

ARTICLE 4

SUBDIVISION DESIGN STANDARDS

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SECTION 4-1 APPLICABILITY

4-101. All subdivisions of land subject to these regulations shall, as a minimum, conform to the following design standards and to the intent of the Comprehensive Plan. Such design standards shall govern the approval of subdivision plats by the Planning Commission and by the Governing Body.

4-102. Comprehensive Plan Coordination. All subdivisions shall be consistent with the Comprehensive Plan. The Governing Body may disapprove residential subdivision proposals where it is determined that the location of said subdivision is not compatible with the adopted Comprehensive Plan or development policies of the Governing Body. Compatibility of subdivision design with the Comprehensive Plan is also governed by Section 4-6.

4-103. Access. Except as otherwise provided in these regulations, all lots located in any subdivision shall take access directly from a street dedicated and accepted for public use.

4-104. Land Subject to Erosion. On land subject to excessive soil movement that may result in erosion, deposition of soil, or increased stormwater runoff, the Planning Commission, in accordance with the City Engineer's recommendations, may require, in addition to those standards set forth in these regulations, necessary Best Management Practices (BMPs) during construction and development of the subdivision.

(4-104 revised 11-16-11)

4-105. Conformance to Applicable Laws and Regulations. In addition to the requirements established herein, all subdivision plats shall comply with all applicable laws and regulations, including the following:

- a. City zoning regulations;
- b. Regulations of the Kansas Department of Transportation if the subdivision or any lot contained therein abuts a state highway;
- c. City-adopted building and housing codes;
- d. City-adopted fire and life safety codes;
- e. City-adopted stormwater management and erosion and sediment control codes; (updated 11-16-11)

- f. Any other applicable federal, state or local laws or regulations.
(4-105-e revised 11-17-11)

SECTION 4-2 BLOCK STANDARDS

4-201.

- a. Length. Intersecting streets, which determine block length, shall be provided at such intervals as to serve cross traffic adequately and to meet existing streets in the neighborhood. In residential districts where no existing plats are recorded, the blocks shall not exceed one thousand two hundred (1,200) feet in length, except that a greater length may be permitted where topography or other conditions justify a departure from this maximum. In blocks longer than seven hundred and fifty (750) feet, pedestrian ways and/or easements through the block may be required by the Director of Planning near the center of the block. Such pedestrian ways or easements shall have a minimum width of ten (10) feet. Pedestrian ways shall have a minimum width of ten (10) feet and shall be constructed in a manner approved by the City Engineer. Blocks for business use should normally not exceed six hundred (600) feet in length.
- b. Width. In residential development, the block width shall normally be sufficient to allow two (2) tiers of lots of appropriate depth. In certain instances, however, a different arrangement may be required in order to provide better circulation or to protect a major circulation route. Blocks intended for business or industrial use shall be of such width and depth as may be considered most suitable for the prospective use. Block width and depth shall be determined with regard to needs for convenient access, safety and circulation and with consideration of topography.

SECTION 4-3 STREET STANDARDS

4-301.

- a. Relationship to Adjoining Street Systems.
1. The arrangement of streets in new subdivisions shall make provisions for the continuation of the existing streets in adjoining additions (or their proper projection where adjoining property is not subdivided) insofar as they may be necessary for public requirements.
 2. The width of such streets in new subdivisions shall not be less than the minimum street widths established in the adopted Comprehensive Plan.
 3. Alleys, when required, and street arrangement shall permit owners of adjoining property to extend street rights-of-ways into such property.
 4. Whenever there exists a dedicated or platted half street or alley adjacent to the tract to be subdivided, the other half of the street or alley shall be platted and dedicated as a public right-of-way, or vacated upon the City's determination that the right-of-way is not necessary.
 5. Where topographical conditions make street continuance or conformity impracticable, the Planning Commission may approve an alternative layout.

