

ARTICLE 7

DESIGN STANDARDS FOR THE LAYOUT OF SUBDIVISIONS

The following design standards are intended to assist a developer in creating a subdivision and meeting the purpose of these subdivision regulations. These standards are to be used in preparing a Preliminary Plat, Improvement Plan, Final Plat and Conveyance Plat.

The purpose of these standards is to establish minimum design and improvement standards which will be required as a pre-condition to development or in conjunction with development for lots, streets, utilities, and other physical elements of a subdivision or development. The developer's engineer, licensed in Kentucky, shall design these aspects of the subdivision or development.

SECTION 7.1 STREET DESIGN

- A. Street Classification: The developer or subdivider is encouraged to meet with the Planning Commission's Engineer to determine the design requirements of proposed streets based upon the streets classification. In addition, a property owner may be required to dedicate land for street right-of way in order to upgrade existing arterial, collector, subcollector or local roads and bring them into conformance with the regulations.

- B. Street Rights-of-Way Widths:

The minimum width of right-of-way for a public street, measured from right-of-way line to right-of-way line and at a right angle to the centerline, shall be as follows:

Arterial	80 feet
Collector	60 feet
Sub-Collector	50 feet
Local	50 feet
Cul-de-sac	50 feet
Alley	30 feet

- C. Additional right-of-way: Subdivisions or developments that adjoin an existing city or county street, additional rights-of-way shall be dedicated to meet the minimum right-of-way width, if it does not exist, for all streets. The entire right-of-way shall be provided where any part of the subdivision or development is on both sides of the existing street; and one-half of the right-of-way shall be provided, as measured from the centerline for subdivisions or developments that is located only on one side of the existing street.

- D. Cul-de-sac: Cul-de-sacs streets shall not be longer than 1,200 feet, unless local topographic or other physical conditions are such as to render these provisions impracticable.
- E. Street Names: Proposed streets, which are in alignment with other existing streets, shall bear the name of the existing street unless separated by an intersecting collector or arterial street. In no case shall the name of a proposed street duplicate an existing street name, irrespective of the use of the suffix street, road, lane, avenue, boulevard, way, place, or court, nor shall a proposed street name phonetically approximate the name of any existing street or approved street name in Grant County. Proposed street names will be reserved when the Preliminary Plat is approved. Street names on Improvement Plans and Final Plats shall follow the approved names listed on the Preliminary Plat. Street names may be changed with the approval of the Planning Director.
- F. Alleys:
1. Alleys shall be prohibited in residential zoning districts, unless otherwise approved by the Planning Commission.
 2. In commercial and industrial areas, adequate alleys shall be provided where the design requires.
- G. Intersections: The two centerlines of proposed streets at their intersection shall be as nearly to a right angle as possible and that angle at no time shall be less than eighty (80) degrees.
1. For residential subdivisions, the radius of the curve at the intersection of the two right-of-way lines shall not be less than twenty feet (20'), and for the intersection of the two pavement edges, the radius curve shall not be less than twenty five (25) feet.
 2. For industrial and commercial subdivisions, the radius of the curve at the intersection of the two right-of-way lines shall not be less than forty feet (40'), and for the intersection of two pavement edges, the radius curve shall not be less than forty five feet (45').
 3. There shall be no greater than four basic street legs at any proposed intersection unless the intersection is divided. Merging lanes, deceleration lanes, "Y" intersections, etc. are considered as being parts of one street leg.
 4. Proposed intersections with existing or proposed streets shall not be closer than one hundred twenty five feet (125') to an intersection of any other street as measured from intersection point to intersection point.

- H. Easements: When ever any sanitary sewer, storm sewer or water main is located outside of a dedicated public right-of-way there shall be provided an easement at least twenty (20) feet in width and shall be centered on the centerline of the pipe structure. A surface drainage easement, at least twenty (20) feet in width, shall be provided from the discharge point of any storm sewer pipe the receiving drainage channel. See Article 9, Section 9.1-H for Surface Drainage Easement Statement.

- I. Cul-de-sac Streets; Proposed cul-de-sac streets shall not be more than twelve hundred feet (1,200') in length when measured from the center of the cul-de-sac along the centerline of the street to the nearest intersection. When topographic conditions or other physical conditions are such to render these provisions impracticable, the Planning Commission's Engineer may waive this requirement.

- J. Temporary Dead-End Streets: When any street is temporarily dead-ended a temporary turn-around shall be provided.

