

Chapter 9

Subdivision Design & Public Facilities

Rev. 03-20-07

Section 9.1 Purpose of This Chapter

The purpose of this Chapter is to establish design guidelines necessary for proper layout of a subdivision and to establish the public improvement requirements for the development of a subdivision, but more specifically to:

1. ensure that public facilities and services are available to all subdivisions in the City; and
2. establish reasonable standards of design for public facilities.

Section 9.2 Authorization for Adoption of This Chapter

The regulations contained in this Chapter have been adopted under the following authority:

1. *Chapter 212 – Municipal Regulation of Subdivisions and Property Development of the Texas Local Government Code*, which authorizes a municipality to adopt rules governing plats and subdivisions of land within the municipality's jurisdiction.
2. *Chapter 51 – General Powers of Municipalities of the Texas Local Government Code*, which authorizes a municipality to adopt ordinances, rules, or police regulations that are for the good government, peace, or the trade and commerce of the municipality.
3. *The Home Rule Charter of the City of Colleyville*, which authorizes the City Council to exercise all powers granted to municipalities by the Constitution or the laws of the State of Texas.

Section 9.3 Variances and Appeals

Any person seeking approval of a development as required by this Land Development Code may request a waiver from a requirement contained in this Chapter, or appeal a decision of an Administrative Official by submitting a request using the procedures described in *Chapter 1 – General Provisions* of this Land Development Code.

Section 9.4 Definitions

Definitions applicable to this Chapter may be found in *Chapter 2 – Definitions* of this Land Development Code.

Section 9.5 Subdivision Design Guidelines

Every subdivision plat shall be reviewed for conformance with the design guidelines contained in this Chapter. The City recognizes that suitability characteristics vary from site to site and when approving a subdivision plat the following guidelines shall be used for interpretation, application and enforcement of the design guidelines contained in this Chapter:

1. It is the intention of these subdivision design guidelines to encourage new and creative ways to develop subdivisions. Developers and city officials are encouraged to utilize new and innovative ways to improve safety, economy, tax yield, maintenance cost, response time, drainage, vehicular access, and pedestrian

passage.

2. Whenever a subdivider can demonstrate an alternative method of meeting the requirements of this Chapter, it shall be incumbent upon the city staff, the Planning and Zoning Commission, and the City Council to review the proposed variations and approve, approve with modifications, or disapprove the proposed alternatives as appropriate for the conditions.

Section 9.6 Blocks

- A. General Design – Blocks should have sufficient depth to provide for two (2) tiers of lots of appropriate depths, except that blocks adjacent to major streets, railroads or waterways shall have only one tier of lots.
- B. Block Lengths & Widths – Residential and industrial blocks generally shall be no longer than sixteen hundred (1,600) feet and business blocks no longer than one thousand (1,000) feet. Where long blocks in the vicinity of a school, park or shopping center are proposed, the City Council may require a public walkway near the middle of long blocks or opposite a street that terminates between the streets at the ends of the block.

Section 9.7 Lots

- A. Lot Arrangement – Lots shall be arranged to provide access to lots from approved streets and to avoid foreseeable difficulties due to topography and natural physical features inherent to the property.
- B. Lot Area and Dimensions – Lot area and dimensions shall be consistent with the minimum requirements of the applicable zoning district and the following:
 1. *Special Lot Width Requirement* - The width between side lot lines at their foremost points (where they intersect with the street line) shall not be less than eighty (80) percent of the required lot width. In the case of lots on the turning circle of a cul-de-sac, the width may be less than eighty (80) percent of the required lot width.
 2. The City may approve a plat which contains a lot that does not meet the minimum requirements when special conditions exist.
- C. Frontage on Public Access Required – All lots shall have frontage on a public street, except a non-residential lot may be approved when the proposed public access has been determined by City to be adequate to meet the intent of this requirement. The lot line common to the street right-of-way line shall be the front line; except that a lot may have more than one lot line common to a street right-of-way line.
- D. Access from Major Thoroughfares
 1. Residential Lots - No residential lot shall front on or derive access directly from an existing or proposed collector street, or larger, as shown on the Master Thoroughfare Plan, except where the proposed subdivision meets all the following criteria:
 - a. Where the only street frontage which may be provided to the residential lot is from a collector street due to the shape, topography, or other physical condition of the property;
 - b. The City Engineer has provided favorable recommendation; and
 - c. Where the residential lot is designed and dimensioned to permit loop driveways or on-site turnaround facilities so that vehicles head into the collector street.
 2. Non-residential Lots – Non-residential lots which have frontage onto or derive access directly from an existing or proposed collector street, or larger, as shown on the Master Thoroughfare Plan, shall have

