

ORDINANCE NO. 23225-06-2018

AN ORDINANCE AMENDING THE SUBDIVISION ORDINANCE OF THE CITY OF FORT WORTH, BEING ORDINANCE NO. 17154, CODIFIED AS CHAPTER 31 OF THE CODE OF THE CITY OF FORT WORTH, BY AMENDING ARTICLE VI, "SUBDIVISION DESIGN STANDARDS"; AMENDING SECTION 31-101, TO ADD SUBSECTION (G) COLLECTOR NETWORK PLANNING; AMENDING SECTION 31-102, "STREETS AND BLOCK ARRANGEMENT," TO AMEND PROVISIONS FOR INTERCONNECTIVITY OF NEIGHBORHOODS; AND SECTION 31-106, "STREET DESIGN STANDARDS," TO ADD REFERENCE TO "CITY OF FORT WORTH ACCESS MANAGEMENT POLICY" AND REVISE TABLE; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, on September 12, 2006, the City Council of Fort Worth adopted Ordinance Number 17154 which combined the Subdivision Regulations of Chapter 31 of the City Code and the Plan Commission Rules and Regulations into one revised subdivision ordinance adopted by the City Council as Appendix C, "Subdivision Ordinance" to the City Code; and

WHEREAS, on October 30, 2007, the City Council adopted Ordinance Number 17851 which repealed the contents of Chapter 31 "Subdivision Regulations," replaced with the contents of Appendix C, "Subdivision Ordinance" and repealed Appendix C; and

WHEREAS, the City Council of the City of Fort Worth has adopted five strategic goals; and

WHEREAS, amongst the City Council's adopted strategic goals is a desire to improve mobility and air quality and to promote orderly and sustainable development; and

WHEREAS, in support of orderly and sustainable development, access management of rights-of-way also has an overall positive economic impact on businesses in access-controlled corridors; and

WHEREAS, the proposed amendments provide for and manage access to land development, while preserving the regional flow of traffic in terms of safety, capacity, and speed; and

WHEREAS, said changes to the Subdivision Ordinance will apply to new applications; and

WHEREAS, the City Plan Commission has reviewed the above proposed amendments and recommends amending the Subdivision Ordinance as proposed.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORT WORTH, TEXAS

SECTION 1.

Article V, “Subdivision General Standards”; Section 31-81, “Generally” of Chapter 31, “the Subdivision Ordinance” of the City of Fort Worth, is amended to revise Subsection (b)(5), “Incorporation of adopted design standards and policy manuals to add “e. Access Management Policy” to read as follows:

SEC. 31-81 GENERALLY.

(b) These subdivision regulations shall be administered in accordance with the following:

(5) *Incorporation of adopted design standards and policy manuals.*

e. Access Management Policy. The city’s Access Management Policy is incorporated by reference as if fully set forth in these regulations.

SECTION 2.

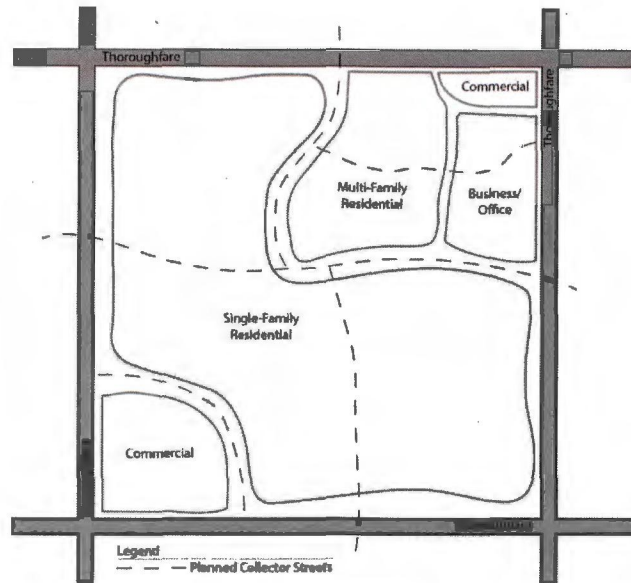
Article VI, “Subdivision Design Standards”; Section 31-101, “Access” of Chapter 31, “the Subdivision Ordinance” of the City of Fort Worth, is amended to add subsection (g) to add collector network planning and figures, to read as follows:

Sec. 31-101 ACCESS.

