



5C-1 Urban Geometric Design Guides

A. General

The values contained in Tables 1 through 5 and the corresponding reference discussions for each item, as described in Section 5C-2, were developed from the 2001 AASHTO "Green Book" a Policy on Geometric Design of Highways and Streets. Also used were the Design Criteria for Local Public Agency (LPA) Federal Aid Projects and the Design Guides for New and Reconstructed Highways from the Iowa Department of Transportation. Other various Iowa DOT publications and the ADA Facilities Compliance workbook were utilized.

The Urban Design Criteria listed in Tables 1 through 5 either meets or exceeds the Iowa DOT Alternative Urban Design Guides or the Design Guides for New and Reconstructed Highways. These guides are not meant to be applied rigidly to every situation. There will be situations when special site conditions (such as environmental, aesthetic, or economic considerations) warrant deviation from the values in the tables. It is acceptable to use values below these minimums with the approval of the Iowa DOT and the Jurisdictional Engineer. In these cases, a design exception shall be prepared clearly documenting the reasons.

It is important that the designer recognize the different design criteria normally used by Iowa DOT for those projects that require Iowa DOT review. The following is a summary of the comparison between the applicable Iowa DOT Manuals and the Urban Design Manual.

Summary of comparison

NO	CONDITIONS		Iowa DOT DESIGN CRITERIA	RELATION TO URBAN DESIGN STANDARDS
	ROUTE TYPE	FUNDING TYPE		
1.	Primary Highway	Federal Aid (NHS)	Iowa DOT Design Guides for New and Reconstructed Highways	Major Arterials: Transitional - Table 1 Reduced Speed - Table 2
2.	Primary Highway	Non- Federal Aid & Federal Aid	Iowa DOT Design Guides for New and Reconstructed Highways	Major Arterials: Transitional - Table 1 Reduced Speed - Table 2
3.	Non- Primary Roadway	Federal Aid	Iowa DOT Design Criteria (Urban Design Aids and Alternative Urban Design Guides)	Minor Arterial - Table 3 Collector - Table 4
4.	Non- Primary Roadway	Non-Federal Aid	(None)	Minor Arterial - Table 3 Collector - Table 4 Local - Table 5

- 1. Primary highways.** Exceptions to the values in Table 1 and 2 for Primary Highways must be approved by the Iowa DOT District Engineer in the district they are in.
- 2. Non-primary highways.** Exceptions to the values in Tables 3 through 5 fall into Federal and Non-Federal Aid as follows:

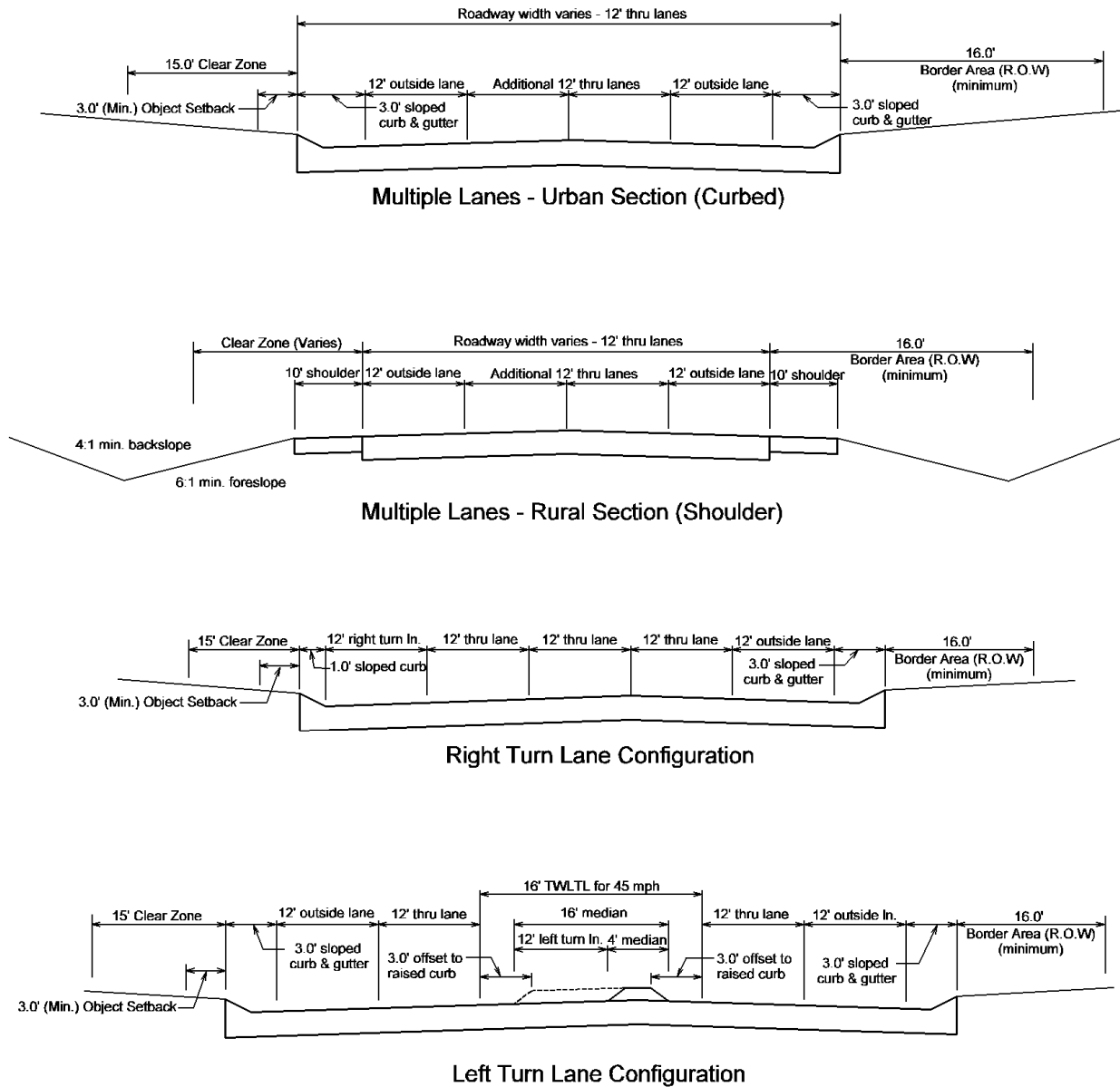
Project	Approval Required	Values Categories	Approval Process
Federal Aid	Iowa DOT Local Systems Engineer	Condition 1: < Urban Design Criteria* but > Alternative Urban Design Guides	Reason for request in letter form
		Condition 2: < Alternative Urban Design Guides	Iowa DOT Design Exception Process
Non-Federal Aid	Jurisdictional Engineer	< Urban Design Criteria*	Reason for request in letter form

