

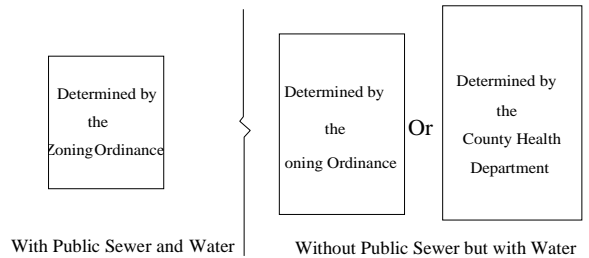
ARTICLE 4 | GENERAL REQUIREMENTS AND STANDARDS OF DESIGN

A. LOT LAYOUT

In general, all lots within a subdivision have about the same area. Minimum lot areas and frontages are specified in the Fayetteville Municipal Zoning Ordinance; however, a subdivision plan should not be predicated solely on producing maximum density. The lot layout plan should give balanced consideration to the natural topography of the subdivided tract, to the conservation and preservation of the natural environment, to provisions for adequate open space, to enhancing the character and beauty of the community, to the optimization of lot density, to improvements ratio, and to the protection of life and property.

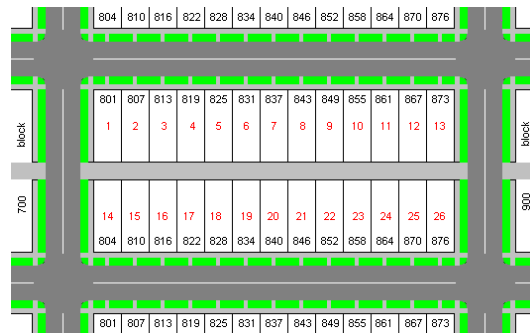
1. Adequate Building Sites Each lot will contain a building site not subject to flooding or other hazards and such site will be outside the limits of any easements, right-of-ways, building lines, side yards, rear yards and front yards as defined in these regulations and the Fayetteville Municipal Zoning Ordinance.

Adequate Building Site



2. Arrangement of Lots Where practical, side lot lines will be at right angles to straight street lines and radial to curved street lines. Each lot will front on a public street or road, which has a right-of-way width of not less than 50 feet. Where lots abut an arterial street, a marginal access street, or have double frontage, acceptable arrangements will be made to control ingress and egress onto streets from the individual lots.

Lot Arrangement

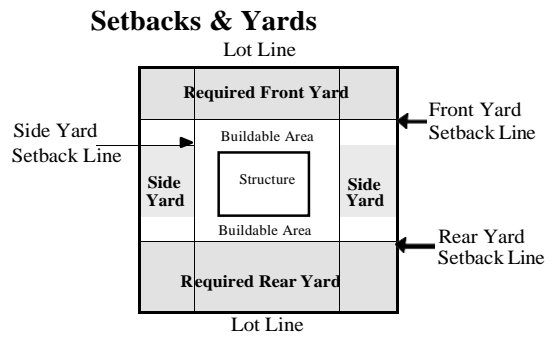


3. Minimum Size of Lots The size, shape and orientation of lots or buildings sites will be as the Planning Commission deems appropriate for the intended use and topography of the site, for adjoining land uses, and for the protection of life and property. The minimum area and dimensions of all lots will be as specified by the Fayetteville Municipal Zoning Ordinance. Multifamily residential office, commercial and industrial tracts must also take into consideration adequate space for the off-street service and parking

facilities, landscaping and screening required by the type of use and proposed development.

4. **Building Setback and Yard Requirements**

All lots or tracts will have at least the minimum front, side and rear yard required by the zoning ordinance. To accommodate site peculiar conditions, such as side yard drainage, the Planning Commission may require increasing the yard requirements for a given lot or tract.



- a. In the case of electrical transmission lines where easement widths are not definitely established, there will be a minimum building setback line from the center of the transmission line as follows:

Voltage Line

46 KV
69 KV
161 KV

Building Setback

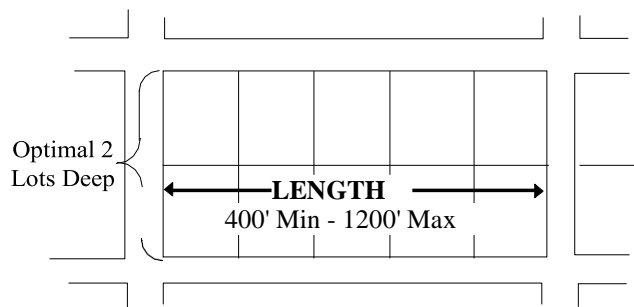
37.5 feet
50 feet
75 feet

- 5. **Large Tracts or Parcels** Where land is subdivided into larger parcels buildings sites, the parcels will be arranged to allow for future opening of streets and for logical resubdivision. In no case will this be construed to allow the creation of severed parcels.
- 6. **Lot Drainage and Grading** Where possible, lots will drain toward the street or toward both the street and rear lot lines. In case of drainage to the rear lot line, lateral drainage along rear lot lines will be required, necessitating careful attention to grading. Where required by the topography, side yard drainage may be required, in which case it may be necessary to increase the minimum side yard requirements. Terracing of lots, particularly in residential subdivisions, will be avoided unless essential for erosion control or to reduce the velocity of runoff.

B. BLOCKS

Subdivision block arrangement is determined by street layout to provide efficient and safe vehicular and pedestrian circulation. Blocks will not be less than 400 feet nor more than 1,200 feet in length measured centerline to centerline of street, unless approved by the Planning Commission to achieve efficient use of the land or desired features or street pattern. The Planning Commission may require public cross walks of not less than 10 feet in width extending across the block if it deemed necessary.