- K. Street Connections to Adjoining Tracts or Areas: Street connection to adjacent tracts or areas shall be required unless topographic conditions render these provisions impracticable.

The Planning Commission shall consider the following criteria for requiring street connections to adjacent tracts:

1. The adjoining land must be compatible with the subject development as determined by the current zoning.
2. The adjoining land has the potential for compatible uses, as determined by the Planning Commission's Engineer.
3. The Planning Commission may require the connection of local streets to adjoining tracts or areas in order to prevent a local street from becoming a cul-de-sac which exceeds the maximum length permitted for a cul-de-sac.
4. Connections to the existing street system will be consistent with the existing conditions and the design of adjacent streets.
5. In instances where a street connection cannot be constructed all the way to a shared property line due to grading or other construction feasibility issues, until development occurs on an adjacent tract, the connection shall be constructed as far as practical toward the property. The developer shall deposit the cash amount plus contingency with the Planning Commission for the estimated costs of remaining street construction, including water mains, to the property line. The developer shall be responsible for the construction of the remaining street segment when the adjoining tract develops.

6. Subdivisions that are required to provide sub-collector or collector streets shall also be required to provide for connection of such streets to other collector or arterial streets or connection to adjoining lands.
- L. Sidewalks: All proposed residential, commercial and industrial subdivisions or developments shall have sidewalks, as follows:
1. Residential Subdivisions: All proposed residential subdivisions shall have sidewalks on both sides of all streets.
 2. Commercial subdivision or development shall have sidewalks on both sides of all streets.
 3. Industrial subdivisions or developments shall have sidewalks on one side of all streets.

Sidewalks shall be constructed of Portland cement concrete on compacted subgrade and have a minimum depth of four inches (4"), except at driveways, the minimum depth shall be five inches (5") in residential zones. In commercial and industrial zones, driveways shall have a minimum depth of eight inches (8"). All sidewalks shall be located five (5) feet from the back of curb or the edge of the pavement and shall be five (5) feet in width. At intersections, handicap ramps shall be installed meeting ADA requirements. Handicap ramps shall be installed as part of the original development.

Sidewalks shall be installed by the developer of the subdivision or the builder of each structure as each lot is developed. In cases where sidewalk improvements have not been completed along platted but undeveloped lots, such sidewalk improvements shall be completed by the owner of the lot(s) in question within one (1) years from the date when ninety (90%) percent of the individual lots within a phase or section have been developed. Sidewalk construction shall be inspected by the appropriate legislative body.

- M. Street Signs: Street signage installation, maintenance and replacement shall be the responsibility of the appropriate legislative body.
- N. Perimeter Requirements: Development in all residential districts shall provide a minimum four foot (4') high fence along the common boundary with an active agricultural operation or if the adjoining property is currently zoned A-1. An active agricultural operation for the purpose of this section includes the raising of livestock or annual crops on at least fifteen (15) contiguous acres. This fencing shall be placed on the developing property and shown within an easement on the Final Plat. The fencing may be placed on the property of the active agricultural operation by agreement with the property owner. Maintenance of the fence shall be the responsibility of the owner(s) of the property(ies) where the fence is located unless assigned to a specific party or entity such as a Homeowner's Association. The fencing material shall minimally be stock wire, although chain link, rail fencing with wire inserts, picket fencing, solid privacy fencing, and comparable material are also acceptable. The finished side of the fence shall

face the developing property. Materials or fence location may be altered or the acceptance of an existing fence, upon agreement of an affected property owners. The fencing required by this section may be waived by the Planning Commission.

- O. Street Lights: When required by the applicable legislative body, the subdivider or developer of the subdivision will provide street lighting poles, accessories and the necessary easements at the subdivides expense and in accordance to the specifications of the applicable legislative body and appropriate utility company. In general, street lights shall be placed at strategic locations and distances to assure safe pedestrian and vehicular traffic. Distance between street lights will be based upon lot size and street configuration and the appropriate legislative body. The ownership and maintenance of street lights shall be the responsibility of the appropriate legislative body.

SECTION 7.2 BLOCKS:

Intersecting streets which determine block length and width shall be provided at such intervals which include existing street patterns, topography, and requirements for safe and convenient vehicular and pedestrian circulation. Blocks of proposed subdivisions or developments shall not be less than two hundred and forty feet (240') and not more than twelve hundred feet (1,200') in length.