driveway locations which *comply with the spacing requirements established elsewhere in Chapter 14 – Engineering Design Standards* of this Land Development Code.

- E. Buildable Area – Every lot shall contain a buildable area that is adequate in size for the proposed development. The buildable area shall be situated out of the 100 year flood plain.
- F. Flag Lots Prohibited – It is the policy of the City to prohibit the creation of flag lots unnecessarily, and to discourage the creation of any lot which, by virtue of its relatively great depth in relation to its width, is likely to facilitate future requests for re-subdivision to create a flag lot.
- G. Building Lines – Front building lines shall be shown on all lots in the subdivision. Building lines shall be shown along each street-facing of corner lots and through-lots. The building line shall be consistent with the requirements of the applicable zoning district, however, the City may approve a building line which differs from the zoning requirements when special conditions exist.
- H. Side Lot Lines – Where possible, all side lot lines shall be at right angles to straight street lines and radial to curved street lines.
- I. Lot Drainage and Grading
 - 1. Grading and drainage of all lots shall be designed in a manner which will allow one lot to drain across an adjacent lot and into a permanent structure, such as a concrete flume, lined channel, or proper inlet to an adequate drainage facility, or to a street right-of-way. If an approved drainage structure is not present, it will be required of the developer to construct the necessary facilities. (O-00-1261 / 12-19-00)
 - 2. Sheet flow techniques shall be used for lot to lot drainage where possible. (O-00-1261 / 12-19-00)
 - 3. Single lots shall accommodate their own drainage into an approved structure where topographic elevations allow this to occur. (O-00-1261 / 12-19-00)

Section 9.8 Waterbodies and Water Courses

If a tract being subdivided contains a water body, or portion thereof, lot lines shall be drawn so as to distribute the entire ownership of the water body among the adjacent lots. The City may approve an alternate plan provided the ownership of and responsibility for maintenance of the water body is so placed that it will not become a City responsibility. Where a watercourse separates the buildable area of a lot from the street by which it has access, provision shall be made for installation of a culvert or other structure, of design approved by the City. Any lot which includes a water body and contains a building site, contain a buildable area that is not less than the minimum buildable area for the applicable zoning district.

Section 9.9 Street Names

The developer shall submit all existing and proposed street names on any proposed subdivision plat. New street names shall be sufficiently different in sound and in spelling from other road names in the city so as to not cause confusion to the general public or for emergency response. A road which is, or planned, as a continuation of an existing road shall bear the same name.

Section 9.10 Reserve Strips and Common Areas

The creation of reserve strips shall not be permitted adjacent to a proposed street or to adjacent property in such a manner as to deny access from adjacent property to the street. No common areas shall be allowed in

a subdivision except where notation has been placed on the plat to prohibit development on the common area.

Section 9.11 Double Frontage Lots

Double frontage and reversed frontage lots shall be avoided except where necessary to provide separation of residential development from a collector street or to overcome specific disadvantages of topography and orientation. The City may require that a notation be placed on the plat to limit the facing of main structures or to limit driveway access from a collector street.

