

Appendix D

Design Criteria Documents

Appendix D: Geometric Design Criteria (Page 1 of 3)

ROAD-WAY	FROM	To	FUNCTIONAL CLASSIFICATION	ACCESS CONTROL	TERRAIN	MIN. DESIGN SPEED (MPH)	DESIGN VEHICLE	MIN. CROSS SLOPE	MAX. GRADE	MAX SUPER	LANE WIDTH	SHOULDER WIDTH (SEE NOTES 1 & 2)	
												LEFT	RIGHT
I-495	George Washington Memorial Parkway	I-270 West Spur	Urban Interstate	Yes	Rolling	60	WB-67	2%	4%	6%	12 feet	10 feet	10 feet
I-495 HOT Lanes	George Washington Memorial Parkway	I-270 West Spur	Urban Interstate	Yes	Rolling	60	WB-67	2%	4%	6%	12 feet	10 feet	4 feet
I-270	I-270 West Spur	I-370	Urban Interstate	Yes	Rolling	60	WB-67	2%	4%	6%	12 feet	10 feet	10 feet
I-270 HOT Lanes	I-495	I-370	Urban Interstate	Yes	Rolling	60	WB-67	2%	4%	6%	12 feet	10 feet	4 feet
I-270 West Spur	I-495	I-270	Urban Interstate	Yes	Rolling	60	WB-67	2%	4%	6%	12 feet	10 feet	10 feet
I-270 East Spur	I-270	I-495	Urban Interstate	Yes	Rolling	60	WB-67	2%	4%	6%	12 feet	10 feet	10 feet
I-370	West Access Ramps	I-270	Urban Interstate	Yes	Rolling	55	WB-67	2%	5%	4%	12 feet	Curb & Gutter	Curb & Gutter
I-370	East Access Ramps	I-270	Urban Interstate	Yes	Rolling	60	WB-67	2%	4%	6%	12 feet	6 feet	10 feet
Clara Barton Parkway	North Access Ramps	South Access Ramps	Principal Arterial/ Parkway	Yes	Rolling	55	Bus-40	2%	6%	6%	12 feet	1 foot with Curb	1 foot with Curb
Cabin John Parkway	North Access Ramps	South Access Ramps	Principal Arterial/ Parkway	Yes	Rolling	60	Bus-40	2%	4%	6%	12 feet	4 feet	12 feet

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ROAD-WAY	FROM	TO	FUNCTIONAL CLASSIFICATION	ACCESS CONTROL	TERRAIN	MIN. DESIGN SPEED (MPH)	DESIGN VEHICLE	MIN. CROSS SLOPE	MAX. GRADE	MAX SUPER	LANE WIDTH	SHOULDER WIDTH (SEE NOTES 1 & 2)	
												LEFT	RIGHT
Democracy Boulevard	West Access Ramps	I-270	Minor Arterial	Yes	Rolling	40	WB-62	2%	8%	4%	11 feet	Curb & Gutter	Curb
Democracy Boulevard	East Access Ramps	I-270	Principal Arterial (Other)	Yes	Rolling	40	WB-62	2%	8%	4%	11 feet	Curb & Gutter	Curb
Montrose Road	West Access Ramps	I-270	Minor Arterial	Yes	Rolling	45	WB-62	2%	7%	4%	11 feet	Curb & Gutter	Curb
Montrose Road	East Access Ramps	I-270	Principal Arterial (Other)	Yes	Rolling	45	WB-62	2%	7%	4%	11 feet	Curb & Gutter	Curb
MD 189 Falls Road	West Access Ramps	I-270	Minor Arterial	Yes	Rolling	40	WB-62	2%	8%	4%	12 feet	Curb & Gutter	4 feet with Curb & Gutter
MD 189 Falls Road	East Access Ramps	I-270	Minor Arterial	Yes	Rolling	40	WB-62	2%	8%	4%	12 feet	Curb & Gutter	Curb & Gutter
MD 28 Montgomery Avenue	West Access Ramps	East Access Ramps	Urban Principal Arterial (Other)	Yes	Rolling	35	WB-62	2%	8%	4%	12 feet	Curb & Gutter	Curb & Gutter
Shady Grove Road	West Access Ramps	I-270	Urban Principal Arterial (Other)	Yes	Rolling	45	WB-62	2%	7%	4%	11 feet	Curb & Gutter	Curb
Shady Grove Road	East Access Ramps	I-270	Principal Arterial (Other)	Yes	Rolling	45	WB-62	2%	7%	4%	11 feet	Curb & Gutter	Curb

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ROAD-WAY	FROM	TO	FUNCTIONAL CLASSIFICATION	ACCESS CONTROL	TERRAIN	MIN. DESIGN SPEED (MPH)	DESIGN VEHICLE	MIN. CROSS SLOPE	MAX. GRADE	MAX SUPER	Lane Width	SHOULDER WIDTH (SEE NOTES 1 & 2)	
												Left	Right
West-lake Terrace	Overpass	Overpass	Business B-3 B-3	No	Rolling	35	WB-62	2%	8%	4%	11 feet	Curb & Gutter	Curb
Wooton Parkway	Overpass	Overpass	Arterial	No	Rolling	45	WB-62	2%	7%	4%	12 feet	Curb & Gutter	Curb & Gutter
West Gude Drive	Overpass	Overpass	Minor Arterial	No	Rolling	40	WB-62	2%	8%	4%	12 feet	Curb & Gutter	Curb & Gutter

Ramp Design Criteria

RAMP TYPE	FUNCTIONAL CLASSIFICATION	ACCESS CONTROL	TERRAIN	MIN. DESIGN SPEED (MPH)	DESIGN VEHICLE	MIN. CROSS SLOPE	MAX. GRADE	MAX SUPER	LANE WIDTH	SHOULDER WIDTH	
										LEFT	RIGHT
Loop Ramp	Urban Interstate	Yes	Rolling	20	WB-67	2%	7%	8%	See Note 2 below tables	See Note 2 below tables	See Note 2 below tables
Directional Ramp	Urban Interstate	Yes	Rolling	30	WB-67	2%	7%	8%	See Note 2 below tables	See Note 2 below tables	See Note 2 below tables

Notes for geometric design criteria tables:

1. Where GPLs and PMLs are adjacent, they may be separated with a 4-foot-wide buffer with pylons or similar separator in lieu of providing a 12-foot shoulder on the left of the GPLs.
2. Ramp lane widths and shoulder widths shall be designed in accordance with AASHTO, *A Policy on Geometric Design of Highways and Streets*.
3. Bridge vertical clearances shall be designed in accordance with MDOT or VDOT guidelines based on the location of the structure.