

SECTION 7

MINIMUM DESIGN AND DEVELOPMENT STANDARDS

7.1 General.

- 7.1.1 No Final Plan for a subdivision shall be approved unless the Improvement Plans conform to the minimum design and development standards set forth within this Ordinance.
- 7.1.2 The recommendations of the City Comprehensive Plan for streets, drainage rights-of-way, school sites, public parks and recreational areas, and other public services and facilities shall be considered in the approval of the Final Plan.

7.2 Streets.

- 7.2.1 Classification. Street classification shall be limited to four (4) categories in accordance with their use and function. The four (4) classifications include:

Arterial
Collector
Local (includes Cul-de-Sac)
Marginal Access (Service Roads)

7.2.2 Right-of-Way Width.

- 7.2.2.1 Rights-of-way widths for all street classifications shall conform to the dimensions specified in Plate 1, attached hereto and made a part of this Ordinance. Variances for increases or decreases to the specifications contained in Plate 1 shall only occur in unusual circumstances, determined and approved by the Commission and Council upon recommendations by the City Engineer.

- 7.2.2.2 Local streets, marginal access streets, and cul-de-sacs which terminate in a circular turnaround shall have a minimum right-of-way of one hundred (100) feet diameter for the turnaround.

7.2.2.3 Wherever a dedicated or platted and recorded half-width street or alley right-of-way abuts the tract to be subdivided, the other half of said street or alley right-of-way shall be platted such that the ultimate right-of-way width conforms to the minimum standards set forth in this Ordinance.

7.2.2.4 Except as otherwise provided herein, temporary dead-end streets may be approved where necessitated by the layout of the subdivision or staging of development, provided that temporary unpaved turnarounds shall be constructed where lots are fronting on such temporary dead-end streets. The additional width of the right-of-way required for said temporary turnarounds shall be the same as required for permanent turnarounds. The extra right-of-way shall be vacated upon extension of the temporary street and the re-conditioning of said street and front yards shall be at the expense of the subdivider.

7.2.3 Design.

7.2.3.1 The street layout of the subdivision shall be in general conformity with the Major Street Plan and provide the most advantageous and aesthetically pleasing development of the entire neighborhood and adjoining areas. Where appropriate to the design, proposed streets shall be continuous and in alignment with existing, planned, or platted streets with which they are to connect.

7.2.3.2 The street and alley layout shall provide access to all lots and parcels of land within the subdivision.

7.2.3.3 Reserve strips controlling access to streets shall be prohibited except where their control is definitely placed under the Council with conditions approved by the Commission.

7.2.3.4 Whenever the subdivision contains or is adjacent to a railroad right-of-way or a highway designated as a "Limited Access Highway" by the appropriate highway authorities, provision shall be made for a Marginal Access Street (Service Road) to be constructed at a distance acceptable for the appropriate use of the land between the highway or railroad and such streets.

7.2.3.5 Alleys shall be discouraged in residential areas but shall be included in commercial and industrial areas where needed for loading and unloading or access purposes. All alleys, where platted, shall have a minimum right-of-way width of twenty (20) feet.

7.2.3.6 Dead-end alleys shall be avoided, but if they are unavoidable, they shall be provided with adequate turnaround facilities at the dead-end.

7.2.4 Grades.

7.2.4.1 The maximum grade for arterial streets shall be six (6) percent unless otherwise approved by the Commission and Council.

7.2.4.2 The maximum grade for all other streets and alleys shall be ten (10) percent unless otherwise approved by the Commission and Council.

7.2.4.3 The minimum grade for all streets and alleys shall not be less than seventy-five hundredths (0.75) of one (1) percent.

7.2.5 Intersections.

7.2.5.1 The proposed location of an intersection of any new street with an existing City Street or State Highway shall be subject to approval of the Missouri State Highway Department or City Council as applicable.

7.2.5.2 Intersections shall be designed and constructed to the current standards and specifications of the Missouri State Highway Department or City Council as applicable.

- 7.2.5.3 Streets shall intersect as nearly as possible at right angles where topography and other limiting factors of good design permit. Street jogs with centerline offsets of less than one hundred twenty-five (125) feet shall be prohibited.
- 7.2.5.4 The intersection of more than two (2) streets at one point shall be avoided.
- 7.2.5.5 If the smaller angle of the intersection of two (2) streets is less than sixty (60) degrees, the radius of the arc of the intersection of the property lines shall be as recommended by the City Engineer and approved by the Commission and Council.
- 7.2.5.6 The radius of the arc of the intersection of all other streets and alleys shall be as recommended by the City Engineer and approved by the Commission and Council.
- 7.2.6 Horizontal Visibility. Horizontal visibility on curved streets and vertical visibility on all streets shall be maintained along the centerlines as follows:
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|------------------|----------|
| Arterial: | 500 feet |
| Collector: | 300 feet |
| Marginal Access: | 300 feet |
| Local: | 150 feet |
- 7.2.7 Horizontal Curvature. Horizontal curvature measured along the centerline shall have a minimum radius as follows:
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|------------------|----------|
| Arterial: | 500 feet |
| Collector: | 300 feet |
| Marginal Access: | 300 feet |
| Local: | 150 feet |
- Between reversed curves there shall be a tangent of not less than one hundred (100) feet on Arterial and Marginal Access Streets and forty (40) feet on Collector and Local Streets

7.2.8 Names.

7.2.8.1 Street names shall be in accordance with Plate 3, attached hereto and made a part of this Ordinance.

7.2.8.2 No street shall have a name which will duplicate, or so nearly duplicate as to be confused with, the name of an existing street unless the proposed street is an extension of, or in alignment with, an existing street in which case the duplication shall be mandatory.

