

ARTICLE 6

DESIGN AND IMPROVEMENT STANDARDS FOR MAJOR SUBDIVISIONS

6-1 PURPOSE - The purpose of this Article is to establish the basic and 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 in the subdivision. Standards exceeding these minimum requirements may be provided by the developer, or required by the Commission. A major direction of this Article is to promote development that is most harmonious with the existing environment, while providing guidelines and standards to protect the public health, safety and welfare. To achieve this end, development should follow as closely as possible the contour of the land and should be designed to minimize cuts and fills. The project engineer shall design the work. Accuracy, completeness, and construction feasibility of designs and construction plans, and inspection of all improvements during construction are the responsibility of the project engineer. The Division of Engineering will administer the development process and rely on the project engineer to adequately design the infrastructure and comply with the Division of Engineering Technical and Procedures Manuals.

6-8 STREET STANDARDS - All streets (which are classified herein as either expressways, arterials, collectors/connectors or locals) shall conform to the Division of Engineering Roadway Manual, the Standard Drawings and following standards:

6-8(a) STREET GEOMETRICS - All streets shall conform to the applicable geometric, cross-section and sight triangle standards of Exhibits 6-1 through 6-7.

6-8(b) STREET CONTINUITY - Streets shall be related to topography and shall generally provide for the continuation of existing or dedicated streets in adjoining or nearby tracts, and provide for connection to adjoining unsubdivided tracts, especially those which would otherwise be land-locked. Freeways and arterials shall not penetrate or bisect existing or proposed neighborhoods, but rather shall be located as appropriate boundaries for such. Collectors/Connectors shall carry traffic from arterials into neighborhoods. Locals shall carry traffic from collectors into the neighborhood for the primary purpose of access to individual properties.

6-8(c) STREET NAMES - Streets that are obviously in alignment with existing streets shall bear the name of the existing street. Street names, including cul-de-sacs, shall not duplicate or closely approximate the names of

other streets in Lexington-Fayette County; and all street names, subdivision names, property and building numbers, etc., shall be as determined by the Planning Commission.

6-8(d) PLANNING FOR CONFLICTING TRAFFIC OR LAND USE - Whenever the proposed subdivision contains, or is adjacent to, a railroad right-of-way; arterial or expressway right-of-way; or conflicting changes in land uses, the Planning Commission shall require service roads; reverse frontage lots; lots with rear service alleys; lots with additional depth; or other such treatment as the Commission finds necessary for protection of abutting properties and to afford separation of conflicting types of traffic or land use.

6-8(e) HALF STREETS AND RESERVE STRIPS - New half or partial streets shall not be permitted. Existing half streets generally shall be completed to full right-of-way requirements. All streets to extend into an adjoining property shall have full right-of-way dedicated and street improvements constructed. When streets are constructed adjacent and parallel to an adjoining property, the right-of-way shall be established at the common property line. Reserve strips shall be prohibited.

6-8(f) CUL-DE-SACS - Cul-de-sacs shall not generally be longer than one thousand (1,000) feet, including the turnaround, which shall be provided at the closed end with a right-of-way radius of fifty (50) feet; curb radius of forty (40) feet; and a transition curve radius of seventy-five (75) feet. Alternate turnaround designs depicted in these regulations (See Exhibit 6-7) shall also be permitted. Longer cul-de-sacs may be permitted because of unusual topographic or other conditions; and, in such cases, the Planning Commission may require additional paving width if necessary to prevent overloading of street capacity. Temporary turnarounds may be required at the end of stub streets as long as they are retained within the street right-of-way.

6-8(g) RURAL ROADS - Where right-of-way has not been previously dedicated or otherwise acquired along a rural road, the owner shall be requested to dedicate right-of-way from the centerline of the road to meet the rural local right-of-way standard. In all cases, the plan shall show the right-of-way which at least meets the statutory right-of-way minimum. The Planning Commission may require the construction of

additional pavement, such as turn lanes when necessary, to provide as safe a situation as possible under the circumstances.

6-8(h) MEDIANS - Medians may be permitted in street cross-sections when approved by the Commission. Medians shall only be allowed when the street cross-section is designed to provide for all necessary traffic movements inherent in the standard cross-sections contained in Exhibits 6-1, ~~6-2~~, and 6-3. Provision for the maintenance of any median areas and associated plantings shall be noted on the final subdivision plat of the property. Plantings shall be of a nature that will not conflict with sight distance or other traffic-related requirements. Location and design of medians and the installation of obstructions in the median shall be subject to the approval of the Planning Commission.

6-8(i) BICYCLE ROUTE STANDARDS - Where indicated in the Comprehensive Plan, the Planning Commission shall require the construction of a bicycle lane on the vehicular roadway in accordance with the Roadway Manual.

