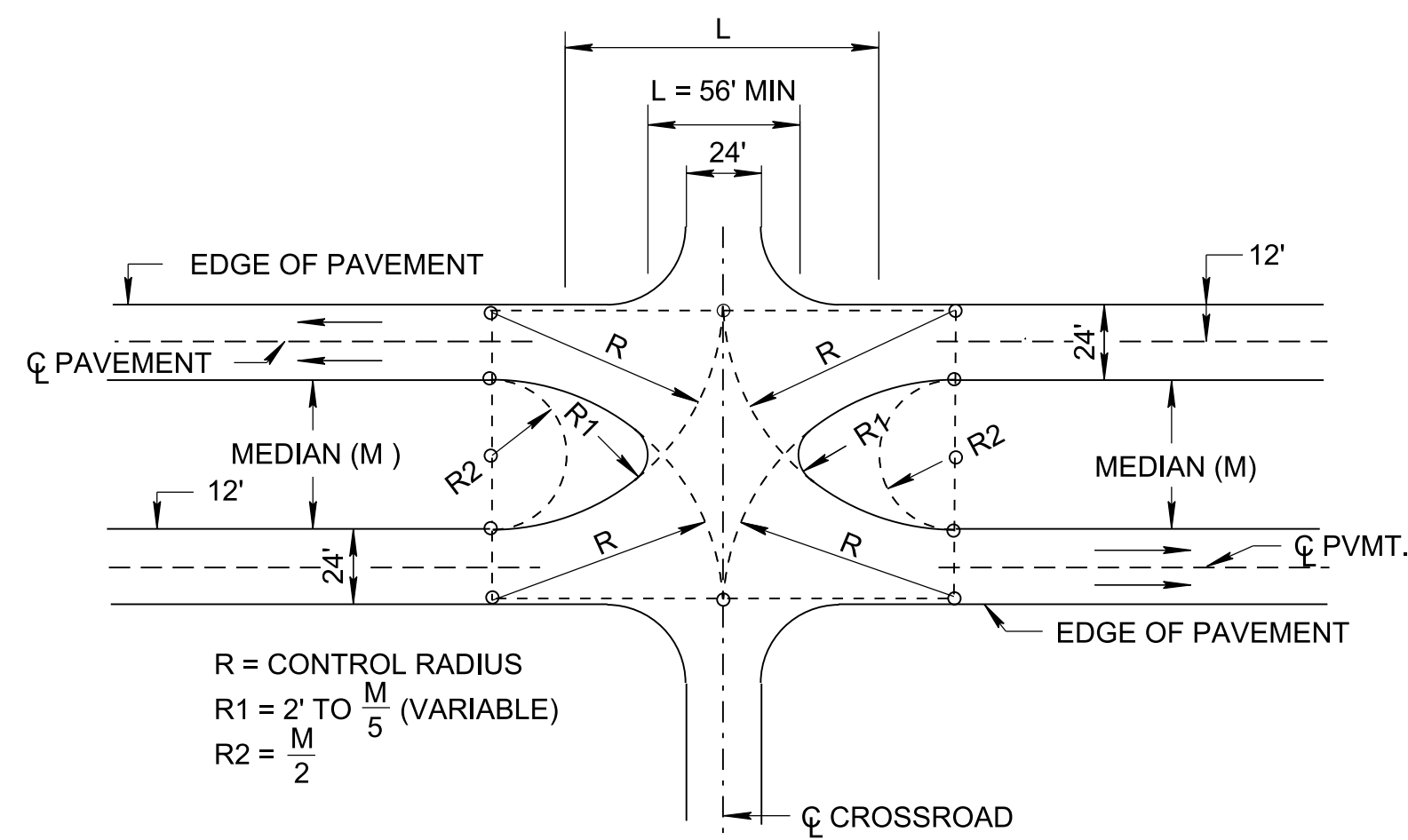


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MINIMUM DESIGN OF MEDIAN FOR PERPENDICULAR CROSSROADS

NOTE: SEMICIRCULAR ENDS ARE NOT DESIRABLE FOR MEDIANS GREATER THAN 10' IN WIDTH.