7.3 Blocks.

7.3.1 Block lengths shall not exceed fifteen hundred (1,500) feet nor be less than three hundred (300) feet unless unusual circumstances justify a greater or shorter length.

7.3.2 Blocks shall be of sufficient width to allow two (2) tiers of lots of an appropriate depth. The Commission may approve block widths providing for a single tier of lots where lots would otherwise front on a major street or where topographic conditions or size of the property prevents two (2) tiers. In the event that a single tier of lots is permitted by the Commission and approved by the Council, an adequate buffer area shall be provided and access from any abutting major street prohibited.

7.3.3 Cul-de-sacs shall not exceed five hundred (500) feet in length unless necessitated by topography and approved by the Commission and Council.

7.3.4 No other specific rule is made concerning the shape of blocks, but blocks shall fit easily into the overall plan of the subdivision and their design shall evidence consideration of lot planning, traffic flow, and public areas.

7.4 Lots.

7.4.1 All lots shall abut on a street or place.

7.4.2 Double frontage lots shall not be platted except where desired between an Arterial and a Collector Street. In that event, the lot shall front on the Collector Street and a planting strip or buffer zone, twenty (20) feet in width, shall be provided along the rear lot line adjacent the Arterial Street.

7.4.3 Minimum lot areas, lot widths, and building setback lines shall be as provided within the Zoning Ordinance for the district in which the subdivision is located. Where an approved public water supply system and/or approved sanitary sewer system is not available, the minimum lot area shall be in accordance with the requirements of the Missouri Division of Health and/or Missouri Clean Water Commission.

7.4.4 Corner residential lots shall be wider than normal to permit appropriate setback lines from both streets.

7.4.5 Side lot lines shall be at approximately right angles to straight streets and on radial lines to curved streets. Some variation from this rule is permissible, but pointed or very irregular lots shall be avoided.

7.5 Easements.

7.5.1 Where alleys are not provided, easements for utilities shall be provided. Such easements shall have a minimum width of twenty (20) feet, one-half of the width taken from each of the abutting lots. Where necessary, a twenty (20) foot easement may extend from the front to the rear lot lines between lots with one-half of the required easement width taken from each abutting lot.

7.5.2 Whenever a subdivision is traversed by a water course, drainage way, channel, or stream, a drainage right-of-way shall be provided for the purpose of widening, improving, protecting, or maintaining the stream course at the subdivider's expense. The width of the easement shall be adequate for any necessary channel relocations and straightenings and approved by the City Engineer.

7.6 Public Use Areas.

7.6.1 Whenever a Preliminary Plan includes a proposal for the establishment of common land, and the Commission finds that said land is not suitable for common usage due to terrain, benefit to only a small portion of the lot owners, difficulty of maintenance, or any similar reason, the Commission may either refuse to approve such a proposal or it may require the rearrangement of the lots within the proposed subdivision to include the establishment of common land.

- 7.6.2 Where the establishment of common land is permitted to be included in the subdivision, a plan for maintenance of said common land shall be included in the Maintenance of Improvements and shall be recorded simultaneously with the Final Plat. Any alterations of the common land shall require the submission of detailed Improvement Plans and shall be considered required improvements.

7.7 Non-Residential Subdivisions.

- 7.7.1 In addition to the standards of this Ordinance which are appropriate to the planning of all subdivisions, the non-residential developer shall demonstrate to the satisfaction of the Commission that the proposed commercial and/or industrial subdivision is specifically adapted to the uses anticipated.
- 7.7.2 Minimum lot areas, lot widths, and building setback lines shall be as provided within the Zoning Ordinance for the district in which the non-residential subdivision is located.
- 7.7.3 All streets in non-residential subdivisions shall be designed to meet the minimum requirements set forth in Plates 1 and 2.
- 7.7.4 Every effort shall be made to provide adequate buffers between the non-residential subdivisions and adjacent residential areas. This should include the provision of extra depth in parcels adjacent to an existing or potential residential development, and provisions for a permanently-landscaped buffer strip between the adjacent non-residential subdivision and other land use areas.

7.8 Topography, Natural Vegetation, and Flooding.

- 7.8.1 In the subdividing of any land within the jurisdiction, due regard shall be shown for all natural features, such as tree growth, water courses or other similar elements which, if preserved, would add attractiveness to the proposed development.
- 7.8.2 The natural topography shall be retained wherever possible in order to reduce excessive runoff onto adjoining property and to avoid extensive regrading of the site.

- 7.8.3 Floor elevations of all buildings shall be carefully studied in relation to existing topography, proposed street grades, existing trees of 12-inch caliper or larger, and other pertinent site features.
- 7.8.4 Consideration shall be given to varying the setback line required in the zoning district where the subdivision is proposed in order to retain, wherever possible existing topography, rock formations, and large trees.
- 7.8.5 Where there is a question as to the suitability of a lot or lots for their intended use due to factors such as rock formations, flood conditions, or similar circumstances, the Commission shall consider withholding approval of such lots.