

		DESIGN SPEED (MPH)						
		30	35	40	45	50	55	60
		TAPER LENGTH (FT)						
T <sub>1</sub> (See Note 2)	Computed	90′	123'	160′	270′	300′	330°	360′
	Rounded	100′	125′	175′	275′	300′	350	<i>375′</i>
T <sub>2</sub> (See Note 3)		100′	200′	200′	200′	200°	200′	200°
Full Deceleration (T <sub>1</sub> + T <sub>2</sub> )		200'	325′	375′	<i>4</i> 75′	500′	550′	575′

## Notes:

- I. Turn Lane Width  $(W_1)$  is to be same as Through Lane Width  $(W_2)$  (12' assumed in computations).
- 2. (For  $\leq$  40 MPH)  $T_1$  = Turn Lane Width X Design Speed  $^2$  ÷ 60 ÷ 2 (Rounded up). (For  $\geq$  40 MPH)  $T_1$  = Turn Lane Width X Design Speed ÷ 2 (Rounded up).
- 3.  $T_2 = 1s$  computed as follows:  $\le 30$  mph; 8:1 = 96' (Rounded to 100') > 35 mph; 15:1 = 180' (Rounded to 200')
- 4. L<sub>1</sub> = Length of storage lane to be determined by Figures 3-5 through 3-22 by capacity analysis for Left-Turn Storage, Minimum Length IOO'.

Example for 45 MPH (I2' Lane): 1) I2' x45 mph  $\div$  2 = 270' (Rounded to 27,5') T 2) For I5:I Taper: I2' Lane x I5 = I80' (Rounded to 200')  $T_2$ 3) 275'  $\div$  200' = 475' (Full Deceleration Distance)

PASSING/LEFT TURN LANE ON TWO-LANE HIGHWAY

## FIGURE 3-4 PASSING/LEFT TURN LANE ON TWO-LANE HIGHWAY\*

Source: <u>2011 Virginia Work Area Protection Manual</u>, Chapter 6C, Page 6C-7 AASHTO Green Book, Chapter 9, Section 9.7.2, page 9-127 (For turning lane tapers)

<sup>\*</sup> Rev. 7/14