

TABLE 4-4A
Final Design Criteria: Mainline and Interchanges—Illinois Tollway

Criteria	Tollway Mainline		Tollway C-D Road		Tollway Interchange Ramps			Reference/Comments
					SYSTEM OR SERVICE	SERVICE		
	I-90	I-294, Elgin O'Hare, West Bypass	I-90	I-294, Elgin O'Hare	Directional & Semi-Directional	Diamond & Outer Ramps	Loop	
GENERAL ELEMENTS								
Design Speed	70 mph	60 mph (Elgin O'Hare: 70 mph where possible)	60 mph	50 mph	50 mph	40 mph	30 mph	ISTHA Design Criteria-2 Specific Tollway Direction
CLASSIFICATION								
Level of Service (Minimum)	E/F		E/F		E/F	E/F	E/F	Specific Tollway Direction
Design Vehicle	WB-65		WB-65		WB-65	WB-65	WB-65	ISTHA Introduction C
Sight Distance								
Stopping Sight Distance	850 ft (Des.) / 730 ft (Min.)	650 ft (Des.) / 570 ft (Min.)	650 ft (Des.) / 570 ft (Min.)	475 ft (Des.) / 425 ft (Min.)	475 ft (Des.) / 425 ft (Min.)	325 ft (Des.) / 305 ft (Min.)	200 ft (Des. and Min.)	ISTHA Design Criteria-3A
Decision Sight Distance	1450 ft (Des.) / 1100 ft (Min.)	1275 ft (Des.) / 1000 ft (Min.)	1275 ft (Des.) / 1000 ft (Min.)	1025 ft (Des.) / 750 ft (Min.)	1025 ft (Des.) / 750 ft (Min.)	825 ft (Des) / 600 ft (Min.)	625 ft (Des.) / 450 ft (Min.)	ISTHA Design Criteria 3B
HORIZONTAL ELEMENTS								
Horizontal Curvature								
Radius	2,292 ft (Des.) / 2,083 ft (Min.)	1910 ft	1910 ft	835 ft	765 ft	470 ft	255 ft	ISTHA Design Criteria-4A
Degree of Curve	2°30' (Des.) / 2°45' (Min.)	3°00'	3°00'					
Length of Curve	1,000 ft (Des.) / 600 ft (Min.)				L = 3 Seconds Travel Distance + 0.3 x (SE Runoff Distance)			ISTHA Design Criteria-4B
Compound Curve Ratio (Maximum)	1.5:1				2:1			ISTHA Design Criteria-4C
Tangent Between Curves								ISTHA Design Criteria-4D
Opposite Direction Curves (Minimum)	As Required for Superelevation 1,500 ft				Continuous Transition Continuous Transition			
Same Direction Curves (Minimum)								
Superelevation (Maximum)	6%				6%	8%		ISTHA Design Criteria-4E,
VERTICAL ELEMENTS								
Mainline Grade								ISTHA Design Criteria-5A ISTHA Design Criteria-5B
Maximum (Des. / Abs.)	±2.0% (Des.) / ±3.0% (Abs.)							
Minimum (Des. / Abs.)	±0.5% (Des.) / ±0.3% (Abs.)							
Ramp Grade								ISTHA Design Criteria-5A ISTHA Design Criteria-5B
Maximum (Des. / Abs.)	+3.0% / -4.0% (Des.) / +4.0% / -6.0% (Min.) ±0.5% (Des.) / ±0.3% (Min.)							
Minimum (Des. / Abs.)								
Intersection Approach Grade	NA				NA	±2%, 100 ft min. platform for stop condition		ISTHA Design Criteria-5A
Profile Tangent Length (Des. / Min.)	1,000 ft (Des.) / 500 ft (Min.)				NA	NA	NA	ISTHA Design Criteria-5C
Vertical Curve - Minimum K Values					50 MPH	40 MPH	30 MPH	ISTHA Design Criteria-5D
Crest Vertical Curve	70 MPH		60 MPH		160 (Des.) / 84 (Min.)	80 (Des.) / 44 (Min.)	30	
Sag Vertical Curve	540 (Des.) / 247 (Min.)		310 (Des.) / 150 (Min.)		110 (Des.) / 96 (Min.)	70 (Des.) / 64 (Min.)	40	
	250 (Des.) / 181 (Min.)		160 (Des.) / 136 (Min.)					
