

NOTES:

1. PAVEMENT DESIGN MUST BE APPROVED BY THE CITY
2. SEE TABLE 1A FOR MINIMUM DIMENSION A.
3. RIGHT OF WAY WIDTH MUST BE WIDE ENOUGH TO INCLUDE ALL PROPOSED PUBLIC STREET FEATURES. SEE TABLE 4.

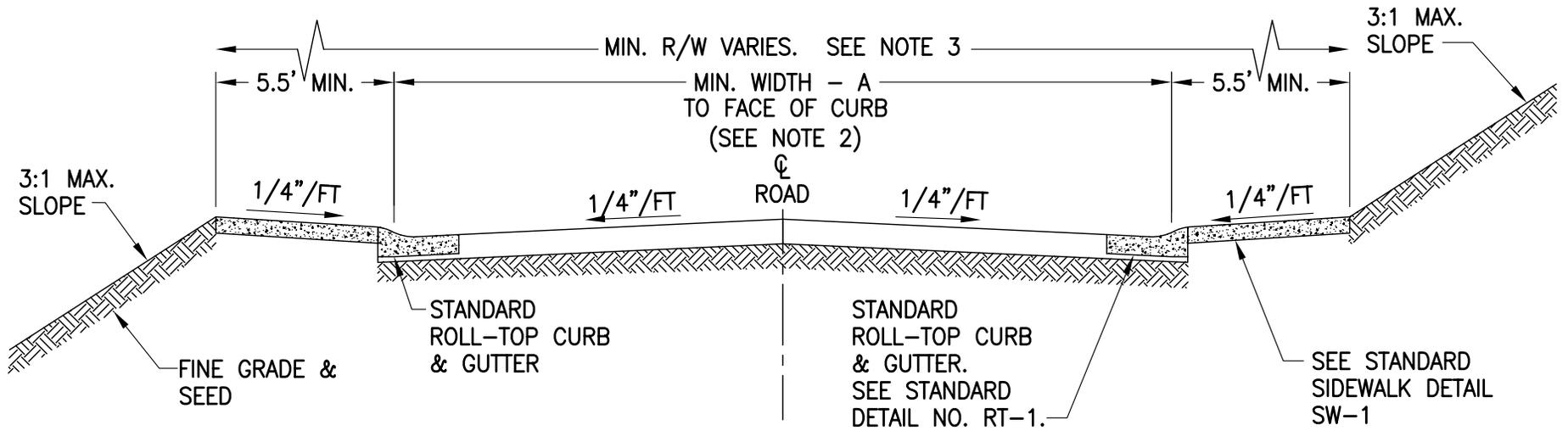


CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS
**CG-6 CURB & GUTTER
ROADWAY SECTION**

SCALE: N.T.S. | STANDARD NUMBER: RS-1



NOTES:

