

**GEOMETRIC DESIGN STANDARDS FOR RESIDENTIAL AND MIXED USE SUBDIVISION STREETS (GS- SSAR)**  
**TABLE 3 – ONE-LANE (ONE-WAY) SUBDIVISION STREETS**

TRAFFIC	PROJECTED TRAFFIC VOLUME (ADT)	DESIGN SPEED (MPH) (NOT POSTED SPEED)	HORIZONTAL AND VERTICAL CONTROLS Maximum 2:1 cut or fill slope				ROADWAY SECTION CRITERIA					
			MINIMUM CURVE RADIUS (WITHOUT SUPERELEV.)	MAXIMUM % GRADE	MINIMUM SIGHT DISTANCE		SHOULDER AND DITCH ROADWAYS Minimum ditch width (front slope) should be 4 feet or greater, based on slopes of 3:1 (Gentler slopes promote homeowner maintenance of ditches) Width includes 3' for G.R. installation. (NO PARKING)				CURB AND GUTTER ROADWAYS (NO PARKING)	
					STOPPING	INTERSECTION	MINIMUM ROADWAY WIDTH	FILL WITH G.R.	CUT OR FILL W/O G.R.	CLEAR ZONE (FROM EDGE OF TRAVELWAY)	WIDTH MEASURED FROM FACE OF CURB TO FACE OF CURB	HORIZONTAL CLEARANCE (FROM FACE OF CURB)
ONE-WAY (1-LANE)	≤ 400	25	198' (4)	NOTE (2)	125' (5)	115' (6)	15' (7)	5'	2' (1)	6' (3)	15' (7)	1.5'
<p>Notes:</p> <p>These design standards may also be used for one-way divided pairs, such as subdivision entrances with wide medians.</p> <p>On-street parking is anticipated; a parking lane width not less than 7 feet should be used.</p> <p>Right Of Way requirements can be found in Section B-4.1 Right of Way.</p> <p>Lower design speeds (and street widths) may be utilized provided they are designed in accordance with the AASHTO Green Book or AASHTO's Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT&lt;400). The designer should coordinate with VDOT in advance of design (e.g. sketch plan stage) if this alternative criteria is being utilized.</p> <p>If 20 mph minimum design speed is utilized, a 20 mph advisory speed limit sign shall be posted along with any other horizontal or vertical curve warning signs as warranted.*</p> <p>An engineering speed study sealed and signed by a licensed professional engineer, using VDOT's standard speed study report, must be provided by the developer and approved by VDOT for any roads posted at other than the statutory speed limit and planned for acceptance into the state system.</p>							<ol style="list-style-type: none"> <li>2004 AASHTO Green Book Chapter 5 (Page 384 – Exhibit 5-5)</li> <li>2004 AASHTO Green Book Chapter 5 (Page 391)</li> <li>Clear zone widths may be reduced with the concurrence of the District Administrator's Designee where terrain or social/environmental impact considerations are appropriate. (AASHTO 2001 Very Low Volume Local Roads Guide Chapter 4, Page 48)</li> <li>AASHTO 2004 Green Book Chapter 3 (Page 151, Exhibit 3-16)</li> <li>AASHTO 2001 Very Low Volume Local Roads Chapter 4 (Page 34, Exhibit 8)</li> <li>AASHTO 2001 Very Low Volume Local Roads Chapter 4 (Page 45, Exhibit 14, August 2002 Errata)</li> <li>If on-street parking is allowed the appropriate additional paved width needs to be provided.</li> </ol>					

\* Rev. 3/11