Section 9.12 General Infrastructure Policy

(02-07-06 / O-06-1562)

- A. General Requirement – The developer of a subdivision shall install all water, sewer, street, sidewalk and drainage improvements, and any other facilities required by this Land Development Code, which are necessary for the proper development of the subdivision. The design, construction and inspection of any public facilities shall be a cost to the developer, unless the City has entered into an agreement for cost sharing. All such facilities shall be designed and constructed in accordance with the criteria contained in this Land Development Code and be in conformance with the general layout of the City of Colleyville Master Land Use Plan and Capital Improvements Plan. The public facility requirement of this section shall be applicable to the upgrading of any existing facilities which do not meet current standards.
- B. Apportionment of Infrastructure Costs – As a condition of the approval of a development, the developer's portion of the costs may not exceed the amount required for infrastructure improvements that are roughly proportionate to the projected impact of the proposed development, as determined by a professional engineer, licensed in the State of Texas, and who is retained by the City of Colleyville.
1. In making the rough proportionality determination, consideration shall be given to the availability of adequate and minimum levels of public facilities and accessibility to the site for delivery of emergency services.
 2. The professional engineer making the proportionality determination may rely on categorical findings from comparable public improvement projects for establishing a cost basis. The basis used for determining estimated costs shall be revised annually on July 1 by the Colleyville Engineering Department.
 3. A developer who disputes the determination by said professional engineer may appeal to the City Council and present testimony and evidence in support of the appeal. The appeal shall be written and filed with the City Secretary within ten (10) days after the date action taken by the Planning and Zoning Commission on the development proposal. The developer shall not be required to waive the right to appeal as a condition of approval of the development project.
- C. Optional Escrow Provision – Where, in the opinion of the City, construction of a required public improvement should be deferred to a future date, the developer shall place in escrow with the City, an amount equal to the estimated cost of the improvements, as determined by the City Engineer. The Planning and Zoning Commission or City Council may consider an alternate arrangement when appropriate.
- D. City Participation in Over-Sizing – Where over-sizing of a public improvement is required by the Comprehensive Master Plan, Thoroughfare Plan, Water or Sewer Capital Improvements Plan or other planning document adopted by the City, City participation shall be in accordance with the provisions of any applicable Impact Fee Ordinance or City-Developer Agreement, which has been approved by the City Council.
- E. Public Easements – All public improvements shall be constructed within easements or rights-of-way that have been dedicated for public use. The width of an easement or right-of-way shall be in accordance with the specifications contained elsewhere in this Land Development Code.

Section 9.13 Water System Requirements

- A. Water Lines – The developer of a subdivision shall be required to install, at no cost to the City, a water distribution system adequate for domestic supply and for fire protection needs which serves each lot. The water system shall be connected to the municipal water system and be designed, sized and constructed in accordance with the city design standards and specifications contained in this Land Development Code.
- B. Fire Hydrants – The developer of a subdivision shall be required to install, at no cost to the City, a sufficient number of fire hydrants to provide fire protection to every lot in the subdivision. All structures in residential areas shall have fire hydrants within 500 feet and a 600-foot hose-lay. All structures in commercial areas shall have fire hydrants within 300 feet and a 500-foot hose-lay. The design and construction of the fire hydrant system shall be in accordance with the city design standards and specifications contained in this Land Development Code. The layout of the fire hydrant coverage shall be approved by the Fire Marshal and be in accordance with the standards of the Texas State Board of Insurance requirements. (O-00-1261 / 12-19-00)

Section 9.14 Sewage System Requirements

- A. Sewage Collection Lines – The developer of a subdivision shall be required to install, at no cost to the City, a sewage collection system adequate which shall serve each lot. The sewage collection system shall be connected to the municipal sewage system and be designed, sized and constructed in accordance with the city design standards and specifications contained in this Land Development Code.
- B. Private Sewage Treatment Systems – Private sewage treatments systems, including septic tanks, shall be prohibited except where approved by the Director of Public Services and the Tarrant County Health Department.

Section 9.15 Storm Water Facility Requirements

- A. Drainage Improvement Requirements – The developer shall provide for the design of storm water management in the proposed subdivision and shall be required to furnish, install, construct, or extend, at his own expense, all storm sewers and drainage structure facilities necessary for the proper development of the subdivision. Storm water facilities shall conform to the storm water drainage master plan and shall be designed in accordance with the design standards and specifications contained in this Land Development Code. Alternate earthen channels may be approved when in accordance with the criteria established in *Chapter 14 – Engineering Design Standards*.
- B. Drainage Easements – All public drainage facilities shall be constructed within a public drainage easement or drainage right-of-way as required by the City. The following statement of restriction shall be placed in the dedication instrument of the subdivision plat:

Drainage Easement Restriction: No construction or filling, without the written approval of the City of Colleyville shall be allowed within a drainage easement, and then only after detailed engineering plans and studies show that no flooding will result, that no obstruction to the natural flow of water will result, and subject to all owners of the property affected by such construction becoming a party to the request. Where construction is permitted, all finished floor elevations shall be a minimum of two feet above the 100-year flood elevation.

