



IF THE STOPPING SIGHT DISTANCE, S, AND THE RADIUS TO THE CENTER OF THE INSIDE LANE, R, ARE KNOWN, THE DISTANCE, M, IS FOUND BY THE FOLLOWING EQUATION:

$$M = R[1 - \cos(28.65 S/R)]$$

IF THE RADIUS, R, AND THE DISTANCE, M, ARE TENTATIVELY SELECTED, THEN THE LENGTH, L, OF THE ARC IN THE MIDDLE OF THE INSIDE LANE MAY BE FOUND BY THE FOLLOWING EQUATION:

$$L = (R/28.65) \arccos[(R-M)/R]$$

IF THE LENGTH, L, IS LESS THAN THE STOPPING SIGHT DISTANCE FOR THE DESIRED DESIGN SPEED, EITHER THE RADIUS, R, OR THE DISTANCE, M, MUST BE INCREASED.

DESIGN SPEED MPH	25	30	35	40	45	50
STOPPING SIGHT DISTANCE, S, (FT.) AS MEASURED ALONG THE PATH OF THE VEHICLE	150	200	250	325	400	475

I:\CITYPPS\AUTOCAD\STD_DETAILS\DRAWING_FILES\T04-01

REV NO.	DATE	BY	APPR	PUBLIC WORKS – STREETS AND TRANSPORTATION
1	8/04	RAW	MHA	
2	3/06	RAW	MHA	
3	2/07	RAW	MHA	
4	8/08	RAW	MHA	
5	7/14	RAW	MHA	
6	9/21	RAW	MHA	APPROVED DATE: 9/1/2021



VIEW OBSTRUCTIONS FOR HORIZONTAL CURVES

STANDARD PLAN NUMBER
T04-01