

## CHAPTER 2 – SUMMARY OF REVISIONS

Page 27 - Table 2.4.4: Minimum Design Turning Radii for Representative Trucks for 90° and 180° Turns

Former guidance (June 2017):

<b>A-train</b>	90	11.2	10.7
	180	9.6	12.3
<b>B-train</b>	90	12.5	10.7
	180	9.6	13.6

Revised guidance (June 2019):

<b>A-train</b>	90	9.6	10.7
	180	11.2	12.3
<b>B-train</b>	90	9.6	10.7
	180	12.5	13.6

Page 39 - Table 2.5.3: Stopping Sight Distance on Grades

Former guidance (June 2017):

30	32	35	35	31	30	29
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Revised guidance (June 2019):

30	35	35	35	31	30	29
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## CHAPTER 5 – SUMMARY OF REVISIONS

### Page 75 - Section 5.7.6: Bikeway Facilities at Bridges or Tunnels

Former guidance (June 2017):

Protective railings, fences, and barriers should be a minimum of 1.05 m and a preferred height of 1.2 m to prevent cyclists from falling over the railing. Additional horizontal clearance will be required in these locations since this height is above the bicycle handlebar height.

Revised guidance (June 2019):

Protective railings, fences, and barriers should be a minimum of 1.37 m and a preferred height of 1.8 m to prevent cyclists from falling over the railing. Additional horizontal clearance will be required in these locations since this height is above the bicycle handlebar height.

## CHAPTER 7 – SUMMARY OF REVISIONS

Page 12 – Table 7.3.1: Clear Zone Distances (m)

Former guidance (June 2017):

90	Under 750	3.5 – 4.5	4.5 – 5.5	"	2.5 – 3.0	3.0 – 3.5	3.0 – 3.5
	750 – 1,500	5.0 – 5.5	6.0 – 7.5	"	3.0 – 3.5	4.5 – 5.0	4.5 – 5.0
	1,500 – 6,000	6.0 – 6.5	7.5 – 9.0	"	4.5 – 5.0	5.5 – 6.5	5.0 – 5.5
	> 6,000	6.5 – 7.5	8.0 – 10.0	"	5.0 – 5.5	6.0 – 6.5	6.0 – 6.5
100	Under 750	5.0 – 5.5	6.0 – 7.5	"	3.0 – 3.5	3.5 – 4.5	3.0 – 3.5
	750 – 1,500	6.0 – 7.5	8.0 – 10.0	"	3.5 – 4.5	5.0 – 5.5	5.0 – 5.5
	1,500 – 6,000	8.0 – 9.0	10.0 – 12.0	"	4.5 – 5.5	5.5 – 6.5	6.0 – 6.5
	> 6,000	9.0 – 10.0	11.0 – 13.5	"	6.0 – 6.5	7.5 – 8.0	8.0 – 8.5
≥ 110	Under 750	5.5 – 6.0	6.0 – 8.0	"	3.0 – 3.5	4.5 – 5.0	4.5 – 5.0
	750 – 1,500	7.5 – 8.0	8.5 – 11.0	"	3.5 – 5.0	5.5 – 6.0	6.0 – 6.5
	1,500 – 6,000	8.5 – 10.0	10.5 – 13.0	"	5.0 – 6.0	6.5 – 7.0	8.0 – 8.5
	> 6,000	9.0 – 10.5	11.5 – 14.5	"	6.5 – 7.5	8.0 – 9.0	8.5 – 9.0

Revised guidance (June 2019):

90	Under 750	3.5 – 4.5	4.5 – 5.5	"	2.5 – 3.0	3.0 – 3.5	3.0 – 3.5
	750 – 1,500	5.0 – 5.5	6.0 – 7.5	"	3.0 – 3.5	4.5 – 5.0	5.0 – 5.5
	1,500 – 6,000	6.0 – 6.5	7.5 – 9.0	"	4.5 – 5.0	5.0 – 5.5	6.0 – 6.5
	> 6,000	6.5 – 7.5	8.0 – 10.0	"	5.0 – 5.5	6.0 – 6.5	6.5 – 7.5
100	Under 750	5.0 – 5.5	6.0 – 7.5	"	3.0 – 3.5	3.5 – 4.5	4.5 – 5.0
	750 – 1,500	6.0 – 7.5	8.0 – 10.0	"	3.5 – 4.5	5.0 – 5.5	6.0 – 6.5
	1,500 – 6,000	8.0 – 9.0	10.0 – 12.0	"	4.5 – 5.5	5.5 – 6.5	7.5 – 8.0
	> 6,000	9.0 – 10.0	11.0 – 13.5	"	6.0 – 6.5	7.5 – 8.0	8.0 – 8.5
≥ 110	Under 750	5.5 – 6.0	6.0 – 8.0	"	3.0 – 3.5	4.5 – 5.0	4.5 – 5.0
	750 – 1,500	7.5 – 8.0	8.5 – 11.0	"	3.5 – 5.0	5.5 – 6.0	6.0 – 6.5
	1,500 – 6,000	8.5 – 10.0	10.5 – 13.0	"	5.0 – 6.0	6.5 – 7.5	8.0 – 8.5
	> 6,000	9.0 – 10.5	11.5 – 14.0	"	6.5 – 7.5	8.0 – 9.0	8.5 – 9.0