6-8(j) STREET AND SIDEWALK LIGHTING AND EASEMENTS - All streets, sidewalks, and walkways shall be properly lighted as required by the Commission. Such lighting shall be installed at the direction and expense of the Urban County Government. Easements necessary for provision of such lighting shall be provided and shall be labeled as "street light easement." Release or modifications of street light easements shall require the expressed approval of the Urban County Council. Encroachments and provision of street light facilities shall be at the approval of the Commissioner of Public Works or the Commissioner's authorized agent.

6-8(k) STREET NAME SIGNS - Temporary street name signs shall be provided, installed and maintained by the developer at all intersections, as required by the Department of Public Safety. Permanent signs shall be installed by the Urban County Government, as determined by the Urban County Traffic Engineer.

6-8(l) PRIVATE STREETS - Private streets may be permitted by the Planning Commission. Subdivision plans containing private streets shall conform to the same design standards as subdivision plans utilizing public streets and shall conform to all other subdivision regulations, unless different requirements are listed in the following:

(1) NO DISRUPTION TO THROUGH MOVEMENT - Private streets may be permitted only if they meet the definition of "local" streets; if they provide absolutely no present or future impediment to necessary through traffic movement in the general area; and if adjoining properties in the general area already

have, or are capable of providing, a proper, efficient and safe street system that will in no way depend upon the private streets.

(2) RIGHT-OF-WAY AND SETBACK - Private street rights-of-way and building setback lines shall be shown on the plat and shall meet at least the minimum requirements of these Subdivision Regulations and the Zoning Ordinance as required for public streets to assure conformance if such streets are ever accepted for public dedication at a later date.

(3) STREET IMPROVEMENT STANDARDS - Any permitted private street also shall conform to the design and improvement standards for public streets. All private street improvements (excepting only the final course of asphalt, as noted below) shall be constructed in compliance with the approved improvement plan before the final subdivision plan is recorded. For the final course of asphalt only, the developer shall be permitted to post a surety in favor of the final maintenance association responsible for the private street, as provided in Article 4 of these Subdivision Regulations, and shall note such requirement on the final plat of the property. The developer shall be required to submit an affidavit to the Division of Planning, attesting that the surety for the private street has been properly posted prior to recording the final record plan.

(4) MAINTENANCE RESPONSIBILITY - A homeowners' association or other mechanism which provides for equitable common responsibility for private street maintenance and repair shall be required to be established by the developer. The developer's responsibility to create such a mechanism shall be noted on the final plat of the subdivision. A requirement that each property owner be individually responsible for maintenance and repair of the portion of the street abutting the lot shall not be considered as acceptable for fulfilling the requirements of this section.

6-8(m) ACCESS EASEMENT STANDARDS - Access easements (as opposed to public or private streets) shall be permitted to provide sole access to a lot only in rare and extreme circumstances where the Commission finds that the application of the requirements and standards for public or private streets would clearly be excessive or impossible due to existing development or other just cause. Prior to permitting an access easement as sole access to a lot, the Commission shall first thoroughly examine the possibility of utilizing a public or private street as access, and shall give specific reasons for permitting the access easement in its action on the proposed

subdivision. The Commission shall have the right to fully regulate such access easements as to width, construction standards, use and any other relevant factor. Nothing within this section shall be construed so as to abrogate the power of the Planning Commission to deny that the easement will not be adequate to satisfy the traffic needs of the proposed subdivision. Access easements which are not for the sole purpose of access to property and are primarily provided for convenience and/or improved flow of traffic between adjoining properties may also be fully regulated by the Commission; however, no special findings shall be required in these cases.

6-8(n) SIDEWALK AND SHARED-USE PATH STANDARDS - All sidewalks and shared-use paths primarily provided for convenience and/or improved flow shall conform to the following standards and shall be designed in accordance with the Division of Engineering Roadway Manual, the Division of Engineering Standard Drawings, and in conformance with the Americans with Disabilities Act (ADA).

6-8(n)(1) SIDEWALK STANDARDS - Conventional pedestrian sidewalks shall be required on both sides of all roads unless the street is specifically exempted by these Subdivision Regulations, or a specific waiver is granted by the Planning Commission. A meandering sidewalk alignment may be approved by the Planning Commission to save trees or other major plantings, avoid rock outcroppings, or to avoid other physical conditions. Sidewalks shall be constructed of concrete and shall be four and one-half (4½) inches in thickness and a minimum width of four (4) feet. Sidewalks shall be placed adjacent to the street right-of-way line, except as noted in Exhibit ~~6-7~~ **6-6** for cul-de-sacs. Slope toward curb shall be one-quarter (¼) of an inch to the foot. Sidewalks shall include a curb ramp wherever an accessible route crosses a curb. Where sidewalks are required on bridges, they shall have a minimum, barrier-free, width of six (6) feet. The Standard Sidewalk Alignment shall be as described in Table A.