- C. Development of Flood Plain – Land within the 100-year flood plain shall be subject to the Colleyville Flood Plain Ordinance. Any land which in the natural state is subject to a 100-year flood or which cannot be properly drained shall not be subdivided, re-subdivided, or developed until receipt of evidence that the construction of specific improvements proposed by the developer can be expected to yield a usable

building site. Thereafter, the Planning and Zoning Commission may recommend approval of the plat. However, construction upon such land shall be prohibited until the specific improvements have been planned and construction completed.

D. Floodway Easements

1. Floodway easements shall be provided along natural drainage-ways and lakes reservations. Floodway easements shall encompass all areas beneath the water surface elevation of the base flood, plus such additional width as may be required to provide ingress and egress to allow maintenance of the banks and for the protection of adjacent property, as determined and required by the Director of Public Services.
2. The following statement of restrictions shall be placed in the dedication instrument of the subdivision plat:

Floodway Easement Restriction: No construction shall be allowed within a floodway easement without the written approval of the City of Colleyville, and then only after detailed engineering plans and studies show that no flooding will result.

E. Off-Site Drainage – The following provisions shall be applicable to off-site drainage of new subdivisions:

1. The developer shall be responsible for all runoff from fully developed property upstream of the proposed development.
2. Where a drainage study indicates that additional runoff from the developing property will overload downstream drainage facilities and result in hazardous conditions, the City may withhold approval of the development until appropriate provisions have been made. These provisions shall include any drainage design or construction plans necessary to accommodate the off-site drainage problem.

Section 9.16 Street Improvement Requirements

- A. General Requirement – The developer shall construct, at his expense, street facilities necessary for the proper development of the subdivision. The street system shall provide access to every lot in the subdivision and be designed and constructed in accordance with the criteria contained in this Land Development Code.
- B. Improvements to Existing Unimproved Streets and Utilities – This section is applicable to a proposed development situated adjacent to an existing street or municipal utility, which does not meet the standards contained in the Land Development Code. (0-06-1562 / 02-07-06)

1. Improvements Required – If a proposed subdivision is situated adjacent to an existing street or municipal utility, which does not meet the standards contained in this Land Development Code, the developer shall bear the cost for constructing the infrastructure improvements required by this Land Development Code in accordance with the General Infrastructure Policy contained elsewhere in the Land Development Code.

For the purpose of this regulation, the calculation used for estimating the reconstruction costs for an unimproved street shall include all street paving, curb and gutter, sidewalks, hike and bike trails, water and sewer utilities, and drainage improvements. The improvements shall be sized in accordance with the most recently approved Master Thoroughfare Plan or Capital Improvements Plan, which is applicable.

2. Escrow – The Administrative Official may recommend approval of a subdivision plat to the Approving Body conditioned upon the deposit in escrow of the estimated costs of the adjacent unimproved street and utility improvements in-lieu of the actual construction of said facilities. Any escrow, without

interest, shall be applied against any assessment for improvements levied on such property, but shall not be deemed to release such property from liability for any future costs assessed which exceed the escrow.

3. *One and Two Lot Residential Subdivisions* – If a proposed residential subdivision contains only one or two lots and the developer does not own any contiguous property, in lieu of actual construction, the developer shall pay the applicable perimeter street costs in accordance with the General Infrastructure Policy contained elsewhere in this Land Development Code for the initial one hundred feet of street frontage. The applicable perimeter street costs shall be reduced 0.2% per linear foot of frontage in excess of one hundred feet, not to exceed fifty percent of the applicable additional street frontage.