(g) **Collector network planning.** All new preliminary plats shall show a collector network consistent with these requirements. Final minor plats contained within or adjacent to the planned or existing collector network shall connect with the collector network.

- Collector design is a careful balance between providing direct connectivity and attracting no more traffic than is appropriate. The primary means of achieving this balance

is through proper subdivision network layout design, which considers each internal roadway's tributary area (the streets and homes that feed it), the daily number of vehicle trips generated by a typical home, and the resulting expected daily traffic on the key internal streets.



Example Collector Street Network

- Collector streets shall provide continuous access between thoroughfares, but discourage long-distance through traffic. The definition of long distance varies with context; figure 4 indicates the target trip length and upper-limit traffic volumes for each context.
- Collector streets serve both residential and non-residential land-uses. However, they shall be planned and designed to discourage non-residential (i.e. commercial, industrial) traffic intrusion into residential areas.

Figure 4

	Residential areas		
	A. With fronting single-family homes*	B. No fronting single-family homes	C. Non-residential / mixed-use areas
Typical trip length	≤ ½ mile	≤ 1mile	up to 2 miles
Upper limit daily traffic volume (both directions)	2,000	5,000	10,000
Applicable design features to promote these characteristics (see text)	Curvilinear design; traffic-calming treatments	Roundabouts; discontinuities	Curvilinear design; roundabouts
On-street parking	Required	Allowed but not required	Allowed but not required

** Collectors without fronting homes are preferred.*

(1) Collectors shall only terminate at an intersection with a thoroughfare or another collector except when the collector is a stub, that when ultimately finished will make this connection.

(2) Collector streets shall connect to thoroughfares at full median opening locations in accordance with the requirements of the Access Management Manual where feasible. The connection shall also be made at a location suitable for a future traffic signal installation.

(3) Collectors shall align across thoroughfares rather than forming offset intersections (to promote safe, efficient traffic flow on the thoroughfare). The City Plan Commission may grant a waiver if analysis determines that applying this approach will encourage cut-through traffic and/or undesirably long trips on a specific collector. Figure 4 indicates the typical trip lengths.

(4) At jurisdictional boundaries, collector planning and design must coordinate with the adjacent jurisdiction to maximize the ability to meet Fort Worth’s policies and needs while supporting the adjacent jurisdiction’s policies and needs.

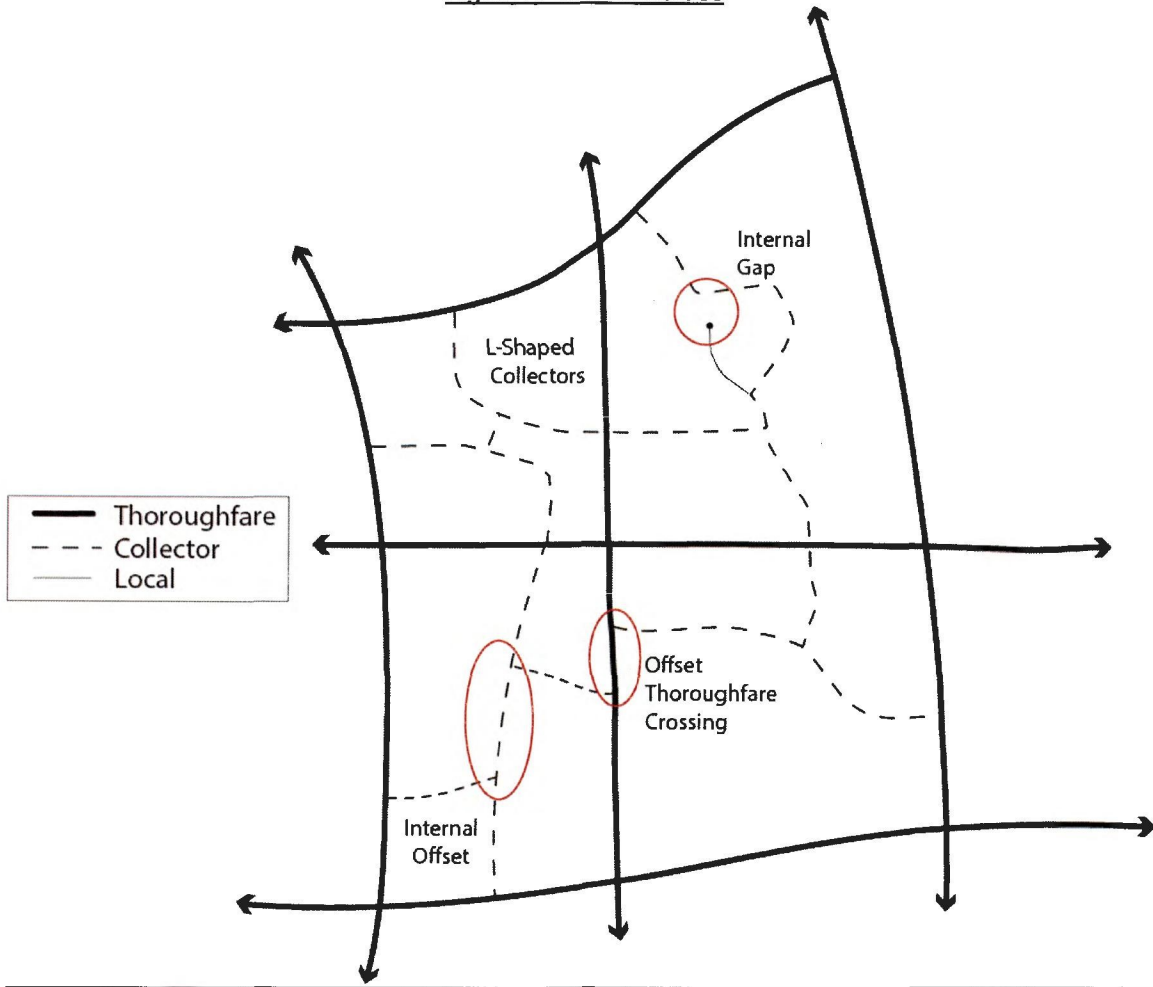
(5) Design features shall encourage speeds of 25 mph or less and provide visual cues to drivers that the street is not intended for long-distance trips.