* Urban Design Criteria - See Section 5C-2.

The criteria in this chapter provides the initial geometric guidelines used in the design of roadways but are not the only design values that need to be considered by the Project Engineer. Other design criteria should include, but not limited to, the information contained in earlier and subsequent chapters and those design considerations outlined as follows:

- Adjacent land use and access control
- Topographic features
- Driver expectancy
- Composition of traffic
- Directional distribution
- Peak hour traffic
- Future traffic projections
- Lane and intersection capacity
- Intersection traffic controls
- Weaving sections
- Pedestrian and bikepath traffic

Figure 1: Major arterials and primary roads - transitional facilities (45-55 mph design speeds)



Note: For rural roadways in urban areas, refer to the "Design Guides for New and Reconstructed Highways" in the Iowa DOT Design Manual for applicable design criteria.

Table 1: Urban design criteria
Major arterials and primary roads - transitional facilities
(new and reconstructed roadways)

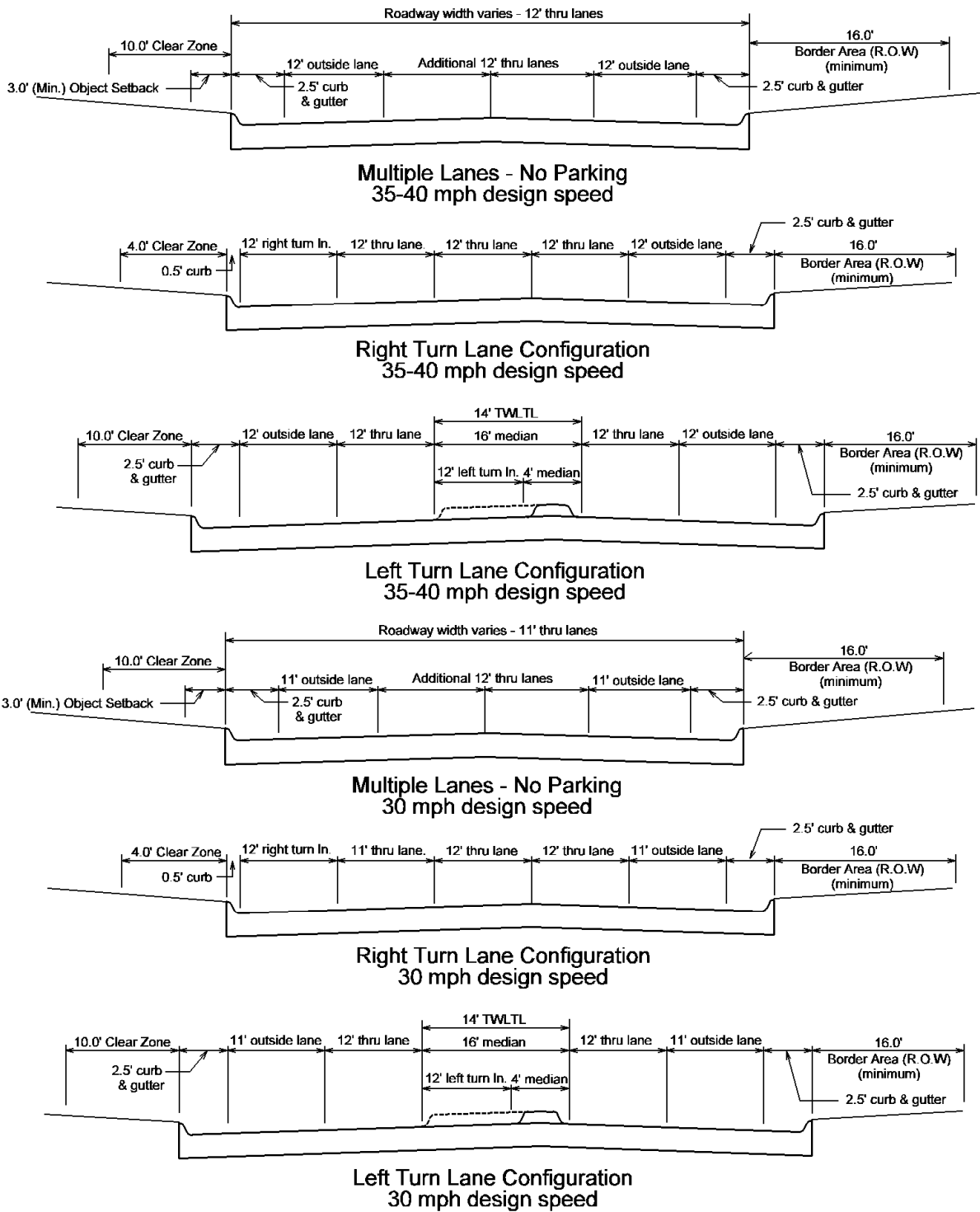
AREA Refer to Section 5C-2		TRANSITIONAL FACILITIES		
1	Design Speed, mph (a)	55	50	45
2	LOS	B	C	C
3	Access Spacing, ft (b)	Desirable, IDOT Priority III (1000 ft-1320 ft); Minimum, IDOT Priority IV-a (600 ft)		
4	Number of Traffic Lanes	Multiple	Multiple	Multiple
5	Travel Lane Width, ft. (Min)			
	A. Outside Lane	12 (c)	12 (c)	12 (c)
	B. Additional Thru Lanes	12 (c)	12 (c)	12 (c)
	C. Left / Right Turn Lane (d)	12	12	12
6	Curb and Gutter Width, ft., (e)	3	3	3
7	Parking Allowed	None		
8	Median Width at Narrowest Pt., ft.			
	A. Raised Curb (Face to Face)	4	4	4
	B. Two Way Left Turns	Not Allowed	Not Allowed	16 (f)
9	Shoulder Width, ft. (e)	10	10	10
10	Vertical Alignment (g)			
	A. Minimum Length, ft.	165	150	135
	B Crest; Minimum / Desirable k	114 / 185	84 / 140	61 / 100
	C. Sag; Minimum k	115	96	79
	D. Maximum Gradient, percent	5	6	6
	E. Minimum Gradient, percent	0.5	0.5	0.5
11	Horizontal Alignment (Min. Radius), ft. (h)	Refer to Section 5C-2, Figure 4		
12	Stopping Sight Distance, ft. (i)	495	425	360
13	Clear Zone, ft (j)	15	15	15
14	Object Setback; ft (k)	3	3	3
15	Desirable Border Area, R.O.W. (from back of Curb), ft. (l)	16	16	16
16	Foreslope, min (if applicable)	6:1	6:1	6:1
17	Backslope, min (if applicable)	4:1	4:1	4:1
18	Bridge Roadway Width - New, ft.	Lane widths + 3 ft clearance each side (m)		