Blocks



C. ROADS AND STREETS

1. Frontage on Roads and Streets No subdivision will be approved unless the area to be subdivided will meet the requirements for access as set forth in this article. If any new street construction or improvements to existing streets is required, such improvements will be approved and publicly dedicated as provided for in these regulations. Any new street or required improvement to a roads or street must be suitably improved to the standards required by this article or be bonded by a surety instrument as required under these regulations. All roads must adhere to the required right-of-way widths of this article and the major road plan.
2. Grading and Improvement Plan Roads and streets will be graded and improved to conform to the standards required by this article and will be approved as to design and specification by the appropriate governmental representative in accordance with the specifications required herein. No wearing surface will be applied to the base of any proposed public way prior to the approval of the Final Plat of the subdivision or the final approval of any section of the subdivision in question without having been properly inspected.
3. Improvements in Floodprone Areas The finished elevation of proposed roads and streets subject to flood will be no more than one foot below the regulatory flood protection elevation. The Planning Commission may require profiles and elevations of roads and streets to determine compliance with this requirement. All drainage structures will be sufficient to discharge flood flows without increasing flood height. Where fill is used to bring the finished elevation of any public way to the required elevation, such fill will not encroach upon a floodway, and the fill will be protected against erosion by riprap, vegetative cover, or other methods deemed acceptable by the Planning Commission.
4. Private Drives/Permanent Access Easements A private drive/permanent access easement is any type of way that provides access to one or more lots with no direct access to a public street. A private drive/permanent access easement can also be within apartment complexes, shopping centers, and other developments, which provide internal circulation for 1 parcel.
 - a. Private drives/permanent access easements may be permitted where the subdivider/developer demonstrates that private ownership, control and maintenance of street facilities is integral to the design and function of the subdivision or development.
 - b. Where the ownership, control and maintenance of any private drive/permanent access easement is proposed providing legal access to more than 1 lot, the private drive/permanent access easement will be constructed to the same design and construction standards herein established for public roads and streets.
 - c. A permanent access easement will be provided over the streets so every parcel or lot has access therefrom.
 - d. All such private improvements will be maintained by the subdivider/developer/owner or by a legally established homeowners' association or other similar group approved by the Planning Commission.

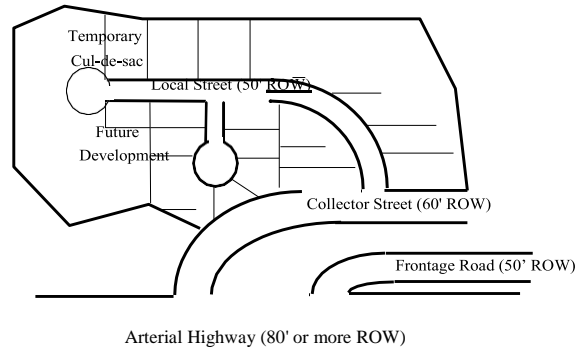
- e. The legal documents establishing ownership and maintenance of the easement will be submitted with the Final Plat for review and approval and will be recorded with the Final Plat.
 - f. A private drive/permanent access easement should not be a direct connection between two public streets. Where the projection or connection of a public street into a private drive system is unavoidable, the private street will be designed to clearly distinguish between the public streets and private drives by means of curbing, turnarounds, signing, and/or other measures.
 - g. No portion of a private drive/permanent access easement will be included in any portion of a required setback as established in the Fayetteville Municipal Zoning Ordinance.
 - h. If public utilities are placed within or adjacent to private drives, a 10-foot utility easement is required.
 - i. If, in the future, a private drive/permanent access easement is submitted for acceptance as a public road, the Planning Commission will provide a recommendation to the City Board prior to any formal action occurring on the road. In considering the private drive/permanent access easement as a public street, the Planning Commission will require the drive/easement to meet the minimum street construction standards in effect at the time the request for public acceptance is made.
5. Design Criteria The street pattern will be based upon the following general design criteria:
- a. Provide for adequate vehicular access to all properties within the development.
 - b. Provide street connections to adjacent properties to ensure adequate traffic circulation within the general area.
 - c. Provide a local residential street system, which discourages through traffic and provides adequate access for fire, police, and other emergency vehicles.
 - d. Provide a sufficient number of continuous streets and major thoroughfares, adequately sized to accommodate the present and future traffic demands of an area.
 - e. Provide principal and minor arterials in accordance with the major road plan.
6. Topography and Arrangement
- a. All roads and streets will be arranged so as to obtain as many of the building sites as possible at or above the grades of the roads and streets. Grades of roads and streets will conform as closely as possible to the original topography.
 - b. All roads and streets will be properly integrated with the existing and proposed system of roads and streets and dedicated right-of-ways as established on the major road plan or the Land Development Plan.

- c. All roads and streets will be properly related to special traffic generators, such as industries, business districts, schools, churches, and shopping areas or centers; to population densities; and to the pattern of existing and proposed land use.
- d. Minor roads and streets will be laid out to conform as much as possible to the topography; to discourage use by through traffic; to permit efficient drainage and utility systems; and to require the minimum ways necessary to provide convenient and safe access to property.
- e. The use of curvilinear streets, cul-de-sac, or "U-shaped streets will be encouraged where such use will result in a more desirable layout.
- f. Proposed roads and streets will be extended to the boundary lines of the tract to be subdivided, unless prevented by topography or other physical conditions or unless, in the opinion of the Planning Commission, such extension is not necessary or desirable for the coordination of the subdivision design with the existing layout or the most advantageous future development of adjacent tracts.
- g. In business and industrial developments, roads and streets and other access routes will be planned in connection with the grouping of buildings, location of rail facilities, and the provision of alleys, truck loading and maneuvering areas, and walks and parking areas, so as to minimize conflict of movement between the various types of traffic, including pedestrian traffic.

7. Classification of Roads and Streets

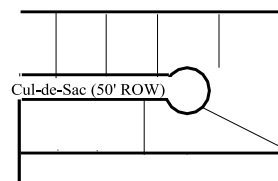
- a. Arterial Streets having the primary purpose of carrying through traffic and the secondary purpose of providing access to abutting properties. The service to abutting land should be subordinate to the provision of travel service to major traffic movements.

(1) Collector Streets entering neighborhoods, collecting traffic from local streets and channeling it into the arterial systems. A minor amount of through traffic may be carried on collector streets, but the system primarily provides service access and carries local traffic movements within residential neighborhoods, or commercial and industrial areas. It may also serve local bus routes.



Road Types

(2) Minor/Residential streets not classified in a higher system, primarily providing direct access to abutting land and to collector streets



Offers the lowest level of mobility and usually carry no bus routes. Service for through traffic is deliberately discouraged.

- b. Dead-end Street (Cul-de-sac) - Cul-de-sacs are permanent dead-end streets, which

may provide access to commercial, industrial or residential properties, and are designed to prevent future extension.