6. Where the preliminary plat submitted covers only a portion of the contiguous land owned by the subdivider, a sketch of the prospective future street system of the entire ownership shall be submitted.
 7. Where a tract is subdivided into lots of an acre or more, the Planning Commission may require an arrangement of lots and streets such as to permit a later subdivision in conformity with the street requirements.
- b. Street Names. Streets that are obviously in alignment with other already existing and named streets shall bear the names of the existing streets. Otherwise names shall be sufficiently different in sound and in spelling from other street names in the City so as not to cause confusion.
 - c. Major or Arterial Streets. Major or arterial streets through subdivisions shall conform to the Comprehensive Plan as adopted by the Planning Commission and the Governing Body.
 - d. Collector Streets. Collector streets shall be designed primarily to gather traffic from minor or local streets and carry it to major or arterial streets.
 - e. Minor or Local Streets. Minor or local streets shall be so designed to discourage through or non-local traffic.
 - f. Cul-de-sacs. For cul-de-sac turnarounds upon which parking is prohibited there shall be a minimum of one hundred (100) feet of right-of-way, of which at least a seventy (70) foot diameter shall be hard-surfaced, not including curb and gutter. For cul-de-sac turnarounds upon which parking is permitted, the Zoning Administrator shall establish the turnaround right-of-way, and the dimensions of hard surfaced area required. Turnarounds shall be provided at the closed end of a dead end local street segment. Such local street segment should not exceed seven hundred feet (700') in length from the intersection of a cross street to the juncture with the cul-de-sac.
 - g. Right Angle Intersections. Under normal conditions, streets shall be laid out to intersect, as nearly as possible, at right angles. Where topography or other conditions justify a variation from the right angle intersection, the minimum angle shall be sixty (60) degrees. The subdivision designer shall make every effort to align intersecting cross streets without an offset. Where an offset is necessary the minimum offset shall be no less than one hundred twenty-five (125) feet.
 - h. Round-a-bouts. Plats may incorporate the proposed use of round-a-bouts in a plat upon the recommendation of the Planning Director and City Engineer.
 - i. Streets Adjacent to a Railroad Right-of-Way, Limited Access Freeway, Principal Highway or Arterial Streets. Where lots front or side, but do not back on railroad rights-of-way, limited access freeways, principal highways, or arterial streets a marginal access street, reverse frontage or frontage road may be required. The distance from said rights-of-way shall be determined with due consideration to minimum distance required for approach connections to future grade-separated intersections.
 - j. Half-Streets. Half-streets shall be avoided, except:
 1. Where they are essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations; or,

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- 2. When the Planning Commission finds that it will be practical to require the dedication of the other half of the street when the adjoining property is subdivided. Where a half-street, or portion thereof, is existing and adjacent to a tract to be subdivided, the other half of the street shall be based on minimum requirements as set forth in 4-301.l and shall be platted within such tract.
- k. Alleys. Alleys may be required in commercial, industrial and residential areas consistent with the objectives of the City’s zoning regulations and comprehensive plan. Dead end alleys shall be avoided, wherever possible; but if unavoidable, such alleys shall be provided with adequate turnaround facilities at the dead-end.
- l. Minimum Requirements. All right-of-way for streets, alleys and public ways, included in the subdivision, hereafter dedicated and accepted, shall not be less than the minimum width for each classification as follows:

	Rural Arterial	Urban Arterial	Rural Collector	Urban Collector	Local Comm./Ind.	Local Resid.	Alley	Commercial Alleys
Number of lanes	2-5	2-5	2-3	2-3	2	2	N/A	N/A
ROW width	120'	100'	100'	80'	80'	60'	20'	25'
Pavement width*	28'+	28'+	28'+	28'+	25'+	23'+	20'	25'
Curb and gutter req.	No	Yes	No	Yes	Yes	Yes	No	No
Shoulder width	6'+	N/A	6'+	N/A	N/A	N/A	N/A	N/A
Sidewalk req.	Both sides	Both sides	Both sides	Both sides	Both sides	One side	N/A	N/A
Min. Sidewalk width	6'	6'	6'	6'	5'	5'	N/A	N/A
Bike Lanes (4' - Both sides)	No	No	Preferred	Preferred	No	No	N/A	N/A
Separate Bike Path (10')	Preferred	Preferred	No	No	No	No	N/A	N/A
Parking	No	No	No	No	TBD	One side**		N/A
Design Speed	40+	40+	30+	30+	30+	30+	20+	20
Driveways	No	No	No***	No***	Yes	Yes	N/A	N/A

Notes

- *Width does not include curb and gutter
- **Parking may be allowed on both sides if pavement width is 27'
- ***May be allowed if adequate justification is provided