MEDIAN WIDTH M IN FEET	L= MINIMUM LENGTH OF MEDIAN OPENING (IN FEET)					
	P DESIGN VEHICLE CONTROL RADIUS = 40'		SU DESIGN VEHICLE CONTROL RADIUS = 50'		WB-40 DESIGN VEHICLE CONTROL RADIUS = 75'	
	SEMICIRCULAR TYPE "A"	BULLET NOSE TYPE "B"	SEMICIRCULAR TYPE "C"	BULLET NOSE TYPE "D"	SEMICIRCULAR TYPE "E"	BULLET NOSE TYPE "F"
4	76	76	96	96	146	122
6	74	60	94	76	144	121
8	72	56	92	68	142	112
10	70	56	90	62	140	104
12	68	56	88	58	138	98
14	66	56	86	56	136	92
16	64	56	84	56	134	88
20	60	56	80	56	130	78
24	56	56	76	56	126	72
28	56 MIN	56 MIN	72	56	122	65
32	56 MIN	56 MIN	68	56	118	60
36	56 MIN	56 MIN	64	56	114	54
40	56 MIN	56 MIN	60	56	100	49
50	56 MIN	56 MIN	60 MIN	56 MIN	-	-
60	56 MIN	56 MIN	60 MIN	56 MIN	90	44
70	56 MIN	56 MIN	60 MIN	56 MIN	80	44 MIN
80	56 MIN	56 MIN	60 MIN	56 MIN	70	44 MIN
100	56 MIN	56 MIN	60 MIN	56 MIN	50	44 MIN
110	56 MIN	56 MIN	60 MIN	56 MIN	50 MIN	44 MIN

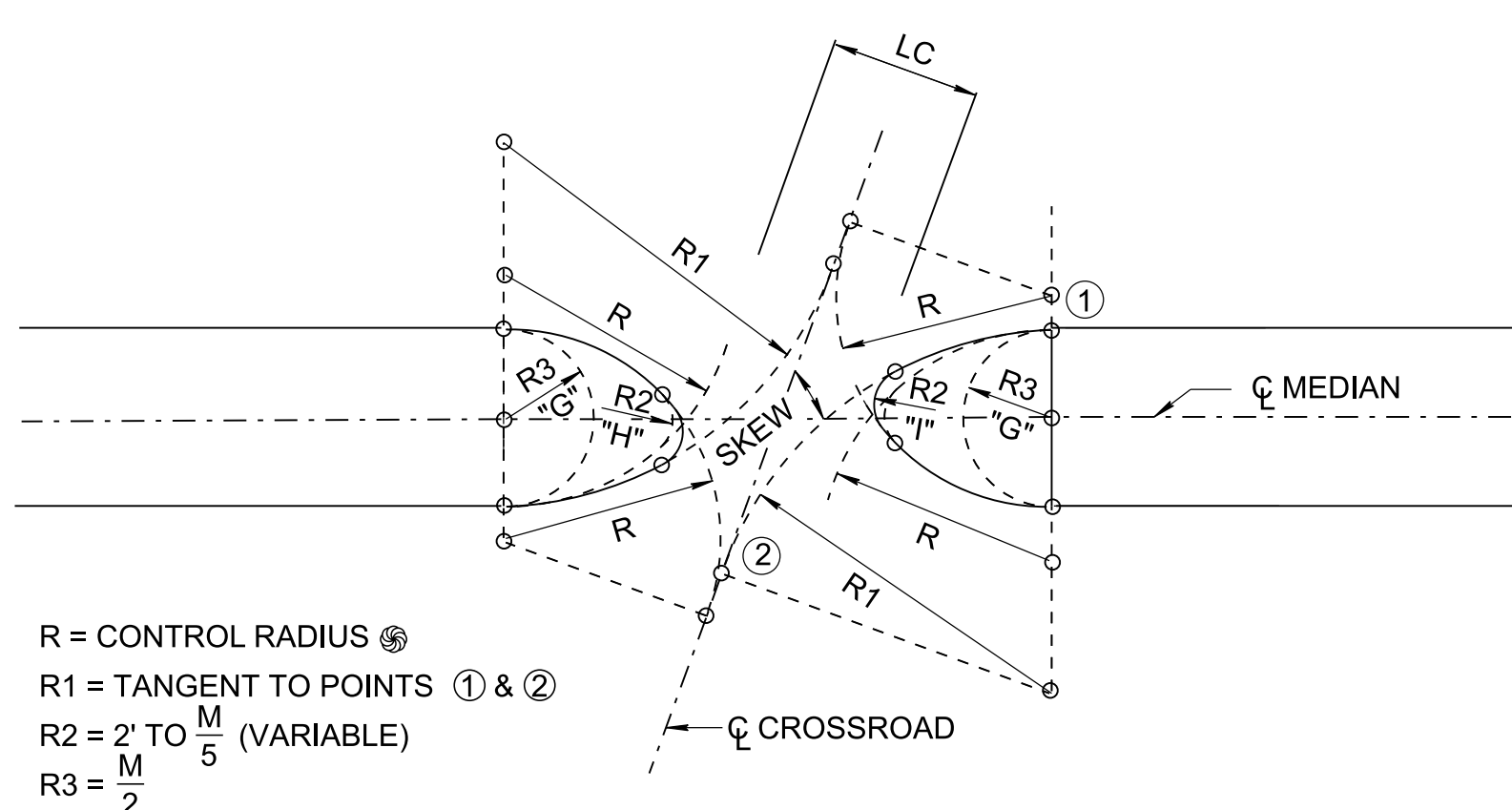
TABLE IS TAKEN FROM TABLE 9-25 (PAGE 9-145), TABLE 9-26 (PAGE 9-146) AND TABLE 9-27 (PAGE 9-147).

