

Geometric Design Guide Supplement

Section:

Sight Distance

Subject:

Passing Sight Distance

SKS 2.5-B.1 Introduction

Long stretches of road are undesirable where passing is not possible. On two lane highways it is important to provide as many passing opportunities as practical.

Most of the terrain encountered in Saskatchewan is flat to moderately rolling. Experience has shown that, except in special cases in rough topography, it is feasible to obtain the desirable standard for passing sight distance. Sight distance better than the standard is feasible in much of the terrain.

A highway which is deficient in sight distance could result in earlier obsolescence due to operational problems and capacity. As a result, serious consideration must be given to the long term effects before a decision is made to use something less than the desirable standard.

SKS 2.5-B.2 Minimum Distance

The minimum distance to pass a vehicle is the sum of four distances as described in Subsection 2.5.3.

SKS 2.5-B.3 Assumptions

Note that the Saskatchewan assumptions are slightly different than the assumptions made in the GDG. The assumptions made in the ministry standard are as follows:

- The speed of vehicle being overtaken is about 16 km/h below the design speed in the lower speed ranges and 24 km/h in the 110 to 130 km/h speed range.
- The speed of the passing vehicle is higher than the design speed in the lower ranges and equal to the design speed in the higher ranges.
- The speed of the opposing vehicle is assumed to be the same as the design speed in the 50 to 100 km/h speed range and 8 km/h less than the design speed in the 110 to 130 km/h speed range.
- The clearance between the passing vehicle and the opposing vehicle was assumed to be from 60 to 180 m.
- The top of a car is not considered to be suitable criteria to use for an object height. To clearly identify a car, especially in poor light conditions, the upper portions of the hood and top of car must be visible.
- Passing sight distance is determined for a single vehicle passing a single vehicle.

SKS 2.5-B.4 Ministry Standard

The Ministry standard for passing sight distance is shown in Standard Plan No. 20260.