- c. Marginal Access Street - Marginal access streets are minor land access streets which are normally parallel to and adjacent to arterial streets and highways; which provide access to abutting properties (usually office, commercial or industrial uses); and which are designed to provide protection from through traffic and to provide maximum control of ingress and egress onto heavily traveled thoroughfares.
 - d. Alleys - are minor roads and streets used primarily for service access to the back or side of properties otherwise abutting on a street. Where permitted, alleys may serve in lieu of otherwise required utility easements.
 - e. Permanent Easement Vehicular - A permanent easement is a private road or street that is maintained by a landowner or a homeowners association. It will be required to have a width of at least 50 feet and will be constructed to the adopted road standards herein if it proposes to service more than one lot.
8. Right-of-way Widths - The minimum width of right-of-way, measured from lot line to lot line, will be as shown on the Major Road Plan, or if not shown on such plan, will be not less than the widths listed below. In cases where topography or other physical conditions make a street of the minimum required width impracticable, the Planning Commission may modify the above requirements by not more than 10% percent of the specified widths. In no case will the street widths be modified solely for the purpose of increasing the area of marketable land, nor to accommodate a land use, which might otherwise be inappropriate:

<u>Road Type</u>	<u>Right-of-way Width</u>
Super Arterial	As required by TDOT
Major Arterial	84 - 220 feet
Minor Arterial	84 feet
Major Collector	68 feet
Minor Collector	60 feet
Minor/Residential	50 feet
Dead-end (Cul-de-sac)	50 feet*
Marginal Access	50 feet
Permanent Easement	50 feet
Alley	20 feet

* 100 foot diameter turn around (40 feet with 100foot diameter turn around with sidewalk if required)

- 9. Street Construction and Width - The subdivider/developer will construct all streets, roads, and alleys at his expense to the approved alignments, grades and cross-sections. Subdivisions in all commercial or industrial districts will require the subdivider/developer to improve the existing road adjoining said development. Improvements will be provided for the entire width of the street where any part of the subdivision is on both sides of the existing street.

All subdivisions of three (3) or more, including the parent tract in Residential Districts, will require the subdivider/developer to improve the existing road adjoining said development. When a subdivision is located on only one side of an existing street, the side of the street abutting the subdivision will be improved. Improvements to existing streets will include, but not be limited to, the widening of the base and pavement to meet existing subdivision regulation criteria and the placement of a required shoulder. In addition, if required, the relocation of the drainage ditch/ditches to accommodate street improvements.

Deviations due to site conditions may be allowed only with prior approval of the Planning Commission. The Planning Commission reserves the right to waive improvements when adequate space is unavailable.

- a. Special Precautions - Where streets are constructed under or adjacent to existing electric transmission lines or over gas transmission lines, the nearest edge of the pavement will be a minimum of 15 feet from any transmission line structure. All street grading will be done in a manner, which will not disturb the structure nor result in erosion endangering the structure. In the case of electric transmission lines, the clearance from the pavement surface to the nearest conductor will meet the requirements of the National Electrical Safety Code.
- b. Minimum Pavement Widths - Where curb and gutter is provided, required pavement widths are measured from back of curb to back of curb. Where curb and gutter is not provided, pavement widths are measured from edge of pavement to edge of pavement. When curb and gutter is not provided, a 3foot gravel shoulder will be required on each side of the pavement. The minimum pavement widths for all roads will be as follows:

<u>Road Type</u>	<u>With Curb & Gutter</u>	<u>Without Curb & Gutter</u>
Arterial	48 feet	44 feet
Collector Street	36 feet	32 feet
Minor/Residential	28 feet	24 feet
Dead-end Street (Cul-de-sac)	28 feet	24 feet
Permanent Easement	28 feet	24 feet
Marginal Access Street	36 feet	32 feet
Alley	20 feet	20 feet

- c. Roadway Subgrade Preparation
 - (1) Clearing and Grubbing - Before roadway grading begins, the entire right-of-way area will be cleared of stumps, brush, roots, all trees not intended for preservation, and all other objectionable materials. The cleared and grubbed material will be disposed of in a legal manner, generally away from the construction site.
 - (2) Excavation - During construction, roadbed excavations should be maintained in a smooth condition with sufficient slope to insure adequate drainage under all weather conditions. All obstructions, such as roots, stumps, boulders and other similar material, will be removed. Rock, when encountered, will be scarified to a depth of 12 inches below the subgrade. All loose material in the roadway will be compacted in a manner prescribed by the public works supervisor.
 - (3) Embankment - All suitable material from roadway excavations may be used in the construction of roadway embankments. Excess or unusable materials will be legally disposed of away from the construction site. The fill material used in the construction of embankment will be spread in layers not to exceed 6 inches loose and will be compacted at optimum moisture content by a sheepsfoot roller or other compacting equipment approved by the public works supervisor. During construction, embankments will be maintained in a smooth condition with sufficient slope to insure adequate drainage under all weather conditions.

(4) Dust Control - Provide positive methods and apply dust control materials to minimize raising dust from construction operation and provide positive means to prevent airborne dust dispersing into the atmosphere.

d. Pavement Base Course

Arterials and Collector Streets: After preparation of the subgrade, the roadbed will be surfaced with 11 inches of Mineral Aggregate Base (Limestone) or 8 inches Aggregate Cement Base compacted to minimum 95% Standard Proctor and conforming to the Technical Specifications of the City of Fayetteville.

1 ½" Asphaltic Concrete
2 ½" Asphalt Base
8" Aggregate Base or 11" Mineral Aggregate Base (Limestone)

Other Public Streets: After preparation of the subgrade, the roadbed will be surfaced with 8 inches of Mineral Aggregate Base (Limestone) or 6 inches Aggregate Cement Base Class A aggregate, Grading D as defined for a Type A Base over the pavement compacted to minimum 95% Standard Proctor conforming to the Technical Specifications of the City of Fayetteville.

1 ½" Asphaltic Concrete
2" Asphalt Base
6" Aggregate-Cement Base or 8" Mineral Aggregate Base (Limestone)

Proposed standards will not waiver from the above requirements, unless that waiver is determined to be equivalent to the above standards by the City Engineer.

e. Asphalt Binder Course

Arterials and Collector Streets - After preparation of the base course a prime coat conforming to Tennessee Department of Transportation (TDOT) specification 402 (if determined it is needed by the Engineer) followed by the application of a bituminous plant mix base course Tennessee Department of Transportation specification 307B, 2 ½ inches thick.

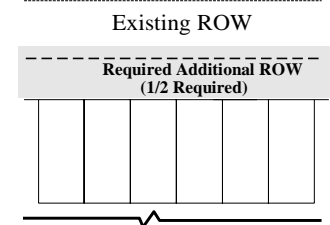
Other Public Streets - After preparation of the base course a prime coat conforming to TDOT specification 402 (if determined it is needed by the Engineer) followed by the application of a bituminous plant mix base course conforming to TDOT specification 307B, 2 inches thick.

f. Asphalt Wearing Surface

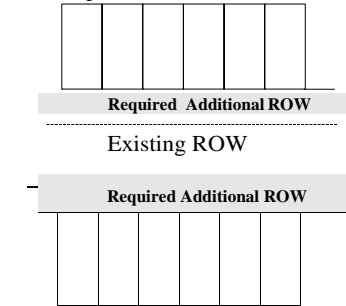
After the installation of the binder course the roadway surface will be paved with an asphaltic concrete pavement wearing surface after the application of an asphalt tack coat conforming to TDOT specification 403. Immediately thereafter the surface course will be applied. The surface course will conforming to TDOT specification 411D, 1 ½ inches thick.