CROSS SECTION ELEMENTS								
Mainline								ISTHA Design Criteria-7A
Pavement Width								
1 Lane					16 ft			
2 Lanes					24 ft			
3 Lanes	37 ft paved (36 ft striped)		37 ft paved (36 ft striped)					
4 Lanes	49 ft paved (48 ft striped)							
5 Lanes	61 ft paved (60 ft striped)							
6 Lanes	73 ft paved (72 ft striped)							
Auxiliary Lane	12 ft striped		12 ft striped					ISTHA Design Criteria-7B
Shoulder Width - Right								
Open Drainage (No Gutter)								
3 Lanes or Fewer	12 ft total = 1 ft mainline + 11 ft shldr pavement (typical)		10 ft total = 1 ft mainline + 9 ft shldr pavement (typical)					
4 Lanes or More	12 ft (typ.)		---					
Open Drainage (with Guardrail)	12 ft (typ.)		10 ft (typ.)					
Closed Drainage (Type F Barrier or Similar)	12 ft (typ.) + G-3 Gutter		10 ft (typ.) + G-3 Gutter					
Closed Drainage (with Wall/Noise Barrier)	12 ft + 5 ft snow storage = 17 ft total, + G-3 Gutter		10 ft + 5 ft snow storage = 15 ft total, + G-3 Gutter					ISTHA Design Criteria-7B, modified
Shoulder Width - Left								
Open Drainage (Paved)	10 ft		4 ft					
Closed Drainage (Median Barrier)	12.5 ft		---					
Horizontal Clearances	Clear Zone Requirements, or as Determined by Barrier Warrants		Clear Zone Requirements, or as Determined by Barrier Warrants					ISTHA Design Criteria-6B
Ramps								
Pavement Width								ISTHA Design Criteria-7A
1 Lane								
2 Lanes	16 ft 24 ft (50 mph design) 36 ft							
3 Lanes	16 ft 28 ft (40 mph design) ---							
Shoulders								ISTHA Design Cteria-7B
Right (Paved)	10 ft							
Left (Paved)	4 ft							
With Wall or Noise Barrier	Add 7 ft to width (4 ft of shoulder plus 3 ft G-3 Gutter)							
Cross Slopes (Mainline & Ramps)								ISTHA Design Criteria-7C
For 2 Lanes	1.5%				1.5%	1.5%	1.5%	
For 3rd Lane in Same Cross Slope Direction	1.5%				1.5%	1.5%	NA	
For Additional Lanes	2.0%				NA	NA	NA	
Shoulders	4.0%				4.0%	4.0%	4.0%	
Rollover (Maximum)								
Between Pavement and Shoulders	7%							ISTHA Design Criteria-4F
Between Adjacent Pavement Lanes	3%							

TABLE 4-4A
Final Design Criteria: Mainline and Interchanges—Illinois Tollway

Criteria	Tollway Mainline		Tollway C-D Road		Tollway Interchange Ramps			Reference/Comments
					SYSTEM OR SERVICE	SERVICE		
	I-90	I-294, Elgin O'Hare, West Bypass	I-90	I-294, Elgin O'Hare	Directional & Semi-Directional	Diamond & Outer Ramps	Loop	
CROSS SECTION ELEMENTS - Continued								
Median Width Existing Elgin O'Hare, Elgin O'Hare Extension West Bypass, I-294, I-90 I-290	60 ft 30 ft Match Existing: 27 ft, 46 ft							
Sideslopes--Fill Section Foreslopes Within Clear Zone Outside Clear Zone Back Slopes	6:1 (Des.) / 4:1 (Max) 4:1 (Des.) / 2.5:1 (Absolute) 4:1 (Des.) / 2.5:1 (Absolute)				6:1 (Des.) / 4:1 (Max) 4:1 (Des.) / 2.5:1 (Absolute) 4:1 (Des.) / 2.5:1 (Absolute)			ISTHA Design Criteria-7D and Tollway Maintenance
STRUCTURES - TOLLWAY UNDER								
Retain Existing Structure Over Tollway Shoulder Width, Minimum Right Side Left Side Vertical Clearance	Case By Case Case By Case No Less Than Existing (Min.) / 16'-3" (Des.)							