- m. Additional Requirements. When existing or anticipated traffic on arterial and collector streets warrants greater widths of rights-of-way, or where needed for cuts, fills or utilities, additional right-of-way may be required to be dedicated for any streets.
- n. Street Grades. The grades of streets, alleys and other public ways included in any subdivision should not be greater than five percent (5%) or less than one percent (1%). Variations from these standards may be made when warranted by topographic conditions. Such changes shall be approved only upon the recommendation of the City Engineer.
- o. Street Alignment. Minimum horizontal and vertical alignment on all streets, except in unusual cases, shall be as follows:
 - 1. Horizontal alignment: Radii at the centerline.

Major streets.500
 Local streets150

Design curves shall meet minimum design speed of the road.

- 2. A tangent shall be provided between all reversed curves to provide for a smooth flow of traffic.
- p. Vertical Alignment. All changes in street grade shall be connected by vertical curves of such length as to provide for desired sight distance as set out in American Association of State Highway and Transportation Officials Geometric design standards and shall be subject to the approval of the City Engineer.
- q. Street Layout. Proposed streets shall conform to topography as nearly as possible to reduce drainage problems and grades.
- r. Paving Material. All streets shall be hard surfaced with asphalt or concrete subject to the specifications of the City. All paving must be provided with a stabilized sub-base and concrete curb and gutter unless otherwise directed by Zoning Administrator.

SECTION 4-4 LOT STANDARDS

4-401.

- a. Minimum lot width shall be measured at the building setback line and shall not be less than required by the zoning regulations of the district in which the subdivision is located. Corner lots shall have a width at least twenty (20) feet greater than the minimum width.
- b. Minimum lot depth shall be one hundred and twenty (120) feet, measured through the center of the lot and perpendicular to the property line, or radial to the property line on curved streets, unless in a zoning district that allows for less depth.
- c. Maximum depth of residential lots shall not exceed three (3) times the width of the lot.
- d. If the proposed subdivision is to be served with City water and City sewer or a community-type sewage treatment plant, approval of the plat shall be subject to the minimum requirements set forth in these regulations, the City Code and the zoning regulations of the district in which the subdivision is located.
- e. If the proposed subdivision is to be served with a public water supply, but not with a public sanitary sewer system, the preliminary plat will be submitted on the basis of the minimum of three (3) acre lots and will be subject to the approval of the City and the County Health Department, which shall make or cause to be made soil analysis and percolation tests for each lot and make recommendations to the Planning Commission. The platted lots will be so proportioned as to permit future re-platting consistent with good subdivision design.
- f. Lot dimensions shall comply with the minimum area requirements of the zoning regulations with no lot in a residential district being less than fifty (50) feet in width at the building setback line, except as provided in the HO-O regulations. Non-residential lots shall provide adequate depth and width to provide for the type of use contemplated.

- g. Minimum lot area shall be subject to the zoning district regulations in which the subdivision is located; however, if a zoning lot contained two or more principal residential structures on June 5, 1975, separate substandard lots may be created, according to these regulations, to accommodate these existing residences, provided that side yard requirements are met.
- h. All side lot lines shall bear sixty (60) to ninety (90) degrees from the street right-of-way line on a straight street or from the tangent of a curved street.
- i. Front building or setback lines shall be shown on the final plat for all lots in the subdivision and shall not be less than the setbacks required by the zoning regulations or any other regulation adopted by the Governing Body. The greater setback requirement shall govern.
- j. Double frontage lots shall be avoided unless, in the opinion of the Planning Commission, a variation to this prohibition will give better street alignment and lot arrangement.
- k. Every lot shall have adequate frontage on a public street other than an alley.
- l. The subdivision or re-subdivision of a tract or lot shall not be permitted where said subdivision or re-subdivision places an existing permanent structure in violation of the requirements of the zoning regulations or the minimum design standards of these regulations.
- m. Whenever the area is divided into lots containing one (1) or more acres and there are indications that such lots will eventually be re-subdivided into smaller lots, consideration must be given to the highway, street and lot arrangement of the original subdivision so that additional minor streets can be opened which will permit a logical arrangement of smaller lots. Easements providing for the future opening and extension of such streets may, at the discretion of the Planning Commission, be made a requirement of the plat.
- n. Whenever possible, residential lots shall not take access from arterial streets. The number of lots facing on collector streets shall be kept to a minimum in each subdivision. The street pattern shall be designed so that the side line of lots abut collector streets wherever land shapes and topography permit.