Right-of-way Dedication

Development on one side of the str



Development on both sides of the s



10. Access and Circulation

a. Intersections Arterials roads and streets should intersect with other arterials and collector roads. Minor/residential

streets intersecting arterials will be discouraged. Intersections of minor/residential streets with limited access roads will not be permitted.

b. Arterials - Limited access roads and arterials will be designated according to the most recently adopted major road plan. When a tract fronts on an arterial street or highway, the Planning Commission may require such lots to be provided with frontage on a marginal access street.

c. Collectors -Any street that serves or is expected to serve over 200 dwelling units will be designated as a collector. Streets serving over 600 dwelling units at any density will be designated as major collector.

d. Number of Access Points - Residential developments with more than 50 lots or dwelling units will have at least two separate points of public road access. Developments with more than 200 lots or dwelling units should have at least three separate points of public road access.

11. Additional Width on Existing Streets - Where a subdivision adjoins an existing narrow public way or where the major road plan or any zoning setback provisions indicate plans for realignment or widening of a public way that would require use of some of the land in the subdivision, the subdivider/developer will be required to dedicate, at his expense, areas for widening or realigning such public way. The required amount of right-of-way will be dedicated in accordance with the provisions indicated in this article.

a. The entire right-of-way will be provided where any part of the subdivision is on both sides of the existing street.

b. Where the subdivision is located only on one side of an existing street, half of the required right-of-way measured, from the center line of the existing right-of-way, will be provided.

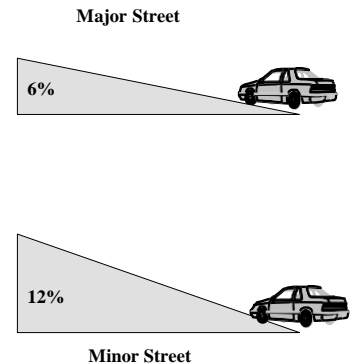
c. A nonresidential subdivision abutting and having access on a residential street will provide the total additional right-of-way required for a collector street.

d. Where subdivision development requires an existing street be cut down for proper sight distance and the subdivision is on one side of the street, the subdivider/developer will improve the entire road.

Street Grade

12. Access Limitations

- a. Limited Access Roadway - Where a subdivision abuts a proposed or existing limited access road, all right-of-way vehicular access to such road will be conveyed to the City including existing points of access. If no other means of access to the subdivision is available, a frontage road will be provided along the entire frontage. A temporary access from the frontage road to the limited access arterial road may be permitted, but such access will be terminated when the frontage road is further extended or is connected to another public street.



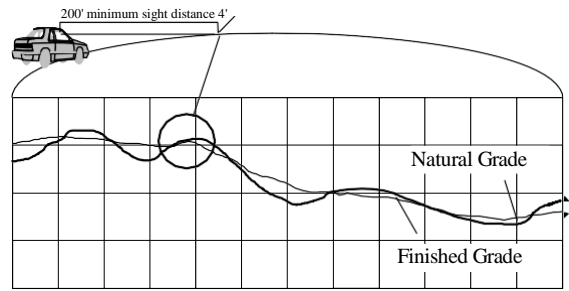
- b. Frontage roads will meet the requirements of the appropriate street classification for the development, except that sidewalks are not required on the side of the street nearer the limited access facility.
- c. Arterials - Where a subdivision abuts an existing or proposed arterial, double frontage lots with no access to the arterial roadway, lots with rear service drives, common access drives, or other treatment may be required. Driveways should not be permitted on existing or proposed arterials. Where this requirement cannot be met, shared or common driveways may be required. All driveways will be designed to provide egress in a forward motion.
- d. Double Frontage and Corner Lots - Where lots have frontage on two (2) streets, a conveyance of vehicular access on the street carrying or expected to carry the lesser traffic volume may be required.
13. Street Grades – Grades on arterial and major collector streets will not exceed 6 percent and grades on all other streets will not exceed 12 percent.

14. Curves

- a. Horizontal - Where deflection angle of more than 10 degrees occurs in the alignment of a street, a curve adhering to the identified centerline radius below will be required.
- | | |
|------------------------------------|------------|
| (1) Limited Access Roads..... | 1,400 feet |
| (2) Arterial | 1,125 feet |
| (3) Collector..... | 825 feet |
| (4) Nonresidential Cul-de-sac..... | 400 feet |
| (5) Marginal Access..... | 250 feet |
| (6) Minor/Residential | 150 feet |
| (7) Cul-de-sac | 150 feet |

- b. Vertical - Every change in grade will be connected by a vertical curve constructed to afford a minimum sight distance of 200 feet. The sight distance will be measured from the driver's eye, which is assumed to be 4.5 feet above the pavement surface, to an object 4 inches high on the pavement.

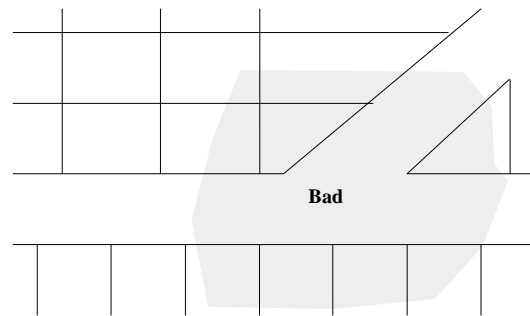
Vertical Curve



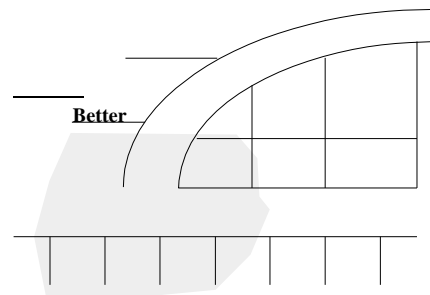
15. Intersections

- a. Roads and streets will be laid out so as to intersect as nearly as possible at right angles. A proposed intersection of 2 new roads and streets at an angle of less than 80 degrees will not be permitted. An oblique public way should be curved approaching an intersection and should be approximately at right angles for at least 100 feet therefrom. Not more than 2 roads and streets will intersect at any one point unless specifically approved by the Planning Commission.