Exemption: A lot platted under this Section that contains an existing single-family dwelling at the time a subdivision plat application is filed with the City and the lot is situated with a zoning district that allows single-family residential uses, said lot shall have an automatic exemption from the perimeter street costs, provided that existing perimeter street facilities are sufficient to assure the safe, effective and orderly movement of traffic in and about the subdivision and utility services are adequate to serve the development. The following notation shall be placed on the plat: *“Any future divisions of these lots will require full compliance with the unimproved street requirements applicable at the time of any subsequent replatting.”*

Section 9.17 Street Design Criteria

- A. Street Functional Classification – All streets shall be designed in accordance with the functional classification shown on the most recent version of the Master Thoroughfare Plan and the following:

Functional Classification of Streets	
Street Classification	Functions - Uses
Local	Carries traffic from residential and commercial areas to collector streets and interconnects individual sites. Local streets carry light traffic volumes and trips are of a short duration.
Collector Major Minor	Carries traffic from local streets to arterial streets. Uses served would include medium and high density residential, limited commercial facilities, elementary schools, some small offices and as direct access within industrial parks. Collector streets also carry heavy traffic to major commercial and industrial facilities from arterial streets. Uses would include office parks, industrial parks, and community level commercial facilities.
Arterial Major Minor	The main function of an arterial is to carry traffic from on urban area to another. The arterial streets serve the major activity centers of urbanized areas. An arterial street is used for longer urban trips and carries a high portion of the total traffic with a minimum of mileage.

- B. Street Design

1. *In-General* – Streets shall be designed with due regard to topography, with due consideration of the abutting uses, and the anticipated destination of traffic and traffic volumes at full development of the neighborhood. Where necessary to prevent traffic congestion and to ease the movement of vehicles to and from principal traffic generators, additional right-of-way width or other special design shall be provided. Where topographical conditions make other treatment necessary to secure the best overall design, these standards may be modified by the approving body.
2. *Street Continuity* – The street layout shall provide for the continuation of the collector street system as shown on the Master Thoroughfare Plan. Streets shall provide connection to streets in adjacent subdivisions, but local streets shall be designed so as to discourage use by through traffic and to require the minimum number of streets necessary for convenient and safe access to property.

3. *Curvilinear Streets Encouraged* - The subdivider is encouraged to consider curvilinear, cul-de-sac, and loop street designs where such use would result in a more functional layout and not necessarily adhere to a rigid rectangular gridiron street pattern.
4. *Right-of-way Widths* – Every subdivision plat shall dedicate sufficient right-of-way to comply with the requirements of the Master Thoroughfare Plan. The right-of-way widths shall be designed for the intended use and anticipated traffic volume at optimum development of the area served. Additional right-of-way may be required at street intersections and to provide for left and right turn lanes at high-volume intersections.
5. *Cul-de-sac Lengths* – No street shall be designed as a permanent dead-end street, but shall be designed to incorporate a cul-de-sac which complies with this Section. (O-00-1261 / 12-19-00)
 - a. *Diameter* – A cul-de-sac street shall be provided at the closed end with a minimum property line right-of-way diameter of one hundred feet, and a pavement turn-around with a minimum outside diameter of eighty feet (80'). (O-00-1261 / 12-19-00)
 - b. *Length* – No cul-de-sac street shall exceed six hundred feet (600') in length, unless additional right-of-way width and additional pavement width are provided as required in this Section. Furthermore, no cul-de-sac street shall exceed the maximum length of one-thousand two hundred feet (1,200'). For purpose of this regulation, cul-de-sac length shall be measured along the centerline of the cul-de-sac from the intersecting street right-of-way line to the center point of the cul-de-sac. (O-00-1261 / 12-19-00)
 - c. *Width* – A cul-de-sac street shall have a minimum right-of-way width of fifty feet (50') and a minimum pavement width of thirty-one feet (31'), back-to-back of curb. However, a cul-de-sac street which exceeds six-hundred feet (600') in length shall have a minimum right-of-way width of fifty-six feet (56') and minimum pavement width of thirty-six feet (36'), back-to-back of curb. (O-00-1261 / 12-19-00)
 - d. *Maximum Number of Lots* – The maximum number of single-family lots served on a cul-de-sac street shall be as shown in the following table: (O-00-1261 / 12-19-00)

