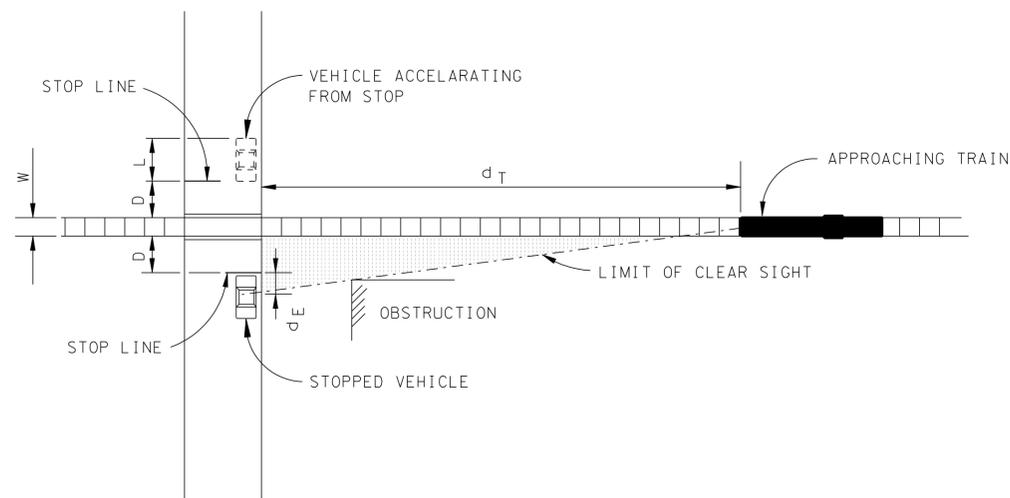CASE A
APPROACHING VEHICLE TO SAFELY CROSS OR STOP AT RAILROAD CROSSING
(FOR CLARITY RIGHT OF WAY LINES ARE NOT SHOWN FOR THE OTHER QUADRANTS)

CASE B
VEHICLE DEPARTING FROM STOPPED POSITION TO SAFELY CROSS RAILROAD TRACK
(FOR CLARITY RIGHT OF WAY LINES ARE NOT SHOWN FOR THE OTHER QUADRANTS)

LEGEND

▨ AREAS FREE OF SIGHT OBSTRUCTIONS

DESIGN SIGHT DISTANCES FOR COMBINATIONS OF TRAIN AND HIGHWAY VEHICLE SPEEDS

CONDITIONS: SINGLE RR TRACK 90° CROSSING
DESIGN VEHICLE WB-67
FLAT HIGHWAY GRADES
PASSIVE CROSSING

TRAIN SPEED (MPH) TS	CASE B VEHICLE DEPARTURE FROM STOP	CASE A MOVING VEHICLE					
		VEHICLE SPEED (MPH)					
	0	10	20	30	40	50	60
	DISTANCE ALONG RAILROAD FROM CROSSING, d_T (FT)						
10	240	146	106	99	100	105	111
20	480	293	212	198	200	209	222
30	721	439	318	297	300	314	333
40	961	585	424	396	401	419	444
50	1201	732	530	494	501	524	555
60	1441	878	636	593	601	628	666
70	1681	1024	742	692	701	733	777
80	1921	1171	848	791	801	838	888
90	2162	1317	954	890	901	943	999
STOPPING SIGHT DISTANCE ALONG HIGHWAY FROM RR CROSSING, d_H (FT)							
		69	135	220	324	447	589

GENERAL NOTES

(1) SIGHT DISTANCES ARE REQUIRED IN ALL QUADRANTS OF THE CROSSING.

(2) CORRECTIONS MUST BE FOR CONDITIONS OTHER THAN SHOWN IN THE TABLE, SUCH AS, MULTIPLE RAILS, SKEW, ASCENDING AND DESCENDING GRADES, AND CURVATURE OF HIGHWAYS AND RAILS. FOR CONDITION ADJUSTMENTS AND ADDITIONAL INFORMATION REFER TO RAILROAD-HIGHWAY GRADE CROSSINGS UNDER CHAPTER 9 OF "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", AASHTO 2001.

(3) DEFINITIONS

d_H = SIGHT-DISTANCE LEG ALONG HIGHWAY ALLOWS A VEHICLE PROCEEDING TO SPEED V_V TO CROSS TRACKS EVEN THOUGH A TRAIN IS OBSERVED AT A DISTANCE d_T FROM THE CROSSING OR TO STOP THE VEHICLE WITHOUT ENCROACHMENT OF THE CROSSING AREA (FT)

V_V = SPEED OF THE VEHICLE (MPH)

W = DISTANCE BETWEEN OUTER RAILS (FOR A SINGLE TRACK, THIS VALUE IS 5 FT.)

D = DISTANCE FROM THE STOP LINE OR FRONT OF THE VEHICLE TO THE NEAREST RAIL, WHICH IS ASSUMED TO BE 15 FT.

d_E = DISTANCE FROM THE DRIVER TO THE FRONT OF THE VEHICLE, WHICH IS ASSUMED TO BE 8 FT.

L = LENGHT OF VEHICLE, WHICH IS ASSUMED TO BE 65 FT.

d = SIGHT DISTANCE ALONG RR TRACK

TS = DESIGNER SHOULD OBTAIN THIS INFORMATION FROM THE UTILITIES OFFICE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INTERSECTION
SIGHT DISTANCE FOR
PASSIVE RAILROAD
HIGHWAY GRADE
CROSSINGS

NOT TO SCALE   10-1-08   RD01-SD-7