(6) If a subdivision network layout alone is insufficient to achieve the characteristics above, especially on collectors fronted by homes, special design approaches shall be incorporated. Traffic engineering studies can predict or estimate the effects of many of the design approaches described below, especially the effects on traffic volumes. If these measures are not sufficient to achieve the desired characteristics, then larger building

setbacks and/or landscaping along the street shall be considered to buffer residences fronting on higher-volume collector streets. Design features to discourage speeding and long-distance trips:

- Curvilinear street design: Curvilinear design reduces speeds, gives the road a meandering feel, and supplies a visual cue (if curvature is visible from intersections) that speeds are lower and unsuitable for cut-through traffic.
- Neighborhood entry features: For residential collectors that have fronting homes and that cross thoroughfares, neighborhood entry features – including treed entry medians and entry signage – send visual cues that the street is intended for neither through traffic nor desirable for that purpose.
- Traffic calming measures: These measures are most appropriate on residential collectors with fronting homes. They can include such items as on-street parking, roundabouts, mini-roundabouts, chicanes, and raised crosswalks.
- Discontinuities: The design approaches listed above are generally sufficient to discourage cut-through traffic and promote desirable collector function. For cases in which these measures are deemed through analysis to be inadequate, discontinuities (Figure 5) may be considered. Discontinuities generally make thoroughfare access unnecessarily difficult for local travelers. Therefore, the discontinuity treatments described below shall only be considered if the above design approaches are shown, via traffic engineering analysis, to be unable to provide volume and trip-length limits appropriate to their context as described in figure 4.
 - L-shaped collectors: This approach discourages cut-through traffic with a collector that connects intersecting thoroughfares rather than parallel thoroughfares.
 - Offset thoroughfare crossing: This approach puts a jog in the collector where it intersects the thoroughfare. This approach decreases pedestrian access and comfort and increases the number of intersections on the thoroughfare.
 - Internal offset: This approach puts a jog in between the thoroughfares connected by the collector.
 - Internal gap: This approach creates deliberately circuitous navigation through the neighborhood.

Figure 5: Discontinuities



(7) Collector streets shall be spaced according to figure 6, subject to consistency with the Access Management Policy, unless natural or man-made features pose constraints. When planning and designing a collector layout:

- Avoid steep slopes and otherwise unsuitable topography
- Minimize impact to the built environment
- Minimize wetland and floodplain impacts (i.e., identify 90-degree stream crossings at the narrowest point possible), critical watershed areas, and stream crossings
- Avoid railroad crossings and bisecting parks
- Minimize impacts to utilities (e.g., gas wells)

(8) The City Plan Commission may grant waivers to these requirements only upon finding that the development is constrained by topographic features, existing development, or other impassible features. The City Traffic Engineer or designee may administratively modify the spacing requirements within 10% or 100 feet (whichever is less) where it is impractical to meet the standards.