Maximum SF Residences Served on Cul-de-sac	
District	Max. Number of Lots Served
AG	5
RE	5
R-40	10
R-30	10
R-20	12
R-15	12
PUD-R	12

- e. *Temporary Turn-Around* – A temporary turn-around is required when a street is temporarily dead-ended and is longer one-hundred and fifty (150) feet, as measured from the intersecting street right-of-way line. The temporary turn-around shall be within a temporary easement and constructed of asphalt or concrete. (O-00-1261 / 12-19-00)
6. *Temporary Dead-End Streets* - Temporary dead-end streets shall have provision for future extension of the street and utilities and, if a temporary cul-de-sac is utilized, a reversionary right to the land abutting the turnaround for excess right-of-way shall be provided.
7. *Stub-outs for Future Extensions* - Permanent dead-end roads shall not be allowed. The street layout shall be extended to the tract boundary to provide for future access into adjoining tracts to assure adequate neighborhood circulation, unless prevented by topography or other physical conditions, or

unless, the Planning and Zoning Commission determines that the extension is neither necessary for future development of adjacent tracts. In general, these extensions should be not more than one thousand (1,000) feet apart.

8. *Pavement Required* - All street surfaces within or abutting the proposed subdivision shall be paved, with curbs and gutters installed, and constructed in accordance with the standards and specifications contained elsewhere in this Land Development Code.
9. *Frontage Access Road* - Where a subdivision abuts or contains an existing or proposed collector street or railroad right-of-way or abuts a commercial or industrial land use, the City may require a frontage street approximately parallel to and on each side of such right-of-way to separate through and local traffic, or reverse frontage with screen planting contained in a non-access reservation along the rear property line, deep lots with rear service alleys, or equivalent treatment as may be necessary for adequate protection of residential properties.
10. *Half Streets* - Half streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations, and where the Planning and Zoning Commission finds it will be practicable to require the dedication of the other half when the adjoining land is subdivided, the other half of the street shall be platted within such tract.
11. *Number of Subdivision Entryways* – Every subdivision shall be designed to provide sufficient access into the development to accommodate anticipated traffic demands and to provide for emergency public services using the criteria contained in this Section. (O-01-1280 / 08-08-01)
 - a. Where a proposed subdivision, or cul-de-sac street, contains more than twelve (12) lots, the development shall provide for two entryways as follows:
 - i. The development shall provide one street entryway and one emergency access easement. The emergency access easement shall be located on an adjacent or opposite side of the subdivision from the main entryway. The widths of the right-of-way and driving surfaces of the street entryway and the emergency access easement shall be in accordance with the standards contained elsewhere in this Land Development Code, or
 - ii. The development shall provide two street entryways separated not less than one-hundred feet between the centerlines of the driving surfaces. The widths of the right-of-way and driving surfaces of the two entryways shall be in accordance with the standards contained elsewhere in this Land Development Code, or
 - iii. The development shall provide a divided entryway and one emergency access easement. The driving surfaces of the divided entryway shall be separated by a median not less than ten (10) feet in width and provide for one-way traffic. The widths of the right-of-way and driving surfaces of the divided entryway shall be in accordance with the standards contained elsewhere in this Land Development Code. The emergency access easement shall be located on an adjacent or opposite side of the subdivision from the main entryway and be constructed in accordance with the standards contained elsewhere in this Land Development Code.
 - b. If it is physically impractical or otherwise impossible to provide two entryways or to incorporate an emergency access easement into the development in accordance with the above stated requirements, the following alternative may be considered by the approving body:
 - i. A single pavement width of forty-one (41) feet shall be constructed. Said pavement shall extend back from the intersecting street right-of-way a minimum distance of one-hundred (100') feet. All residences within the subdivision shall contain automatic fire-sprinkler systems.

- c. If it is physically impractical or otherwise impossible to comply with the above-stated requirements, an alternative design may be submitted to the City Council for consideration. The approving body may approve the alternate design if it finds that the above-state requirements can not be satisfied and that all efforts have been made by the developer to comply with said requirements.