6-8(n)(2) OTHER PEDESTRIAN WALKWAYS

- In addition to the sidewalks paralleling streets, the Commission also may require pedestrian walkways, with at least a 10-foot easement, at mid-block or other locations, to provide better pedestrian access to parks, schools, cemeteries, greenways or other land uses.

6-8(n)(3) SHARED-USE PATH STANDARDS

- Where these paths are indicated in the Comprehensive Plan, the Commission shall require the dedication of right-of-way, or an easement of sufficient width for the construction and use of the path. If a shared-use path is required by the Commission in lieu of a sidewalk, the maximum obligation of the developer shall be the cost of a conventional pedestrian sidewalk. The shared-use path shall be designed and constructed in conformance with the Roadway Manual.

6-8(o) STREET CONSTRUCTION

- Specifications for streets, including grading and embankments, excavation, subgrade preparation, fill materials, curbs and gutters, and street paving, shall be designed and constructed in conformance with the Division of Engineering Standard Drawings, the Technical Manuals, and these Subdivision Regulations.

6-8(p) STREET IMPROVEMENT REQUIREMENTS FOR DEVELOPMENT ADJOINING EXISTING ROADWAYS

- Any substantial development of subdivided property may reasonably be anticipated to create a burden on existing public roads, thereby posing a traffic and safety hazard. In order to ameliorate that hazard and to advance the public's interest in having safe and adequate roadways, the following requirements shall apply whenever a subdivision is proposed for property abutting an existing public roadway which does not meet the right-of-way and pavement width standards for the functional classification of that street:

TABLE A: STANDARD SIDEWALK ALIGNMENT

STREET CLASSIFICATION	WIDTH (FEET)	
	DISTANCE FROM ROADWAY	WIDTH OF SIDEWALK
Non-Residential and Industrial Collectors/Connectors (40' Street Width)	10.5	4.0
Non-Residential and Industrial Collectors/Connectors (51' Street Width)	5.0	4.0
Residential Collectors/Connectors and Industrial Locals	5.5	4.0
Local Residential Neo-Traditional	5.5	5.0
Local Residential	5.5	4.0
Local Residential Cul-de Sac	7.0	4.0

(1) PROPOSED SUBDIVISIONS WHICH ABUT LOCAL OR COLLECTOR / CONNECTOR STREETS - Whenever a subdivision is proposed for property which abuts a local or collector/connector street, as defined in these Land Subdivision Regulations, the developer shall be required to dedicate right-of-way along the entire street frontage to a width which will provide one-half of the total right-of-way necessary to comply with the standards as set out in Exhibit ~~6-16-2~~ of these Land Subdivision Regulations. It is assumed that the same right-of-way dedication will be required on the opposite side of the roadway at such time as that property develops, thereby providing the full necessary right-of-way width. Construction of roadway widening improvements (including paving, curb, gutter and sidewalk, where appropriate) shall also be required as necessary to bring the roadway up to full cross-section requirements as set forth in Exhibits 6-1, ~~6-2~~, and 6-3 of these Land Subdivision Regulations. Upon the recommendation of the Commissioner of Public Works, the Commission may permit a long-term surety to be posted in lieu of construction of such improvements where such are intended to augment programmed improvements to be made by the government.

(2) PROPOSED SUBDIVISION OF PROPERTY ABUTTING AN ARTERIAL STREET - Whenever a subdivision is proposed for property that abuts an arterial street which is, or is proposed to be, four lanes or more in width, the developer may be required to dedicate sufficient right-of-way to permit any necessary widening. In consideration of the fact that such dedication requirement may exceed that which would ordinarily be required for subdivisions abutting local or collector/connector streets, the developer shall not be required to construct roadway widening improvements for the full road frontage; but rather, improvements such as turn lanes for new intersecting streets or other access points may be required when necessary to provide as safe a situation as possible under the circumstances.

6-8(q) INTERSECTION AND ACCESS SPACING GUIDELINES - The following guidelines shall be the basis for the determination of proper spacing for street intersections and driveway access for subdivisions. It is recognized that these guidelines will not be able to be adhered to in all cases, especially in areas where existing development is present. The Planning Commission shall attempt in all cases, however, to apply these guidelines to the greatest extent feasible in order to create safe and efficient traffic movement systems:

(1) SPACING MEASUREMENT DEFINITION - Distance shall be defined as the distance between the

centerlines of intersecting streets and roads. However, in the case of an interchange, distances shall be measured from the centerline of any intersecting roadway to the closest near edge (projected) of the ramp roadway or, in the case of a free flow ramp terminal, to the gore of the nearest ramp.

