

ARTICLE 30.
MINIMUM SUBDIVISION STANDARDS

Section 1. PURPOSE:

The Comprehensive Plan establishes important public policies for rational and orderly development patterns and practices which respect natural and man-made constraints and opportunities for development in the County. The requirements and standards of this Article support the plan, and are intended to contribute to the implementation of the important public policies established in the plan. This Article establishes minimum standards so that subdivisions:

- A. have street systems, lot layouts, and subdivision improvements that reflect good planning principles and construction practices and that incorporate and utilize the surrounding environmental attributes, and
- B. are designed and developed in a manner that demonstrates an understanding of and appreciation for both the near term, and lasting, long-range impacts, that subdivisions have on the health, safety, and general welfare of the public.

Section 2. STREETS AND DRIVEWAYS:

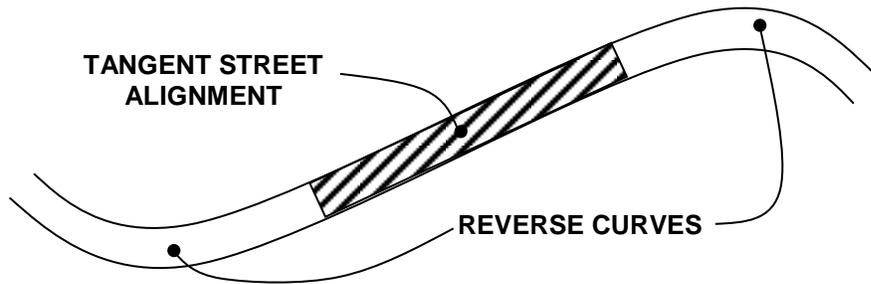
A. General Layout and Design Criteria – Existing and New Streets and Driveways:

- 1. General Street Layout and Design Considerations: A convenient, safe street system is important for the health, safety and welfare of the community and the economic well-being of the County. The County’s street system should be designed to provide appropriate routes for through traffic, especially with respect to major nodes of urban development. Ultimately, local streets that serve individual building sites should be interconnected to the network of major and minor arterial streets which primarily provide for the through traffic needs. As areas of the County develop, a pattern of interconnected streets should follow. This street network is particularly important within subdivisions with multiple streets and will become increasingly important upon an area’s further urbanization and densification.

Rural Subdivisions with lot sizes of at least 10 acres may function as “holding zones” for future development, even if the subdivisions take direct access off of an arterial road, if important elements are managed, such as, a) upholding the Comprehensive Arterial Network Plan (CARNP) frontage requirements, b) providing for connectivity to adjacent properties and to the interior of the section, and c) coordination with the street/land use plans of cities in the fringe areas.

- 2. Environmental Considerations: Street layouts shall attempt to conform to the existing natural topography and shall attempt to avoid the disruption of existing mature vegetation, 100-year flood plains and other significant natural features of the area and shall also comply with the General Environmental Review Criteria and Standards in Subsection 4 (B) of this Article.
- 3. Internal Street Layout Considerations: The location, arrangement, alignment, character, and type of all streets in the subdivision shall:
 - a. Provide for safe and convenient traffic circulation within, and to and from, the subdivision for the uses of the land to be served by such streets.
 - b. Be arranged so that through traffic is minimized for local streets and so traffic is channeled to Collector and Arterial Streets and to Parkways.

- c. Attempt to be arranged with the existing natural topography to provide appropriate drainage within and through the subdivision and to minimize drainage problems and comply with the General Environmental Review Criteria and Standards in Section 4 (B) of this Article.
- d. Provide tangent street alignment sections between reverse curved sections of streets.



- e. Be arranged to facilitate the free flow of traffic and limit potential traffic hazards by:
 - 1). Providing lots with Rural District Zoning:
 - a). with local or collector street access via driveways that comply with the criteria of the Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County, or
 - b). with direct access to Arterial Streets and Parkways in accordance with the Street Frontage Required per Driveway of Article 30, Section 2(B)(2);
 - 2). Providing lots with Planned Rural, Residential, or Planned Residential District Zoning with local or collector street access via driveways that comply with the criteria of the Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County; and by preventing direct access onto Arterial Streets, Parkways, and Highways in accordance with the Street Frontage Required per Driveway of Article 30, Section 2(B)(2); and
 - 3). Providing lots with Planned Retail Business or Planned Employment Center District Zoning:
 - a). with direct access onto Local or Collector Streets via driveways that comply with the criteria of the Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County, or
 - b). with direct access to Arterial Streets and Parkways in accordance with the Street Frontage Required per Business Driveway Spacing criteria of Article 30, Section 2(B)(1).
- f. Local or Collector Street layouts shall attempt to serve each subdivision lot or parcel and provide:
 - 1). Transportation access, and
 - 2). Routes for utility service lines wherever permanent easements would not provide utility service line routes such as:

- a). Where such easements would not be provided along rear or side lot lines,
- b). Where such easements would cause the utility service lines to cross natural or man-made obstacles such as rivers, steep slopes, highways or arterial streets in a manner which would make the installation or maintenance of the utility service lines unusually expensive, hazardous or difficult, or
- c). Where such easements would not provide utility service line routes in a direct, reasonably short, utility service line route with respect to the layout of the lots and blocks in the subdivision.