12. *Reverse Curves* - Between reverse curves there shall be a tangent section of centerline not less than one hundred feet (100') long.

C. Intersections

1. Streets shall be laid out so as to intersect as nearly as possible at right angles. A proposed intersection of two (2) new streets at an angle of less than seventy-five (75) degrees shall not be acceptable.
2. Proposed new intersections along one side of an existing street shall, wherever practicable, coincide with any existing intersections on the opposite side of such street. Not more than two (2) streets shall intersect at any one point unless specifically approved by the City.
3. Street jogs with centerline offsets of less than one hundred thirty-five (135) feet shall not be permitted.
4. Local streets intersecting a collector street or larger shall have a tangent section of centerline at least fifty (50) feet in length measured from the right-of-way line of the collector street; however, no such tangent is required when the minor street curve has a centerline radius greater than four hundred (400) feet with the center located on the collector street right-of-way line.
5. At local street intersections, the property line corner shall be rounded by an arc having a radius of twelve (12) feet. This radius shall be increased when the smallest angle of intersection is less than eighty (80) degrees. At intersections of streets with major and collector streets the property line corners shall be rounded by an arc having a radius of twenty-five (25) feet. The approving body may submit comparable cut-offs or cords in place of rounded corners.
6. Where practical, spacing of intersections along collector streets shall be at least 500 feet apart.

D. Easements – Easements for drainage and utility construction, service, and maintenance shall be provided in locations approved by the City and affected utilities according to the following standards:

1. Easement for the use of public utilities of not less than seven and one-half (7.5') feet in width shall be provided on each lot and extend along the entire length of the rear property line. Easements shall connect with easements already established on adjoining properties or extend to connect with a public right-of-way. No lot shall be shown with an easement which prevents proper development and full utilization of the lot as a suitable building site for the intended zoning district.
2. For lots of more than two hundred (200) feet deep, the utility easement shall be not less than sixteen (16) feet wide.
3. The width of any drainage easement shall be determined by the City Engineer or in accordance with the need for drainage improvements established by any drainage study.
4. All utility easements shall be dedicated as utility and/or drainage easements.
5. When an easement is granted for public purposes as a separate instrument, the following statement of restrictions shall be placed in dedication instrument:

Utility Easements

Any public utility, including the City of Colleyville, shall have the right to move and keep moved all or part of any building, fences, shrubs, other growths or improvements which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective systems on any of the easements shown on the plat; and any public utility, including the City of Colleyville, shall have the right at all times of ingress and egress to and from and upon said easements for the purpose of construction, reconstruction, inspection, patrolling, maintaining and adding to or removing all or part of its respective systems without the necessity at any time of procuring the permission of anyone.

- E. Easements Adjacent to State Highways – When a proposed water or sewer line or drainage facility will be placed adjacent to a public road maintained by the Texas Department of Transportation, a separate specific use easement shall be provided for each utility or drainage facility.
- F. Emergency Access Easements – Emergency access easements shall have a clear unobstructed width to accommodate a pavement section of not less than twenty-four (24) feet in width. The emergency access easement shall connect at each end to a dedicated public street or shall have a suitable size turnaround at the dead-end, and appropriate turning space at inside corners to permit free movement of emergency vehicles. An emergency access easement may be used as a driveway to gain access to parking or loading spaces, but shall not be used for parking. All emergency access gates shall provide for an opening of not less than twenty four (24) feet wide by fourteen (14) feet in height and include a locking and opening mechanism acceptable to the Fire Department. (03-20-07 / O-07-1613)
- G. Alleys – Alleys shall be provided in commercial and industrial districts and at the rear of multifamily residential building sites for adequate circulation. Where approved by the Fire Marshal, an emergency access easement not less than twenty-four feet (24') in width shall be provided for emergency vehicle access in lieu of any alley. Alleys should intersect streets at right angles or radially to curved streets where sharp changes in alignment cannot be avoided. Property line corners shall be cut off fifteen feet (15') on each side to permit safe vehicular movement. Dead-end alleys shall be prohibited except where prior development of land adjoining the subdivision permits no other reasonable design; under such circumstances alleys shall be provided with turnaround or back-around facilities at the dead-end adequate to permit clear maneuvering of sanitation trucks, utility service vehicles and emergency vehicles. Alleys shall be not less than the following widths:
 - 1. Twenty feet (20') where residential building sites are provided on both sides;
 - 2. Twenty-two feet (22') wherever residential development abuts commercial or industrial areas;
 - 3. Twenty-four feet (24') where commercial or industrial development abuts on both sides.
- H. Mutual Access Easements (O-02-1336 / 04-16-02)
 - 1. *Purpose* – The purpose of this requirement is to provide public access to adjacent properties by reducing the number of driveway cuts and potential traffic accidents on adjacent streets.
 - 2. *Applicability* – This Section shall be applicable to properties abutting and that may derive access from a Collector Street or Arterial Street as shown on the Master Thoroughfare Plan.
 - 3. *Requirement* – The City shall require the dedication of a mutual access easement to provide cross access to adjacent properties or shared use of a driveway to conform with the minimum driveway standards contained in Chapter 14 of this Land Development Code.
 - 4. *Easement Dimensions* – Easements for shared driveways shall be 16 feet in width and 35 feet in length, but may vary given the shape of the particular tract. Easements extending across the entire width of the property shall not be less than 24 feet in width.