(2) ACCESS STANDARDS BY FUNCTIONAL CLASSIFICATION

(a) EXPRESSWAYS - Expressways shall have intersections with arterials and/or other expressways. There shall be no intersections with lower type facilities. All intersections shall be of the grade-separation interchange type. The spacing of interchanges on expressways within the Urban County shall be determined jointly by the Lexington-Fayette Urban County Government and the Kentucky Department of Transportation.

(b) PRINCIPAL ARTERIALS - Principal arterials shall have intersections with expressways, other principal arterials, minor arterials and collector streets. Intersections shall be signalized as warranted. Any access to a principal arterial must be located at a minimum of 1,600 feet from any other access along that principal arterial (i.e., principal arterials, minor arterials, collectors/connectors, major commercial or industrial driveway accesses). No new residential driveway access shall be allowed on a principal arterial. Protected left and right turn lanes with ample storage space must be provided at all intersections. The Kentucky Department of Transportation will be consulted when state maintained roads are involved.

(c) MINOR ARTERIAL - Minor arterials shall have intersections with expressways, principal arterials, other minor arterials and collector/connector streets. Intersections shall be signalized as warranted. No new residential driveway access shall be allowed on a minor arterial. Commercial or industrial driveways shall be treated according to the non-residential spacing formula. Adequate provisions for left and right turn lanes shall be determined by the Division of Traffic Engineering and the Kentucky Department of Transportation for state maintained facilities. The spacing of intersections along a minor arterial shall be as follows:

1. Between an intersection with an expressway and an intersection with a principal or minor arterial, the distance shall be a minimum of 1,600'.

2. Between an expressway and a collector/connector -- minimum 1,400'.
3. Between one principal or minor arterial and another -- minimum 1,400'.
4. Between a principal or minor arterial and a collector/connector -- minimum 1,200'.
5. Between a collector/connector and another collector/connector -- minimum 1,000'.

(d) COLLECTOR/CONNECTOR STREETS - Collector/connector streets shall have intersections with arterials, collectors/connectors and locals. Collector/connector streets shall be designed for system continuity and traffic flow. The spacing of intersections along collectors/connectors shall be as follows:

1. Between a principal or minor arterial and another, the distance shall be a minimum of 1,400'.
2. Between a principal or minor arterial and a collector/connector -- minimum 1,000'.
3. Between one collector/connector and another -- minimum 800'.
4. Between one principal or minor arterial and a local -- 500'.
5. Between a collector/connector and a local - minimum 400'.
6. Between a local and another local -- minimum 250'.

(e) LOCAL STREETS - Local streets shall have intersections with collectors/connectors and other local streets. Some designs may warrant exceptions. The spacing of intersections on local streets shall be as follows:

1. Between one collector/connector and another collector/connector -- minimum 800'.
2. Between a collector/connector and a local - minimum 250'.
3. Between a local and another local -- minimum 250'.

6-8(q)(3) LAND USE ACCESS

(a) RESIDENTIAL - All single-family residential structures shall be allowed one access per lot. An additional point of access may be permitted for corner lots, loop driveways, or other instances where public safety will not be impaired by utilizing a second point of access. Duplexes and four-plexes shall be permitted two accesses. Subdivisions shall be designed such that these uses have no direct driveway to either principal or minor arterials.

Apartment complexes, condominium developments, as well as all other developments that are accessed through a common private drive or street system, shall be treated as high density residential developments regardless of the actual overall density of the development. These developments shall not have access to principal arterials. However, they may be allowed access to minor arterials, provided that the private driveways are allowed, consistent with the access spacing standards governing the access of collector/connector streets to minor arterial streets. The access of these private driveways to collector/connector streets shall be spaced according to the minimum distances produced by the following formula: $A = 50(\sqrt{x})$

Where:

A = the required access spacing in feet from the nearest intersecting street or another high density private driveway. (This figure should be rounded to the nearest 10 feet).

x = the number of units in the development.

50 = the minimum access spacing (in feet).

The minimum spacing requirement shall not exceed the spacing standards established for the spacing of local streets along a collector/connector street. Distances for high density private driveway access shall be measured from the centerline of the driveway to the right-of-way line of the nearest intersecting street or to the centerline of another high density private driveway access. High density private driveways should not intersect local streets. All other residential accesses shall not be less than 25 feet from any local street intersection (whether public or private streets), nor less than 50' from any public collector street intersection.