4. Connectivity and the Relationship of Internal Street Layouts to Adjoining Properties and Streets:

The location, arrangement, alignment, character, and type of streets serving new subdivisions shall be planned and designed:

- a. for the extension of existing dead-end streets except where topography, lakes, streams, Highways, Parkways, Arterial streets, railroads or other such natural or man-made features would obstruct the provision of through streets.
- b. for the continuation of existing streets from adjoining subdivisions.
- c. for streets to be continued to adjoining properties that have not been subdivided.
- d. to be properly integrated with the existing and planned street system and pattern.
- e. to be continued to the boundaries of the area being subdivided at reasonable intervals that shall be not greater than 1,320 feet so that future-abutting subdivisions may connect therewith.

If the subdivision borders on or contains an existing or proposed Parkway or Arterial Street, then a frontage road may be required, or lots that back up to such Parkway or Arterial Street may be required to contain a non-access easement along the Parkway or Arterial Street in order to prevent driveway access and traffic hazards or congestion. See Section 2 (B)(8) of this Article.

5. Geometric design and right-of-way requirements for all streets shall be based upon projected future traffic volumes. Additional factors to be considered in the geometric design and right-of-way requirements are as follows:
- a. Topography and physical features;
 - b. Design speeds;
 - c. Access conditions (controlled access with Frontage Roads, access opening, turning radius of design vehicles, medians, and pedestrian facilities); and
 - d. Designation of the street in the Comprehensive Arterial Road Network Plan (CARNP).

6. Street and right-of-way improvements:
 - a. Regardless of whether new streets are constructed in the subdivision, the road ditches along all street frontages of all lots smaller than fifteen (15) acres shall be regraded to have mowable slopes as directed by the County Engineer.
 - b. For existing or planned streets within or adjacent to the perimeter of subdivisions, the following street-type improvements are required:
 - 1). Type A Streets: Paved streets with concrete curb and gutter are required within and adjacent to residential subdivisions with any lots smaller than three (3) acres and for all streets within and adjacent to subdivisions in the planned retail business districts or the planned employment center districts, and are otherwise permitted in all other subdivisions.
 - 2). Type B Streets: Paved streets with rock shoulders and open road ditches are allowed only in and adjacent to rural and residential subdivisions with all lots three (3) acres or larger.

In addition, more specific standards for street-type improvements are also required by the Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County.

7. Functional Street Classifications: Functional classification is an ordering system that defines the part that any particular road or street plays in serving the flow of vehicle trips through a street network. Functional classification categorizes streets according to their ability to 1) move vehicle traffic, and 2) provide access to adjacent properties. Access to adjacent properties shall be in conformance with Article 30, Section 2(B) of these Regulations. For existing or planned streets within subdivisions, the following functional street classifications and criteria shall apply:
 - a. Cul-de-sac Streets: Serve individual building lots. Connecting to other Local Streets or Collector Streets is encouraged, however, Cul-de-sac Streets may connect directly to Parkways or Arterial Streets.
 - b. Local Streets: Serve individual building lots. Connecting to other Local Streets or Collector Streets is encouraged, however, Local Streets may connect directly to Parkways or Arterial Street.
 - c. Collector Streets: Connect Local Streets to Arterial Streets, Parkways, and Highways. Direct access from individual building lots is discouraged. Collector Streets are typically located at the 1/4-section, 1/2-section, or 1/3-section lines.
 - d. Arterial Streets: Provide for travel between Collector Streets, Parkways, and Highways.

For each arterial street, whether it be a Major Arterial Street or a Minor Arterial Street, the ultimate pavement width is intended to be two (2) to four (4) lanes for through traffic movements in accordance with the Comprehensive Arterial Road Network Plan (CARNP) criteria.
 - e. Parkways: Provide for travel between Highways and Arterial Streets and serve major development areas and large areas of the county. Access control shall be required to facilitate the movement of through traffic.

8. Street Design and Construction and Right-of-way Dedication: Streets and right-of-way improvements shall be designed and constructed as specified in the then applicable Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County.

a. Arterial Streets within or adjacent to subdivisions and Lot Splits shall comply with the following requirements:

- 1). The right-of-way width shall be eighty (80) feet, or
- 2). The right-of-way width shall be one-hundred and twenty (120) feet if the land is located in the Urban Fringe Policy Area or an exurban area where the standard needs to match city requirements (as indicated within this subsection, below); if the land is located adjacent to a Parkway or a Major Arterial Street as shown on the Comprehensive Arterial Road Network Plan (CARNP) adopted by the County; if the development is for planned retail business, planned employment center, public/quasi-public or institutional zoning or land use; or if the subdivision plat is proposed with PRN-2, Planned Residential Neighborhood Two District, or less restrictive zoning.

Provided, however, that right-of-way dedications shall not be required along Parkway or Arterial Street frontages of lots resulting from rural or residential subdivision plats or from lot splits if, in either case, the road frontage of the lot is six hundred (600) feet or more. This exception shall not apply to subdivisions that provide internal streets.

Factors contributing to the exurban character of an area and the associated need for subdivisions within the area to match city requirements include, but are not limited to, the following:

- i). The subdivision is within one mile of a city boundary and/or is within the planning area of a city;
 - ii). The subdivision is within an area, in the opinion of the Chief Engineer of the Johnson County Unified Wastewater District, that is considered likely or reasonable to expect that sanitary sewer service would be available for the subdivision within a fifteen (15) year period of time;
 - iii). Urban type development is occurring within one mile of the subdivision, including residential subdivisions at urban densities and nonresidential zoning; or
 - iv). Area utility providers have upgraded their systems in anticipation of urban development (i.e., waterline improvements to increase capacity, construction of electrical substations, or school district expansion and improvements).
- b. Collector Streets adjacent to Lot Splits or within or adjacent to subdivisions shall comply with the following requirements:
- 1). The right-of-way width for Collector Streets with curbs shall be sixty (60) feet, and
 - 2). The right-of-way width for Collector Streets without curbs shall be eighty (80) feet.