SECTION 7.3 LOTS:

The size, shape and arrangement of lots in a proposed subdivision or development, shall be such as set forward in the applicable zoning ordinance and these subdivision regulations. Rectangular shaped lots shall be encouraged and extremely irregular shaped lots shall be avoided. Side lot lines shall be as closed to right angles with the street centerline as possible, or radial to curve street centerline. Lot lines not at right angles with the street centerline, and lots lines intersecting with curved right-of-way shall have a reference tie to the tangent line of that centerline curve. Lot lines of a subdivision should display an organized and uniform development pattern.

- A. Lot Size: The minimum size of a lot in a proposed subdivision or development depends on the current zoning district that said subdivision or development or section thereof lies in. The minimum size for the respective zone is contained in the current zoning regulations as established by the legislative body have territorial jurisdiction over the proposed subdivision or development.
- B. Land Adjoining Arterial or Collector Streets: The subdivision of new lots on land with a minimum lot size of less than one (1) acre which adjoin arterial or collector streets shall be platted in a manner which necessitates vehicular access to be provided from a secondary street or private access driveway and not from the arterial or collector streets. A note shall be provided on the final plat which states that vehicular access is prohibited from the arterial or collector street When access is from a secondary street or private access driveway, an earthen berm shall be constructed within the lot and adjacent to the right of way line of the

arterial or collector street, which shall have a minimum height of five (5) feet above the elevation at the right of way line of the arterial or collector street.

- C. Irregular Lots: Irregular lots which include corner lots, double frontage lots, flag lots and lots that have irregular shape and size because of topography shall conform to the minimum requirements of the applicable zoning ordinance. Double frontage lots shall be avoided except where essential to provide separation of a residential development from arterial or collector streets or to overcome specific disadvantage of topography and orientation.
- D. Corner Lot Driveways: Driveways on corner lots shall be located at the building line farthest from the intersection.
- E. Lot Frontage: All lots in a subdivision shall have the minimum frontage on a public street as determined in the applicable zoning ordinance.
- F. Flag Lots: Flag lots shall only be permitted in those locations where because of geometric, topographic, or other natural features, it would be impractical to extend a public street. Flag lots shall have a panhandle extending to a publicly dedicated street for the purpose of access, and shall have two conforming lots adjoining the flag lot (see page 7.8).

- 1. Flag lots in agricultural and residential subdivisions shall meet the following standards:

Single flag lots shall have twenty feet (20') of frontage on a publicly dedicated street. In the case of two contiguous flag lots, there shall be thirty feet (30') of frontage on a publicly dedicated street with a common driveway. With two contiguous flag lots, a deeded fifteen foot (15') strip of land for each lot is required with a common unobstructed access easement for a shared driveway to the public street

- 2. Flag lots in commercial and industrial subdivisions shall meet the following standards:

Flag lots shall have a minimum of thirty feet (30') of frontage and a maximum of fifty feet (50') of frontage on a publicly dedicated street. In the case of two contiguous flag lots, there shall be a minimum of thirty feet (30') of frontage and a maximum of fifty feet (50') of frontage, for both lots combined, on a publicly dedicated street with a common driveway. With two contiguous flag lots, a deeded strip of land that is at least fifteen feet (15') wide, but no greater than twenty five feet (25') in width, is required for each lot with a common unobstructed access easement for a shared driveway to the public street.

3. When the applicable zoning ordinance specifies a minimum lot frontage at the right of way line greater than those specified in paragraph 1 and 2, then the panhandle shall maintain a width equal to the minimum lot frontage required at the right of way line for the full length of the panhandle.