(b) NON-RESIDENTIAL - All non-residential land uses may have access to principal arterial streets via service roads. Non-residential land uses may also have access to minor arterials and to collector/connector streets. Non-residential land uses shall generally not have access to residential local streets. The spacing of these accesses shall be measured from the right-of-way line of the nearest intersecting street or the centerline of the nearest intersecting non-residential access point (i.e., driveway). The minimum spacing on non-residential access points shall be based upon the maximum potential trip generation of the contiguous area which has been zoned and/or planned for non-residential land use that

abuts the subject road facility and encompasses the area which has been proposed for development by the developer. Access to a minor arterial via a service road shall be allowed only in accordance with the spacing standards based upon the trip generation of the total area immediately served by the service road. The determination of potential trip generation shall be made using sources and methods approved by the Lexington-Fayette Urban County Government, Division of Planning. The spacing of access points shall be determined as follows: $D = 1400 - (1000 (1 - TE/3000))$

Where:

D = the required distance between access points (in feet).

TE = the maximum potential trip ends of the area in which the development will take place.

If D exceeds 1,400 feet, then the minimum standard of 1,400 feet shall apply to all access points of that development. D shall be rounded to the nearest 50 feet. For properties fronting along street facilities where the required spacing would not allow an individual access to properties adjacent to the property currently being developed, an arrangement shall be made for the joint use of entrances or the construction of service roads by developers.

6-9 TRAFFIC CALMING – Traffic calming measures shall be integrated into all existing and proposed street designs to improve public safety, ensure safe operating speeds, and facilitate context sensitive design that results in a safe multi-modal street network.

The Division of Traffic Engineering will consider traffic calming measures on a case-by-case basis, and make recommendations to the Division of Planning and the Urban County Planning Commission.

Traffic calming measures have been established by the Division of Traffic Engineering in the Neighborhood Traffic Management Manual. Type 2 techniques or additional design measures may include, but are not limited to: bump-outs/curb extensions, pinch points, pavement narrowing (chokers), change in paving materials, roundabouts and/or traffic circles, raised intersections and/or crosswalks, site furniture/bike racks for intersections adjacent to open space, and/or reducing block lengths. Road closures and restrictions (Type 3 techniques) should not be utilized.

~~NEO TRADITIONAL RESIDENTIAL DEVELOPMENTS~~—The Planning Commission may approve the use of Street Geometries for Neo Traditional Residential Developments, Exhibit 6-2, only when the Commission finds that the overall development meets the criteria below. Plans are not required to incorporate all of these concepts to be considered neo traditional, but plans that use only a few of these concepts should not be eligible to use the neo traditional street geometries. Only when these concepts have been shown in the preliminary subdivision plan, approved by the Commission, may the neo traditional street geometries be used in the final record plan.

~~6-9(a) STREET WIDTH~~—The streets shall be designed for multiple modes of transportation (i.e., bicycles and pedestrians, as well as cars).

~~6-9(b) INTERCONNECTED STREET PATTERN~~—The streets shall be interconnected, using a grid pattern, allowing locations to be reached via multiple, redundant paths that diffuse traffic through the entire neighborhood. Cul de sacs are not part of a neo traditional design, except in locations where extreme topographic or wetland conditions preclude a connection. Wherever possible in these situations, a close street should be used over a cul de sac, and non-vehicular connections for pedestrians and bicycles should be used.

~~6-9(c) TRAFFIC CALMING AND VISTA TERMINATION~~—The design should incorporate devices that encourage traffic calming, such as central squares that break up straight road segments, shorter blocks, center island traffic circles that require the driver to deviate from the road's straight path, and curb narrowing at intersections.

~~6-9(d) STREET TREES AND LANDSCAPING~~—Trees and other landscaping and open space should be incorporated into the design.

~~6-9(e) SIDEWALKS AND SHARED USE PATHS~~—The design should incorporate wider sidewalks and/or shared use paths to encourage walking and ensure connectivity between different areas of the development.

~~6-9(f) OPEN SPACES~~—The design should be organized around squares, village greens, and other types of formal and informal spaces.