B. Driveways, Median Breaks, Intersections, and Frontages:

1. Median Break and Street Intersection Spacing for all Zoning Districts and Street Frontage Required per Business Driveway:

- a. Along the following streets, the Median Break and Street Intersection Spacings for all Zoning Districts shall be as follows:

Street Category	Minimum Median Break Spacing/Street Intersection Spacing	Recommended Median Break Spacing/Street Intersection Spacing
1) Type III, Parkways	2,640 feet	2,640 feet
2) Type II, Major Arterial Streets	1,320 feet	1,760 feet
3) Type I, Minor Arterial Streets	1,000 feet	1,320 feet
4) Collector Streets	330 feet	---
5) Local Streets	190 feet	---

- b. Along the following Streets, the Street Frontage Required per Business Driveway shall be as follows:

Street Category	Street Frontage Required per Business Driveway ^{1, 2, 3}
1) Type III, Parkways	1,320 feet ⁴
2) Type II, Major Arterial Streets	1,320 feet ⁴
3) Type I, Minor Arterial Streets	1,320 feet ⁴

¹ Driveways onto Parkways or Arterial Streets shall be at least 600 feet from the centerline of any intersecting Parkway or Arterial Street. Corner lots with less than 600 feet of frontage are restricted to access along the lesser-designated route if there is a lesser-designated route. (For example, along a Local Street instead of along a Collector Street or along a Collector Street instead of along an Arterial Street).

² Construction of new streets is an option for situations that do not meet the street frontage requirement for driveways.

³ One driveway shall be allowed for legal tracts of record that cannot meet these requirements.

⁴ For driveways with both right and left-hand turning movements in Planned Retail Business and Planned Employment Center zoning districts. However, right-turn-only driveway spacings shall be allowed at intervals that are at least one-half these distances and the right-turn-only driveways shall be labeled as such on final development plans for the property and shall be the subject of an access easement that defines the terms and conditions under which the driveway would be limited to right-turn-only usage. The easement shall be executed by the property owner and recorded with the Register of Deeds of Johnson County, Kansas.

2. Minimum Street Frontage Required per Driveway in the Rural, Planned Rural, Residential, or Planned Residential Districts:

Along the following streets, the Minimum Street Frontage Required per Driveway in the Rural, Planned Rural, Residential, or Planned Residential Districts shall be as follows:

<u>Street Category</u>	<u>Minimum Street Frontage Required per Driveway in the Rural, Planned Rural, Residential, or Planned Residential Districts^{1, 2, 3, 4}</u>
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Applicable to the Rural District only:

- | | |
|------------------------------------|------------|
| a. Type III, Parkways | 1,320 feet |
| b. Type II, Major Arterial Streets | 660 feet |
| c. Type I, Minor Arterial Streets | 330 feet |

Applicable to Planned Rural, Residential and Planned Residential Districts only:

- d. Lots shall not have access directly onto a Highway, a CARNP designated Parkway, or a CARNP designated Arterial Street in accordance with the Minimum Infrastructure Requirements for Roads, Article 31, Section 3(B).

Applicable to Rural, Planned Rural, Residential or Planned Residential Districts:

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|----------------------|----------|
| e. Collector Streets | 150 feet |
| f. Local Streets | 35 feet |

¹ Driveways onto Parkways or Arterial Streets shall be at least 600 feet from the centerline of any intersecting Parkway or Arterial Street. Corner lots with less than 600 feet of frontage are restricted to access along the lesser-designated route if there is a lesser-designated route. (For example, along a Local Street instead of along a Collector Street or along a Collector Street instead of along an Arterial Street).

² Construction of new streets is an option for situations that do not meet the street frontage requirement for driveways.

³ One driveway shall be allowed for legal tracts of record that cannot meet these requirements.

⁴ For additional frontage and access requirements and restrictions, see also Article 30, Section 3(A) and Article 31, Sections 3 and 4 of these regulations.

3. A Plat Exception from the Median Break Spacing, Street Intersection Spacing, Street Frontage Required per Business Driveway, and the Minimum Street Frontage Required per Driveway in the Rural or Planned Rural, Residential, or Planned Residential Districts requirements of Section 2 (B)(1) or (2) above may be approved subject to the provisions of Article 27, Section 5 and the recommendation of the County Engineer based upon:
 - a. Geological, topographical, flood plain, or other environmental constraints;
 - b. Safety considerations (e.g. sight distances, curvature, capacity, speed, bridges and other existing structures); or
 - c. Other traffic engineering design principles.
4. Minimum sight distances shall be provided at all intersections and driveways in accordance with the requirements contained in the then applicable Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County. No proposed street or

driveway shall be permitted to intersect an existing County road at a location that would not comply with said standards and which would thereby result in:

- a. Undue interference with or a hazard to the free movement of normal traffic, or
 - b. Intersection sight distances along the existing road that would be less than the minimum distance for the posted speed limit as required by the Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County.
5. Residential blocks shall not exceed one thousand three hundred twenty (1,320) feet in length, as measured between centerlines of intersecting streets.
 6. Streets shall intersect as nearly as possible at 90-degree angles; no streets shall intersect at less than a 75-degree angle.
 7. Street centerlines shall be laid out to meet the following:
 - a. Arterial Streets continuing through an intersection shall have a continuous, straight centerline.
 - b. Offset intersections shall not be allowed where on Collector Streets that intersect Arterial Streets unless the offset intersections are located to meet the minimum Median Break Spacing and Street Intersection Spacing requirements of Section 2(B)(1) above.
 - c. Except in Rural Subdivisions and Residential Subdivisions, Collector Streets continuing through an intersection shall have a continuous, straight centerline.
 - d. Local Streets that intersect a Collector Street shall have either a continuous, straight centerline through the Collector Street right-of-way or shall be offset so that there is at least one hundred fifty (150) feet between the centerlines of the Local Streets. Collector Streets that intersect another Collector Street also shall meet this criterion by having either a continuous, straight centerline through the intersection or by being offset so there is at least one hundred fifty (150) feet between their centerlines.
 8. Subdivision plats shall include non-access easements that:
 - a. prevent driveways from being located where the intersection-sight distance along the street is less than that required by the Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County, for the design speed for proposed streets or the posted speed limit for existing streets; and
 - b. prevent driveway access that would not conform to these regulations.

Such non-access easements shall also be provided to prevent driveway access across the rear line of double frontage lots.

9. Shared Driveways and Single Entrance Points for Multiple Lots: There are situations that arise when it is desirable for lots or tracts to share a single entrance point (e.g. due to topographical or sight distance constraints). A single entrance point may require a shared driveway to serve multiple lots or tracts or two or more driveways may use the same single entrance point. For example, typically, a shared driveway will begin at the single entrance point, run along abutting lot lines, and then branch off to the separate residences constructed on the separate lots. However, it may also be permissible to construct two separate driveways from the single entrance point, each serving a lot or tract. The landowner shall provide for

the installation and a mechanism for the continued maintenance of the entrance point for the benefit of those lots or tracts benefitted by the single entrance point. Any covenant, restriction, or provision for the creation and maintenance of the joint driveway(s) shall be reflected in a written agreement recorded in the Office of Records and Tax Administration.

Lots or tracts served by a single entrance point shall also meet the street frontage requirements of Section 2(B)(1) and (2) of this article unless a plat exception is approved by the Board of County Commissioners in accordance with Article 27, Section 5 of these regulations or unless such deviation is approved as part of the inherent flexibility of planned zoning as indicated in Article 27, Section 5.

C. Cul-de-sac Streets:

1. Dead-end streets, whether temporary or permanent, shall be constructed as cul-de-sac streets in accordance with the provisions in the then applicable Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County. It is recommended, but shall not be required, that temporary dead-end streets:

- a. That terminate at the boundary of a subdivision, and
- b. Which terminate more than 200 feet from the nearest intersection

shall be provided with a temporary cul-de-sac constructed at their terminus according to the aforementioned street construction standards.

2. Cul-de-sac streets shall not be longer than 700 feet measured from the intersecting street right-of-way line to the centerline of the cul-de-sac radius, except in the Rural District (RUR) or the Planned Rural District (PRUR) which shall not be longer than 2,000 feet.
3. Unless topography, lakes, streams, Highways, Parkways, Arterial Streets, railroads or other such natural or man-made features would obstruct the provision of through streets, permanent cul-de-sac streets shall be minimized by laying out the subdivisions to comply with the block length and cul-de-sac street length criteria of these regulations in order to facilitate traffic circulation, utility line interconnections, road maintenance and snow removal.

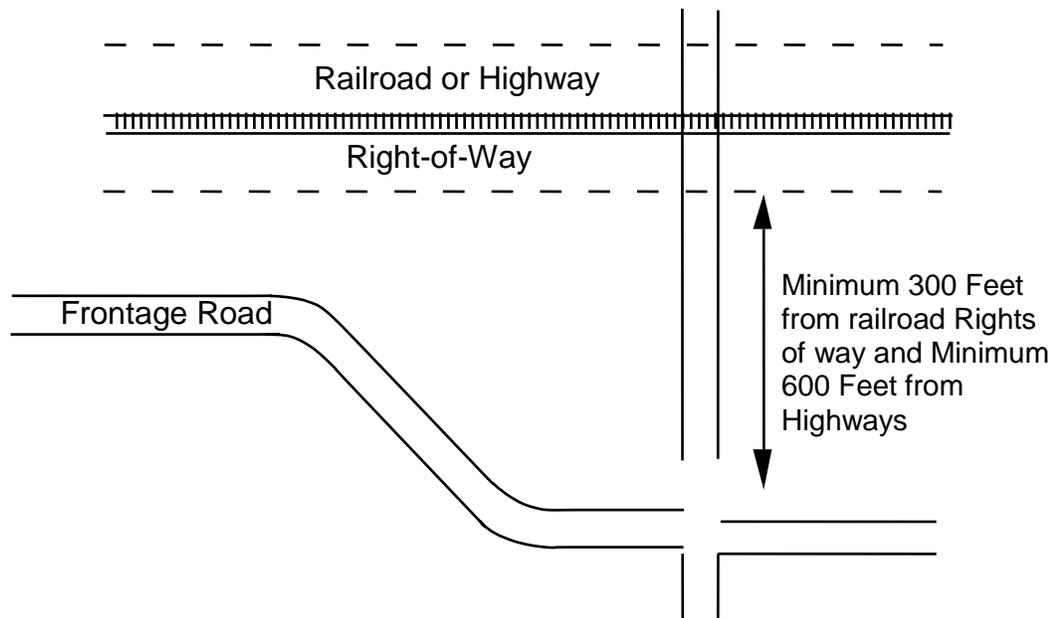
D. Alleys:

1. Alleys shall be discouraged unless topography, lakes, streams, Highways, Parkways, Arterial Streets, railroads or other such natural or man-made features would obstruct access by way of streets.
2. Any proposed alleys shall be reviewed by the County Planning Office and Public Works Department with respect to specific design and location considerations to assure that the alley would be an integral part of the subdivision.

