TAC; TRANSPORTATION ASSOCIATION OF CANADA THE GEOMETRIC DESIGN GUIDE FOR CANADIAN ROADS SEPTEMBER 1999

METRIC

ALL DIMENSIONS IN METRES

| | LOCAL RESIDENTIAL ROADS | LOCAL INDUSTRIAL ROADS | MINOR RESIDENTIAL COLLECTOR ROADS | COLLECTOR ROADS | ARTERIAL ROADS |
|---|-------------------------------|------------------------------|--|--------------------|-------------------|
| DESIGN SPEED | 50 km/h | 50 km/h | 50/60 km/h | 70 km/h | 90 km/h |
| STOPPING SIGHT DISTANCE (TAC TABLE 2,1,3,2) | 65 m | 65 m | 85 m SEE NOTE 7 | IIO m | 170 m |
| STOPPING SIGHT DISTANCE (FOR CREST (VERTICAL CURVES) | 65 m | 65 m | 90m SEE NOTE 7 | 120m | 180m |
| MINIMUM RADIUS (C _L OF ROAD) | N/A | N/A | 150m SEE NOTE 7 | 325m | 580m |
| GRADE (MINIMUM) SEE NOTE 4 | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% |
| GRADE (MAXIMUM) | 7.0% | 6.0% | 6.0% | 6.0% | 6.0% |
| GRADE (MAXIMUM) THROUGH ROADS AT INTERSECTIONS | 3.5% | 3.0% | 3.0% | 3.0% | 2.0% |
| GRADE (MAXIMUM) STOP ROADS AT INTERSECTIONS | 2.5% | 2.0% | 2.0% | 2.0% | 1.0% |
| INTERSECTION ANGLE | 70-90 ⁰ | 70-90 ⁰ | 70-90 ⁰ | 70-90 ⁰ | 80-90 ° |
| MINIMUM TANGENT LENGTH FOR INTERSECTION APPROACHES (FROM C L) | 40m | 45m | 45m | 45m | 75m |

NOTES:

- I. THIS STANDARD TO BE USED IN CONJUNCTION WITH CITY OF MISSISSAUGA STANDARDS (SECTION 2211 ROADWAYS)
- 2. CHANGES IN VERTICAL ALIGNMENT SHALL BE AS PER CITY OF MISSISSAUGA STANDARDS 22II.020 AND 22II.030
- 3. CHANNELIZATION WILL NORMALLY BE USED AT ARTERIAL TO ARTERIAL INTERSECTIONS. SEE CITY OF MISSISSAUGA STANDARD 221.210
- 4. ON CUL-DE-SACS, THE CURB LINES OR EDGE OF PAVEMENT ARE TO MAINTAIN A MINIMUM GRADE OF 0.5%
- 5. STOPPING SIGHT DISTANCE REFER TO THE TAC MANUAL, TABLES 1.2.5.2 AND 1.2.5.3 DERIVED USING THE COEFFICIENT OF FRICTION FOR WET PAVEMENT.
- 6. MINIMUM RADII MAY BE REDUCED WITH THE USE OF SUPERELEVATION AS DIRECTED BY THE COMMISSIONER OF TRANSPORTATION AND WORKS. IF SUPERELEVATION IS USED, THE DESIGN IS TO ADHERE TO THE REQUIREMENTS OF TABLE 2.1.2.6 IN THE TAC MANUAL.
- 7. STOPPING SIGHT DISTANCES MEETS 60 km/h, MINIMUM RADIUS MEETS 50 km/h REQUIREMENTS.



STANDARD

GEOMETRIC DESIGN
STANDARDS FOR ROADS

| EFF. | DATE | 2002-01-01 | SCALE | N.T.S. | |
|------|------|------------|-------------|----------|--|
| RFV. | | | STANDARD NO | 2211 010 | |