EXHIBIT 6-1: STREET GEOMETRICS

	COLLECTOR/ CONNECTOR STREETS		LOCAL STREETS				
	RESIDENTIAL	NON- RESIDENTIAL	CONTINUING	LOOP/ CONTINUING OR CUL-DE-SAC	COMMERCIAL SERVICE ROAD	NON- RESIDENTIAL	RURAL LOCAL
STREET DIMENSIONS							
Right-of-Way Width	60'	70'	50'	50' (*3)	40' – 50'	60'	60'
Roadway Width (face to face)	36' - 40' (*5)	40' - 50'	27'-30'	27' – 30' (*3)	30'	40'	20'
Curbs and Gutters	Yes	Yes	Yes	Yes	Yes	Yes	No
Sidewalk (width and sides)	4' (both)	4' (both)	4' (both)	4' (both)	4' (*1)	4' (both)	No
Driveway Access	(*1) Yes	(*1) Yes	Yes	Yes	Yes	Yes	Yes
Double-Frontage Lots	(*1) No	(*1) No	No	No	No	No	No
Street Grade (Maximum)	8%	8%	10%	10%	10%	6%	8% (*4)
Street Grade (Minimum)	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Pavement Cross Slope	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.	¼" / ft.
Cut Slopes (Minimum)	2:1	2:1	2:1	2:1	2:1	2:1	2:1
Fill Slopes (Minimum)	2:1	2:1	2:1	2:1	2:1	2:1	2:1
STREET ALIGNMENT							
Horizontal Curve Radius	500'	500'	250'	100'	150'	300'	250'
Stopping Sight Distance	250'	250'	200'	200'	200'	200'	250'
Crest Vertical Curve Formula	(*6)	(*6)	(*6)	(*6)	(*6)	(*6)	(*6)
Crest Vertical Curve (Minimum)	100'	100'	100'	100'	100'	100'	100'
Sag Vertical Curve Formula	(*7)	(*7)	(*7)	(*7)	(*7)	(*7)	(*7)
Sag Vertical Curve (Minimum)	100'	100'	100'	100'	100'	100'	100'
STREET INTERSECTION							
Maximum Street Legs	4	4	4	4	4	4	4
Intersection Angle (Preferred and Minimum)	90° - 80°	90° - 80°	90° - 80°	90° - 80°	90° - 80°	90° - 80°	90° - 80°
Intersection Spacing	(*2)	(*2)	(*2)	(*2)	(*2)	(*2)	(*2)
Curb Radius Along Street	(*1)	(*1)	20'	20'	20'	20' – 40'	N/A
Max. Grade within 50' of Intersecting Gutter	3%	3%	3%	3%	3%	3%	N/A
Max. Tangent Offset within 100' of Intersecting Gutter	8.3'	8.3'	11.3'	11.3'	11.3'	11.3'	N/A

(*1) As approved by the Planning Commission.

(*2) Intersection spacing shall apply as described in Section 6-8(q).

(*3) ~~Alternate dimensions of 22' (face-to-face roadway width may be utilized as described in Exhibit 6-3).~~ The 27' cross-section shall restrict on-street parking to one side of the roadway.

(*4) The Planning Commission may grant a variance in conformance with Section 1-5 to permit grades of up to 12% in the Rural Service Area and greater than 12% in areas near the Kentucky River.

(*5) The 36' cross-section shall be used for transition to older sections of collector/connector streets. See Exhibit 6-2 6-3: Typical Cross-Sections for further information.

(*6) Refer to the Division of Engineering Roadway Manual for design controls for crest vertical curves.

(*7) Refer to the Division of Engineering Roadway Manual for design controls for sag vertical curves.

Note: Typical cross-section applications are described in Exhibit 6-3.

6-2: RESERVED FOR TRAFFIC CALMING or SPEED REDUCTION GRAPHICS
STREET GEOMETRICS FOR NEO-TRADITIONAL RESIDENTIAL STREETS

	COLLECTOR/ CONNECTOR STREETS	LOCAL STREETS			
		TWO-SIDED STREET PARKING	ONE-SIDED STREET PARKING	CLOSE	-ALLEYS
STREET DIMENSIONS					
Right-of-Way Width	55'—65'	45'	40'	40'	20'
Roadway Width (face to face)	36'	24'	20'	20'	10'
Curbs and Gutters	Yes	Yes	Yes	Yes	N/A
Sidewalk (width and sides)	5' (both)	5' (both)	5' (both)	5' (*1)	N/A
Driveway Access	(*1)	No	No	No	Yes
Double Frontage Lots	(*1)	No	No	No	Yes
Street Grade (Maximum)	8%	10%	10%	10%	10%
Street Grade (Minimum)	0.8%	0.8%	0.8%	0.8%	0.8%
STREET ALIGNMENT					
Horizontal Curve Radius	425'	205'	205'	100'	25'
Stopping Sight Distance	250'	200'	200'	200'	100'
Crest Vertical Curve Formula	(*3)	(*3)	(*3)	(*3)	(*3)
Crest Vertical Curve Minimum	100'	100'	100'	100'	100'
Sag Vertical Curve Formula	(*4)	(*4)	(*4)	(*4)	(*4)
Sag Vertical Curve Minimum	100'	100'	100'	100'	100'
STREET INTERSECTIONS					
Maximum Street Legs	4	4	4	4	4
Intersection Angle (Preferred and Minimum)	90°—80°	90°—80°	90°—80°	90°—80°	90°—80°
Intersection Spacing	(*2)	(*2)	(*2)	(*2)	(*2)
Curb Radius Along Street	(*1)	15'	15'	10'—15'	N/A
Max. Grade within 50' of Intersecting Gutter	3%	3%	3%	3%	3%
Max. Tangent Offset within 100' of Intersecting Gutter	8.3'	11.3'	11.3'	11.3'	11.3'

(*1) As approved by the Planning Commission.