DESIGN VEHICLE DIMENSIONS (IN FEET)											
DESIGN VEHICLE	SYMBOL	OVERALL			OVERHANG		WHEELBASES			S	T
		H	W	L	F	R	WB1	WB2	WB3		
PASSENGER CAR	P	4.3	7	19	3	5	11	-	-	-	-
SINGLE UNIT TRUCK	SU	11-13.5	8	30	4	6	20	-	-	-	-
LARGE SCHOOL BUS	A-BUS	10.5	8	40	7	13	20	-	-	-	-
INTERMEDIATE SEMITRAILER	WB-40	13.5	8	45.5	3	4.5 a	12.5	25.5	-	-	-
DOUBLE-BOTTOM SEMITRAILER	WB-67D	13.5	8.5	72.3	2	3	11	23	22.5	3	7
INTERSTATE SEMITRAILER	WB-62	13.5	8.5	69	4	4.5	19.5	41	-	-	-
INTERSTATE SEMITRAILER	WB-67	13.5	8.5	73.5	4	4.5	19.5	45	-	-	-

FOR ADDITIONAL DESIGN VEHICLES, SEE TABLE II-1B (PAGE 2-4).

NOTE: S IS THE DISTANCE FROM THE REAR EFFECTIVE AXLE TO THE HITCH POINT OR POINT OF ARTICULATION.
T IS THE DISTANCE FROM THE HITCH POINT OR POINT OF ARTICULATION MEASURED BACK TO THE CENTER OF THE NEXT AXLE OR THE CENTER OF THE TANDEM AXLE ASSEMBLY.
H = HEIGHT, W = WIDTH, L = LENGTH, F = FRONT & R = REAR

- REV. 7-1-72: CHANGED DRAWING NAME.
- REV. 7-1-76: CHANGED DWG. NO. FROM M-O-1 (68) TO RP-M-1.
- REV. 3-15-76: DELETED REFERENCE TO OLD DWG. NO., SUBSTITUTED NEW DWG. NO.
- REV. 10-17-86: CHANGED C-43 TO WB-40 AND MEDIAN OPENING LENGTH. CHANGED U-TURN CHART AND NOTES. CHANGED CHARTS FOR DESIGN CONTROL FOR MINIMUM MEDIAN OPENINGS AND FOR DESIGN VEHICLE DIMENSIONS. ELIMINATED TYPICAL MEDIAN OPENING DETAIL AND TYPE "K" OPENING. ADDED TYPES "L", "M" & "N" OPENINGS.
- REV. 10-26-93: REDREW AND REORGANIZED SHEET. CHANGED DWG. NO. FROM RP-M-1 TO RP-DHO-1. UPDATED TO CONCUR WITH AASHTO PUBLICATION "A POLICY ON GEOMETRIC DESIGN FOR HIGHWAYS AND STREETS" - 1990 EDITION.
- REV. 05-01-20: REVISED ALL TABLES, TABLE NOTES AND GENERAL NOTE (A) TO COMPLY WITH AASHTO PUBLICATION "A POLICY ON GEOMETRIC DESIGN FOR HIGHWAYS AND STREETS" - 2011 EDITION. REDREW SHEET.