Figure 6

Land Use		Dwelling Units/Acre	Access Function	Desired Maximum Spacing between Collector Intersections along a Thoroughfare (feet)
	Rural	<2	N.A.	N.A.
Residential	Suburban	2-4	High	1,500 – 3,000
	Urban	>4	High	750 – 1,500
Non-Residential and Mixed-Use		n.a.	Medium	750 – 1,500

SECTION 3.

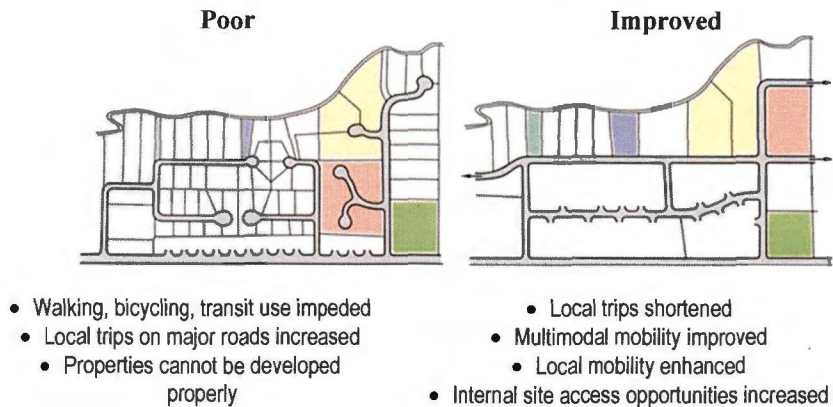
Article VI, “Subdivision Design Standards”; Section 31-102, “Streets and Block Arrangements” of Chapter 31, “the Subdivision Ordinance” of the City of Fort Worth, is amended to revise subsection (b)(2), “Interconnectivity of neighborhoods” to add a figure and to read as follows:

Sec. 31-102 STREETS AND BLOCKS ARRANGEMENTS.

(b)(2) *Interconnectivity of neighborhoods.* Fragmented street systems impede emergency access and increase the number and length of individual trips. New residential subdivisions shall be designed to coordinate with existing, proposed, and anticipated streets. Local and collector streets shall be extended to the tract boundary to provide future connection with adjoining un-platted lands. In instances where the street stub-out would traverse an adjacent 100-year floodplain, the spacing of the street crossings shall not exceed one-half mile. Where the street crossing is in a public park, the design of the crossing shall provide for pedestrian/bicycle access under the street, unless the depth of the creek below the roadway makes such a grade separation infeasible. Subdivisions shall be designed to connect to adjacent existing stub-out streets as provided on an approved preliminary or final plat. Subdivisions shall be designed to discourage the use of local streets by non-local traffic while maintaining the connectivity with the surrounding system of roadways. This

can be accomplished using modified grid systems, T-intersections, roadway jogs, or other appropriate traffic calming or roadway design measures.

Figure 7: Street Connectivity



SECTION 4.

Article VI, “Subdivision Design Standards”; Section 31-103, “Lot Types and Design” of Chapter 31, “the Subdivision Ordinance” of the City of Fort Worth, is amended to revise subsections (b) “Residential lot arrangements” to amend “4. Alternative lot platting arrangements: double frontage residential lots (a.k.a. reverse frontage lots)” to revise the language in item “c. Arterial street (primary) lot frontage” and add “5. Residential corner lots” to read as follows:

Sec. 31-103 LOT TYPES AND DESIGN.

(b) Residential lot arrangements

(4) **Alternative lot platting arrangements: double frontage residential lots (a.k.a. reverse frontage lots).** Double frontage residential lots may only be platted providing such lots have their primary frontage onto a residential street or collector street and their opposite (secondary non-access) frontage abutting an arterial street. Such lots shall be platted, screened and landscaped in accordance with the following requirements:

...

c. *Arterial street (primary) lot frontage.* Direct residential driveway access to individual one-family and two-family dwellings shall not be allowed on any arterial. The City Plan Commission may grant a waiver if such lots are a minimum of 150 feet in width or greater at the building setback line and contain a circular access drive with approval by the City Traffic Engineer and egress per TPW design requirements.