## CHAPTER 9 – SUMMARY OF REVISIONS

### Page 33 - Table 9.4.1: Desirable Spacing between Signalized Intersections for Progression (m)

Former guidance (June 2017):

40	335	290	445	500	555
50	415	485	555	625	695

Revised guidance (June 2019):

40	335	390	445	500	555
50	415	485	555	625	695

### Page 67 - Table 9.9.3: Time Gap for Case B1, Left Turn from Stop

Former guidance (June 2017):

- For multi-lane highways: For left turns onto two-lane highways with more than two lanes, add 0.5 s for passenger cars and 0.7 s for trucks for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.

Revised guidance (June 2019):

- For multi-lane highways: For left turns onto highways with more than a single lane in each direction, add 0.5 s for passenger cars and 0.7 s for trucks for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle.

## CHAPTER 10 - SUMMARY OF REVISIONS

Page 31 – Table 10.6.2: Design Length for Deceleration

Former guidance (June 2017):

100	85-100	85	170-215	160-210	155-205	145-200	135-180	120-165	100-145	
110	91-110	90	185-250	175-245	170-240	160-230	150-220	140-205	120-190	100-165
120	98-120	95	200-320	190-315	185-310	180-305	170-300	155-280	135-270	120-240
130	105-130	100	215-335	205-335	200-330	190-325	180-320	170-300	150-285	135-270

Revised guidance (June 2019):

100	85-100	85	170-215	160-210	155-205	145-200	135-185	120-165	100-145	
110	91-110	90	185-250	175-245	170-240	160-230	150-220	140-205	120-190	100-165
120	98-120	95	200-320	190-315	185-310	180-305	170-300	155-280	135-270	120-240
130	105-130	100	215-340	205-335	200-330	190-325	180-320	170-300	150-285	135-270

Page 41 – Table 10.6.5: Design Length for Acceleration

Former guidance (June 2017):

Speed of roadway (km/h)		Length of Taper (m) $L_1$	Length of Acceleration Lane Excluding Taper (m)							
Design	Assumed Operating		$L_d$							
			Stop condition	Design Speed of Turning Roadway curve (km/h)						
			20	30	40	50	60	70	80	
60	55-60	55	85-115	70-100	60-80	45-60	20-35			
70	63-70	65	120-60	115-150	100-135	80-115	50-85	15-40		
80	70-80	70	160-225	150-215	130-200	115-185	85-160	40-100		
90	77-90	80	215-325	200-310	180-300	160-285	140-250	50-200	40-145	
100	85-100	85	275-450	250-440	240-420	225-405	200-375	140-325	100-285	40-230
110	91-100	90	330-650	320-645	305-630	290-600	260-575	210-525	150-475	100-410
120	98-120	95	410-730	400-725	375-710	370-690	340-660	285-590	250-515	135-430
130	105-130	100	550-885	540-880	510-870	500-850	470-820	400-745	340-655	300-550

Revised guidance (June 2019):

Speed of roadway (km/h)		Length of Taper (m) $L_1$	Length of Acceleration Lane Excluding Taper (m)							
Design	Assumed Operating		$L_d$							
			Stop condition	Design Speed of Turning Roadway curve (km/h)						
			20	30	40	50	60	70	80	
60	55-60	55	85-115	70-100	60-80	45-60	20-35			
70	63-70	65	120-160	115-150	100-135	80-115	50-85	15-40		
80	70-80	70	160-225	150-215	130-200	115-185	85-160	40-100		
90	77-90	80	215-325	200-310	180-300	160-285	140-250	50-200	40-145	
100	85-100	85	275-450	250-440	240-420	225-405	200-375	140-325	100-285	40-230
110	91-100	90	330-650	320-645	305-630	290-600	260-575	210-525	150-475	100-410
120	98-120	95	410-730	400-725	375-710	370-690	340-660	285-590	250-515	195-430
130	105-130	100	550-885	540-880	510-870	500-850	470-820	400-745	340-655	300-550