Construct New Structure Over Tollway Shoulder Width on Tollway Right Side Left Side Horizontal Clearance Vertical Clearance	12 ft 12.5 ft 30 ft (minimum) 16'-3"							ISTHA Design Criteria-7B ISTHA Design Criteria-6B ISTHA Design Criteria-6C
STRUCTURES - TOLLWAY OVER								
Retain Existing I-90 Structure Shoulder Width, Minimum Right Side Left Side Vertical Clearance	Case By Case Case By Case No Less Than Existing							
Widen Existing I-90 Structure Shoulder Width Right Side (minimum) Left Side (minimum) Vertical Clearance	12 ft 10 ft No Less Than Existing							ISTHA Design Criteria-6A Refer to I-90 Design Approach
Construct New Tollway Structure Shoulder Width Right Side (minimum) Left Side (minimum) Vertical Clearance Tollway Facilities IDOT Facilities Freeways, Interchanges Elgin O'Hare - East of I-290; West Bypass; I-294 Elgin O'Hare - West of I-290; I-290; I-90 Arterials, SRA's, Collectors Local Roads Railroads	12 ft 10 ft 16'-3" 15'-0" 16'-9" New, 16'-0" Existing 14'-9" New, 14'-0" Existing 14'-9" New, 14'-0" Existing 23'-0" (RR company may require greater clearance, such as 23'-4")				10 ft 6 ft 16'-3" 15'-0" 16'-6" New, 16'-0" Existing 14'-9" New, 14'-0" Existing 14'-9" New, 14'-0" Existing 23'-0" (RR company may require greater clearance, such as 23'-4")			ISTHA Design Criteria-6A ISTHA Design Criteria-6A ISTHA Design Criteria-6C Specific Tollway Direction IDOT BDE Manual Fig. 48-6.A and Fig. 46-2.E BLRS Fig. 36-4I, Fig. 36-5C ISTHA Design Criteria-6C
STRUCTURES - OTHER								
Horizontal Clearances Sign Truss Supports (behind guardrail) Vertical Clearances Sign Bridge over Tollway Toll Plaza Canopy	4 ft (Min.) 17'-3" 17'-3"				4 ft (Min.) 17'-3" 17'-3"			
OPERATIONAL ELEMENTS								
Lane Balance	Applies				Applies			
Lane and Route Continuity	Applies				Applies			AASHTO GDHS, pp. 811-814
Ramp Spacing (Minimum)								AASHTO GDHS, pp. 807-808
Entrance - Entrance Exit - Exit Exit - Entrance Entrance-Exit (System to Service) Entrance-Exit (Service to Service)	1000 ft 1000 ft 500 ft 2000 ft 1600 ft		800 ft 800 ft 400 ft 1600 ft 1000 ft					AASHTO GDHS, Exh.10-68
Interchange Access Control Requirements Spacing from Ramp to Access Point (Minimum) Cross Street Design Speed: 30 mph 40 mph 45 mph 50 mph 55 mph	450 ft 625 ft 750 ft 900 ft 1050 ft							ISTHA Access Control Requirements, Table 1

TABLE 4-4B
Final Design Criteria: Mainline and Interchanges—IDOT

Criteria	IDOT Mainline	IDOT C-D Road	Reference/Comments	IDOT Interchange Ramps			Reference/Comments
				SYSTEM	SERVICE		
				Directional & Semi-Directional	Diamond & Outer Connection	Loop	
GENERAL ELEMENTS							
Design Speed	60 mph	40-50 mph urban 50 mph rural	IDOT BDE Manual Fig. 44-5.A, IDOT BDE Manual 37-4.02(b)	Directional: 50 mph Semi-Directional: 40 - 50 mph	Diamond: 50 mph to 25 mph Outer: 50 mph (Des.) / 45 mph (Min.)	30 mph (Des.) / 25 mph (Min.)	IDOT BDE Manual 37-4.04
Level of Service (Minimum)	C	C	IDOT BDE Manual Fig. 44-5.A	---			
Design Vehicle	WB-65	WB-65	---	WB-65			IDOT BDE Manual 37-5.01
Sight Distance							
Stopping Sight Distance	570 ft		IDOT BDE Manual Fig. 31-3.A				IDOT BDE Manual 31-3.01(a)
25 mph				155 ft			IDOT BDE Manual Fig. 31-3.A
30 mph				200 ft			IDOT BDE Manual Fig. 31-3.A
40 mph		305 ft		305 ft			IDOT BDE Manual Fig. 31-3.A
50 mph		425 ft		425 ft			IDOT BDE Manual Fig. 31-3.A
Decision Sight Distance	1125 ft		IDOT BDE Manual Fig. 31-3.C				
25 mph				445 ft			AASHTO GDHS, p. 117
30 mph				535 ft			IDOT BDE Manual Fig. 31-3.C
40 mph		715 ft		715 ft			IDOT BDE Manual Fig. 31-3.C
50 mph		890 ft		890 ft			IDOT BDE Manual Fig. 31-3.C
HORIZONTAL ELEMENTS							
Superelevation (Maximum)	6%		IDOT BDE Manual Fig. 44-5.D	6 %			IDOT BDE Manual 37-4.07(b)
Horizontal Curvature							
Radius	3000 ft (Des.) / 1330 ft (Min.)		IDOT BDE Manual Fig. 44-5.D				IDOT BDE Manual Fig. 37-4.F
25 mph				145 ft			
30 mph				235 ft			
40 mph		485 ft	IDOT BDE Manual Fig. 32-3.C	485 ft			
50 mph		835 ft	IDOT BDE Manual Fig. 32-3.C	835 ft			
Length of Curve							
Minimum ($\Delta \geq 5^\circ$)	400 ft	200 ft (40 mph), 300 ft (50 mph)	IDOT BDE Manual Fig. 32-2.G	100 ft (30 mph), 200 ft (40 mph, 300 ft (50 mph)			IDOT BDE Manual Fig. 32-2.G
Compound Curves with Decreasing Radii							IDOT BDE Manual Fig. 37-4.H
Radius = 150 ft				70 ft (Des.) / 50 ft (Min.)			