19	Bridge Roadway Width - Existing, ft.	Lane widths + offset (n)		

Note: This table and corresponding figure contain recommended design values for various roadway features. It is recognized that the values contained in this table may not be achievable in certain situations due to economic, environmental, geometric, right of way, or other constraints. The designer may deviate from these values with the approval of the Jurisdictional Engineer. Design exceptions should be prepared when appropriate.

- a. Design speed should be equal to or greater than posted speed.
- b. The desirable access spacing, Priority III, shall be used for all new construction and for reconstruction when possible. For previously built up areas where the desirable access spacing cannot be provided, a minimum of Priority IV-a may be used. Refer to Section 5I-3 for additional information on access spacing.
- c. Lane widths shall be same as connecting rural facility (12 ft minimum).
- d. Right turn lane width is to face of curb. No additional curb offset is required.
- e. If an urban cross section is used in lieu of a shoulder, a 2-foot offset from edge of lane to the bottom edge of a 1 ft. wide, 6 in high, sloped curb is used (3 ft from edge of traveled lane to back of curb). This applies to both median and outside curbs for design speeds greater than or equal to 45 mph.
- f. 16 ft width allows future installation of 12 ft turn lane with a 4 ft raised median. Two-Way-Left-Turn-Lane width may be reduced to 14 ft if no need for a future raised median is foreseen.
- g. Based upon design speed. See Section 5C-2 for details.
- h. Refer to Section 5C-2, Figure 4. For design speeds greater than 45 mph, refer to Chapter 3 of AASHTO's *A Policy on Geometric Design of Highways and Streets*, Exhibits 3-21 to 3-25.
- i. Based upon design speed. See Section 5C-2 for more information regarding stopping sight distance.
- j. Clear Zone for curbed section shown (measured from back of curb). Refer to Section 5C-2 for rural roads and additional information on Clear Zone.
- k. Measured from back or curb. Refer to Section 5C-2 for additional information on Object Setback
- l. Refer to Section 5C-2 for additional information on Border Area.
- m. Values shown do not include parking, medians, or sidewalk. Present and future need for sidewalk(s) should be evaluated for each bridge.
- n. Design loading should be sufficient to accommodate legal loads.

