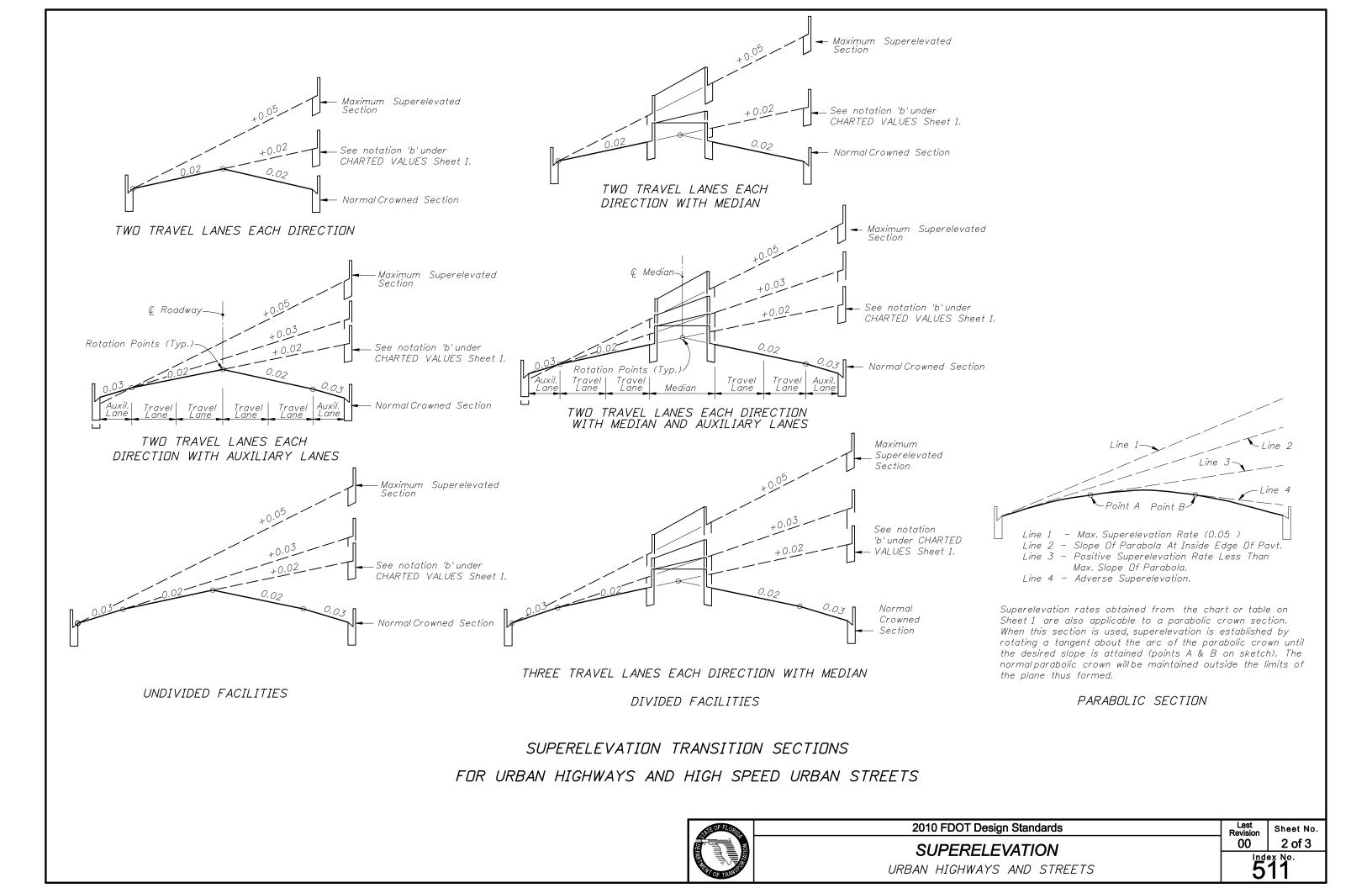
SUPERELEVATION RATES (e) FOR URBAN HIGHWAYS AND HIGH SPEED URBAN STREETS

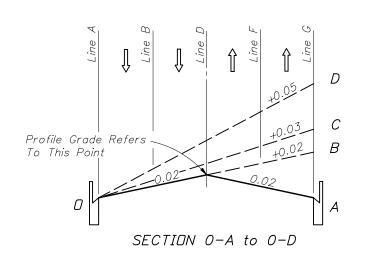
## GENERAL NOTES

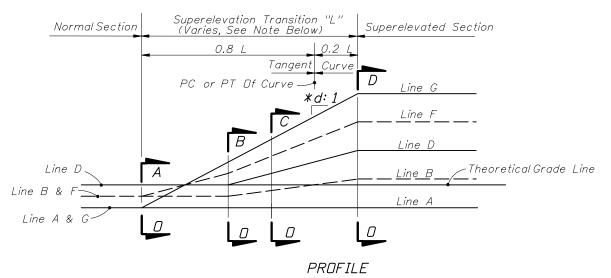
- 1. Maximum rate of superelevation for urban highways and high speed urban streets shall be 0.05.
- 2. Superelevation shall be obtained by rotating the plane successively about the break points of the section until the plane has attained a slope equal to that required by the chart. Should the rotation traverse the entire section and further superelevation be required, the remaining rotation of the plane shall be about the low edge of the inside travellane. Crown is to be removed in the auxiliary lane to the outside of the curve only when the adjoining travellanes require positive superelevation.
- 3. When positive superelevation is required, the slope of the gutter on the high side shall be a continuation of the slope of the superelevated pavement.
- 4. In construction, short vertical curves shall be placed at all angular profile breaks within the limits of the superelevation transition.
- 5. The variable superelevation transition length "L" shall have a minimum value of 50 feet for design speeds under 40 MPH and 75 feet for design speeds of 40 MPH or greater.
- 6. Roadway sections having lane arrangements different from those shown, but composed of a series of planes, shall be superelevated in a similar manner.
