



**NOTES:**

- \* THE PROFILE GRADE IS ON THE CENTRELIN OF THE FINISHED TRAVEL LANES.
- \* SUPERELEVATION IS NORMALLY ATTAINED BY ROTATING INDIVIDUAL ROADWAYS ABOUT THE CENTRELIN OF TRAVEL LANES.

**SUBGRADE AND SURFACING DIMENSIONS**

$A_1, A_2$  = THICKNESS OF ACP (1st STAGE + FINAL STAGE PAVING)  
 $B_1, B_2$  = THICKNESS OF BASE  
 $T_1 = A_1 + B_1$ ,  $T_2 = A_2 + B_2$   
 $P_1, P_2$  = THICKNESS OF FIRST STAGE PAVING

EXAMPLE: IF  $A_1 = 220\text{mm}$ ,  $A_2 = 200\text{mm}$ ,  $B_1 = 400\text{mm}$ ,  $B_2 = 350\text{mm}$   
 $P_1 = 100\text{mm}$ ,  $P_2 = 80\text{mm}$   
 $T_1 = 620\text{mm}$ ,  $T_2 = 550\text{mm}$ ,  $Y_1 = 6.70\text{m}$ , AND  $Y_2 = 5.70\text{m}$

$$X_3 = \frac{B_1 - B_2}{40} = \frac{400 - 350}{40} = 1.25\text{m} \quad ; \text{(OFFSET DISTANCE FROM SUBGRADE CROWN TO BASECOURSE CROWN)}$$

$$X_4 = \frac{P_1 - P_2}{40} = \frac{100 - 80}{40} = 0.5\text{m} \quad ; \text{(OFFSET DISTANCE FROM BASECOURSE CROWN TO PAVEMENT CROWN)}$$

$$Z_1 = 5(T_1 + 0.16) = 5(0.62 + 0.16) = 3.9\text{m}$$

$$Z_2 = 5(T_2 + 0.16) = 5(0.55 + 0.16) = 3.55\text{m}$$

$$\therefore \text{TOTAL SUBGRADE WIDTH} = \text{FINISHED PAVEMENT} + Z_1 + Z_2$$

$$= 5.7 + 6.7 + 3.9 + 3.55$$

$$= 19.85 \text{ m}$$

**NOTE:**  
 THIS DRAWING MAY BE USED TO CALCULATE THE REQUIRED SUBGRADE WIDTH BASED ON SURFACING THICKNESS ON FOUR LANE DIVIDED HIGHWAYS.

	RUMBLE STRIPS ADDED	PM	2017-04-12
	5:1 PAVEMENT SLOPE	BK	27/06/05
No.	REVISIONS	BY	DATE

	<p>FIGURE C-8.1g</p> <p>Date: DECEMBER 2002</p>		
	<p>TYPICAL PAVEMENT DESIGN FOR FOUR-LANE DIVIDED HWY</p> <p>RFD-412.4-130 &amp; RAD-412.4-120</p>		
<p>Prepared By: T.N.</p>	<p>Checked By: BK</p>	<p>Scale: N.T.S.</p>	<p>PAGE C- 95</p>