Intersections



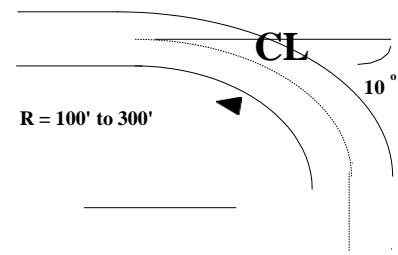
- b. Proposed new intersections along one side of an existing public way will coincide, wherever practicable, with any existing intersections on the opposite side of such public way. Jogs within roads and streets having center line offsets of less than 150 feet are not permitted, except where the intersected road and street have separated dual drives without median breaks at one intersection. Where roads and streets intersect arterial or collector routes, their alignment will be continuous. Intersections of arterial or collector roads and streets will be at least 800 feet apart.



- c. Minimum curb radius at the intersection of 2 minor roads and streets will be 25 feet, and minimum curb radius at an intersection involving a collector public way will be 30 feet. Alley intersections and abrupt changes in alignment within a block will have the corners cut off in accordance with standard engineering practice to permit safe vehicular movement.

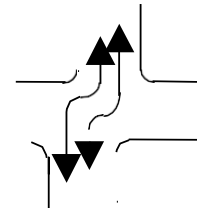
- d. Where a public way intersection will involve earth banks or existing vegetation inside any lot corner that would create a traffic hazard by limiting visibility, the subdivider/developer will cut such ground or vegetation (including trees) in connection with the grading of the public right-of-way to the extent necessary to provide adequate sight distance.
- e. Intersections will be designed with a flat grade wherever practical. In hilly or rolling areas, at the approach to an intersection, a leveling area will be provided having not greater than a 2 percent grade for a distance of 60 feet, measured from the nearest right of way line of the intersecting public way.
- f. The cross-slope on all roads and streets, including intersections, will be 3 percent or less.
- g. The centerline of two streets intersecting the road on opposite sides will be offset as shown and illustrated in the preceding graphics. Offset dimension between intersections is categorized by the type of roadway involved. If the two legs creating the offset are different types of roads, the shorter of the offset dimension will apply.

Centerline Radius

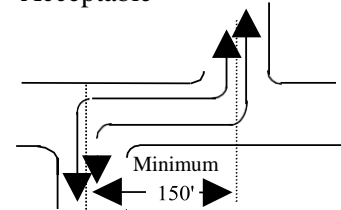


Centerline Offset

Unacceptable



Acceptable



Arterial.....	300 feet
Collector.....	200 feet
Minor/Residential	150 feet

16. Sight Distance

The minimum sight distance for the various road types are shown below:

- a. Stopping Sight Distance Stopping sight distance is measured in feet on a vertical curve between .5 feet to 3.75 feet above the centerline of the finished grade.

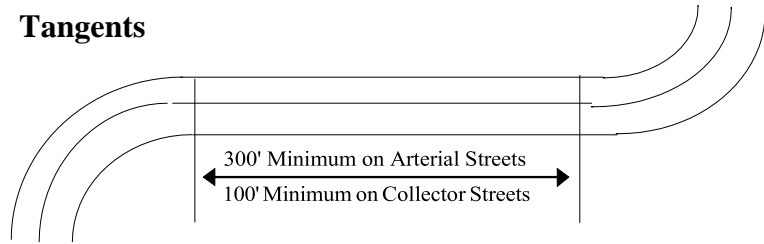
Arterial.....	350 feet
Collector.....	275 feet
Minor/Residential	200 feet

- b. Intersection Sight Distance

- (1) Sight Distance is measured in feet from a point on intersecting streets 15 feet from the edge of the through street pavement and from a height of the eye of 3.75 inches on the intersecting street, to a height of an object 4.5 feet on the through street.
- (2) Property line radii at street intersections involving arterial or collector streets will be not less than 35 feet. All other intersections will have property line radii of not less than 25 feet.

17. Tangents - Between curves there will be a minimum centerline tangent that adheres to the following length requirements.

Tangents



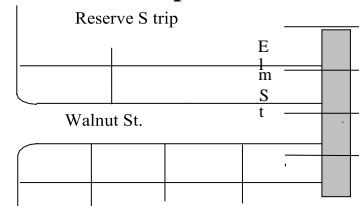
Arterial with Arterial.....	300 feet
Arterial with Collector	200 feet
Collector with Arterial	100 feet
Collector with Collector.....	100 feet
Collector with Minor/Residential	75 feet
Minor/Residential with Minor/Residential	75 feet
Minor/Residential with other	75 feet

18. Corner Radii - The minimum property line radii for the various street intersections are shown below:

Arterial with Arterial.....	55 feet
Arterial with Collector	35 feet
Arterial with Minor/Residential	35 feet
Collector with Collector.....	35 feet
Collector with Minor/Residential	25 feet
Minor/Residential with Minor/Residential	25 feet

19. Reserve Strips - There will be no reserve strips controlling access to streets.

Reserve Strips

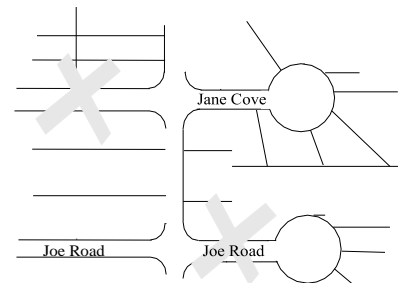


20. Street Names - Proposed streets which are obviously in alignment with other streets already existing and named will bear the names of the existing streets. In no case will the street name for a proposed street duplicate an existing street name regardless of the suffix used, i.e., street, avenue, boulevard, drive, parkway, cove, court, or place.

21. Dead-end Roads and Streets

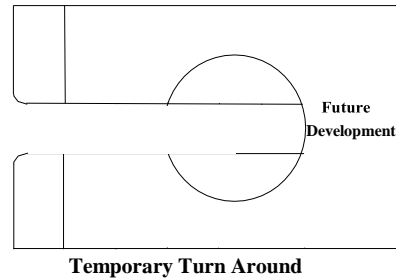
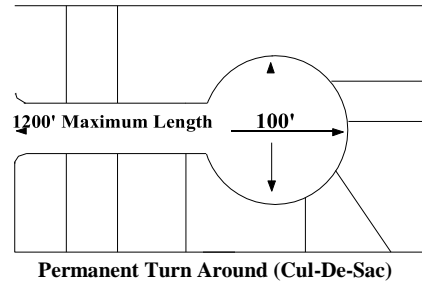
- a. Arrangement of Continuing Roads and Streets -The arrangement of roads and streets will provide for the continuation of major roads and streets between adjacent properties when such continuation is necessary for convenient movement of traffic, effective fire protection, efficient provisions of utilities, and when such continuation is in accordance with the major road plan. If the adjacent property is undeveloped and the public way must be a dead-end public way temporarily, the right-of-way will be extended to the property line. A temporary cul-de-sac will be provided on all temporary dead-end roads and streets as required in this article, with a notation on the subdivision plat that land outside the normal road or street will revert to abutting property owners whenever the road or street is continued.