Radius = 200 ft				90 ft (Des.) / 60 ft (Min.)			
Radius = 250 ft				120 ft (Des.) / 80 ft (Min.)			
Radius = 300 ft				140 ft (Des.) / 100 ft (Min.)			
Radius = 400 ft				180 ft (Des.) / 120 ft (Min.)			
Radius = 500 ft or greater				200 ft (Des.) / 140 ft (Min.)			
Compound Curve Ratio (Maximum)	1.5:1		IDOT BDE Manual 32-2.01(c)	2:1 for decreasing radii			IDOT BDE Manual 37-4.07(c)
Tangent Between Curves							
Opposite Direction Curves (Minimum)	sec. of travel time, if used		IDOT BDE Manual 32-3.06	As required for continuous superelevation transition			IDOT BDE Manual 37-4.07(b)
Same Direction Curves (Minimum)	1,500 ft		IDOT BDE Manual 32-2.01(f)	As required for superelevation transitions			
Lane Drop Taper	840 ft (70:1)		IDOT BDE Manual 44-2.06				
Lane Addition Taper	600 ft (50:1)		IDOT BDE Manual Fig. 44-2.M				
VERTICAL ELEMENTS							
Mainline Grade							
Maximum	(Abs., restricted conditions)	+4.0% / -6.0%	IDOT BDE Manual Fig. 44-5.D, 37-4.F				
Minimum	±0.5% (Des.), ±0.3% with C&G, 0.0% with special ditching	±0.3% (Abs.)	IDOT BDE Manual Fig. 44-5.D				
Ramp Grade							IDOT BDE Manual Fig. 37-4.F
Maximum				+4.0% / -6.0%			
Minimum (Des./ Abs.)				±0.5% (Des.) / ±0.3% (Min.)			
Intersection Approach Grade				NA	+1.5% - 2.0%, 150 ft - 200 ft min. platform		IDOT BDE Manual 37-5.01
Vertical Curve - Minimum K Values for SSD							
Crest Vertical Curve	151		IDOT BDE Manual Fig. 33-4.A				
25 mph				12			AASHTO GDHS, Exh. 3-72
30 mph				19			IDOT BDE Manual Fig. 33-4.A
40 mph		44		44			IDOT BDE Manual Fig. 33-4.A
50 mph		84		84			IDOT BDE Manual Fig. 33-4.A
Sag Vertical Curve	136		IDOT BDE Manual Fig. 33-4.E				
25 mph				26			AASHTO GDHS, Exh. 3-75
30 mph				37			IDOT BDE Manual Fig. 33-4.E
40 mph		64		64			IDOT BDE Manual Fig. 33-4.E
50 mph		96		96			IDOT BDE Manual Fig. 33-4.E

TABLE 4-4B
Final Design Criteria: Mainline and Interchanges—IDOT

Criteria	IDOT Mainline	IDOT C-D Road	Reference/Comments	IDOT Interchange Ramps			Reference/Comments
				SYSTEM	SERVICE		
				Directional & Semi-Directional	Diamond & Outer Connection	Loop	
CROSS SECTION ELEMENTS							