Design Year ADT	Offset – each side (ft)
0-750	0
751-2000	1
2001-4000	2
> 4000	3

Figure 2: Major arterials and primary roads
 Reduced speed urban facilities
 (30-40 mph design speeds)



Note: For rural roadways in urban areas, refer to the "Design Guides for New and Reconstructed Highways" in the Iowa DOT Design Manual for applicable design criteria.

Table 2: Urban design criteria
Major arterials and primary roads - reduced speed urban facilities

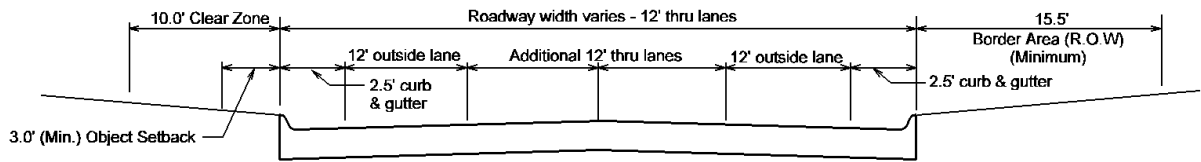
AREA Refer to Section 5C-2		REDUCED SPEED URBAN FACILITIES		
1	Min. Design Speed, mph (a)	40	35	30
2	LOS	C	C	C
3	Desirable Access Spacing, ft (b)	Priority IV-b- 300 ft		
4	Number of Traffic Lanes	Multiple	Multiple	Multiple
5	Travel Lane Width, ft. (Min)			
	A. Outside Lane	12	12	12
	B. Additional Thru Lanes	12	12	12
	C. Left / Right Turn Lane (c)	12	12	12
6	Curb and Gutter Width, ft.,	2.5(d)	2.5(d)	2.5(d)
7	Parking, ft. (e)	10(f)	10(f)	10(f)
8	Median Width at Narrowest Pt., ft.			
	A. Raised Curb (Face to Face)	4	4	4
	B. Two Way Left Turns	14	14	14
9	Vertical Alignment (g)			
	A. Minimum Length, ft.	120	105	90
	B Crest; Minimum / Desirable k	44 / 70	29 / 50	19 / 30
	C. Sag; Minimum k	64	49	37
	D. Maximum Gradient, percent	6	7	8
	E. Minimum Gradient, percent	0.5	0.5	0.5
10	Horizontal Alignment (Min. Radius), ft.	Refer to Section 5C-2, Figure 4		
11	Stopping Sight Distance, ft. (h)	305	250	200
12	Clear Zone, ft (i)	10	10	10
13	Object Setback; ft (j)	3	3	3
14	Desirable Border Area, R.O.W. (from back of Curb), ft. (k)	16	16	16
15	Bridge Roadway Width - New, ft.	Lane widths + 3 ft clearance each side (l)		
16	Bridge Roadway Width - Existing, ft.	Lane widths + offset (m)		

Note: This table and corresponding figure contain recommended design values for various roadway features. It is recognized that the values contained in this table may not be achievable in certain situations due to economic, environmental, geometric, right of way, or other constraints. The designer may deviate from these values with the approval of the Jurisdictional Engineer. Design exceptions should be prepared when appropriate.

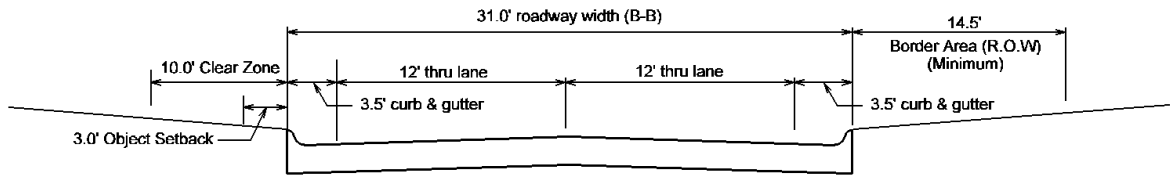
- a. Design speed should be equal to or greater than posted speed.
- b. Refer to Section 5I-3 for additional information on access spacing
- c. Turn lane widths are to face of curb. No additional curb offset is required.
- d. For an urban section, a 2-foot offset from edge of lane to the face of a 6-inch wide, 6-inch high vertical curb is used (2.5 ft from edge of traveled lane to back of curb). This applies to outside curbs only. No offset is required to median curb for design speeds less than 45mph.
- e. Curb and gutter width is included as part of the parking lane width when parking is allowed.
- f. Parking allowed only upon special approval of the Jurisdictional Engineer.
- g. Based upon design speed. See Section 5C-2 for details.
- h. Based upon design speed. See Section 5C-2 for more information regarding stopping sight distance.
- i. Clear Zone for curbed section shown (measured from back of curb). Refer to Section 5C-2 for rural roads and additional information on Clear Zone.
- j. Measured from back of curb. Refer to Section 5C-2 for additional information on Object Setback
- k. Refer to Section 5C-2 for additional information on Border Area.
- l. Values shown do not include parking, medians, or sidewalk. Present and future need for sidewalk(s) should be evaluated for each bridge.
- m. Design loading should be sufficient to accommodate legal loads.