Street Names



- b. Dead-end Roads and Streets - Where a road or street does not extend beyond the boundary of the subdivision and its continuation is not required by the Planning Commission for access to adjoining property, its terminus will have an outside roadway diameter of 80 feet, a right-of-way diameter of 100' and will not be nearer to such boundary than 50 feet. However, the Planning Commission may require the reservation of an appropriate easement to accommodate drainage facilities, pedestrian traffic, or utilities. A cul-de-sac turnabout will be provided at the end of a dead-end public way in accordance with the design standards of these regulations. For greater convenience to traffic and more effective police and fire protection, permanent dead-end roads and streets will, in general, be limited in length to 1,200 feet.

Turn Arounds



22. Roads and Streets Surfacing and Improvements - After underground utilities have been installed, the subdivider/developer will surface or cause to be surfaced all roads and streets to the widths prescribed in these regulations. Types and methods of paving will be in accordance with the specifications of this article and in no event will such construction be below the specifications set forth in these regulations. Adequate provisions will be made for culverts, drains and bridges, as required.
23. Block Width - Blocks will be wide enough to allow 2 rows of lots, except where double frontage or open space is provided or required, or where prevented by topography or other physical conditions of the side. In such cases, the Planning Commission may permit a single row of lots.

D. STORM DRAINAGE

1. General Requirements - An adequate drainage system, including necessary open ditches, pipes, culverts, intersection drains, drop in lets, bridges, etc., will be provided for the proper drainage of all surface water, as deemed necessary by the Planning Commission. In addition to these regulations, all storm water must be managed per the current edition of the TDEC guidelines as required by the City Staff.
- a. Without Curbs and Gutters - In subdivisions where curbs and gutters are not required or provided, the developer will provide open drainage ditches on each side of the road bed. Also, all intersections of streets will have a minimum of a 15 inch metal, concrete, or aluminum culvert with concrete head walls at least 6 inches above the street. Drainage culverts required at locations other than intersecting streets will be metal, aluminum or concrete and a minimum of 15 inches in diameter with concrete headwalls at least six (6) inches above the street surface.
- b. With Curbs and Gutters - In subdivisions where curbs and gutters are required or provided, the developer will provide inlets every six hundred (600 ft.) that empty into storm sewer facilities, pipes, or open ditch. Storm sewer facilities are required when

existing public storm sewer is accessible. When easements are required for drainage facilities outside the road right-of-way, the easement will be at least 15 feet in width. Drainage easements will be carried from the road to a natural watercourse or to other drainage facilities.

2. Nature of Stormwater Facilities - The subdivider may be required by the Planning Commission to transport by pipe or open ditch any spring or surface water that may exist prior to or as a result of the subdivision. Such drainage facilities will be located in the public way right-of-way, where feasible, or in perpetual unobstructed easements of appropriate width and will be constructed in accordance with the construction specifications contained in these regulations.
 - a. Accessibility to Public Storm Sewers - Where a public storm sewer is accessible, the subdivider/developer will install storm sewer facilities, or if no outlets are within a reasonable distance, adequate provision will be made for the disposal of stormwater, subject to the specifications of the appropriate governmental representative. The inspection of facilities will be conducted to assure compliance and will be conducted by the enforcing officer.
 - b. Accommodation of Upstream Drainage Areas - A culvert or other drainage facility will in each case be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the subdivision. Necessary facilities will be sized based on the construction specifications and assuming conditions of maximum potential watershed development permitted by any zoning ordinance.
 - c. Effect on Downstream Drainage Areas - The Planning Commission also will study the effect of each subdivision on existing downstream drainage facilities outside the area of the subdivision. Where it is anticipated that the additional runoff incident to the development of the subdivision will overload an existing downstream drainage facility, the Planning Commission may withhold approval of the subdivision until provision has been made for adequate improvement of such drainage facilities in such sum as the Planning Commission will determine. No subdivision will be approved unless adequate drainage will be provided to an adequate drainage watercourse or facility.
 - d. Areas of Poor Drainage - Whenever a plat is submitted for an area which is subject to flooding, the Planning Commission may approve such subdivision; provided, that the applicant fills the affected flood fringe area to place all public ways no more than one foot below the regulatory flood protection elevation and first floor elevations (including basements) at least 1 foot above the regulatory flood elevation. The plat of such subdivision will provide for a floodway along the bank of any stream or watercourse of width sufficient to contain or move the water of the regulatory flood, and no fill will be placed in the floodway; neither will any building nor flood restrictive structure be erected or placed therein. The boundaries of the floodway and floodway fringe area, and the regulatory flood elevation, will be determined by the Planning Commission based upon the review specified in these regulations and the submission of flood data on the Preliminary Plat as specified in these regulations.

- e. Floodplain Areas - The Planning Commission may when it deems it necessary for the health, safety, or welfare of the present and future population of the area or necessary to the conservation of water, drainage, and sanitary facilities, prohibits the subdivision of any portion of the property which lies within the floodplain of any stream or drainage course. The regulatory floodway will be preserved from any and all destruction or damage resulting from clearing, grading, or dumping of earth, waste material, or stumps. Any subdivision which contains floodprone land are subject to the special provisions set forth in these regulations.
3. Dedication of Drainage Easements
- a. General Requirements - Where a subdivision is traversed by a watercourse, drainage way, channel, or stream, there will be provided a stormwater easement or drainage right-of-way conforming substantially to the lines of such watercourse and of such width and construction as will be adequate. Where open drainage ways are utilized they will be designed for the 25-year frequency flood.
 - b. Drainage Easements
 - (1) Where topography or other conditions are such as to make impracticable the inclusion of drainage facilities within the right-of-way of a public way, perpetual unobstructed easements at least 10 feet in width for such facilities will be provided across property outside the public way lines and with satisfactory access to roads and streets. All easements will be indicated on the Preliminary Plat and Final Plat. Drainage easements will be carried from the public way to a natural watercourse or to other drainage facilities.
 - (2) When a new drainage system is to be constructed which will carry water across private land outside the subdivision, appropriate drainage rights must be secured and indicated on the plat.
 - (3) The applicant will dedicate, when required by the Planning Commission, either in fee, or by drainage or conservation easement, the land on both sides of an existing watercourse to a distance to be determined by the Planning Commission.
 - (4) Along watercourses, low-lying lands within any floodway, whether or not included in areas for dedication will be preserved and retained in their natural state as drainage ways.
4. Ditching, Concrete Paving, Culverts and Storm Drains – The design and construction details of drainage facilities will be in accordance with the provisions of these regulations. The City and/or county engineer, public works director or other appropriate governmental representative will approve the design and construction details of all proposals. All culverts will be installed by the builder according to the design criteria and approved by the Department of Public Works before the building official issues a certificate of occupancy.
5. Design and Construction Criteria for Open Channel Ditches - An adequate drainage system, including necessary open ditches, pipes, culverts, intersection drains, drop inlets, bridges, etc., will be provided for the proper drainage of all surface water so that there is no impact on adjacent properties.

