

§ 151.07 DESIGN STANDARDS.

(A) *Blocks.*

(1) *Block length.* In general, intersecting streets, determining block lengths shall be provided at such intervals so as to serve cross-traffic adequately and to meet existing streets. Where no existing plats control, the blocks in residential subdivisions should not exceed 1,800 feet nor be less than 600 feet in length, except where topography or other conditions justify a departure from this maximum. In blocks longer than 900 feet, pedestrian ways and/or easements through the block may be required near the center of the block.

(2) *Block width.* The width of the block shall normally be sufficient to allow two tiers of lots of appropriate depth. Blocks intended for business or industrial use shall be of such width as to be considered most suitable for their respective use, including adequate space for off-street parking and deliveries.

(B) *Lots.*

(1) *Area.* The minimum lot area, width and depth shall not be less than that established by Chapter 150 in effect at the time of adoption of the final plat.

(2) *Corner lots.* Corner lots for residential use shall have additional width to permit appropriate building setback from both streets as required in Chapter 150.

(3) *Side lot lines.* Side lines of lots shall be approximately at right angles to street lines or radial to curved street lines.

(4) *Frontage.* Every lot must have the minimum frontage on a city approved street other than an alley, as-required in Chapter 150.

(5) *Setback lines.* Setback or building lines shall be shown on all lots intended for residential use and shall not be less than the setback required by Chapter 150, as may be amended.

(6) *Water courses.* Lots abutting a water course, wetland, ponding area, or stream shall have additional depth and width, as required under the provisions of Chapter 150.

(7) *Features.* In the subdividing of any land, due regard shall be shown for all natural features, such as tree growth, water courses, historic spots or similar conditions which if preserved will add attractiveness and stability to the proposed development.

(8) *Lot remnants.* All remnants of lots below minimum size left over after the subdividing of a larger tract must be added to adjacent lots, rather than allowed to remain as unusable parcels.

(9) *Political boundaries.* No singular plat shall extend over a political boundary or school district line without document notification to affected units of government.

(10) *Frontage on two streets.* Double-frontage, or lots with frontage on two parallel streets, shall not be permitted except: where lots back on arterial streets or highways, or where topographic or other conditions render subdividing otherwise unreasonable. Such double-frontage lots shall have an additional depth of at least 20 feet in order to allow space for screen planting along the back lot line.

(11) *Turn around access.* Where proposed residential lots abut a collector or arterial street,

they should be platted in such a manner as to encourage turn-around access and egress on each lot.

(C) *Streets and alleys.*

(1) *Streets, continuous.* Except for cul-de-sacs, streets shall connect with streets already dedicated in adjoining or adjacent subdivisions, or provide for future connections to adjoining unsubdivided tracts, or shall be a reasonable projection of streets in the nearest subdivided tracts. The arrangement of thoroughfares and collector streets shall be considered' in their relation to the reasonable circulation of traffic, to topographic conditions, to turn-off of storm water, to public convenience and safety, and in their appropriate relation to the proposed uses of the area to be served.

(2) *Local streets and dead-end streets.* Local streets should be so planned as to discourage their use by non-local traffic. Dead-end streets are prohibited, but cul-de-sacs shall be permitted where topography or other physical conditions justify their use. Cul-de-sacs shall not be longer than 600 feet, including a terminal turn-around which shall be provided at the closed end, with a right-of-way radius of not less than 40 feet.

(3) *Street plans for future subdivisions.* Where the plat to be submitted includes only part of the tract owned or intended for development by the subdivider, a tentative plan of a proposed future street system for the unsubdivided portion shall be prepared and submitted by the subdivider.

(4) *Temporary cul-de-sac.* In those instances where a street is terminated pending future extension in conjunction with future subdivision, a temporary turn around facility shall be provided at the closed end, in conformance with cul-de-sac requirements.

(5) *Provisions for resubdivision of large lots and parcels.* When a tract is subdivided into larger than normal building lots or parcels, the lots or parcels shall be so arranged as to permit the logical location and openings of future streets and appropriate resubdivision, with provision for adequate utility connections for resubdivision.

(6) *Street intersections.* Under normal conditions, streets shall be laid out so as to intersect as nearly as possible at right angles, except where topography or other conditions justify variations. Under normal conditions, the minimum angle of intersection of streets shall be 80 degrees. Street intersection jogs with an offset of less than 125 feet shall be avoided.

(7) *Subdivisions abutting major rights-of-way.* Wherever the proposed subdivision contains or is adjacent to the right-of-way of a U.S. or state highway or thoroughfare, provision may be made for a marginal access street approximately parallel and adjacent to the boundary of the right-of-way, provided that due consideration is given to proper circulation design, or for a street at a distance suitable, for the appropriate use of land between the street and right-of-way. The distance shall be determined with due consideration of the minimum distance required for approach connections to future grade separations, or for lot depths.

(8) *Sidewalks.* In those cases where the City Council deems appropriate and necessary, sidewalks of not less than four feet in width shall be provided. Where a proposed plat abuts or includes an arterial street, sidewalks of not less than four feet in width on both sides of the paved surface shall be provided. Where the proposed plat abuts or includes a collector street, sidewalks of not less than four feet in width, shall be required on one side of the street. In all cases where sidewalks are provided provisions shall be made for handicapped access.

(9) *Service access, alleys.* Service access shall be provided in commercial and industrial, districts for off-street loading, unloading and parking consistent with and adequate for the uses

proposed. Except where justified by special conditions, such as the continuation of an existing alley in the same

block, alleys will not be approved in residential districts. Alleys, where provided, shall not be less than 20 feet wide. Deadend alleys shall be avoided wherever possible, but if unavoidable, such deadend alleys may be approved if adequate turnaround facilities are provided at the closed end.