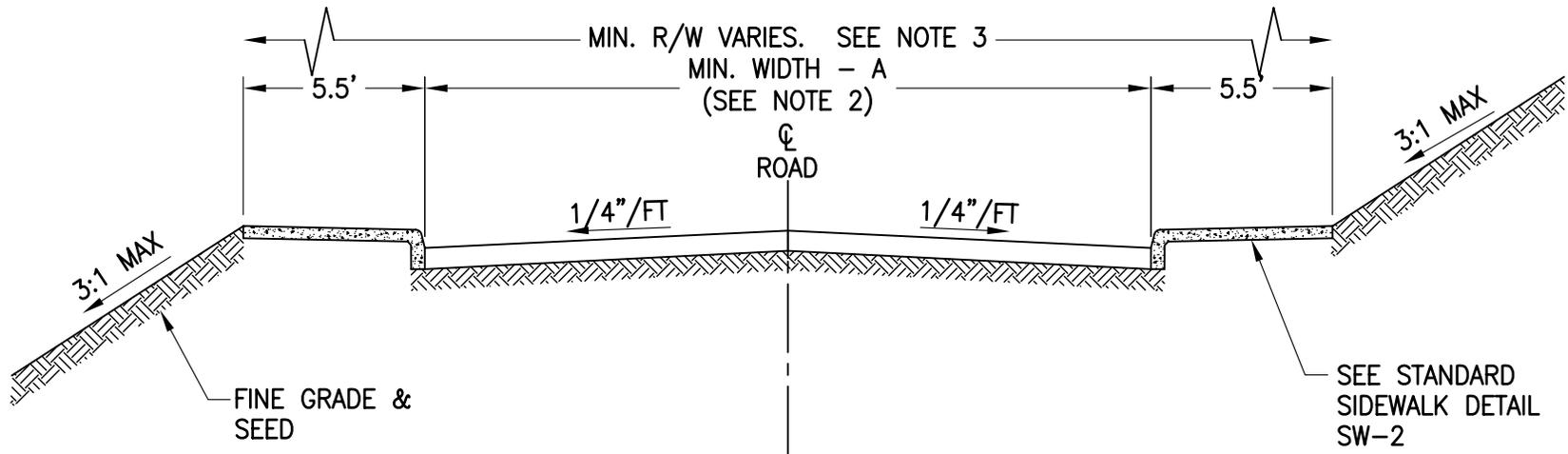
1. PAVEMENT DESIGN MUST BE APPROVED BY THE CITY.
2. SEE TABLE 1B FOR MINIMUM DIMENSION A.
3. RIGHT OF WAY WIDTH MUST BE WIDE ENOUGH TO INCLUDE ALL PROPOSED PUBLIC STREET FEATURES. SEE TABLE 4.



CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS	
ROLL-TOP CURB & GUTTER	
ROADWAY SECTION	
SCALE: N.T.S.	STANDARD NUMBER: RS-2



NOTES:

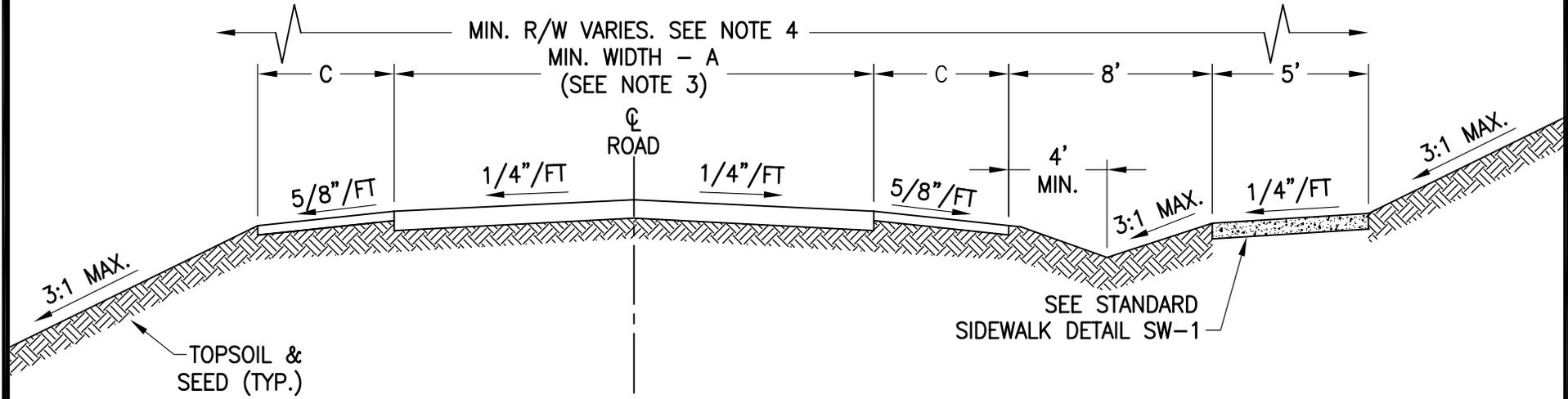
1. PAVEMENT DESIGN MUST BE APPROVED BY THE CITY.
2. SEE TABLE 1C FOR MINIMUM DIMENSION A.
3. RIGHT OF WAY WIDTH MUST BE WIDE ENOUGH TO INCLUDE ALL PROPOSED PUBLIC STREET FEATURES. SEE TABLE 4.



CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS	
MONOLITHIC SIDEWALK WITH CURB ROADWAY SECTION	
SCALE: N.T.S.	STANDARD NUMBER: RS-3



NOTES:

1. WHEN PEDESTRIAN FACILITIES ARE PROVIDED BEHIND DITCHES, THE SHOULDER WIDTH MAY BE REDUCED TO A MINIMUM OF 2 FEET.
2. PAVEMENT DESIGN MUST BE APPROVED BY THE CITY.
3. SEE TABLE 2 FOR MINIMUM DIMENSION A.
4. RIGHT OF WAY WIDTH MUST BE WIDE ENOUGH TO INCLUDE ALL PROPOSED PUBLIC STREET FEATURES. SEE TABLE 4.



CITY OF CHARLOTTESVILLE

REVISION	DATE

CITY STANDARDS	
TYPICAL STREET WITH SHOULDER & DITCH (LID) SECTION	
SCALE: N.T.S.	STANDARD NUMBER: RS-4

**GEOMETRIC DESIGN STANDARDS FOR NEW RESIDENTIAL SUBDIVISION STREETS
TABLE 1A – CG-6 CURB AND GUTTER SECTION**

		HORIZONTAL AND VERTICAL CONTROLS MAXIMUM 3:1 CUT OR FILL SLOPE					CURB AND GUTTER ROADWAYS	
PROJECTED TRAFFIC VOLUME (ADT)	MIN. DESIGN SPEED (MPH)	CURVE DATA		SUGGESTED MAXIMUM % GRADE (1)	MIN. SIGHT DISTANCE		MINIMUM WIDTH CURB TO CURB WITHOUT PARKING OR BIKE LANES (A)	SUGGESTED CLEAR ZONE WITHOUT PARKING (MEASURED FROM FACE OF CURB)
		MINIMUM CENTERLINE RADIUS	SUPER-ELEV.		STOPPING	INTER-SECTIONS		
UP TO 400	20	120'	NONE	8	125'	200'	24'	3'
401 - 1500	25	165'	NONE	8	155'	280'	24'	3'
1501 - 2000	30	275'	NONE	8	200'	335'	24'	6'
2001 - 4000	30	275'	NONE	8	200'	335'	26'	6'
<p>NOTES: For streets with volumes over 4000 or serving heavy commercial or industrial traffic; use the appropriate geometric design standard. (see VDOT's road design manual) The roadway with the highest volume will govern the sight distance.</p>				<p>1. The maximum allowable street grade shall be eight percent (8%). The agent or commission, with the advice of the traffic engineer, may vary or grant exceptions to this requirement, pursuant to section 29-36, to no more than 10%.</p>				

**GEOMETRIC DESIGN STANDARDS FOR NEW RESIDENTIAL SUBDIVISION STREETS
TABLE 1B – ROLL-TOP CURB AND GUTTER SECTION**

		HORIZONTAL AND VERTICAL CONTROLS MAXIMUM 3:1 CUT OR FILL SLOPE					ROLL-TOP CURB AND GUTTER ROADWAYS	
PROJECTED TRAFFIC VOLUME (ADT)	MIN. DESIGN SPEED (MPH)	CURVE DATA		SUGGESTED MAXIMUM % GRADE (1)	MIN. SIGHT DISTANCE		MINIMUM WIDTH CURB TO CURB WITHOUT PARKING OR BIKE LANES (A)	SUGGESTED CLEAR ZONE WITHOUT PARKING (MEASURED FROM FACE OF CURB)
		MINIMUM CENTERLINE RADIUS	SUPER- ELEV.		STOPPING	INTER- SECTIONS		
UP TO 400	20	120'	NONE	8	125'	200'	21'	3'
401 - 1500	25	165'	NONE	8	155'	280'	25'	3'
1501 - 2000	30	275'	NONE	8	200'	335'	25'	6'
2001 - 4000	30	275'	NONE	8	200'	335'	27'	6'
<p>NOTES: For streets with volumes over 4000 or serving heavy commercial or industrial traffic; use the appropriate geometric design standard. (see VDOT's road design manual) The roadway with the highest volume will govern the sight distance.</p>				<p>1. The maximum allowable street grade shall be eight percent (8%). The agent or commission, with the advice of the traffic engineer, may vary or grant exceptions to this requirement, pursuant to section 29-36, to no more than 10%.</p>				