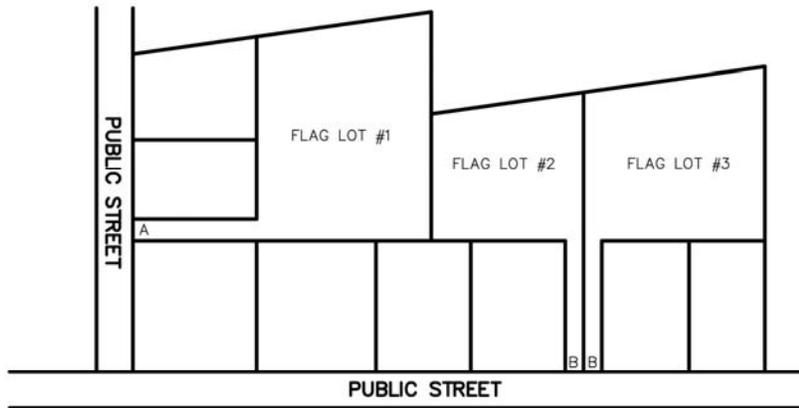
- 4 All Flag lots shall meet the following standards:
 - a. Flag lots shall have a panhandle for the minimum distance (length) of two (2) times the minimum lot frontage required by the applicable zone with a maximum required length of one hundred fifty feet (150') from a publicly dedicated street.
 - b. In no case shall more than two flag lots be contiguous to each other at the publicly dedicated street.
 - c. The maximum number of flag lots permitted for each phase of a subdivision (Improvement Plan submittal) shall not exceed fifteen percent (15%).
 - d. A driveway must be located within the panhandle of the deeded property for a flag lot.
 - e. A written agreement, in a recordable form, requiring the perpetual maintenance of the driveway located within the panhandle of the flag lot, shall be recorded with the Grant County Court Clerk at the same time that the final plat is recorded.
 - f. The driveway for a flag lot shall be located at a minimum of five feet (5') from each lot line, unless approved by the Grant County Planning Commission.
 - g. For two contiguous flag lots with a common driveway, a joint access easement shall be shown across the entire width of both panhandle containing the common driveway on the Final Plat.

PROPER USE OF FLAG LOTS

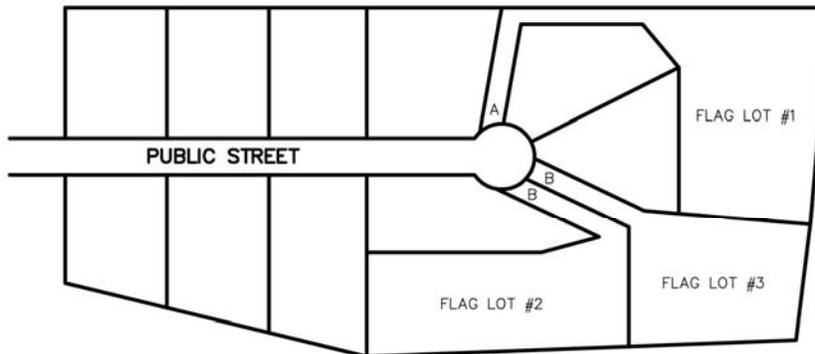
<u>TYPE OF SUBDIVISION</u>	<u>A</u>	<u>B</u>
AGRICULTURAL/RESIDENTIAL	20'	15'
COMMERCIAL/INDUSTRIAL	30' MIN 50' MAX	15' MIN 25' MAX

*PAN HANDLE LENGTH PER SECTION 7.3-F-4-a

EXAMPLE 1



EXAMPLE 2



SECTION 7.4 SUBDIVISION ACCESS

Each existing tract of land is entitled to one (1) entry street provided that the location and design fulfills, as a minimum, the following requirements:

1. The minimum spacing between entry streets shall be five hundred (500) feet. When conditions make this requirement impractical, the Planning Commission may waive this requirement.
2. A proposed subdivision or development containing more than one hundred (100) lots or living units, a second entry street shall be provided. When topographic or physical conditions make this requirement impractical, the Planning Commission may waive this requirement.
3. An encroachment permit shall be obtained from the appropriate legislative body for whichever road is being accessed.
4. The Planning Commission shall require that all entry streets shall operate in such a manner as to not adversely affect the level of service of the adjacent roadway. Provisions for the present or future construction of a frontage road, restriction or channelization of turning movements or other improvements may be required, as a condition of approval, in order to maintain the level of service of any adjacent roadway. (See Section 7.5)
5. If a property has frontage on more than one (1) street, an entry street will be permitted only on those streets where standards contained in these regulations can be met.
6. If a property cannot be served by any entry street location meeting these standards, the Planning Commission will designate one or more entry street locations based on traffic safety, operational needs and conformance to as much of these requirements as possible.
7. All entry streets shall be designed and located so that the minimum sight distances, as shown in Table 7.1 and 7.2, are provided. The required sight distance must be unobstructed by horizontal and vertical road curves, embankments, structures or vegetation and all other obstructions.
8. All entry streets shall be designed and located to provide sight triangles, as shown in Figure 7.1. Sight triangles are areas clear of visual obstructions to allow for safe egress of vehicles from an access point. Measurements must be calculated with a driver eye height on 3.5 feet and a sight object height of 4.25 feet. The existing driver position at the proposed access point must be calculated at 18 feet back from the pavement edge of the thoroughfare. The sight distance must meet the measurements listed in Tables 7.2 and 7.2.

