

## Sight Distance Measurement Procedure

### For Intersections with Stop Control at the Approach

#### PROCEDURE:

If the highway has only two lanes, you may stop measuring at 900'. If the highway has more than two lanes, then you can stop measuring at 1500'.

**Step 1: Record the number of lanes on the highway and their widths**

**Step 2: Measure Roadway Grades (Highway and Approach Road)**

- Measure the grade of the highway with a SmartLevel at the steepest section within 900'/1500', left and right of the intersection.
- Measure the grade of the approach with a SmartLevel at a point 20' behind the fog stripe, curb or back of sidewalk if the approach is on an upgrade.

**Step 3: Record the Posted Speed:** Record the posted speed (PS) in each direction of the intersection. Record any curve rider speed (CRS) that applies to curves within 900'/1500' of the intersection. Record observations of the apparent running speed (RS) in the area; does it appear to be slower than the PS or higher?

**Step 4: Measure Sight Distance:** Measure the Sight Distance (Y), left and right of the intersection as shown on Exhibit "A" using the following values:

Set out four (4) Object Height (OH) markers inline with the center of the proposed intersection at the (X) locations shown below.

- #1: (X) = 0' (Opposite fog stripe or curb), OH = 2.0'
- #2: (X) = 0' (near fog stripe or curb), OH = 2.0'
- #3: (X) = 10' (behind the near fog stripe or curb), OH = 3.5'
- #4: (X) = 15' (behind the near fog stripe or curb), OH = 3.5'

Use a sighting height (Driver's Eye Height) = 3.5' - All measurements to the left should be taken from the near fog stripe or curb. All measurements to the Right should be taken from the opposite fog stripe or curb. This is where you will be sighting and measuring from, for your safety. Starting on or near the fog stripe and at the centerline of the approach, with your measuring wheel set to 0', walk along the highway until you can not see one of the markers, record the distance ( $Y_{L\#/R\#}$ ) and marker # ( $X_{1,2,3}$  or 4). Continue the process of walking and recording information for the remaining markers or until you reach the maximum distance of 900' or 1500'.

- Take measurements from Right of the approach to Objects: #1, #2, #3 & #4
- Take measurements from Left of the approach to Objects: #2, #3 & #4

If the "Y" distance is 900'/1500' or more, and the sight triangle is clear of obstructions, then an actual measurement past 900'/1500' is not necessary. In this case, record the "Y" distance as 900'+/1500'+. This will signify that a measurement was taken at 900'/1500' but the actual sight distance is greater than 900'/1500'.