(*2) Intersection spacing shall apply as described in Section 6-8(q).

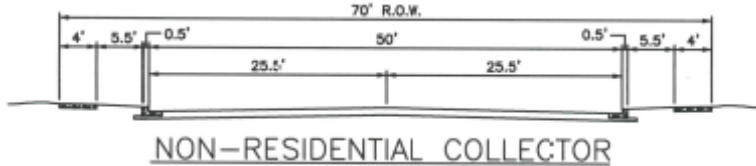
(*3) Refer to the Division of Engineering Roadway Manual for design controls for crest vertical curves.

(*4) Refer to the Division of Engineering Roadway Manual for design controls for sag vertical curves.

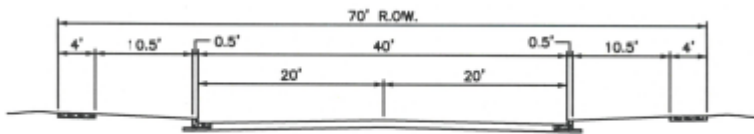
EXHIBIT 6-3: TYPICAL STREET CROSS-SECTIONS

Note: The following cross-sections shall be considered typical for the situations listed. Other cross-sections may be required by the Planning Commission upon advice from the Division of Traffic Engineering and the Division of Planning, based upon the design of the actual situation encountered. Some existing stub streets were constructed using cross-sections that are now obsolete. These streets should be completed using the obsolete cross-section to an appropriate stopping point, which is customarily the next street intersection. Cross-sections for arterial streets or other roadways, larger than those shown in this exhibit, shall be designed by the LFUCG or the Kentucky Department of Transportation, as appropriate.

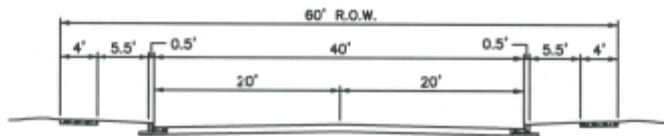
CROSS-SECTION



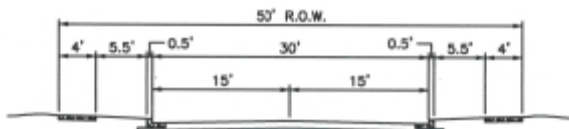
NON-RESIDENTIAL COLLECTOR



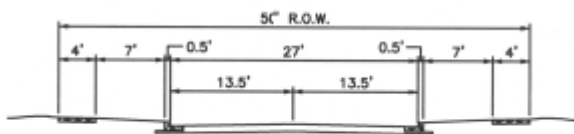
NON-RESIDENTIAL OR INDUSTRIAL COLLECTOR



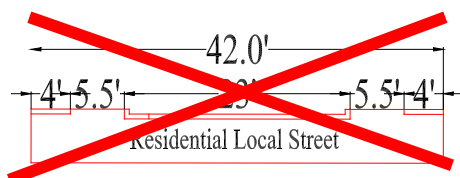
RESIDENTIAL COLLECTOR AND INDUSTRIAL LOCAL



RESIDENTIAL CONTINUING LOCAL
OR COMMERCIAL SERVICE



RESIDENTIAL CUL-DE-SAC
AND CONTINUING LOCAL



APPLICATION

Collector/Connector street in non-residential areas; intersection with an arterial street for at least 250'. A transition section is required to the normal collector/connector street cross-section.

Collector/connector street in non-residential areas; industrial area collectors/ connectors and locals. (Note: Sidewalk may be eliminated on one side when street is completely contained within an industrial area)

Residential collector/connector street depicted in the Comprehensive Plan; industrial area locals and cul-de-sacs. (Note: Sidewalk may be eliminated on one side when street is completely contained within an industrial area).

Residential local street or commercial service roads.