Table 7.1

**Minimum Sight Distance along Through Road For Turning Vehicle
From Proposed Access**

Posted Speed Limit	25 MPH	35 MPH	45 MPH	55 MPH
Passenger Car	220	308	396	484
*Truck	440	616	792	968

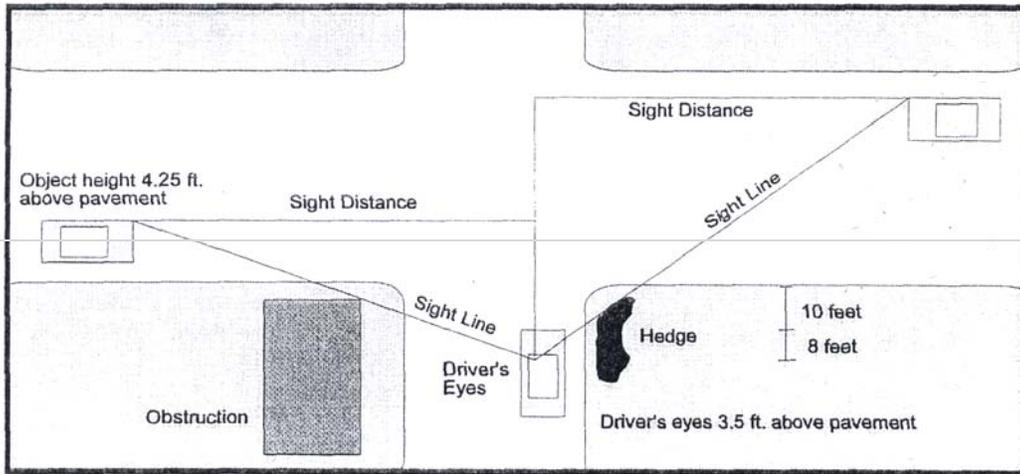
*When there is substantial truck usage as determined by the Planning Commission's Engineer.

**Table 7.2
Minimum Sight Distance For Vehicle on Through Road
Turning Left onto Proposed Access**

Posted Speed Limit	25 MPH	35 MPH	45 MPH	55 MPH
Passenger Car	150	225	326	443
*Truck	225	337	489	665

*When there is substantial truck usage as determined by the Planning Commission's Engineer

**FIGURE 7.1
Sight Triangles**



SECTION 7.5 TURN LANES:

Turn lanes shall be provided on the intersected street as follows:

1. Subdivision or development containing more than one hundred (100) residential lots or housing units, a left turn lane shall be provided from the thoroughfare into the subdivision or development.
2. Subdivision or development containing more than one (100) lots or housing units but less than two hundred (200) or less residential lots or housing units, turn lanes, both right and left turns, shall be provided from the thoroughfare into the proposed subdivision development. The left turn lane shall have a minimum length of one hundred twenty five (125) feet with a minimum taper of fifty (50) feet. The right turn lane shall have a minimum length of eighty (80) feet with a minimum taper of fifty (50) feet.
3. Subdivision or developments containing two hundred (200) or more residential lots or living units, turn lanes shall be provided. The developer shall have a traffic study prepared to determine the design requirements for the turn lanes. The minimum requirements shall be as specified in paragraph 2 of this Section.
4. All commercial or industrial subdivisions or developments shall provide turn lanes from the thoroughfare into the subdivision or development. The developer shall have a traffic study prepared to determine the design requirements for the turn lanes. The minimum requirements shall be as specified in paragraph 2 of this Section.
5. The minimum turning radius for all right hand turns from the thoroughfare into the subdivision or development shall have a minimum radius of forty-five feet (45'). A fifty foot (50') taper may be used if approved by the Planning Commission's Engineer.
6. Subdivisions or developments that have access from a state maintained roadway shall obtain an Encroachment Permit and comply with all requirements of the Kentucky Transportation Cabinet.
7. All required turn lanes shall be constructed in conjunction with the construction of the intersecting street.
8. When topographic or physical conditions make the installation of turn lanes impractical, the Planning Commission may waive this requirement.