(5) *Residential corner lots.* Residential corner lots adjacent to arterials shall obtain access from the collector or local street, and access shall be placed as far from the arterial intersection as possible to achieve the maximum available corner clearance.

SECTION 5.

Article VI, "Subdivision Design Standards"; Section 31-106, "Street Design Standards" of Chapter 31, "the Subdivision Ordinance" of the City of Fort Worth, is amended to revise subsection A. Street Types, (7) Collector Street (C) to revise language in "a. Service" item 3 to refer to Section 31-101(g), revise the language in "b. Average daily traffic volumes" from 8,000 to 10,000 and amend the "Table of Geometric Street Design Standards," to revise the language in items 11, 16, 23, 24, 25 and the legend in the table, to read as follows:

Sec. 31-106 STREET DESIGN STANDARDS

(7) *Collector street (C).*

a. *Service.*

1. The collector street system differs from the arterial systems in that facilities on the collector system may penetrate neighborhoods, distributing trips from the arterials through the neighborhood area to the ultimate destination such as a park, elementary, or middle school, which may be on a residential street or a collector street. Conversely, the collector Street also collects traffic from residential streets in the neighborhood and channels it into the arterial systems. In some cases, due to the design of the overall street system, a minor amount of through traffic may be carried on some collector streets.

2. The collector provides for both land access service and local traffic movements within residential neighborhoods, commercial areas and industrial areas.

3. Street layout shall provide for collector streets in areas between arterial streets. See Section 31-101 (g)

b. *Average daily traffic volumes.* Average traffic volumes on collector streets should not exceed 5,000 vehicles per day in residential areas, and 810,000 vehicles per day in commercial or industrial areas.

b. **Table of Geometric Street Design Standards**

Item	Design Standard	Where also found	Cul de Sac & Ltd. Local (CS & LL)	Urban Local (UL)	Collector-Standard Undivided (C)	Collector Standard-TWTL	Industrial
1.	Right-of-Way (minimum width)	MTP	50ft. (CS) 40 ft. (LL)	50 ft.	60 ft.	66 ft.	80 ft.
2.	Parkway Width (each side of street)	MTP	10.5ft (CS) 7.5ft. (LL)	10.5 ft.	See MTP	See MTP	See MTP
3.	Sidewalk Width (each side of street)	MTP	5 ft.	5 ft.	6-10 ft.	6-10 ft.	10 ft.
4.	Paved Surface (F-F of Curb)	MTP	28 ft. (CS) 24 ft. (LL)	28 ft.	See MTP	See MTP	See MTP
5.	Roadway Width (B-B of Curb)	MTP	29 ft. (CS) 25 ft. (LL)	29 ft.	See MTP	See MTP	See MTP
6.	Traffic Lanes (No. and Width)	MTP	2@10'(CS) 2@ 12'(LL)	2 @ 10 ft.	See MTP	See MTP	2 @ 12 ft. & TWLTL @ 11 ft.
7.	Median Width (B -B of curb)	MTP	n/a	n/a	n/a		
8.	Parking Lanes (No. and Width)	MTP	Staggered	Staggered	See MTP	See MTP	See MTP
9.	Horizontal Centerline Radius (normal x-section)	BB	150 ft.	150 ft.	460 ft.		
10.	Target Speed (mph)	MTP	20-25	25	25	25	25
11.	Minimum Street Spacing (CL-CL)	AM/Sub Code	135 ft.	135 ft.	See AM		

12.	Minimum Tangent Between Curves	BB	50 ft.	50 ft.	100 ft.		
	Tangent at Intersections: (ROW to ROW)	BB					
13.	b) Collector/Arterial	BB	-	-	150 ft.		
	c) Collector/Collector	BB	-	-	100 ft.		
	d) Local/Collector	BB	50 ft.	50 ft.	-		
	e) Local/Local	BB	50 ft.	50 ft.	-		
	f) Ltd Loc/Ltd Loc	BB	40 ft.	-	-		
14.	Vertical Clearance (From Rdwy. Surface)	BB/AASHTO	14 ft.	14 ft.	14 ft.		
15.	Intersection Safe Site Distance	BB/AASHTO	350 ft.	350 ft.	525 ft.		
16.	Median Openings (Spacing)	AM	n/a	n/a	n/a		
17.	Max. Intersection Deviation Angle Allowed -from 90°	BB/Sub Code	5°	5°	5°		
18.	Mid-Block horizontal street change / departure angle shall not be less than:	BB/Sub Code	60°	60°	60°		
19.	Percent Gradient of Streets & Alleys:						
	a. Minimum %	BB	0.5	0.5	0.5		
	b. Maximum %	BB	10.0	10.0	8.0		