SECTION 4-5 EASEMENTS

4-501.

- a. Where alleys are not provided, permanent easements of not less than ten (10) feet in width shall be provided on each side of all rear lot lines, and on side lot lines, where necessary, for utility poles, wires, conduits, storm and sanitary sewers, gas, water and heat mains, and other public utilities. Where a utility company or other service provider can demonstrate the need for a wider easement than required above for a specific location, such may be required by the Governing Body and provided by the developer. These easements shall provide for a continuous right-of-way at least twenty (20) feet in width. An additional twelve (12) foot wide temporary construction easement abutting each side of a utility easement shall be provided for initial construction of water, sewer and other utility lines. Such temporary easement shall be terminated by the City upon its determination that development of lots adjoining the easement is completed with all utilities fully installed.
- b. All easements shall be shown on the plat. Permanent easements shall not be obstructed by buildings or permanent vegetation. No fences may be placed in storm drain easements. A

property owner may otherwise erect fences and landscape the easement at his or her own risk of loss.

- c. **Drainage Easements.** If a subdivision is traversed by a water course, stormwater pipe, drainage way or channel, then a stormwater easement or drainage right-of-way shall be provided. No utilities would be allowed to run parallel within a drainage easement, although they may cross perpendicular. Such easement or right-of-way shall conform substantially to the lines of the natural water course and shall be of such width or construction, or both, as may be necessary to provide adequate stormwater drainage and for access for maintenance thereof. Parallel streets or parkways may be required in connection therewith. The developer's engineer shall make a study, which shall be reviewed by the City Engineer who shall report his or her recommendation to the Planning Commission as to the desired width of such easement. Such study and report shall be based on the one hundred (100) year flood depth. Maintenance of stormwater easements and drainage right-of-way shall be the responsibility of the owners of property adjoining such easements or right-of-way.
- d. Where a lot or group of lots side or back on an existing high-pressure oil line or existing high-pressure gas line, a fifty-foot (50) setback shall be provided on each side of said oil line or gas line. The fifty-foot (50) setback shall be provided on that part of the lot which abuts the oil line or gas line, and no building or structure shall be located or constructed within said fifty-foot (50) setback. In no case shall any structure be constructed closer than twenty-five foot (25) of the original easement.

SECTION 4-6 DESIGN TECHNIQUES

4-601. Subdivision Design: The design of the subdivision shall provide for efficient traffic flow, proper mixing of land uses, and a logical link between surrounding, existing development, and the proposed layout. The Comprehensive Plan should be used as a guide in determining if the design of the proposed subdivision is proper. The Planning Commission shall have the authority to deny a plat or request redesign, if, in its opinion, the layout is not suitable for the site, or if the development of the subdivision would be premature.

SECTION 4-7 ACCESS CONTROL

4-701. In the interest of public safety and for the preservation of the traffic carrying capacity of the street system, the Planning Commission shall have the right to regulate points of access to all property from the public streets system. Such proscriptions shall be indicated on the final plat. Where the Kansas Department of Transportation (KDOT) has jurisdiction and conflict between regulations occurs, the more restrictive shall apply.

SECTION 4-8 LAND SUBJECT TO FLOODING

- a. All land subject to an intermediate regional flood shall not be subdivided for any use incompatible with such flooding. An intermediate regional flood is a flood having an average frequency of occurrence in the order of once in 100 years, although the flood may occur in any year or even in successive years. It is based on statistical analyses of stream flow records available for the watershed and analyses of rainfall and runoff characteristics in the general region of the watershed. Data on the flood characteristics for the planning area may be obtained from the

Kansas Water Resources Board, the U.S. Army Corps of Engineers, Kansas City District, or Federal Emergency Management Agency.

- b. Subdivision proposals shall include regulatory flood elevation data in areas zoned Floodway or Floodplain on the Ottawa Zoning Map.
- c. Adequate drainage shall be provided so as to reduce exposure to flood hazards.
- d. All public utilities and facilities shall be located so as to minimize or eliminate flood damage.
- e. All proposed development shall be consistent with the need to minimize flood damage.