Section 9.18 Traffic Impact Analysis

When a proposed subdivision plat is estimated to generate more than 1,000 vehicle trips per day, a traffic impact analysis shall be required with the earliest submittal of a plat application. The traffic impact analysis shall be prepared in accordance with the requirements of the Director of Public Services. The purpose of the traffic impact analysis is to determine the need for traffic mitigation measures which may include, but are not limited to, dedication of additional right-of-way, construction of turning lanes, or construction of traffic control facilities. This requirement may be waived when a traffic impact analysis was submitted at the time the current zoning was adopted and the traffic impact analysis is less than one year old. Any mitigating measures required shall be the responsibility of the developer, unless a cost-sharing agreement is approved by the City.

Section 9.19 Sidewalks

- A. General Sidewalk Requirement – Sidewalks shall be constructed for each lot prior to completion of any primary structure. The sidewalks shall be constructed adjacent to and within the public street right-of-way and include curb ramps where applicable. Where no public right-of-way exists, the sidewalk shall be located within a public access easement that provides accommodation of the future street right-of-way dedication. When a subdivision is proposed with a masonry or other permanent perimeter screening wall adjacent to a street, the sidewalk shall be constructed by the developer at the same time as the - screening wall. All sidewalks shall conform to the standards and specifications contained in this Land Development Code.

- B. Trails System Sidewalks – When a proposed sidewalk coincides with the general location of a future sidewalk shown in the most recently approved Colleyville Trails System Plan, the sidewalk shall be constructed in accordance with the design standards for a trails system sidewalk. The standards and specifications for a trails system sidewalk are contained elsewhere in this Land Development Code. The developer shall be required to provide additional street right-of-way dedication or a public access easement of sufficient width to accommodate the trails system sidewalk. Where the trails system sidewalk will be located at the rear or to the side of a lot, such as within a green-belt or similar open space, the developer shall provide sufficient right-of-way or public access easement to accommodate the sidewalk.

Section 9.20 Street Lighting

- A. General Requirements – The developer shall be required to install, at no cost to the City, a street lighting system at all street intersections, at the end of all cul-de-sac streets, and at additional locations in accordance with the criteria contained elsewhere in *Chapter 14 – Engineering Design Standards* of this Land Development Code.

Section 9.21 Amendments to This Chapter

Ord. Number	Date	Subject
O-00-1261	12/19/00	Cul-de sac street lengths
O-00-1261	12/19/00	Lot Drainage and Grading
O-00-1261	12/19/00	Fire Hydrants
O-00-1261	12/19/00	Divided Entryways
O-00-1280	08/08/01	Number of Subdivision Entryways
O-00-1214	12/18/01	Existing Unimproved Street Requirements
O-02-1336	04/16/02	Mutual Access Easements
O-06-1562	02/07/06	General Infrastructure Policy
O-07-1613	03/20/07	Emergency Access Gates