20.	Reverse Curve: Minimum Tangent Separation Distance	BB/Sub Code	50 ft.	50 ft.	150 ft.		
21.	Minimum Cul-de-Sac Turn-Around Dimensions (Public & Private Streets)						
	<i>a. S/F and 2/F Districts:</i>						
	1) ROW Radius	BB	50 ft.	50 ft.			
	2) Paving -Radius (F-F)	BB	40 ft.	40 ft.			
	<i>b. Other Zoned Districts:</i>						
	1) ROW Radius	BB	60 ft.	60 ft.			
	2) Paving Radius (B/B)	BB	50 ft.	50 ft.			
22.	No. of Left Turn Lanes per Arterial Street Intersection Leg	AM	-	-	-		
23.	Maximum ADT Traffic Design Volume	Sub Code	1,000 to 2,000	2,500	10,000		
24.	Design Trip Length	Sub Code	See Fig 4	See Fig 4	See Fig 4		
25.	Access Control	AM	None	None	None		
<p>Legend: Referenced abbreviations include: TWLTL - Two-way-left-turn lane; BB - Traffic Engineering Design Standards and Policy Guidelines (aka Brown Book); MTP - Master Thoroughfare Plan; AASHTO - American Association of State Highway and Transportation Officials; AM – Access Management; and Sub Code - Subdivision Ordinance</p>							

SECTION 6.

Article VI, "Subdivision Design Standards"; Section 31-106, "Street Design Standards" of Chapter 31, "the Subdivision Ordinance" of the City of Fort Worth, is amended to amend subsection (c) "General Street Design Standards" to revise item "(17) Horizontal residential street alignment standards" to renumber the figure and all remaining figures in subsection (c), revise "(18) Limited local residential and urban local residential and collector street intersection spacing intervals with higher order streets" to delete certain language and replace with reference to the "City of Fort Worth Access Management Policy" and deleting Figure 9 and revise item (19) "Median spacing and location" to delete certain language and add reference to "City of Fort Worth Access Management Policy", to read as follows:

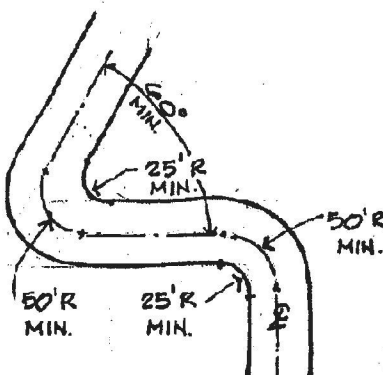
Sec. 31-106 STREET DESIGN STANDARDS

(c) *General street design standards.*

(17) *Horizontal residential street alignment standards.*

a. *Ninety-degree directional alignment change.* A 90-degree (+/- five degrees) bend or elbow in a horizontal alignment change of an urban local residential street shall have an interior acute angle right-of-way radius of not less than 25 feet.

b. *Sixty to 89-degree directional alignment change.* A continuous street with a horizontal alignment bend having an acute angle between 60 and 89 degrees, measured at the centerline intersection of the bend, shall have a centerline radius of not less than 50 feet. For reasons of safe traffic flow and safe site distances, horizontal alignment changes less than 60 degrees are prohibited.



**Directional Alignment Change
Figure 8**

(18) *Limited local residential and urban local residential and collector street intersection spacing intervals with higher order streets.* Public and private local streets

and collector streets shall be designed consistent with the City of Fort Worth Access Management Policy.

(19) ***Median spacing and location.*** Proposed median openings along arterial streets may only be shown on preliminary plats consistent with the City of Fort Worth Access Management Policy. The location and design of all median openings shall be approved by TPW.

SECTION 7.

This ordinance shall be cumulative of all provisions of ordinances and of the Code of the City of Fort Worth, Texas (2015), as amended, except where the provisions of this ordinance are in direct conflict with the provisions of such ordinances and such Code, in which event conflicting provisions of such ordinances and such Code are hereby repealed.

SECTION 8.

It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and, if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 9.

All rights and remedies of the City of Fort Worth, Texas, are expressly saved as to any and all violations of the provisions of Code of the City of Fort Worth which have accrued at the time of the effective date of this ordinance and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

SECTION 10.

