

## **SUBDIVISION DESIGN STANDARDS**

### **SECTION 4-1 APPLICABILITY**

**4-101.** All subdivisions of land subject to these regulations shall conform to the following minimum 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. 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 or deposition of soil, the Planning Commission, in accordance with the City or County Engineer's recommendations, may require necessary preventive measures as part of the final plat approval and/or during construction and development of the subdivision.

**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. The Lyon County Health Department's regulations;
- c. Regulations of the Kansas State Department of Transportation if the subdivision or any lot contained therein abuts a state highway or connecting street;
- d. The City/County building and housing codes.
- e. The City fire and life safety codes.
- f. The standards and regulations adopted by the City Engineer and County Engineer; and
- g. Any other applicable state or local laws or regulations.

### **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 eight hundred (800) feet, pedestrian ways and/or easements through the block may be required near the

- center of the block. Such pedestrian ways or easements shall have a minimum width of ten (10) feet. Pedestrian ways shall be constructed in a manner approved by the Engineer having jurisdiction. 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 principal 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 widths established at Figure 8 of the 1998 Comprehensive Plan.
  3. Alleys, when required, and street arrangement must cause no hardship to owners of adjoining property when they plat their land and seek to provide for convenient access to it.
  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 way.
  5. Where topographical conditions make street continuance or conformity impracticable, the Planning Commission may approve an alternative layout.
  6. Where the 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. Arterial Streets. Arterial streets through subdivisions shall conform to the Comprehensive Plan as adopted by the Planning Commission and the Governing Body.
- d. Local Streets. Local streets shall be so designed to discourage through or non-local traffic.
- e. Cul-de-sacs. An adequate turnaround of not less than a eighty (80) foot

diameter right-of-way which shall be provided at the closed end of a dead end local street segment. Such local street segment should not exceed six hundred (600) feet in length from the intersection of a cross street to the juncture with the cul-de-sac.

f. 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.

g. 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 or frontage road may be required parallel and adjacent to the boundary of such rights-of-way. 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.

h. Half-Streets. Half-streets shall be avoided, except:

1. For arterial streets and collector streets where applicable, or where they are essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations; or,
2. When the Planning Commission finds it 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.j and shall be platted within such tract.

i. Alleys. Alleys may be required in commercial, industrial and residential areas. Dead end alleys shall be avoided, wherever possible; but if unavoidable, such alleys shall be provided with adequate turnaround facilities at the dead-end. Alleys should be avoided in residential areas except where alleys of adjoining subdivisions would be closed or shut-off by failing to provide alleys in the adjoining subdivision.

j. 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:

Arterial Streets	100 feet
Collector Streets	80 feet
Local Streets, residential	60 feet
Local Streets, industrial and commercial	80 feet
Cul-de-Sacs	80 feet diameter
Marginal access or frontage roads	50 feet
Alleys	20 feet
Pedestrian Ways	10 feet

All widths for streets included in the subdivision, hereafter dedicated and accepted, shall not be less than the minimum width for each classification as follows:

Arterial	41 feet
Collector	37 feet
Local	31 feet

k. 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.

l. Street Grades. The grades of streets, alleys and other public ways included in any subdivision shall not be greater than is necessary for the topographic conditions and shall be subject to the approval of the engineer having jurisdiction. A minimum gradient of one percent (1.0%) shall exist on all streets whenever practical, but in no event shall the gradient be less than one-half percent (0.50%).

m. Street Alignment. Minimum horizontal and vertical alignment on all streets, except in unusual cases, shall be as follows:

Vertical. 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 Officials Geometric Design Standards and shall be subject to the approval of the engineer having jurisdiction.

n. Street Layout. Proposed streets shall conform to topography as nearly as possible to reduce drainage problems and grades.

o. 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.

#### **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 fifteen (15) feet greater than the minimum width.

b. Minimum lot depth shall be one hundred and ten (110) feet, measured through the center of the lot and perpendicular to the property line, or radial to the property line or curved streets.

c. Maximum depth of residential lots shall not exceed two and one-half (2-1/2) 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 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 County Health Department, who shall make or cause to be made soil analysis and percolation tests for each lot and make recommendations to the Planning Commission. The plat lots will be so proportioned as to permit future

re-platting consistent with good subdivision design.

f. If the proposed subdivision is served with a public sanitary sewer system and not with a public water supply, and the developer will use a private water supply, the preliminary plat will be submitted on the basis of a minimum of one (1) acre lots, subject to the approval of the County Health Department, and be so proportioned that future platting will be consistent with good subdivision design.

g. If the proposed subdivision is not served with either an approved public water supply or an approved public sanitary sewer system and the developer will be using a private water supply with an approved private sewage disposal system, the subdivider shall submit his or her preliminary plat on the basis of ten (10) acre lots, subject to the approval of the County Health Department, which shall secure soil analysis and percolation tests and submit a recommendation to the Planning Commission. The lots will be so proportioned as to permit future re-platting consistent with good subdivision design.

h. 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. Flag lots shall make provisions for no less than fifteen (15) feet of street frontage. Non-residential lots shall provide adequate depth and width to provide for the type of use contemplated.

i. Minimum lot area shall be subject to the zoning regulations of the district in which the subdivision is located.

j. 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.

k. 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 resolution adopted by the Governing Body. The greater setback requirement shall govern.

l. 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.

m. Every lot shall have frontage on a public street other than an alley.

n. 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.

o. 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.

p. Whenever possible, residential lots shall not face on 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 seven and one-half (7-1/2) 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 fifteen (15) feet in width. An additional six (6) 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.

b. All easements shall be shown on the plat. Permanent easements shall not be obstructed by structures or vegetation. A property owner may erect fences and landscape the easement at his or her own risk of loss.

c. Drainage Easements. If a subdivision is traversed by a watercourse, drainage way or channel, then a storm water easement or drainage right-of-way shall be provided. Such easement or right-of-way shall conform substantially to the lines of the natural watercourse and shall be of such width or construction, or both, as may be necessary to provide adequate storm water drainage and for access for maintenance thereof. Parallel streets or parkways may be required in connection therewith. The engineer having jurisdiction shall make a study and 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 year flood depth (if known). Maintenance of storm water easements and drainage right-of-way shall be the responsibility of the owners of property adjoining such easements or right-of-way.

## **SECTION 4-6 DESIGN TECHNIQUES**

**4-601.** The appendix contains illustrations which may be used as guides in the review of subdivision applications.

**4-602.** 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.

## **SECTION 4-8 SOLAR ACCESS**

**4-801.** a. In order to promote the conservation of energy through the use of both passive and active solar systems, it is suggested that streets in residential subdivision should have an east-west alignment. Lots intended for detached

dwellings should be of sufficient width to allow the structure to be built with its longest axis running east-west.

b. Any subdivider may grant or establish a solar skyspace easement to protect solar energy systems from being shaded. The easements shall be created in writing and shall be recorded on the face of the plat. The easements shall run with the land.