E. Frontage Roads:

1. Frontage roads are a specific type of internal street pattern and shall be allowed only if the existing geology, topography, floodplain, or other environmental constraints or lot patterns are such that frontage roads are the most feasible way to provide for local traffic service to appropriate access points on Parkways or Arterial Streets. For example, when internal street patterns cannot be arranged to meet the street spacing and median break spacing requirements of these regulations, or if the lots cannot be arranged with side lot lines or rear lot lines adjacent to Arterial Streets, Parkways, Highways or railroad lines .

2. Frontage roads or other internal street patterns shall be planned and constructed in subdivisions when the number of access points on one side of the Highway, Parkway or Arterial Street would exceed the maximum number that would be allowed by compliance with the minimum Street Intersection Spacing requirements in Section 2 (B)(1) of this Article.
3. Frontage roads shall not intersect Parkways, Arterial Streets or Collector Streets at closer intervals than the Street Intersection Spacings allowed by Section 2 (B)(1) of this Article.
4. Frontage roads shall conform to the then applicable Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County, and any other applicable criteria specified herein.
5. Frontage roads or other streets that are parallel to railroad or Highway rights-of-way shall not intersect streets that cross the railroad or Highway- at -grade unless the frontage road or other parallel street centerline is at least three hundred (300) feet from the closest edge of the railroad or six hundred (600) feet from the closet edge of the Highway right-of-way.



6. Frontage road access points on opposite sides of Parkways and Arterial Streets shall be aligned to minimize the number of future median openings.

F. Acceleration, Deceleration and Left-Turning Lanes:

Acceleration, deceleration, and left turning lanes shall be provided by the developer /subdivider at intersections of subdivision streets with adjacent Collector Streets, Arterial streets and Parkways, when existing and projected traffic conditions would warrant them as determined by the County Engineer.

G. Sidewalks:

1. Sidewalks are required and shall be installed by the subdivider on one side of all streets in residential subdivisions with a majority of the lots less than one (1) acre in size, and are permitted in all other subdivisions in conformance with the requirements set forth herein. Sidewalks shall be located within the public right-of-way and shall not be more than one (1)

foot from the public right-of-way line of all streets. There shall be a landscaped area at least two (2) feet wide between the sidewalk and curb. If site conditions do not allow for the buffer area and sidewalks must be constructed adjacent to the curbs, the sidewalks shall be constructed as a separate entity to the curb, and at no time shall the two be constructed as a single unit.

2. The minimum width of sidewalks shall be four (4) feet.
3. Sidewalks at street intersections shall be ramped to provide access for physically impaired persons.
4. In and adjacent to residential subdivisions where substantial pedestrian circulation may occur, such as adjacent to schools, the dedication of a public right-of-way and the construction of pedestrian walkways shall be required whenever street rights-of-way or public open space would not be available or would not provide acceptable and reasonable pedestrian routes. These rights-of-way shall be between ten (10) and fifteen (15) feet wide, shall be adequately fenced and shall contain a concrete sidewalk the entire length of the right-of-way. The required width of the sidewalk may vary, but in no case shall it be less than four (4) feet.

H. Street, Signage and Signalization:

1. The design and placement of street name signs by the developer shall be in accordance with the then applicable Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County.
2. If the design of a subdivision requires traffic signalization within or adjacent to the subdivision, as determined by the County Engineer as a result of a traffic study, then the developer of the subdivision shall be responsible for the cost of installing such traffic control signs and devices, in accordance with relevant County standards as established by the County Engineer.

I. Shade Trees:

1. Along Arterial and Collector Street rights-of-way adjacent to residential subdivisions with any lots smaller than one (1) acre, or within or adjacent to any retail business or employment center subdivision, new shade trees shall be planted or existing trees shall be kept as follows:
 - a. The trees shall be within the required yards behind the public right-of-way lines,
 - b. The trees shall be of low water and low-maintenance varieties,
 - c. The trees shall be hardy species,
 - d. At the time of planting, the trees shall have a minimum caliper of one and one-half (1-1/2) inches when measured at a height of twelve (12) inches above the ground level, and
 - e. For every seventy-five (75) feet of street frontage, an average of one (1) deciduous tree shall be provided that has or will have a mature trunk size of at least twelve (12) inches.

The subdivider/developer shall either plant such trees, retain such existing trees, or require future owners of the lots to plant and maintain sufficient trees to meet the above standards.

2. The planting of all shade trees and shrubs in the public right-of-way shall be subject to the prior written approval of the County Planning Office and Public Works Department. A list of appropriate plant materials shall be available at the Planning Office.
3. The location of utility easements and tree planting or protection areas shall be coordinated to prevent conflicts between utility lines and trees.