**GEOMETRIC DESIGN STANDARDS FOR NEW RESIDENTIAL SUBDIVISION STREETS
TABLE 1C – MONOLITHIC SIDEWALK WITH CURB ROADWAY SECTION**

		HORIZONTAL AND VERTICAL CONTROLS MAXIMUM 3:1 CUT OR FILL SLOPE					ROADWAYS WITH MONOLITHIC CURB AND SIDEWALK	
PROJECTED TRAFFIC VOLUME (ADT)	MIN. DESIGN SPEED (MPH)	CURVE DATA		SUGGESTED MAXIMUM % GRADE (1)	MIN. SIGHT DISTANCE		MINIMUM WIDTH (A) CURB TO CURB WITHOUT PARKING OR BIKE LANES	CLEAR ZONE WITHOUT PARKING (MEASURED FROM FACE OF CURB)
		MINIMUM CENTERLINE RADIUS	SUPER-ELEV.		STOPPING	INTER-SECTIONS		
UP TO 400	20	120'	NONE	8	125'	200'	20'	3'
401 - 1500	25	165'	NONE	8	155'	280'	20'	3'
1501 - 2000	30	275'	NONE	8	200'	335'	22'	6'
2001 - 4000	30	275'	NONE	8	200'	335'	24'	6'
<p>NOTES:</p> <p>For streets with volumes over 4000 or serving heavy commercial or industrial traffic; use the appropriate geometric design standard. (see VDOT's road design manual)</p> <p>The roadway with the highest volume will govern the sight distance.</p>				<p>1. The maximum allowable street grade shall be eight percent (8%). The agent or commission, with the advice of the traffic engineer, may vary or grant exceptions to this requirement, pursuant to section 29-36, to no more than 10%.</p>				

**GEOMETRIC DESIGN STANDARDS FOR NEW RESIDENTIAL SUBDIVISION STREETS
TABLE 2 – SHOULDER AND DITCH SECTION (LID DESIGNS)**

		HORIZONTAL AND VERTICAL CONTROLS					SHOULDER AND DITCH ROADWAYS			
		MAXIMUM 3:1 CUT OR FILL SLOPE					Minimum ditch width should be 4 feet or greater, based on slopes of 3:1 or flatter (Gentler slopes promote homeowner maintenance of ditches)			
PROJECTED TRAFFIC VOLUME (ADT)	MIN. DESIGN SPEED (MPH)	CURVE DATA		SUGGESTED MAXIMUM % GRADE (3)	MIN. SIGHT DISTANCE		MINIMUM PAVEMENT WIDTH (A) WITHOUT PARKING OR BIKE LANES	MINIMUM GRADED SHOULDER WIDTH (C)		SUGGESTED CLEAR ZONE (MEASURED FROM EDGE OF ROADWAY PAVEMENT)
		MINIMUM CENTERLINE RADIUS	SUPER-ELEV.		STOPPING	INTER-SECTIONS		FILL W/ GUARD RAIL	CUT OR FILL	
UP TO 400	20	120'	NONE	8	125'	200'	20'	5'	4' (1)	6' (2)
401 - 1500	25	165'	NONE	8	155'	280'	20'	8'	5'	7'
1501 - 2000	30	275'	NONE	8	200'	335'	22'	9'	6'	10'
2001 - 4000	30	275'	NONE	8	200'	335'	24'	11'	8'	12'
<p>NOTES:</p> <p>For streets with volumes over 4000 or serving heavy commercial or industrial traffic; use the appropriate geometric design standard. (see VDOT's road design manual)</p> <p>The roadway with the highest volume will govern the sight distance.</p>				<ol style="list-style-type: none"> When pedestrian facilities are provided behind ditches, the shoulder width may be reduced to a minimum of 2 feet. Clear zone widths may be reduced with the concurrence of the City Engineer where terrain or social/environmental impact considerations are appropriate. The maximum allowable street grade shall be eight percent (8%). The agent or commission, with the advice of the traffic engineer, may vary or grant exceptions to this requirement, pursuant to section 29-36, to no more than 10%. 						