Design Year ADT	Offset – each side (ft)
0-750	0
751-2000	1
2001-4000	2
> 4000	3

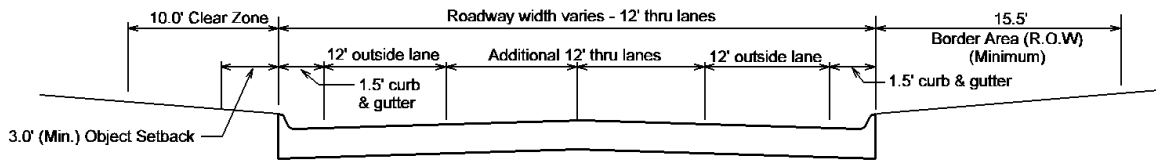
**Figure 3: Minor (non-primary) arterials
(35-40 mph design speeds)**



**Multiple Lanes - No Parking
Commercial / Industrial**



**2 Lanes - No Parking
Commercial / Industrial - Fringe / Residential**



**Multiple Lanes - No Parking
Fringe / Residential**

Note: For new and completely reconstructed rural roadways in urban areas, refer to the Iowa DOT Instructional Memorandum (I.M.) 3.210 for applicable design criteria.

For Rehabilitation, Restoration, and Resurfacing (3R) projects on rural roadways in urban areas, refer to the Iowa DOT Instructional Memorandum (I.M.) 3.214 for applicable design criteria

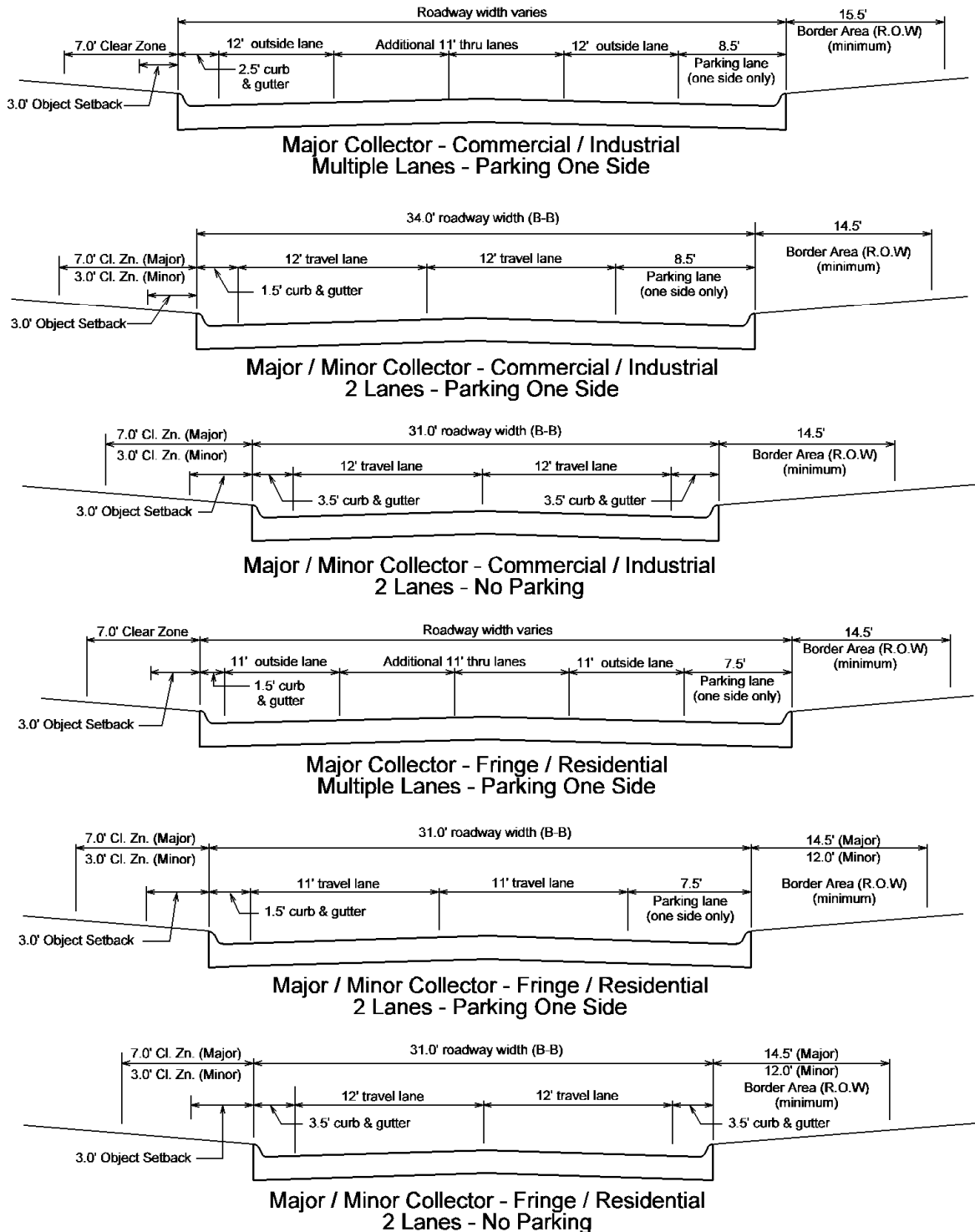
Table 3: Urban design criteria
Minor (non-primary) arterials