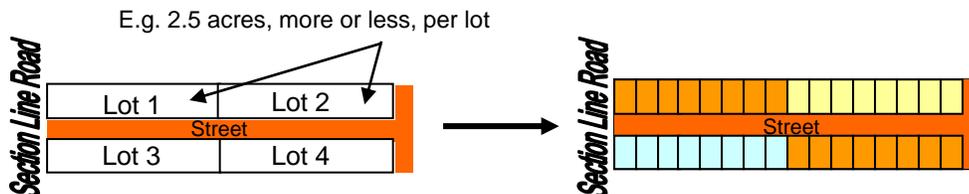
Section 3. LAYOUT OF LOTS:

A. In General:

1. Every lot within a subdivision shall have at least thirty-five (35) feet of frontage on a street and shall also comply with Article 30, Section 2(B) of these regulations, which may require greater frontages.
2. As required by the Minimum Infrastructure Requirements of Article 31 of these regulations, lots in subdivisions having Planned Rural, Residential or Planned Residential District Zoning shall not have access directly onto a Highway, a CARNP designated Parkway, or a CARNP designated Arterial Street, unless a waiver from such Minimum Infrastructure Requirement is approved by the Board of County Commissioners in accordance with the requirements of Article 31, Section 2(E) of these regulations.

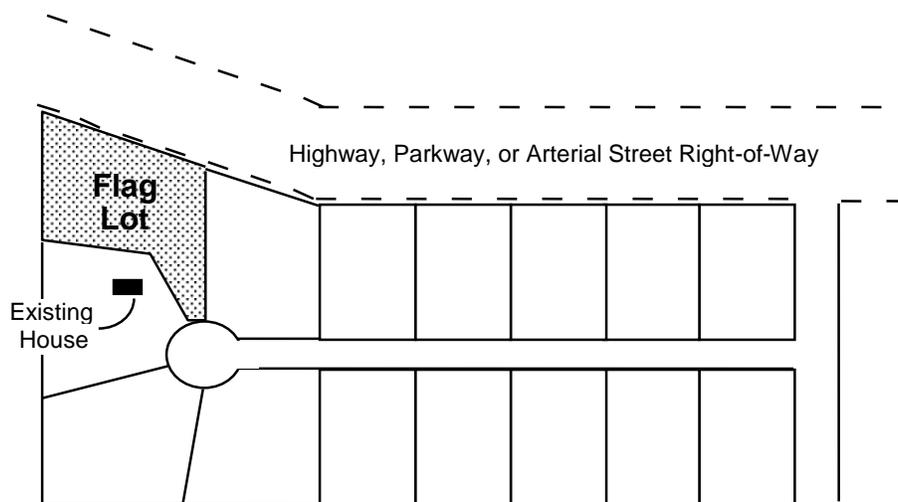
B. Residential and Rural Subdivision Lots:

1. Within subdivisions of property zoned residential or planned residential district, the lot-depth to lot-width ratios shall not exceed three to one or be less than one to one. Within subdivisions of property zoned Rural District (RUR) or Planned Rural District (PRUR), the lot-depth to lot-width ratios for lots smaller than ten (10) acres shall not exceed three to one or be less than one to one. Within subdivisions of property zoned Rural District (RUR) or Planned Rural District (PRUR), the lot-depth to lot-width ratios for lots ten (10) acres or larger shall not exceed four to one or be less than one to one.
2. Provisions for Replatting Certain Existing Lots: Existing lots or tracts with a Nominal Lot Area of at least ten (10) acres but not more than fifteen (15) acres that have a lot-depth to lot-width ratio not greater than 4-to-1, may be subdivided to create new 3-acre or smaller lots with lot-depth to lot-width ratios that are less than 1-to-1 but not greater than 1-to-6 if all the following criteria are met:
 - a. The subdivision shall be in an area where sanitary sewer service is expected to be available within a reasonable period, e.g. ten (10) to fifteen (15) years.
 - b. The subdivision lot layout shall be arranged to enable the 3-acre or smaller lots to be resubdivided laterally along the street into smaller lots if the property is rezoned in the future to allow smaller lots. An example is shown in the following diagrams:



- c. Provisions shall be made to facilitate the construction of sanitary sewers in the subdivision to minimize major disruptions of the streets and other utility infrastructure in the subdivision.

- d. The Final Plat shall include a note stating that any resubdivisions of any of the lots would be subject to the requirements of the Subdivision Regulations in effect when the resubdivision occurred, and that any resubdivision shall not occur until and unless sanitary sewers are available to serve the lots.
 - e. The topography of the site shall be such that gravity-flow sanitary sewers, storm drainage systems, and the street centerline grades will meet the then applicable design criteria and standards of the Unified Wastewater District and the County Public Works Department.
 - f. The land to be subdivided has or will have at least RN-2, Residential Neighborhood Two District, PRN-2, Planned Residential Neighborhood Two District, RLD, Residential Low Density District, or PRLD, Planned Residential Low Density District, zoning before the plat is recorded.
3. Corner lots shall have sufficient depth and width to allow the yard setbacks required in the applicable zoning district to be provided along all street frontages.
 4. Residential lots shall have a depth of at least 125 feet for lots smaller than 1-acre and shall have a depth of at least 150 feet for all other lots.
 5. The minimum lot width required in the zone shall be provided at least at the front building setback line.
 6. Double frontage lots smaller than ten (10) acres shall not be allowed in subdivisions zoned Rural District (RUR), or Planned Rural District (PRUR), or residential or planned residential district unless no other lot arrangement is possible, such as where lots back onto an Arterial Street, Parkway or Highway. All double frontage lots shall include a non-access easement which shall prevent driveway access on the rear lot line.
 7. In residential subdivisions, flag-shaped lots may be permitted when necessary to avoid or control the number of driveway accesses onto Highways, Parkways, or Arterial Streets.