GEOMETRIC DESIGN STANDARDS FOR NEW RESIDENTIAL SUBDIVISION STREETS
TABLE 3 (page 1 of 2) - ONE-LANE (ONE-WAY) SUBDIVISION STREETS

TRAFFIC	PROJECTED TRAFFIC VOLUME (ADT)	DESIGN SPEED (MPH)	HORIZONTAL AND VERTICAL CONTROLS Maximum 3:1 cut or fill slope				ROADWAY SECTION CRITERIA					
			MIN. CURVE RADIUS W/O SUPER-ELEV.	MAX. % GRADE SUG. (1)	MINIMUM SIGHT DISTANCE		SHOULDER AND DITCH ROADWAYS Minimum ditch width should be 4 feet or greater, based on slopes of 3:1 (gentler slopes promote homeowner maintenance of ditches)				MONOLITHIC SIDEWALK & CURB ROADWAYS	
					STOPPING	INTER-SECTION	MINIMUM PAVEMENT WIDTH NO PARKING	SHOULDER WIDTH FILL W/ GUARD RAIL	SHOULDER WIDTH CUT OR FILL W/O GUARD RAIL	CLEAR ZONE (FROM EDGE OF TRAVELWAY)	CURB TO CURB WIDTH WITHOUT PARKING	SUGGESTED CLEAR ZONE (FROM FACE OF CURB)
ONE-WAY (1-LANE)	≤ 400 (2)	20	120'	8%	125'	200' (3)	20	5'	4' (4)	6' (5)	20	3'

GENERAL NOTES:

These design standards may also be used for one-way divided pairs, such as subdivision entrances with wide medians.

For streets anticipated to serve mixed residential-commercial, commercial, or industrial traffic, use the appropriate urban standard in the road design manual, in such settings, where

- On-street parking is anticipated; a parking lane width not less than 7 feet should be provided for residential and not less than 8 feet should be provided for commercial w/loading zones.
- Normal minimum shoulder widths and construction practices make parking along rural typical roadway sections inappropriate if not illegal.
- On shoulder and ditch roadway, no side parking is allowed.

FOOTNOTES:

1. The maximum allowable street grade shall be eight percent (8%). The agent or commission, with the advice of the traffic engineer, may vary or grant exceptions to this requirement, pursuant to section 29-36, to no more than 10%.
2. For traffic volumes > 400 vpd. pavement widths will be established by the City Traffic Engineer.
3. The roadway with the highest volume will govern the sight distance.
4. When pedestrian facilities are provided behind ditches, the shoulder width may be reduced to a minimum of 2 feet.
5. Clear zone widths may be reduced with the concurrence of the City Engineer where terrain or social/environmental impact considerations are appropriate.

