

Texas Department of Transportation

TECHNICAL PROVISIONS

STATE HIGHWAY 360

DESIGN-BUILD PROJECT

Attachment 11-1

Roadway Design Criteria

TABLE 11-1: Geometric Design Criteria

	SH 360 Main lanes	Ramps and Transitions	Direct Connectors	SH 360 Frontage Roads	Cross Streets
Functional Classification	Urban Freeway	Urban Freeway	Urban Freeway	Urban Collector	See Table 11-2
Design Speed (MPH)	70	50	50	40	See Table 11-2
Stopping Sight Distance (ft)	730	425	425	305	-
Horizontal Alignment					
Superelevation	e(max)= 6%	e(max)= 6%	e(max)= 6%	e(max)= 6%	N/A
Minimum Radius of Curvature (ft)	3390	1050	1050	485	-
Vertical Alignment					
Minimum Grade (%)	0.5	0.5	0.5	0.35 (curbed)	-
Maximum Grade (%)	3	4	4	7	-
Crest (Min. K-Value)	247	84	84	44	-
Sag (Min. K-Value)	181	96	96	64	-
Cross Section					
Lane Widths (ft)	12	14	14	12 ⁴	12-14
Inside Shoulder Widths (ft)	4-24 ¹	4	4	2' curb offset	-
Outside Shoulder Widths (ft)	6-22 ²	8	8	10 ⁴	-
Pavement Cross Slope (ft/ft)	0.0200 ³	0.0200	0.0200	0.0200	0.0200
Clear Zone					
Within Clear Zone	6:1	6:1	6:1	1.5% max for sidewalks	1.5% max
Outside of Clear Zone	4:1 max	4:1 max	4:1 max	4:1 max	3:1 max
Clear Zone Width (ft)	30	16	16	4' min / 6' des / 6' min to column	4' min / 6' des / 6' min to column

1. 4' inside shoulder only for new Super 2 SB passing lane area.
2. 6' outside shoulder only for new Super 2 SB passing lane area.
3. 2% for 2 interior lanes, then 2.5% for outside lanes
4. Outside lane width shall be 12' when 10' shoulder is used; otherwise a 14' outside lane is required to accommodate bicycle traffic.
5. Design vehicle WB-62
6. Design speed for SSD on direct connector ramps shall be 45 mph.