8. In residential and planned residential subdivisions, lots shall be arranged so that surface drainage in swales or channels across residential lots is avoided or is located along side or rear lot lines, unless surface drainage in other locations on the lots is necessary as determined

by the County Engineer. Where surface drainage in a swale or channel on a residential lot is necessary, as determined by the County Engineer, drainage easements may be required and the drainage systems in such easements shall be improved in accordance with the Design Criteria for Storm Drainage systems adopted by the County. Each residential lot that will have surface drainage in a swale or channel shall be appropriately shaped, sized and dimensioned to provide a buildable area that the County Engineer deems to be appropriate for the subdivision.

9. Where resubdivision of the property is likely due to existing development patterns and planned development densities as indicated in the adopted plan, the lots in the subdivision shall be arranged with due care and regard for such future resubdivisions in accordance with good planning principles and the provisions of these regulations.

Section 4. ENVIRONMENTAL RESOURCES:

A. General Environmental Review Information Required: As part of the preliminary plat process for any subdivision proposing any lots smaller than ten (10) acres, the subdivider shall cause to be prepared and submitted an Environmental Overlay Analysis which reflects the existing and proposed site conditions which must be considered for appropriate subdivision planning and design sensitivity to topics such as the following:

1. Natural topography and slopes;
2. Established natural drainage areas and patterns;
3. Bluffs, ravines, and major rock outcroppings;
4. Designated flood plains; and, where base flood elevations have not been previously determined, and if 50 lots or more would be created or if greater than 5 acres would be involved in the subdivision, then the subdivider shall cause the base flood elevation to be determined and the base flood area shall be delineated on the plat in accordance with Article 22 of these regulations.
5. Designated open space and trail linkages of the Johnson County Parks and Recreation Master Plan (if applicable);
6. Mature trees and existing forested areas;
7. Major off-site vistas and solar access characteristics; and
8. Soil characteristics within the subdivision if sanitary sewers are not available or are not proposed to be provided with the development of the subdivision.

The submitted environmental analysis information shall be either an overlay to the Preliminary Plat or shall be included on the Preliminary Plat itself. Any such available information shall be discussed at the pre-platting conference with representatives of the County Planning Office and the Public Works Department prior to the preparation of a Preliminary Plat.

B. General Environmental Design Review Criteria and Standards:

1. Erosion Control/Storm water Management:
 - a. Natural bluffs and major rock outcroppings shall be preserved as open space to the maximum extent practicable and consistent with good site design and the ability to utilize

the property. If the natural bluffs and major rock outcroppings are such that there would be safety hazards or land stability problems for development, no uses or improvements, other than non-structural recreational use or open space use, shall be permitted within erosion hazard areas associated with the natural bluffs and major rock outcroppings.

- b. Natural ravines and waterways shall be preserved as open space to the maximum extent practicable and consistent with good site design and the ability to utilize the property.

Natural ravines and waterways may be eliminated by construction of improvements such as storm sewers and waterways constructed in accordance with the County's adopted standards, or, if necessary to comply with the County's adopted Design Criteria for Storm Drainage Systems or detention facilities.

- c. Final landscape grading shall be appropriate for landscape plantings and erosion control of roadside areas. Cut and fill slopes shall not be steeper than 3:1 (3 feet horizontal to 1-foot vertical) and slope intercepts shall be rounded and blended into the natural terrain in order to emulate natural topographic characteristics and to enhance their overall appearance.
- d. Subdivisions that would alter or construct improvements on steep slopes shall be appropriately evaluated by the subdivider and a report on the slope stability characteristics shall be submitted with the preliminary plat application. Properties which exhibit unsuitable slope stability characteristics may be denied subdivision approval or may be required to appropriately alter the subdivision design or undertake appropriate engineered solutions to slope stabilization as a condition of subdivision approval.
- e. Runoff calculations in accordance with the Design Criteria for Storm Drainage Systems and Post Construction Stormwater Quality Treatment Regulations adopted by the County and using accepted engineering practices for calculations which comply with those standards shall be submitted with the final plat for all subdivision proposals. Appropriate stormwater runoff control measures shall be provided in order to assure that runoff from the development due to increased impermeable surfaces and the amount of sedimentation that will leave the site because of particular development conditions will comply with the above referenced drainage standards adopted by the County. Runoff calculations and the design of all proposed stormwater control measures and treatment facilities shall be prepared by a qualified professional engineer licensed to practice in the State of Kansas and shall be in accordance with the Street Construction and Storm Drainage Standards for New Subdivisions and Post Construction Stormwater Quality Treatment Regulations, as adopted by the County.
- f. All storm drainage plans shall be prepared pursuant to, and storm drainage improvements and treatment facilities provided shall be built to comply with, the Design Criteria for Storm Drainage Systems, the Post Construction Stormwater Quality Treatment Regulations, and with the Street Construction and Storm Drainage Standards for New Subdivisions, as adopted by the County.
- g. Maintenance of detention structures and post construction stormwater facilities must be addressed by the subdivider and approved by the County Engineer in order to avoid public nuisances and health hazards. Care must be taken to design and construct all such facilities in accordance with applicable federal, state and local regulations.
- h. All areas subject to local flooding shall be identified and indicated on the preliminary and final plats. Permanent drainage easements shall be provided and shall be appropriate for

the required improvements or shall indicate a natural channel easement. See also Section 4 (A)(4) and Section 4 (B)(2) of this Article and see Article 22 of these regulations.