(10) *Half streets.* Dedication of half streets shall not be considered for approval except where it is essential to the reasonable development of the subdivision and in conformity with the other requirements of these regulations or where it is found that it will be practical to require the dedication of the other half when the adjoining property is subdivided.

(11) *Street grades.*

(a) The grades in all streets, arterial highways, collector streets, minor streets and alleys in any subdivision shall not be greater than the maximum grades for each classification as follows:

<i>Urban expressway</i>	<i>As required by the Minnesota State Highway Department</i>
Principal arterial highway	5%
Minor arterial highway	5%
Collector street	5%
Local street	8%
Alley	8%

(b) In addition, there shall be a minimum grade on all streets and arterial highways of not less than .05%.

(12) *Curb radius.* The minimum curb radii for thoroughfares, collector streets, local streets and alleys shall be as follows:

Arterial streets, collector and local streets	10 feet
Alleys	4 feet

(13) *Reverse curves.* Minimum design standards for collector and arterial streets shall comply to Minnesota State Aide Standards.

(14) *Reserve strips.* Reserve strips controlling access to streets shall be prohibited except under conditions accepted by the City Council.

(15) *Street right-of-way width.*

(a) For all public ways hereafter dedicated and accepted, the minimum right-of-way widths for streets and thoroughfares shall be shown in the comprehensive plan and where not shown therein, the minimum right-of-way width for streets, arterial highways or pedestrian ways included in any subdivision shall not be less than the minimum dimensions for each classification as follows:

<i>Classification</i>	<i>Desirable</i>	<i>Acceptable</i>
Principal arterial highway	104 feet	74 - 80 feet
Minor arterial highway		75 feet
Collector streets	75 feet	66 feet
Local streets		66 feet
Marginal service access roads		50 feet
Alley		20 feet
Pedestrian way		10 feet

(b) Where existing or anticipated traffic on principal, and minor arterial highways warrants greater widths of rights-of-way, these shall be required.

(16) *Street alignment.* The horizontal and vertical alignment standards on all streets shall be as follows:

(a) *Horizontal.*

1. Radii of center line:

	<i>Desirable</i>	<i>Minimum Acceptable</i>
Urban expressway	As required by the Minnesota State Highway Department	
Principal arterial highway	800 feet	500 feet
Minor arterial highway	800 feet	500 feet
Collector street	500 feet	300 feet
Local street	500 feet	100 feet

2. There shall be a tangent between all reversed curves of a minimum length as follows:

	<i>Minimum Acceptable</i>
Urban expressway	As required by the Minnesota Department
Principal Arterial Highway	100 feet
Minor Arterial Highway	100 feet
Collector Street	50 feet
Local Street	50 feet

(b) *Vertical*. All changes in street grades shall be connected by vertical parabolic curves of such length as follows:

Principal or minor	30 times the algebraic difference in the percent of grade of the two adjacent slopes
Collector or local street	20 times the algebraic difference in the percent of grade of the two adjacent slopes

(17) All proposed streets shall be offered for dedication on public streets. Except that private streets may be permitted, following approval of the variance application, within the boundaries of property under one ownership.

(D) *Easements*.

(1) *Width and location*. An easement for utilities at least ten feet wide, shall be provided along all lot lines. If necessary for the extension of main water or sewer lines or similar utilities, easements of greater width may be required along lot lines or across lots.

(2) *Continuous utility easement locations*. Utility easements shall connect with easements established in adjoining properties. These easements, when approved, shall not thereafter be changed without the approval of the City Council after a public hearing.

(3) *Guy wires*. Additional easements for pole guys should be provided, where appropriate, at the outside of turns. Where possible, lot lines shall be arranged to bisect the exterior angle so that pole guys will fall along side lot lines.

(E) *Erosion and sediment control*.

(1) The development shall conform to the natural limitations presented by topography and soil so as to create the least potential for soil erosion.

(2) Erosion and siltation control measures shall be coordinated with the different stages of construction. Appropriate control measures shall be installed prior to development when necessary to control erosion.

(3) Land shall be developed in increments of workable size such that adequate erosion and siltation controls can be provided as construction progresses. The smallest practical area of land shall be exposed at any one period of time.

(4) When soil is exposed, the exposure shall be for the shortest feasible period of time as specified in the development agreement.

(5) Where the topsoil is removed, sufficient arable soil shall be set aside for respreading over the developed area. Top soil shall be restored or provided to a depth of four inches and shall be of a quality at least equal to the soil quality prior to development.

(6) Natural vegetation shall be protected wherever practical.

(7) Runoff water shall be diverted to a sedimentation basin before being allowed to enter the natural drainage system.

(F) *Storm drainage.* All subdivision designs shall incorporate adequate provisions for storm water runoff subject to review and approval of the City Engineer.

(G) *Protected areas.*

(1) Where land proposed for subdivision is deemed environmentally sensitive by the city, due to the existence of wetlands, drainageways, water courses, floodable areas or steep slopes, the design of the subdivision shall clearly reflect all necessary measures of protection to insure against adverse environmental impact.

(2) Based upon the necessity to control and maintain certain sensitive areas, the city shall determine whether the protection will be accomplished through lot enlargement and redesign or dedication of those sensitive areas in the form of outlots.

(3) In general, measures of protection shall include design solutions which allow for construction and grading involving a minimum of alteration to sensitive areas. Where these areas are to be incorporated into lots within the proposed subdivision, the subdivider shall be required to demonstrate that the proposed design will not require construction on slopes over 18%, or result in significant alteration to the natural drainage system such that adverse impacts cannot be contained within the plat boundary.

(Ord. passed - -)