AREA Refer to Section 5C-2		REDUCED SPEED URBAN FACILITIES				FRINGE OR RESIDENTIAL			
1	Min. Design Speed, mph (a)	40		35		40		35	
2	LOS	D	D	D	D	D	D	D	D
3	Desirable Access Spacing, ft	Varies by location, see Section 5I-3 for Access Spacing							
4	Number of Traffic Lanes(b)	Multiple	2	Multiple	2	Multiple	2	Multiple	2
5	Travel Lane Width, ft. (Min)								
	A. Outside Lane	12	12	12	12	12	12	12	12
	B. Additional Thru Lanes	12	---	12	---	12	---	12	---
	C. Left / Right Turn Lane (c)	12	---	12	---	12	---	12	---
6	Curb and Gutter Width, ft.,	2.5	3.5	2.5	3.5	1.5	3.5	1.5	3.5
7	Parking, ft.								
	A. Parking Allowed	None	None	None	None	None	None	None	None
	B. Parking lane width	---	---	---	---	---	---	---	---
8	Median Width at Narrowest Pt., ft.								
	A. Raised Curb (Face to Face)	4	---	4	---	4	---	4	---
	B. Two Way Left Turns	14	---	14	---	14	---	14	---
9	Roadway Width (without median), ft.								
	A. With Parking	---	---	---	---	---	---	---	---
	B. Without parking	Varies	31	Varies	31	Varies	31	Varies	31
10	Vertical Alignment (d)								
	A. Crest; Minimum / Desirable k	44 / 70	44/70	29 / 50	29/50	44/70	44/70	29 / 50	29/50
	B. Sag; Minimum k	64	64	49	49	64	64	49	49
	C. Maximum Gradient, percent (e)	6	6	7	7	6	6	7	7
	D. Minimum Gradient, percent	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
11	Horizontal Alignment (Min. Radius), ft.	Refer to Section 5C-2, Figure 4							
12	Stopping Sight Distance, ft. (f)	305	305	250	250	305	305	250	250
13	Clear Zone, ft (g)	10	10	10	10	10	10	10	10
14	Object Setback; ft (h)	3	3	3	3	3	3	3	3
15	Desirable Border Area, R.O.W. (from back of Curb), ft. (i)	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
16	Bridge Roadway Width - New, ft. (j)	Varies	32	Varies	32	Varies	32	Varies	32
17	Bridge Roadway Width - Existing, ft. (k)	Varies	24	Varies	24	Varies	24	Varies	24

Note: This table and corresponding figure contain recommended design values for various roadway features. It is recognized that the values contained in this table may not be achievable in certain situations due to economic, environmental, geometric, right of way, or other constraints. The designer may deviate from these values with the approval of the Jurisdictional Engineer. Design exceptions should be prepared when appropriate.

- a. Design speed should be greater than or equal to posted speed. (Design speed is typically 5 mph greater than posted speed).
- b. Actual number of lanes based on highway capacity. More than four lanes, refer to AASHTO "Policy" (Green Book)
- c. Turn lane widths are to face of curb. No additional curb offset is required.
- d. Based upon design speed. See Section 5C-2 for details.
- e. Maximum Gradient may be steepened by 2% for short distances (<500 ft) and on one-way down grades.
- f. Based upon design speed. See Section 5C-2 for more information regarding stopping sight distance.
- g. Measured from back of curb. Refer to Section 5C-2 for additional information on Clear Zone.
- h. Measured from back of curb. Refer to Section 5C-2 for additional information on Object Setback.
- i. Refer to Section 5C-2 for additional information on Border Area.
- j. The minimum clear roadway width across a bridge is equal to the traveled way of the road plus 4 ft clearance on each side. Values shown do not include parking, medians, or sidewalk. Minimum of one sidewalk should be extended across structure. Present and future need for sidewalk(s) should be evaluated for each bridge.
- k. Minimum bridge width should be equal to width of traveled way.

Figure 4: Collector streets
(30-40 mph design speeds)



Note: For new and completely reconstructed rural roadways in urban areas, refer to the Iowa DOT Instructional Memorandum (I.M.) 3.210 for applicable design criteria.

For Rehabilitation, Restoration, and Resurfacing (3R) projects on rural roadways in urban areas, refer to the Iowa DOT Instructional Memorandum (I.M.) 3.214 for applicable design criteria