Lane Width	12 ft	1-lane: 16 ft Multi-lane: 12 ft	IDOT BDE Manual Fig. 44-5.A, IDOT BDE Manual 37-4.02(b)	1-lane: 16 ft, Multi-lane: 12 ft	1-lane: 16 ft, Multi-lane: 12 ft	Use AASHTO, 2004 Exhibit 10-67	IDOT BDE Manual 37-4.06
Shoulder Width - Right							
Total Width	12 ft	1-Lane: 8 ft, Multi-Lane: 10 ft	IDOT BDE Manual Fig. 44-5.A, 37-4.B	1-Lane: 8 ft, 2-Lane: 10 ft	1-Lane: 8 ft, 2-Lane: 10 ft	1-Lane: 8 ft, 2-Lane: 10 ft	IDOT BDE Manual 37-4.03, 37-4.06, and Fig. 44-5.A
Paved	12 ft	1-Lane: 6 ft, Multi-Lane: 10 ft	IDOT BDE Manual 37-4.02(b)	1-Lane: 6 ft, 2-Lane: 10 ft	1-Lane: 6 ft, 2-Lane: 10 ft	1-Lane: 6 ft, 2-Lane: 10 ft	
Shoulder Width - Left							
Total Width	12 ft (Min.)	1-Lane: 6 ft, 2/3-Lane: 8/10 ft	IDOT BDE Manual Fig. 44-5A, 37-4B	1-Lane: 6 ft, 2/3-Lane: 8/10 ft	1-Lane: 6 ft, 2-Lane: 8 ft	1-Lane: 6 ft, 2-Lane: 8 ft	IDOT BDE Manual 37-4.03, 37-4.06, and Fig. 44-5.A
Paved	12 ft (Min.)	1-Lane: 4 ft, 2/3-Lane: 6/10 ft	IDOT BDE Manual 37-4.02(b)	1-Lane: 4 ft, 2/3-Lane: 6/10 ft	1-Lane: 4 ft, 2-Lane: 6 ft	1-Lane: 4 ft, 2-Lane: 6 ft	
Auxiliary Lane Right Shoulder							
Total Width	10 ft		IDOT BDE Manual Fig. 44-5.A,				
Paved	10 ft		IDOT BDE Manual 37-4.02(b)				
Horizontal Clearances	30 ft, or as determined by warrants		IDOT BDE Manual 38-3.01				
Cross Slopes							
Lanes Adjacent to Crown	1.5%		IDOT BDE Manual Fig. 44-5.A,	1.5%	1.5%	1.5%	IDOT BDE Manual 37-4.06
For 2nd Lane in Same Cross Slope Direction	2.0%			1.5%	1.5%	NA	
For Additional Lanes in Same Cross Slope Direction	2.5%			2.0%	NA	NA	
Shoulders	4.0%			4.0%	4.0%	4.0%	
Rollover (Maximum)							
Between Pavement and Shoulders	8%		IDOT BDE Manual 32-3.04(a)	8%			IDOT BDE Manual 32-3.04(a)
Between Adjacent Pavement Lanes	4%		IDOT BDE Manual Fig. 36-2.J	4%			IDOT BDE Manual Fig. 36-2.J
Median Width							
Existing Elgin O'Hare, Elgin O'Hare Extension	60 ft, 70 ft						
West Bypass, I-294, I-90	30 ft						
I-290	Match Existing: 27 ft, 46 ft						
Sideslopes--Fill Section							
Foreslopes			IDOT BDE Manual 38-3				IDOT BDE Manual 38-3
Within Clear Zone	1:6 (Des.) / 1:4 (Max.)			1:6 (Des.) / 1:4 (Max.)			