MINIMUM DESIGN OF MEDIAN OPENINGS FOR SKEWED CROSSROADS BASED ON CONTROL RADIUS

NOTE: ASYMMETRIC BULLET NOSE DESIGN IS PREFERABLE FOR ALL SKEWED CROSSROADS.

LC = MINIMUM LENGTH OF MEDIAN OPENING (IN FEET) BASED ON CONTROL RADIUS OF 50 FEET					
SKEW ANGLE DEGREES	MEDIAN WIDTH IN FEET	LC = LENGTH OF MEDIAN OPENING, IN FEET MEASURED NORMAL TO THE CROSSROAD			R1 FOR TYPE C IN FEET
		SEMICIRCULAR	BULLET NOSE		
			SYMMETRICAL	ASYMMETRICAL	
90	10	90	62	-	-
	20	80	44	-	-
	30	70	56 MIN	-	-
	40	60	56 MIN	-	-
	50	60	-	-	-
80	10	106	80	77	70
	20	94	58	56 MIN	68
	30	82	56 MIN	56 MIN	65
	40	71	56 MIN	56 MIN	63
	50	60	-	-	-
70	10	128	100	96	97
	20	115	78	75	92
	30	102	62	52 MIN	86
	40	86	56 MIN	52 MIN	82
	50	74	56 MIN	52 MIN	76
60	10	158	130	121	140
	20	142	105	90	130
	30	126	86	33	120
	40	110	72	50	110
	50	90	58	50 MIN	100
50	10	196	170	150	210
	20	180	140	120	193
	30	160	120	90	174
	40	140	100	68	156
	50	120	86	50	139
60	105	74	32	121	

TABLE IS TAKEN FROM TABLE 9-28 (PAGE 9-153).

NOTE: IN GENERAL MEDIAN OPENINGS LONGER THAN 80 FEET SHOULD BE AVOIDED, REGARDLESS OF SKEW. THIS MAY CALL FOR SPECIAL CHANNELIZATION, LEFT TURN LANES, OR ADJUSTMENT TO REDUCE THE CROSSROAD SKEW, ALL OF WHICH RESULT IN ABOVE MINIMUM DESIGNS.

TYPE OF MANEUVER		M - MINIMUM WIDTH OF MEDIAN (IN FEET) FOR DESIGN VEHICLE					
		P	WB-40	SU-30	BUS	WB-62	WB-67
		LENGTH OF DESIGN VEHICLE					
		19'	50'	30'	40'	63'	68'
INNER LANE TO INNER LANE		30	61	63	63	69	69
INNER LANE TO OUTER LANE		18	49	51	51	57	57
INNER LANE TO SHOULDER		8	39	41	41	47	47

TABLE IS TAKEN FROM TABLE 9-30 (PAGE 9-166).