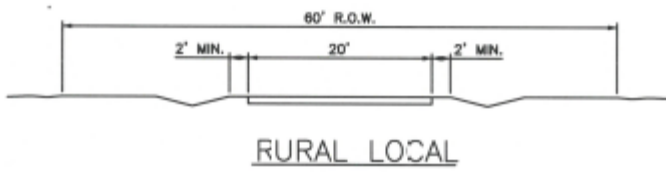
(parking allowed on both sides of the roadway)

Residential cul-de-sacs and continuing residential local streets.

(parking restricted to one side of roadway)

(Note: 4-foot dimension is sidewalk)

~~Residential local, where 15 units or less have access or the average lot width is greater than or equal to 100' (single family only); and where two parking spaces are provided behind the building line, each having independent access to the street. Easement area for sidewalks and utilities required.~~



Rural Local Streets are intended to carry a low volume of traffic.

EXHIBIT 6-4: TYPICAL CROSS SECTIONS FOR NEO-TRADITIONAL RESIDENTIAL STREETS

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~~The following street cross sections shall be used for Neo-Traditional developments.
(Note: The 5-foot dimension on each of the first four diagrams indicates sidewalks)~~

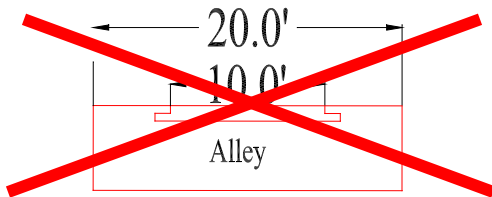
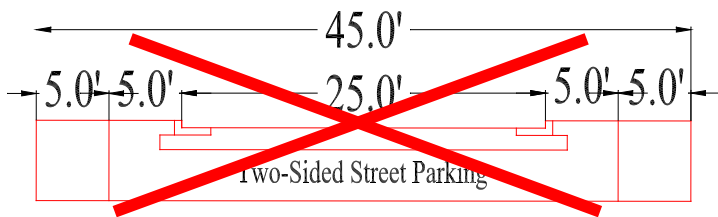
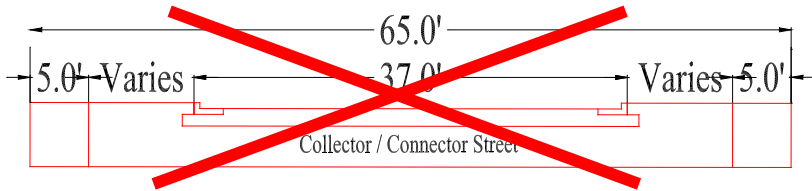


EXHIBIT 6-5: CORNER SIGHT DISTANCES AT INTERSECTIONS

<u>TYPE OF ROADWAY(*1)</u>	<u>PUBLIC OR PRIVATE STREET(*2)</u>	<u>DRIVEWAY(*2)</u>
MAJOR ARTERIAL	325L/150R/15M(*3)	325L/150R/15M
MINOR ARTERIAL	275L/150R/15M	275L/150R/15M
COLLECTOR	200L/150R/15M	200L/150R/15M (non-res.) 150L/120R/15M (res.)
LOCAL	175L/130R/15M	75L/55R/10M

(*1) This column considered as "major" street or intersection.

(*2) This column considered as "minor" street or intersection.

(*3) 325L/150R/15M - Sight triangle to the left/Sight triangle to the right/Distance from edge of curb on minor street or drive approach.

Note: This table assumes right angle intersections and straight major street movement within the sight distance. Situations involving skewed intersections, curvilinear streets and other mitigating factors shall have sight distances determined by the Division of Traffic Engineering.

EXHIBIT 6-6: MINIMUM PAVING SPECIFICATIONS

FUNCTIONAL CLASSIFICATION	ASPHALT SURFACE COURSE/ASPHALT BASE COURSE/GRANULAR BASE	PORTLAND CEMENT SINGLE COURSE/ GRANULAR BASE
RESIDENTIAL LOCAL STREETS (URBAN AND RURAL)	1”/3”/9”	6”/4”
RESIDENTIAL COLLECTOR/CONNECTOR STREETS (URBAN AND RURAL)	1”/6”/8”	7”/4”
ARTERIALS AND NON-RESIDENTIAL STREETS (ALL CLASSIFICATIONS)	1”/9”/6”	8”/4”

NOTE: These paving specifications are the minimum. The project engineer shall design the granular base and asphalt/ concrete thickness in conformance with the standards of the Division of Engineering Roadway Manual. In no case shall the thickness of the granular base and asphalt/cement course be less than shown above.

EXHIBIT 6-7: ALTERNATE CUL-DE-SAC DESIGNS

Note: For all cul-de-sacs, the width of utility strip shall remain constant around the ball of the cul-de-sac, or around the hammerhead, to match the utility strip width in the tangent section.