Outside Clear Zone	1:3 (Des.) / 1:2 (Absolute)			1:3 (Des.) / 1:2 (Absolute)			
Back Slopes	1:3 (Des.) / 1:2 (Absolute)			1:3 (Des.) / 1:2 (Absolute)			
STRUCTURES - IDOT FACILITY OVER							
Construct New Structure Over IDOT Roadway							
Shoulder Width on Structure			IDOT BDE Manual Fig. 39-6.A				IDOT BDE Manual 37-4.06, Fig. 39-6.A
Right Side	12 ft	10 ft		1-Lane: 6 ft, Multi-Lane: 10 ft	1-Lane: 6 ft, 2-Lane: 10 ft	1-Lane: 6 ft, 2-Lane: 10 ft	
Left Side	12 ft	1-Lane: 4 ft, 2/3-Lane: 6/10 ft		1-Lane: 4 ft, 2/3-Lane: 6-10 ft	1-Lane: 4 ft, 2-Lane: 6 ft	1-Lane: 4 ft, 2-Lane: 6 ft	
Right Side, Auxiliary Lane	10 ft	10 ft					
Other Roadways	Use Paved Shldr. Widths; See IDOT Local Roads Criteria			Use Paved Shoulder Widths; See IDOT Local Roads Criteria			
Vertical Clearance, Minimum							
IDOT Facilities							
Freeways, Interchanges							
Elgin O'Hare - East of I-290; West Bypass; I-294	16'-9"		Specific IDOT Direction	15'-0"			Specific IDOT Direction
Elgin O'Hare - West of I-290; I-290; I-90	16'-9" New, 16'-0" Existing			16'-9" New, 16'-0" Existing			
Arterials, SRA's, Collectors	14'-9" New, 14'-0" Existing		IDOT BDE Manual Fig. 48-6.A, 46-2.E	14'-9" New, 14'-0" Existing			IDOT BDE Manual Fig. 48-6.A, 46-2.E
Railroads	23'-0" (RR Co. may require greater clearance, e.g. 23'-4")			23'-0" (RR company may require greater clearance, such as 23'-4")			
STRUCTURES - TOLLWAY UNDER							
Retain Existing IDOT Structure Over Tollway							
Vertical Clearance	15'-3" (Min.) / No Less Than Existing (Des.)		Specific Tollway Direction (I-90)	15'-3" (Min.) / No Less Than Existing (Des.)			Specific Tollway Direction (I-90)
STRUCTURES - TOLLWAY OVER							
Retain Exist. Tollway Structure Over Cross Streets							
Vertical Clearance				No Less Than Existing			Refer to I-90 Design Approach Memo, Finalized June 2007
STRUCTURES - LOCAL ROAD UNDER							
Vertical Clearance Over Local Road	14'-9" New, 14'-0" Existing		BLRS Fig. 36-4I, 36-5C	14'-9" New, 14'-0" Existing			BLRS Fig. 36-4I, 36-5C
STRUCTURES - OTHER							
Vertical Clearances Over IDOT Roadway							
Trusses, Overhead Signs, Pedestrian Overpasses	17'-3"		IDOT BDE Manual Fig. 44-5.A	17'-3"			IDOT BDE Manual Fig. 44-5.A
OPERATIONAL ELEMENTS							
Lane Balance							
	Applies		IDOT BDE Manual 37-2.03	Applies			IDOT BDE Manual 37-2.03
Lane and Route Continuity							
	Applies		IDOT BDE Manual 37-2.06	Applies			IDOT BDE Manual 37-2.06
Ramp Spacing (Minimum)							
Entrance - Entrance, end of taper to gore	300 ft	C-D or Frwy. Distribution Rd.: 300 ft	IDOT BDE Manual Fig. 37-2.D				
Exit - Exit	1000 ft	800 ft					
Exit - Entrance	500 ft	400 ft					
Entrance-Exit (System to Service)	2000 ft	1600 ft					
Entrance-Exit (Service to Service)	1600 ft	1000 ft					

TABLE 4-4C
Final Design Criteria: Local Roads—IDOT

Criteria	Local Road Design Speed = 50 mph	Reference/Comments	Local Road Design Speed = 45 mph	Reference/Comments	Local Road Design Speed = 30 mph	Reference/Comments
OPERATION						
Level of Service	C	IDOT BDE Figure 47-3.C	C	IDOT BLRS Figure 32-2C	D	IDOT BLRS Figure 32-2H
On-Street Parking	Not Recommended	IDOT BDE Figure 48-6.A	Not Recommended	IDOT BDE Figure 48-6.A	Allowed	IDOT BLRS Figure 32-2H
Design Vehicle at Ramp Intersection	WB-65	IDOT BDE 37-5.01	WB-65	IDOT BDE 37-5.01	WB-65	IDOT BDE 37-5.01
Access Control	Consider Managed Access	IDOT BDE Figure 47-3.C	Consider Managed Access	IDOT BDE Chapter 35	Consider Managed Access	IDOT BDE Chapter 35
Sight Distance						
Stopping Sight Distance	425 ft	IDOT BDE Figure 48-6.C	360 ft	IDOT BLRS Figure 32-3B	200 ft	IDOT BLRS Figure 32-3C
Decision Sight Distance	890 ft		800 ft	IDOT BDE Figure 48-6.C	620 ft	IDOT BDE Figure 48-6.C
CROSS SECTION ELEMENTS						
Lane Width		IDOT BDE Figure 47-3C		IDOT BLRS Figure 32-2C		IDOT BLRS Figure 32-2H
Travel Lane	12 ft		12 ft		11 ft (Min.)	
