

New Jersey Department of Transportation
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Baseline Document Change Announcement

ANNOUNCEMENT: BDC17MR-03

DATE: June 30, 2017

SUBJECT: Revision to Figure 4-A of the Roadway Design Manual, 2015

Figure 4-A "Minimum Stopping Sight Distance on Horizontal Curves" of the Roadway Design Manual, 2015 has been corrected since it has been inadvertently left out of the Manual.

The following pages of the 2015 Roadway Design Manual have been revised and replaced:

- Page 4-3 – No Change
- Page 4-4 – Corrected Figure 4-A

Implementation Code R (ROUTINE)

Changes must be implemented in all applicable Department projects scheduled for Final Design Submission at least one month after the date of the BDC announcement. This will allow designers to make necessary plan, specifications, and estimate/proposal changes without requiring the need for an addenda or postponement of advertisement or receipt of bids.

Recommended By:



Paul F. Schneider
Director
Capital Program Support

Approved By:



Eli D. Lambert III, P.E.
Assistant Commissioner
Capital Program Management

Attachment: 2015 Roadway Design Manual Pages 4-3 & 4-4.

centerline of inside lane to the obstruction. When the design speed and the clear distance to a fixed obstruction are known, this figure also gives the required minimum radius which satisfies these conditions.

When the required stopping sight distance would not be available because of an obstruction such as a railing or a longitudinal barrier, the following alternatives shall be considered: increase the offset to the obstruction, increase the horizontal radius, or do a combination of both. However, any alternative selected should not require the width of the shoulder on the inside of the curve to exceed 12 feet because the potential exists that motorists will use the shoulder in excess of that width as a passing or travel lane. This is especially pertinent where bicyclists can be expected to operate.

When determining the required HSO distance on ramps, the location of the driver's eye is assumed to be positioned 6 feet from the inside edge of pavement on horizontal curves.

The designer is cautioned in using the values from Figure 4-A since the stopping sight distances and HSO are based upon passenger vehicles. The average driver's eye height in large trucks is approximately 120 percent higher than a driver's eye height in a passenger vehicle. However, the required minimum stopping sight distance can be as much as 50 percent greater than the distance required for passenger vehicles. On routes with high percentages (10 percent or more) of truck traffic, the designer should consider providing greater horizontal clearances to vertical sight obstructions to accommodate the greater stopping distances required by large trucks. The approximate HSO required for trucks is 2.5 times the value obtained from Figure 4-A for passenger vehicles.

In designing the roadway to provide a particular stopping sight distance the designer is advised to consider alternatives. A wider sidewalk, shoulder or bike lane increases the sight triangle, see Section 6.3. Curb extensions and parking restrictions allow the driver to see pedestrians and cross traffic more easily.

**FIGURE 4-A:
MINIMUM STOPPING SIGHT DISTANCE ON
HORIZONTAL CURVES**