Any person, firm, or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this ordinance shall be fined not more than Two Thousand Dollars (\$2000.00) for each offense. Each day that a violation exists shall constitute a separate offense.

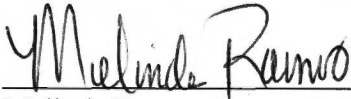
SECTION 11.

The City Secretary of the City of Fort Worth, Texas, is hereby directed to publish the caption, penalty clause and effective date of this ordinance for two (2) days in the official newspaper of the City of Fort Worth, Texas, as authorized by Section 52.013, Texas Local Government Code.

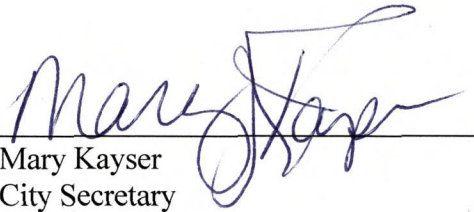
SECTION 12.

This ordinance shall take effect on August 1, 2018.

APPROVED AS TO FORM AND LEGALITY:



Melinda Ramos
Senior Assistant City Attorney



Mary Kayser
City Secretary

ADOPTED: June 5, 2018

EFFECTIVE: August 1, 2018

City of Fort Worth, Texas
Mayor and Council Communication

COUNCIL ACTION: Approved on 6/5/2018 - Ordinance No. 23225-06-2018

DATE: Tuesday, June 5, 2018

REFERENCE NO.: **G-19287

LOG NAME: 06COLLECTORACCESSMANAGEMENT

SUBJECT:

Adopt Ordinance Amending Chapter 31 of the Subdivision Ordinance, Article VI, Addressing Collector Network Planning and Adopt Access Management Policy (ALL COUNCIL DISTRICTS)

RECOMMENDATION:

It is recommended that the City Council:

1. Adopt the attached ordinance amending the Subdivision Ordinance to address Collector Network Planning; and
 2. Adopt a policy on Access Management, in accordance with the Comprehensive Plan, Master Thoroughfare Plan, Walk Fort Worth Plan, and Bike Fort Worth Plan.
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DISCUSSION:

In 2014, the City Council authorized a professional services contract with HDR, Inc. to complete an update of the Master Thoroughfare Plan (MTP), to develop and recommend access management guidelines, and to perform other transportation planning tasks intended to support the new MTP (M&C C-26883). The updated MTP was adopted in May of 2016, after which time staff and the consultant team began developing a draft access management and collector street network policy. The proposed access management policy is contained in a standalone document, while collector network planning has been incorporated into the Subdivision Ordinance.

The purpose of the Subdivision Ordinance text amendment regarding collector network planning is to ensure the establishment of a network of collector streets as necessary to support the thoroughfare network, advance the complete streets vision, and enhance connectivity and mobility. The proposed text amendment includes provisions related to applicability, design, street spacing, mitigation of cut-through traffic, and administrative and City Plan Commission waivers.

Access management is the coordinated planning, regulation, and design of access to and from roadways, with the goal of improving the safety and operation of the City's street network. An effective access management program can reduce crashes, increase roadway capacity, and reduce travel time delay. The proposed Access Management policy includes requirements for driveway, intersection, street, and median-opening spacings, auxiliary turn lanes, and joint- and cross-access. The policy also provides guidance on application to legal non-conforming access, and provides an administrative review process and flexibility for constrained development sites.

Staff has coordinated with multiple stakeholder groups during the development of the proposed policies, including the Development Advisory Committee, the Real Estate Council of Greater Fort Worth, and the Greater Fort Worth Builders Association. The Infrastructure and Transportation Committee was briefed in February 2018 and the City Plan Commission unanimously recommended approval to the City Council at their March meeting.

This M&C does not request approval of a contract with a business entity.

FISCAL INFORMATION / CERTIFICATION:

The Director of Finance certifies that approval of these recommendations will have no material effect on City funds.

FUND IDENTIFIERS (FIDs):

TO

Fund	Department ID	Account	Project ID	Program	Activity	Budget Year	Reference # (Chartfield 2)	Amount
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FROM

Fund	Department ID	Account	Project ID	Program	Activity	Budget Year	Reference # (Chartfield 2)	Amount
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CERTIFICATIONS:

Submitted for City Manager's Office by:

Jay Chapa (6122)

Originating Department Head:

Randle Harwood (6101)

Additional Information Contact:

Katherine Beck (7918)