Outside Lane Shared with Bicycles	--		14 ft (Des.) / 13 ft (Min.)		14 ft (Des.) / 13 ft (Min.)	
Turn Lane (1 or 2 lanes)	12 ft		12 ft		11 ft (Des.) / 10 ft (Min.)	
Auxiliary Lane	12 ft		12 ft (Des.)		11 ft (Des.) / 10 ft (Min.)	
Parking Lane, including Gutter	--				8 ft (Min.)	
Shoulder Width (for Rural Sections)		IDOT BDE Figure 47-3.C		IDOT BLRS Figure 32-2C		IDOT BLRS Figure 32-2B
Right						
Total Width	10 ft		8 ft		2 ft	
Paved	8 ft (Min.)		8 ft		--	
Left, if Present						
Total Width	6 ft		6 ft		--	
Paved	4 ft		4 ft		--	
Auxiliary Lanes	4 ft, paved		4 ft, paved		2 ft	
Outside Curbs (for Urban Sections)						
Curb Type and Width	M-4 Curb & Gutter	IDOT BDE 34-2.04(c)	B-6.24, B-6.18 or B-6.12 CC&G	IDOT BDE 34-2.04(c)	B-6.24, B-6.18 or B-6.12 CC&G	IDOT BLRS Figure 32-2H
Median Width, if Present						
Rural Design		IDOT BDE Figure 47-3.C				
Depressed	50 ft (Des.) / 44 ft (Min.)				--	
Flush, with Concrete Barrier	22 ft				--	
Urban Design		IDOT BDE Figure 48-6.A				
Flush/TWLTL	11 ft - 13 ft		14 ft	IDOT BLRS Figure 31-1.05(b)	12 ft (Des.) / 10 ft - 14 ft (Range)	IDOT BLRS Figure 32-2F
Traversable TWLTL	16 ft		16 ft	IDOT BDE Figure 48-6.A	--	
Raised-Curb	18 ft, 22 ft or 30 ft		18 ft, 22 ft or 30 ft	IDOT BDE Figure 48-6.A	--	
Cross Slope		IDOT BDE Figure 47-3.C				
First 2 Lanes Adjacent to Crown or Median	1.5%		1.5% - 2.0%	IDOT BLRS Figure 32-2C	1.5% - 2.0%	IDOT BLRS Figure 32-2H
Third Lane	2.0%		2.0% - 2.5%	IDOT BLRS Figure 32-2C	2.0% (Min.)	IDOT BLRS Figure 32-2H
Shoulders	4.0%		4.0%	IDOT BDE Figure 47-3.C	4% - 6% Agg., 5% - 8% Turf	IDOT BLRS Figure 32-2B
Sidewalk Width						
Rural Design	Varies		Varies			
Behind Curb With Buffer Strip	5 ft	IDOT BDE 48-2.04	5 ft (Des.) / 4 ft (Min.)	IDOT BLRS Figure 32-2C	5 ft (Des.) / 4 ft (Min.)	IDOT BLRS Figure 32-2H
Behind Curb Without Buffer Strip	7 ft		6 ft	IDOT BLRS Figure 31-2.02	6 ft	IDOT BLRS Figure 32-2F

TABLE 4-4C
Final Design Criteria: Local Roads—IDOT

Criteria	Local Road Design Speed = 50 mph	Reference/Comments	Local Road Design Speed = 45 mph	Reference/Comments	Local Road Design Speed = 30 mph	Reference/Comments
<i>HORIZONTAL ELEMENTS</i>						
Superelevation (Maximum)	6% or 4%	IDOT BDE Figure 32-3.A	4%	IDOT BDE Figure 48-5.A	4%	IDOT BDE Figure 48-5.A
Design Assumption	Open Roadway	IDOT BDE Figure 32-3.A	Low-Speed Urban Streets	IDOT BDE Figure 48-5.A	Low-Speed Urban Streets	IDOT BDE Figure 48-5.A
Horizontal Curvature						
Radius (Minimum)		IDOT BDE Figure 48-6.C				
6% Max. Superelevation	835 ft				--	
4% Max. Superelevation	930 ft		665 ft	IDOT BLRS Figure 32-3B	230 ft	IDOT BLRS Figure 32-3C
<i>VERTICAL ELEMENTS</i>						
Maximum Grade						
Rural Design		IDOT BDE Figure 47-3.D				