- 7. For superelevation of lower speed urban streets, see the FDOT 'Manual Of Uniform Minimum Standards For Design, Construction And Maintenance For Streets And Highways'. For superelevation of curves on rural highways, urban freeways and high speed urban highways, see Index No. 510.

e <sub>max.</sub>= 0.05 SUPERELEVATION FOR URBAN HIGHWAYS AND HIGH SPEED URBAN STREETS



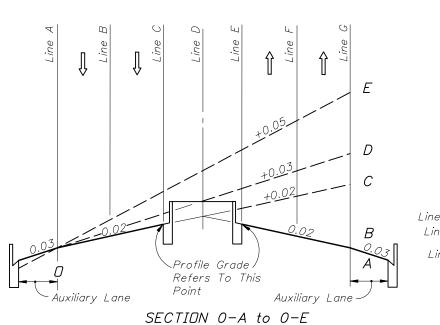


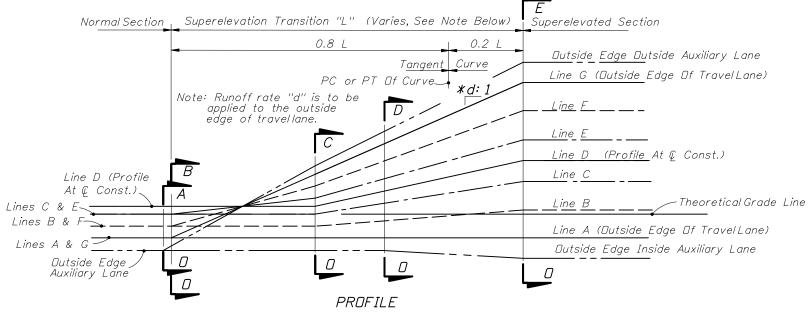




LINE	DESCRIPTION	
A	Inside TravelLane	
В	Inside Lane Line	
С	Inside Median Edge Pavement	
D	© Construction	
Ε	Outside Median Edge Pavement	
F	Outside Lane Line	
G	Outside TravelLane	
Inside And Outside Are Relative To Curve Center		
10 Curve Center		

TWO LANES EACH DIRECTION





*d (Slop	e Ratio)
30 MPH	1: 100
40 MPH	1: 125
45-50 MPH <sup>△</sup>	1: 150
△ 1:125 May	

1: 125 May Be Used For 45 MPH Under Restricted Conditions.

## TWO LANES EACH DIRECTION WITH MEDIAN AND AUXILIARY LANE

Note

The sections and profiles shown are examples of superelevation transitions. Similar schemes should be used for roadways having other sections.

EXAMPLE SUPERELEVATION SECTIONS AND PROFILES
FOR URBAN HIGHWAYS AND HIGH SPEED URBAN STREETS



## 2010 FDOT Design Standards SUPERELEVATION URBAN HIGHWAYS AND STREETS

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ndex No.