

ATB-45-19.13: Roadway Design Criteria

Key Roadway Design Features	Design Criteria References		Project Specific Values			Design Deficiencies	Design Exception Criteria in LD Vol 1 Sec 105.2	Comments
	Section	Figure	Required Design Criteria	Existing	Proposed			
Design Speed (Rural)	104	N/A	45 mph	45 mph	45 mph	No	No	
Stopping Sight Distance	201.2	201-1E, 203-3E, 4E, 6E & 7E	360 feet min.	SSD not restricted by V.C.	SSD not restricted by V.C.	No	No	
Intersection Sight Distance	201.3	201-4E & 5E	500 Feet	500 Feet	500 Feet	No	No	
Maximum Centerline Deflection without Horizontal Curve	202.2	202-1E	1° 40'	No Deflection	No Deflection	No	No	
Degree of Curve	202.3	202-7E	9° 45' max.	Tangent	Tangent	No	No	
Superelevation Rate	202.4	202-7E	NC	NC	NC	No	No	
Grades	203.2	203-1E	6% max. (rolling)	2.28%	2.12%	No	No	
Maximum Change in Vertical Alignment without Vertical Curve	203.3.2	203-2E	0.55%	N/A	0.06%	No	No	
Crest "K" Value	203.3.3	203-3E	61	N/A	N/A	No	No	
Sag "K" Value	203.3.4	203-6E	79	84	94	No	No	
Lane Width	301.1.2	301-2E	12 feet	11 feet	12 feet	No	No	
Graded Shoulder Width	301.2.3	301-3E	13 feet	8 feet	8 feet	Yes	No	Graded Shoulder Width for proposed condition matches that of existing condition.
Treated Shoulder Width	301.2.3	301-3E	8 feet	2 feet	4 feet	Yes	No	Treated Shoulder Width for proposed condition exceeds that of existing condition.
Shoulder Type	301.2.2	301-3E	Paved	Paved	Paved	No	No	
Guardrail Offset	602.1.5	301-3E	10 feet	4 feet	4 feet	Yes	No	Graded Offset for proposed condition matches that of existing condition.
Pavement Cross Slopes	301.1.5	301-6E	0.016	0.0156	0.016	No	No	
Bridge Width	302.1	302-1E	40 feet	28 feet f/f curb	32 feet	Yes	No	Bridge Width for proposed condition exceeds that of existing condition.
Lateral Clearance	302.1	301-1E	8 feet	3 feet	4 feet	Yes	No	Lateral Clearance for proposed condition exceeds that of existing condition.
Vertical Clearance	N/A	N/A	N/A	N/A	N/A	No	No	