Level Terrain	6%		--		--	
Rolling Terrain	7%		--		--	
Urban Design		IDOT BDE Figure 48-6.C		IDOT BLRS Figure 32-3B		IDOT BLRS Figure 32-3C
Level Terrain	4%		6%		9%	
Rolling Terrain	5%		7%		11%	
Minimum Grade						
With Ditch	0.5% (Des.) / 0.0% (Min.)	IDOT BDE Figure 47-3.D	0.5% (Des.) / 0.0% (Min.)	IDOT BLRS Figure 32-3A	0.5% (Des.) / 0.0% (Min.)	IDOT BLRS Figure 32-3A
With Curb and Gutter	0.5% (Des.) / 0.3% (Min.)	IDOT BDE Figure 48-6.C	0.5% (Des.) / 0.3% (Min.)	IDOT BLRS Figure 32-3B	0.5% (Des.) / 0.3% (Min.)	IDOT BLRS Figure 32-3C
Intersection Approach Grade, with Vehicle Storage	+1% - +2%, 100 ft min. platform	IDOT BDE 36-1.06(a)	+1% - +2%, 100 ft min. platform	IDOT BDE 36-1.06(a)	+1% - +4%, 50-100 ft min. platform	IDOT BDE 36-1.06(a)
Vertical Curve - Minimum K Values		IDOT BDE Figure 47-3.D		IDOT BLRS Figure 32-3B		IDOT BLRS Figure 32-3C
Crest Vertical Curve	84		61		19	
Sag Vertical Curve	96		79		37	
Rollover (Maximum)						
Between Pavement and Shoulders	8%	IDOT BDE 32-3.04(a)	8%	IDOT BDE 32-3.04(a)	8%	IDOT BDE 32-3.04(a)
Between Adjacent Pavement Lanes	4%	IDOT BDE Figure 36-2.J	4%	IDOT BDE Figure 36-2.J	5%	IDOT BDE Figure 36-2.J
<i>STRUCTURES - LOCAL ROAD OVER</i>						
Local Road Over Tollway						
Retain Existing Structure Over Tollway	15'-3" (Min.) / ≥ Existing (Des.)	Specific Tollway Direction	15'-3" (Min.) / ≥ Existing (Des.)	Specific Tollway Direction	15'-3" (Min.) / ≥ Existing (Des.)	Specific Tollway Direction
Construct New Structure Over Tollway	16'-3"	ISTHA Design Criteria-6C	16'-3"	ISTHA Design Criteria-6C	16'-3"	ISTHA Design Criteria-6C
Local Road Over IDOT Facilities						
Freeways, Interchanges						
Elgin O'Hare - East of I-290; West Bypass; I-294	15'-0"	Specific Tollway Direction	15'-0"	Specific Tollway Direction	15'-0"	Specific Tollway Direction
Elgin O'Hare - West of I-290; I-290; I-90	16'-9" New, 16'-0" Existing		16'-9" New, 16'-0" Existing		16'-9" New, 16'-0" Existing	
Arterials, SRA's, Collectors	14'-9" New, 14'-0" Existing	IDOT BDE Manual Fig. 48-6.A, 46-2.E	14'-9" New, 14'-0" Existing	IDOT BDE Manual Fig. 48-6.A, 46-	14'-9" New, 14'-0" Existing	IDOT BDE Manual Fig. 48-6.A, 46-2.E
Local Road over Local Crossroads	14'-9" New, 14'-0" Existing	BLRS Fig. 36-4I, 36-5C	14'-9" New, 14'-0" Existing	BLRS Fig. 36-4I, 36-5C	14'-9" New, 14'-0" Existing	BLRS Fig. 36-4I, 36-5C
Local Road over Railroads	23'-0"	BLRS Fig. 36-4J, 36-4K	23'-0"	BLRS Fig. 36-4J, 36-4K	23'-0"	BLRS Fig. 36-4J, 36-4K
<i>STRUCTURES - LOCAL ROAD UNDER</i>						
Vertical Clearance over Local Road	14'-9" New, 14'-0" Existing	BLRS Fig. 36-4I, Fig. 36-5C	14'-9" New, 14'-0" Existing	BLRS Fig. 36-4I, Fig. 36-5C	14'-9" New, 14'-0" Existing	BLRS Fig. 36-4I, Fig. 36-5C