

Design Element				Manual Section	Design Criteria
Design Controls	Design Forecast Year			9.6.2	20 Years
	*Design Speed (Maximum)	Level		9.5.2	70 mph
		Rolling			60 mph
		Mountainous			50 mph
	Access Control			9.8	Controlled by Regulation
Level of Service			9.6.4	Level/Rolling: B Mountainous: C	
Cross Section Elements	*Travel Lane Width (1)			13.2.3	12'
	*Shoulder Width	Right	Total Width	13.2.4	10' (2)
			Paved		2'
		Left	Total Width		10' (2)
			Paved		2'
	Auxiliary Lanes	Lane Width		13.2.5	12'
		Shoulder Width	Total Width		10'
			Paved		2'
	Cross Slope	*Travel Lane		13.2.3.3	2.08%
		Auxiliary Lane		13.2.5	2.08%
		*Shoulder	Paved	13.2.4.3	2.08% (3)
			Unpaved		8.33%
	Median Width	Depressed		13.4.2.3	48'
		Flush (CMB)		13.4.2.1	24'
Roadway Slopes	Side Slopes	Cut Section	Foreslope	13.3.1	6H:1V
			Ditch Type		V-Ditch
			Back Slope		6H:1V to 2H:1V
			Rock Cut		0.25H:1V
		Fill Section	0' – 5'		6H:1V
			5' – 10'		4H:1V
			> 10'		2H:1V
	Median Slopes (Depressed)			13.4.2.3	6H:1V to 8H:1V
	Clear Zone			14.3	(4)
Bridges	New and Reconstructed Bridges	*Structural Capacity			HL-93
		*Clear Roadway Width		13.5.1.1	44' (5)
	Existing Bridges to Remain in Place	*Structural Capacity			HS-20 (6)
		*Clear Roadway Width		13.5.1.1	44' (5)
	*Vertical Clearance (Arterial Under) (7a)	New/Replaced Overpassing Bridges (7b)		12.6	17'-0"
		Existing Overpassing Bridges			16'-0"
		Pedestrian Bridges			18'-0"
		Overhead Signs			17'-6"
	Clearance (Arterial Over)	*Railroads		12.6	23'-0"
Underpass Width		13.6.2	Traveled Way plus Clear Zone		

*Controlling design criteria (see Section 9.2).

Design Criteria for Rural Four-Lane Arterials (New Construction/Reconstruction)
Figure 20.2C (SCHDM 2003)