

**DESIGN FACTORS FOR A DESIGN SPEED OF 50 MPH
(URBAN) USING E= 4 % MAX.**

| RADIUS (FEET) | E (%) | PAVEMENT WIDTH | | | | | | | | | | | |
|------------------|----------|---|-----|-----------|-----|---------|-----|---------|-----|---------|-----|---------|-----|
| | | 24 FT | | 36 FT | | 48 FT | | 60 FT | | 66 FT | | 72 FT | |
| | | IGRDS EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH) | | | | | | | | | | | |
| | | 1 @ 12' | | 1.5 @ 12' | | 2 @ 12' | | 3 @ 10' | | 3 @ 11' | | 3 @ 12' | |
| | | CR | LS | CR | LS | CR | LS | CR | LS | CR | LS | CR | LS |
| 20000 | 2.1 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 15000 | 2.1 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 10000 | 2.1 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 7000 | 2.1 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 5000 | 2.1 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| 4000 | 2.4 | 140 | 160 | 140 | 160 | 140 | 160 | 140 | 160 | 140 | 160 | 140 | 160 |
| 3000 | 2.7 | 125 | 160 | 125 | 160 | 125 | 160 | 125 | 160 | 125 | 160 | 125 | 160 |
| 2500 | 2.9 | 116 | 160 | 116 | 160 | 116 | 160 | 116 | 160 | 116 | 160 | 116 | 160 |
| 2250 | 3.1 | 109 | 160 | 109 | 160 | 109 | 160 | 109 | 160 | 109 | 160 | 109 | 160 |
| 2000 | 3.2 | 105 | 160 | 105 | 160 | 105 | 160 | 105 | 160 | 105 | 160 | 105 | 160 |
| 1750 | 3.4 | 99 | 160 | 99 | 160 | 99 | 160 | 99 | 160 | 99 | 160 | 112 | 180 |
| 1500 | 3.6 | 94 | 160 | 94 | 160 | 94 | 160 | 94 | 160 | 94 | 160 | 105 | 180 |
| 1300 | 3.8 | 89 | 160 | 89 | 160 | 89 | 160 | 89 | 160 | 100 | 180 | 111 | 200 |
| 1150 | 3.9 | 87 | 160 | 87 | 160 | 87 | 160 | 87 | 160 | 97 | 180 | 108 | 200 |
| 1000 | 4.0 | 84 | 160 | 84 | 160 | 84 | 160 | 84 | 160 | 95 | 180 | 105 | 200 |
| 929 ⊗ | 4.0 | 84 | 160 | 84 | 160 | 84 | 160 | 84 | 160 | 95 | 180 | 105 | 200 |

NOTE:

CR AND LS VALUES IN FEET.

FOR PAVEMENT WIDTHS GREATER THAN 72 FEET
USE LS VALUES DEVELOPED BY IGRDS WITH AN
ABSOLUTE MINIMUM LS OF 160 FEET.

⊗ MINIMUM ALLOWABLE RADIUS