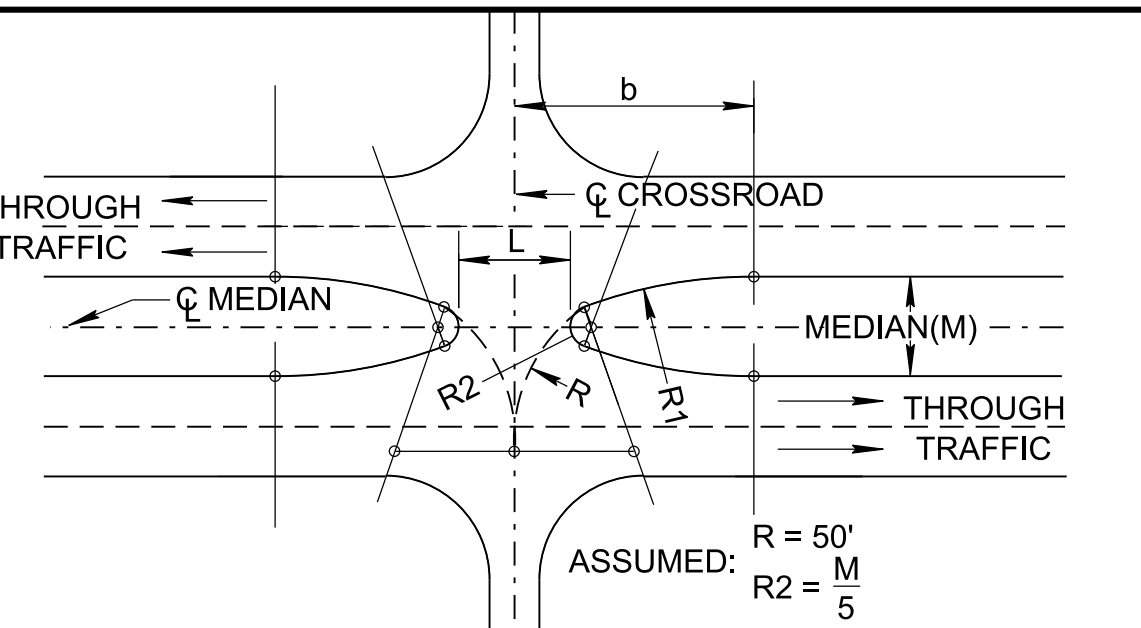
NOTE: WHERE OCCASIONAL U-TURNS ARE MADE IN EITHER DIRECTION, A SYMMETRICAL OPENING SHOULD BE USED AND THE LENGTH OF THE OPENING SHOULD BE FOR THE DESIGN VEHICLE USED. WHEN FREQUENT U-TURNS IN BOTH DIRECTIONS ARE ANTICIPATED, INCREASE THE LENGTH OF THE OPENING OR PROVIDE SEPARATE ONE WAY OPENINGS.

- SEPARATE U-TURN MEDIAN OPENINGS MAY FIT AT THE FOLLOWING LOCATIONS**
- BEYOND INTERSECTIONS TO ACCOMMODATE MINOR TURNING MOVEMENTS NOT OTHERWISE PROVIDED IN THE INTERSECTION OR INTERCHANGE AREA.
 - JUST AHEAD OF AN INTERSECTION TO ACCOMMODATE U-TURN MOVEMENTS THAT WOULD INTERFERE WITH THROUGH AND OTHER TURNING MOVEMENTS AT THE INTERSECTION.
 - OCCURRING IN CONJUNCTION WITH MINOR CROSSROADS WHERE TRAFFIC IS NOT PERMITTED TO CROSS THE MAJOR HIGHWAY BUT INSTEAD IS REQUIRED TO TURN RIGHT, ENTER THE THROUGH TRAFFIC STREAM, WEAVE TO THE LEFT, U-TURN, THEN RETURN.
 - OCCURRING WHERE REGULARLY SPACED OPENINGS FACILITATE MAINTENANCE OPERATIONS, POLICING, REPAIR SERVICE OF STALLED VEHICLES, OR OTHER HIGHWAY-RELATED ACTIVITIES.
 - OCCURRING ON HIGHWAYS WITHOUT ACCESS CONTROL WHERE MEDIAN OPENINGS AT OPTIMUM SPACING ARE PROVIDED TO SERVE EXISTING FRONTAGE DEVELOPMENTS AND AT THE SAME TIME MINIMIZE PRESSURE FOR FUTURE MEDIAN OPENINGS.

APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE STANDARD DRAWING DEPARTMENT OF TRANSPORTATION

MEDIAN OPENINGS ON 4-LANE DIVIDED HIGHWAY



MEDIAN WIDTH IN FEET	DIMENSIONS (IN FEET)					
	R1=90'		R1=170'		R1=230'	
	L	b	L	b	L	b
20	58	65	66	78	71	90
30	48	68	57	85	63	101
40	40	71	50	90	57	109
50	-	-	44	95	51	115
60	-	-	-	46	122	-
70	-	-	-	41	128	-

THIS TABLE IS TAKEN FROM FIGURE 9-59 (PAGE 9-155).

DESIGN CONTROLS FOR MINIMUM MEDIAN OPENINGS

DESIGN VEHICLES ACCOMMODATED	CONTROL RADIUS (FT.)	
	PREDOMINANT	OCCASIONAL
P	SU-30	40
SU-30	SU-40	50
WB-40	-	75
WB-62	WB-67	130

TABLE IS TAKEN FROM TABLE 9-29 (PAGE 9-154).

- GENERAL NOTES**
- FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO "AASHTO A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" (GREEN BOOK, 2011 EDITION).
 - PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM THE ABOVE REFERENCE.