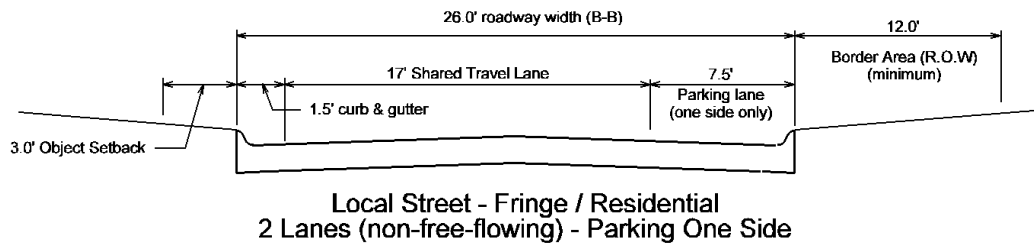
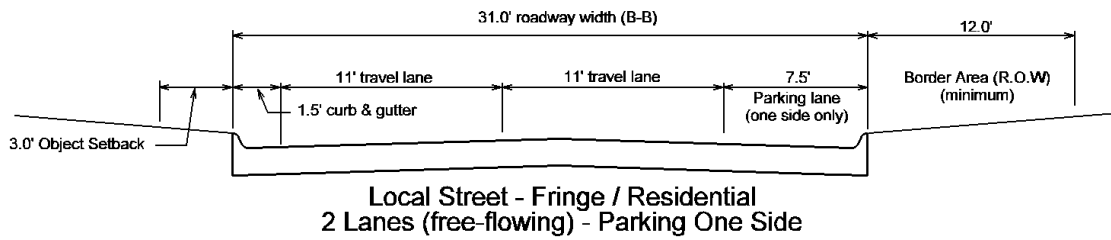
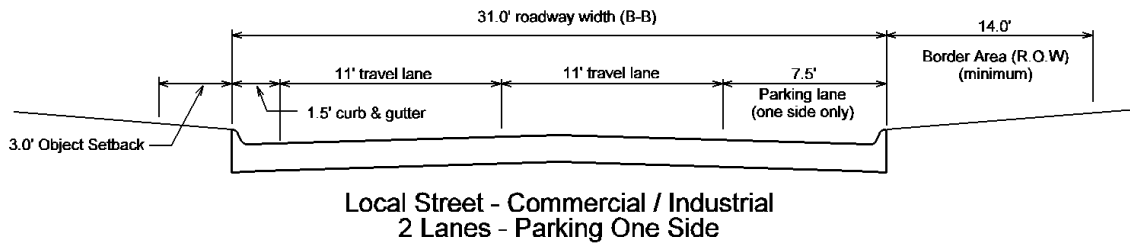
Table 4: Urban design criteria
Collector streets

	AREA Refer to Section 5C-2	MAJOR				MINOR	
		COMMERCIAL OR INDUSTRIAL		FRINGE OR RESIDENTIAL		COMMERCIAL OR INDUSTRIAL	FRINGE OR RESIDENTIAL
1	Min. Design Speed, mph (a)	40		40		35	30
2	Design Year Traffic, ADT	Approx. 2500 to 7500		Approx. 2500 to 7500		Approx. 1500 to 3500	
3	Desirable Access Spacing, ft.	See Section 5I-3 for Access Spacing					
4	Number of Traffic Lanes (b)	Multiple	2	Multiple	2	2	2
5	Travel Lane Width, ft. (Min)						
	A. Outside Lane	12	12	11	12 / 11 (c)	12	12 / 11 (c)
	B. Additional Thru Lane	11	---	11	---	---	---
	C. Left / Right Turn Lane (d)	12	12	11	11	12	11
6	Curb and Gutter Width, ft.	2.5	3.5 / 1.5 (e)	1.5	3.5 / 1.5 (e)	3.5 / 1.5 (e)	3.5 / 1.5 (e)
7	Parking, ft.						
	A. Parking Allowed	One Side	One Side	One Side	One Side	One Side	One Side
	B. Parking Lane Width, ft.	8.5	8.5	7.5	7.5	8.5	7.5
8	Median Width at Narrowest Pt., ft.						
	A. Raised Curb (Face to Face)	4	---	4	---	---	---
	B. Two Way Left Turns	14	---	14	---	---	---
9	Roadway Width (without median), ft.						
	A. With Parking	Varies	34	Varies	31	34	31
	B. Without Parking	Varies	31	Varies	31	31	31
10	Vertical Alignment (g)						
	A. Crest; Minimum / Desirable k	44 / 70	44 / 70	44 / 70	44 / 70	29 / 50	19 / 35
	B. Sag; Minimum k	64	64	64	64	49	37
	C. Maximum Gradient, percent (h)	8	8	8	8	8	8
	D. Minimum Gradient, percent	0.5	0.5	0.5	0.5	0.5	0.5
11	Horizontal Alignment (Min. Radius), ft.	Refer to Section 5C-2, Figure 4					
12	Stopping Sight Distance, ft. (i)	305	305	305	305	250	200
13	Clear Zone, ft. (j)	7	7	7	7	3	3
14	Object Setback, ft. (k)	3	3	3	3	3	3
15	Desirable Border Area, R.O.W. (From Back of Curb), ft. (l)	15.5	14.5	14.5	14.5	14.5	12
16	Bridge Roadway Width - New, ft. (m)	Varies	30	Varies	30	30	30
17	Bridge Roadway Width - Existing, ft. (n)	Varies	24	Varies	22	24	22

Note: This table and corresponding figure contain recommended design values for various roadway features. It is recognized that the values contained in this table may not be achievable in certain situations due to economic, environmental, geometric, right of way, or other constraints. The designer may deviate from these values with the approval of the Jurisdictional Engineer. Design exceptions should be prepared when appropriate.