Where curbs and gutters are not required or provided, the developer will provide open drainage ditches on each side of the proposed roadbed. Where subdivision is proposed with open channel ditches, the open channel ditches will comply with the following design and construction criteria.

Design - Construction Drawings will detail all proposed side ditch flow lines in plan and profile. The minimum depth of the side ditch is 18 inches from the top shoulder of the roadway.

The shoulder adjacent to pavement will have a minimum width of four feet with the first three feet having an eight (8) inch gravel section. Side slopes on open channel ditches will have a maximum slope of three feet horizontal to one foot vertical (3:1). The Developer will submit signed and sealed calculations, prepared by an engineer certified to perform work in the State of Tennessee, that include the following:

- a. Drainage area in acres.
- b. Total post development flow from the site in cubic feet second (cfs)
- c. Flow calculations for each ditch section and culvert that include:
 - I. Design flow in cubic feet per second (cfs)
 - II. Channel or culvert capacity in cubic feet per second (cfs)
 - III. Average slope in feet per feet (ft/ft)
 - IV. Design velocity in feet per second (fps)
- d. Flow calculations for all ditch sections and culverts will be based on a 25 year, 24 hour storm.
- e. Concrete channel design where velocities in the side ditch exceeds 6.5 fps.

All newly constructed channels will have the slopes adequately stabilized to the design flow elevation. Construction drawings will have the minimum drive culvert indicated on the grading plan and the final plat for each lot. All drive culverts will have a headwall with wing wall at each end of the pipe.

Shoulders - Shoulder construction will be completed by blading, moistening or drying as necessary to achieve compaction. The shoulders will be four (4) feet on all roads except arterial status roads, which will require a 6foot shoulder.

Ditching and Channelization - This will consist of the construction of ditches adjacent to roadway shoulders and feeding to and from culverts under or adjacent to the roadway. All drainage ditches will be graded in their entirety and the required ditch stabilization installed during the time the roadways are being graded; such grading and stabilization will be completed prior to final inspection of the roadways.

Stabilization of Ditches with Concrete - All open channel ditches which are required to be stabilized with concrete paving. Will have a minimum according to the following requirements:

Minimum Concrete Swale Dimensions

Size of Nearest Culvert (upstream)	Bottom Width Required	Slope Length
15"	1 ft.	1.0
18" thru 24"	2 ft.	1.0
30" thru 36"	2 ft.	2.0
42" thru 72"	3 ft.	3.5

The design engineer will be responsible for establishing the bottom width and the slope length to contain the design flow.

The side slope will be sodded between top of bank and concrete swale where concrete swale is required.

Concrete Detail: Thickness of 4 inches; Consist of a 4,000psi air entrained mix

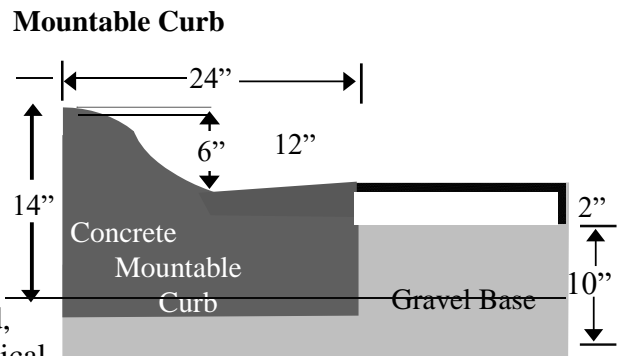
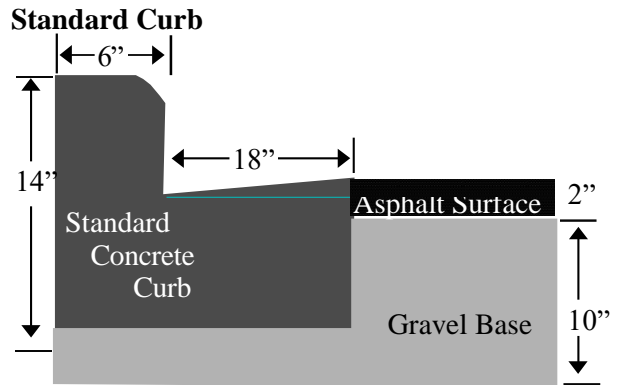
6. Sodding of Front and Side Yards

a. General Requirements. It is required that the builder will sod the front and side yard in all lots equal to and less than ¾ acre. All slopes 3:1 or greater will be sodded. Slopes greater than 3:1 should be pegged to hold sod in place. All drainage swales will be sodded. Sod should be a minimum thickness of ¾”.

b. Guidelines for Erosion Control list recommendations regarding soil preparation and installation of sod.^{xv}

E. CURB AND GUTTER REQUIREMENTS

Effective August 18, 2011, curbs and gutters will be required in all developments. In all developments where curbs and gutters are to be installed, the curbs and gutters will be either of the Standard curb and gutter design, having a 6” vertical concrete curb and an 18” gutter. Or it will be of a mountable curb and gutter design having a 6” rolled curb and an 18” gutter. Only the standard 6” curbs and 18” gutters will be permitted on major streets. The curbs and gutters will be constructed of high quality durable Portland cement, concrete. The concrete will be ready mixed, air entrained, 4000lb. concrete. All concrete will be Class A and will be placed, cured, and tested in accordance with the Technical Specifications.



F. UTILITIES

After roadway grading is completed and approved and before any base course is applied, all of the underground work (i.e. water mains, sewers, etc. and all service connections) will be installed completely and approved throughout the length of the roadway and across the flat section.