2. Flood Plains:

- a. No uses or improvements shall be permitted in any flood plain area except as provided in Article 22 of these regulations.
- b. The County encourages the dedication of identified flood plain areas which are proposed to be recreational trails or open space linkages in the Johnson County Parks and Recreation Master Plan.
- c. With an approved Flood Plain Development Permit as required by Article 22 of these regulations, improvements in flood plains and floodways may be designed and constructed in order to modify designated natural flood plains, provided that all applicable Federal, State and Local regulations are incorporated into the design, review, permit, and construction process. The County Engineer shall review this aspect of the subdivision design in the Preliminary Plat and Final Plat submittals. A preliminary drainage analysis is required, with supporting documents to be supplied by the developer to the County Engineer at the Preliminary Plat submittal. Further detailed analysis may be required by the County Engineer before the Final Plat is filed with the County. Final plats shall include a note stating that flood plains depicted on the plat are based on the best information available at the time the plat was prepared and recorded, and that building permit applications will be reviewed with respect to flood plain information available when each such application is reviewed.

3. Mature Trees and Forestation Areas:

Subdivisions shall be designed and developed to protect and preserve mature trees and forested areas to the greatest extent reasonable and practicable.

4. Major Off-site Vistas, View Corridors and Solar Access Characteristics:

Subdivisions shall be designed and developed to take maximum advantage of major off-site vistas, view corridors and the solar access characteristics of the site.

Section 5. REQUIRED IMPROVEMENTS:

A. General Criteria:

1. The subdivider shall be responsible for the installation of certain public improvements including streets, sidewalks, storm drainage and treatment facilities, and sanitary sewers as required and provided in this Article and these regulations.

For any water, electrical, gas, telephone, cable television, and all other utility service lines to be installed within the subdivision for the initial end users of development on the lots therein, the subdivider shall coordinate with all appropriate utility agencies and companies to assure that the service lines shall be appropriately installed:

- a. to comply with the standards, specifications and policies of the utility service company,
- b. with adequate service capacities and in a timely manner suitable to the needs of the initial end users of each lot in the subdivision, and

- c. in accordance with any applicable Minimum Infrastructure Requirements in these regulations.
 2. Permanent utility easements shall be established by the subdivision plat along all sides of the subdivision which do not abut a public street, and such easements shall be at least ten (10) feet wide. Utility and drainage easements shall be provided along lot lines wherever utility service lines or drainage systems are to be located and shall be at least ten (10) feet wide and shall be centered on the lot lines. The permanent utility easements shall provide utility service line routes in a manner or to a degree acceptable to the Board such as:
 - a. Along rear or side lot lines,
 - b. In locations that would avoid utility service lines across natural or man-made obstacles such as rivers, steep slopes, highways or arterial streets in a manner which would make the installation or maintenance of the utility service lines unusually expensive, hazardous or difficult, or
 - c. In locations that would enable utility service lines to be direct and reasonably short with respect to the layout of the lots and blocks in the subdivision.
 3. Following consultation with the County Wastewater District, locations for underground utility placement shall be coordinated with the County Engineer during preparation of a Preliminary Plat.
 4. "As-built" drawings and specifications for each utility system constructed shall be supplied by the developer to the County Engineer upon completion of each construction phase within any subdivision.

B. Water Supply:

1. Applications for subdivisions where the Article 31 Minimum Infrastructure Requirements are either required or highly recommended for Water Supply Category Factors 1 or 2 shall be accompanied by written verification from the Water District serving the area of the proposed subdivision which assures the County that the property to be subdivided will be served by the Water District via existing water mains or after water mains which meet the standards and specifications of the Water District have been installed. Such Water District verification shall estimate the level of excess service capacity that is currently available, and shall estimate the distance to existing water mains and shall estimate the available water flow in Gallons per Minute (GPM). See also Article 31 of these regulations.

C. Sanitary Waste Disposal and Sanitary Sewers:

1. In cases where sanitary sewers are not available, a note shall be placed on the Final Plat indicating that "Wastewater collection and treatment shall be available or provided in accordance with then applicable County policies, regulations and standards for on-site wastewater disposal and the Environmental Sanitary Code of the County prior to the issuance of a building permit to allow the construction of a dwelling. Alternatively, public sanitary sewers shall be available or provided."
2. Wastewater collection and treatment shall comply with the requirements set forth in Article 31, Section 3(D) of these regulations.

D. Gas, Electric, Telephone and Cable Service:

Underground electrical, telephone and cable utility transmission lines are required for all residential subdivisions with lot sizes smaller than three (3) acres as well as in all employment center or retail business subdivisions.

Section 6. MINIMUM INFRASTRUCTURE REQUIREMENTS:

In addition to the requirements of Section 5 of this Article, compliance with the Minimum Infrastructure Requirements of Article 31 of these regulations is required for new Subdivisions after the effective date of these regulations. Compliance with the highly recommended infrastructure factors of Article 31 shall also be required unless the applicant can show good cause why the highly recommended infrastructure factors should not be provided and that a waiver should be allowed in accordance with Section 2 (E) of Article 31. Compliance with the recommended infrastructure factors of Article 31 of these regulations is strongly encouraged, but not required, for subdivisions after the effective date of these regulations.

Section 7. OPTIONAL PRIVATE IMPROVEMENTS:

Private improvements and facilities such as ornamental neighborhood entrances, private neighborhood open space or passive recreation areas or similar improvements or facilities shall be permitted unless the improvements(s) or facility(ies) would require a Conditional Use Permit as provided in Article 23 of these regulations. When a Conditional Use Permit would be required, such improvements or facilities may be allowed by Conditional Use Permit. See Article 23.