- a. Design speed should be greater than or equal to posted speed. (Design speed is typically 5 mph greater than posted speed).
- b. Actual number of lanes based on highway capacity. More than four lanes, refer to AASHTO "Policy" (Green Book)
- c. Lane width varies. With parking = 11 ft Without parking = 12 ft
- d. Turn lane widths are to face of curb. No additional curb offset is required.
- e. Curb and Gutter width varies. With parking = 1.5 ft Without parking = 3.5 ft
- f. Curb and Gutter width included as part of the parking lane width.
- g. Based upon design speed. See Section 5C-2 for details.
- h. Maximum Gradient may be steepened by 2% for short distances (<500 ft) and on one-way down grades.
- i. Based upon design speed. See Section 5C-2 for more information regarding stopping sight distance.
- j. Refer to Section 5C-2 for additional information on Clear Zone.
- k. Refer to Section 5C-2 for additional information on Object Setback.
- l. Refer to Section 5C-2 for additional information on Border Area.
- m. The minimum clear roadway width across the bridge is the same as the curb-face-to-curb-face width of the street. Widths do not account for sidewalk or parking. Minimum of one sidewalk should be extended across structure. Present and future need for sidewalk(s) should be evaluated for each bridge.
- n. Minimum existing bridge clear width should be equal to width of traveled way.

Figure 5: Local streets



Note: For new and completely reconstructed rural roadways in urban areas, refer to the Iowa DOT Instructional Memorandum (I.M.) 3.210 for applicable design criteria.

For Rehabilitation, Restoration, and Resurfacing (3R) projects on rural roadways in urban areas, refer to the Iowa DOT Instructional Memorandum (I.M.) 3.214 for applicable design criteria

Table 5: Urban design criteria
Local streets

	AREA Refer to Section 5C-2	COMMERCIAL OR INDUSTRIAL	FRINGE OR RESIDENTIAL	
1	Min. Design Speed, mph (a)	30	30	
2	Design Year Traffic	Approx. 300 to 1500	Approx. 300 to 1500	
3	Desirable Access Spacing	See Section 5I-3 for Access Spacing		
4	Number of Traffic Lanes (b)	2	2 (c)	2 (c)
5	Travel Lane Width, ft. (Min)	11	11	17 (Shared Lane)
	A. Outside Lane	---	---	---
	B. Additional Thru Lane	---	---	---
	C. Left / Right Turn Lane (d)	11	11	11
6	Curb and Gutter Width, ft.	1.5	1.5	1.5
7	Parking, ft.			
	A. Parking Allowed	One Side	One Side	One Side (e)
	B. Parking Lane Width, ft. (f)	7.5	7.5	7.5
8	Median Width at Narrowest Pt., ft.			
	A. Raised Curb (Face to Face)	---	---	---
	B. Two Way Left Turns	---	---	---
9	Roadway Width (without median), ft.			
	A. With Parking	31	31	26 (e)
	B. Without Parking	---	---	---
10	Vertical Alignment (g)			
	A. Crest; Minimum / Desirable k	19 / 35	19 / 35	19 / 35
	B. Sag; Minimum k	37	37	37
	C. Maximum Gradient, percent (h)	9	9	9
	D. Minimum Gradient, percent	0.5	0.5	0.5
11	Horizontal Alignment (Minimum Radius) ft. (i)	300	300	300
12	Stopping Sight Distance, ft. (j)	200	200	200
13	Object Setback, ft. (k)	3	3	3
14	Desirable Border Area, R.O.W. (From Back of Curb), ft. (l)	14	12	12
15	Cul-De-Sac (ft.)			
	A. Radius	45	45	45
	B. ROW Radius	55	57	57
16	Bridge Roadway Width - New, ft. (m)	24	24	24
17	Bridge Roadway Width - Existing, ft. (n)	22	22	22

Note: This table and corresponding figure contain recommended design values for various roadway features. It is recognized that the values contained in this table may not be achievable in certain situations due to economic, environmental, geometric, right of way, or other constraints. The designer may deviate from these values with the approval of the Jurisdictional Engineer. Design exceptions should be prepared when appropriate.

- a. Design speed should be greater than or equal to posted speed. (Design speed is typically 5 mph greater than posted speed).
- b. Actual number of lanes based on highway capacity. More than four lanes, refer to AASHTO "Policy" (Green Book).
- c. For typical low volume residential streets, two free-flowing lanes are not required and a 26 ft roadway may be used where parking is allowed on one side only. For higher volume residential streets, which require two continuously free-flowing traffic lanes, a 31 ft roadway should be used.
- d. Turn lane widths are to face of curb. No additional curb offset is required.
- e. Some jurisdictions allow parking on both sides of the street. When this occurs, each jurisdiction will set their own standards to allow for proper clearances including passage of large emergency vehicles. Minimum street width for two sided parking should be greater than 26 ft and will be established by the Jurisdictional Engineer.
- f. Curb and Gutter width is included as part of the parking lane width.
- g. Based upon design speed. See Section 5C-2 for details.
- h. Maximum Gradient may be steepened by 2% for short distances (<500 ft) and on one-way down grades.
- i. Minimum radius based upon -2% super elevation and 30 mph design speed.
- j. Based upon design speed. See Section 5C-2 for more information regarding stopping sight distance.
- k. Refer to Section 5C-2 for additional information on Object Setback.
- l. Refer to Section 5C-2 for additional information on Border Area.
- m. The minimum clear roadway width across the bridge should be the same as the curb-face-to-curb-face width of the street. Widths do not account for sidewalk or parking. Minimum of one sidewalk should be extended across structure. Present and future need for sidewalk(s) should be evaluated for each bridge.
- n. Minimum existing bridge clear width should be equal to width of traveled way, but in no case shall it be less than 22 ft.