GEOMETRIC DESIGN STANDARDS FOR NEW RESIDENTIAL SUBDIVISION STREETS
TABLE 3 (page 2 of 2) - ONE-LANE (ONE-WAY) SUBDIVISION STREETS

TRAFFIC	PROJECTED TRAFFIC VOLUME (ADT)	DESIGN SPEED (MPH)	HORIZONTAL AND VERTICAL CONTROLS Maximum 3:1 cut or fill slope				ROADWAY SECTION CRITERIA		
			MIN. CURVE RADIUS W/O SUPER-ELEV.	MAX. % GRADE SUG.	MINIMUM SIGHT DISTANCE		CURB AND GUTTER ROADWAYS		
					STOPPING	INTER-SECTION	CURB TO CURB WIDTH WITHOUT PARKING CG-6	CURB TO CURB WIDTH WITHOUT PARKING ROLL-TOP	SUGGESTED CLEAR ZONE (FROM FACE OF CURB)
ONE-WAY (1-LANE)	≤ 400 (2)	20	120'	8%	125'	200' (3)	24'	25'	3' (4)

GENERAL NOTES:

- These design standards may also be used for one-way divided pairs, such as subdivision entrances with wide medians.
- For streets anticipated to serve mixed residential-commercial, commercial, or industrial traffic, use the appropriate urban standard in the road design manual, in such settings, where
- On-street parking is anticipated; a parking lane width not less than 7 feet should be used.
 - Normal minimum shoulder widths and construction practices make parking along rural typical roadway sections inappropriate if not illegal.
 - On shoulder and ditch roadway, no side parking is allowed.
 - If no street parking, do not include gutter pan in pavement width.

FOOTNOTES:

1. The maximum allowable street grade shall be eight percent (8%). The agent or commission, with the advice of the traffic engineer, may vary or grant exceptions to this requirement, pursuant to section 29-36, to no more than 10%.
2. For traffic volumes > 400 vpd. pavement widths will be established by the City Traffic Engineer.
3. The roadway with the highest volume will govern the sight distance.
4. Clear zone widths may be reduced with the concurrence of the City Engineer where terrain or social/environmental impact considerations are appropriate.

GEOMETRIC DESIGN STANDARDS FOR NEW RESIDENTIAL SUBDIVISION STREETS
TABLE 4 – MINIMUM WIDTHS FOR PROPOSED STREET FEATURES
(APPLYS TO ALL CATEGORIES LISTED IN TABLES 1A, 1B, 1C,
TABLE 2, TABLE 3 (page 1 and 2))

<u>Feature Type</u>	<u>Minimum Width (Feet) (From Cross-Sectional View)</u>	<u>Notes</u>
Sidewalk	5	Does not include curb. See Std. Detail SW-1
Standard Entrance with Monolithic Sidewalk and Curb	5	See Std. Detail RE-1
Standard Entrance with Sidewalk, Curb and Gutter - Local Streets	5	See Std. Detail RE-2 (page 1 of 2)
Standard Entrance with Sidewalk, Curb and Gutter - Other than Local	6	See Std. Detail RE-2 (page 1 of 2)
Standard Entrance with Curb and Gutter Only - Local Streets	2	See Std. Detail RE-2 (page 2 of 2)
Standard Entrance with Curb and Gutter Only - Other than Local	2-3/8"	See Std. Detail RE-2 (page 2 of 2)
Median Width with Trees and Small Plantings	6	
Median Width with Small Plantings Only	3 - 6	
Median Width without Plantings	3	
Pavement Markings	1/3 (4-inches) Per Lane Marking Line	Additional space req'd between lines or from line to outside edge of pavement per MUTCD
CG-12 Type B Curb Ramp	5	See CG-12 Standards in Appendix B
CG-12 Type C Curb Ramp	7	See CG-12 Standards in Appendix B
Curb (CG-2)	0.5 (6-inches)	See Std. Detail CG-2
Curb and Gutter (CG-6)	2.5	See Std. Detail CG-6
Curb and Gutter (Roll-Top)	3	See Std. Detail RT-1
On-Street Parking - Residential	7	
On-Street Parking - Commercial w/Loading Zones	8	
Bike Lane Adjacent to Travel Lane	5	
Off-Street Bike/Multi-use Trail	10	See Std. Detail BT-1