To eliminate future public way openings, all underground utilities will be installed before any final paving of a public way that is shown on a subdivision plat, unless otherwise approved by the Planning Commission.

1. Water Supply System
 - a. Where a public water main is within reasonable access of the subdivision, as determined by the Planning Commission, the subdivider/developer will be responsible for the cost of extension, design and installation of any and all water lines which will service the development, including fire hydrants. The system proposed for installation will adhere to the construction and material specifications of the City and will be subject to approval by the Planning Commission and the Tennessee Department of Environment and Conservation.
 - b. Unless otherwise specifically approved, water mains will not be less than 6 inches in diameter. The City specifically reserves the authority to require larger diameter pipe, if necessary, to adequately serve both domestic use and fire protection within the proposed development.
 - c. All water system construction plans and specifications will be approved by the area office of the Tennessee Department of Environment and Conservation, prior to any construction. Copies of comments and certificates of approval for the above agency will be forwarded to the public works supervisor.
 - d. Water mains, properly connected with the City's water supply system or with an alternate supply system approved by the Fayetteville Regional Planning Commission, will be provided to all lots and building sites shown on the subdivision plat, and will be constructed to adequately serve both domestic use and fire protection.
 - e. The location and types of valves and hydrants, the amount of soil cover over the pipes and other features of the installation of the water system will be as directed the public works department and will conform to accepted standards of good practice for municipal water systems.
 - f. If water lines are placed within or adjacent to a private drive/permanent access easement, a 10 foot utility easement is required.
2. Fire Protection - Fire hydrants will be required for all subdivisions, minor or major. They will be located no more than 500 feet apart and will be within 250 feet of any residential, commercial, or industrial lot. However, the Planning Commission may require closer spacing where physical conditions or types of structures warrant it.
3. Sewage Disposal System - The subdivider/developer will be responsible for ensuring that each lot proposed on the plat can adequately dispose of sewage, either, through an individual lot disposal system or a public sewer system. No private sewer systems will be allowed in the City of Fayetteville.
 - a. Individual Waste Disposal Systems

If public sewer facilities are not available and individual disposal systems are proposed, lot areas will not be less than the minimum specified in the Fayetteville Municipal Zoning Ordinance and by the Lincoln County Health Department.

 - (1) When the division of a parcel of land into 2 parcels is proposed and both parcels have a minimum lot size of 1 acre, the certificate of approval for a subsurface waste disposal system may be waived by the Planning Commission, provided the proposed new parcel has been granted a permit by the Lincoln County Health Department for an individual subsurface waste disposal system. A copy of the permit must be attached to the

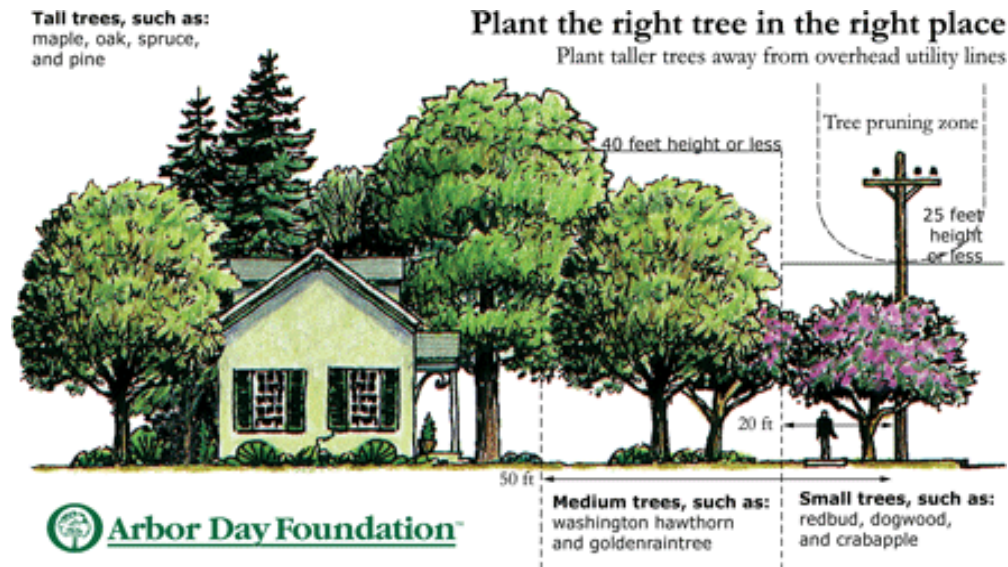
- (2) All individual waste disposal systems, including the size of the septic tank and the field lines or other secondary treatment device will be approved by the county health department.
- (3) The Planning Commission will not approve any lot within any subdivision that is not suitable, according to the Tennessee Department of Environment and Conservation, for the installation of a subsurface waste disposal system.

b. Public Waste Water System

- (1) Where a public waste water system is within reasonable access of the subdivision, as determined by the Planning Commission, the subdivider/developer will be responsible for the cost of extension, design and installation of any and waste water facilities that will service the development.
 - (2) When connection to a public waste water system is proposed for a subdivision in the City of Fayetteville, the system will be installed in a manner prescribed by the regulations of the Tennessee Department of Environment and Conservation and by any other applicable standards and specifications. All plans will be designed and approved in accordance with the rules, regulations, specifications, and standards, of any applicable governmental agency or appropriate unit thereof.
 - (3) When connection to a public waste water system is proposed in a subdivision in the City of Fayetteville, the subdivider/developer will be responsible for providing sanitary sewer facilities to each lot therein and will connect the facilities to the public system.
 - (4) All sanitary sewer system facilities located in a flood hazard area will be flood proofed to the regulatory flood protection elevation. All sewer facilities located below the regulatory flood protection elevation will be designed to prevent infiltration of floodwaters into the sewer system and discharges from the system into floodwaters.
 - (5) Sanitary sewer systems will be designed for the ultimate tributary population based upon appropriate plans and zoning regulations.
 - (6) The minimum size of a public sewer line will be 8 inches in diameter for gravity lines and 6 inches in diameter for forced lines. Individual lot service lines will be a minimum of 4 inches.

All sanitary sewer facilities will be located within a public street right-of-way, unless topography dictates otherwise. Public utility easements will be provided across private property for access to lines and manholes. Such easements will be of an adequate width to service the lines, but in no case will they be less than 20 feet.
 - (7) If sanitary sewer facilities are placed within or adjacent to a private drive/permanent access easement, a 10foot utility easement will be required.
4. With the exception of existing street facing infill development, underground electric service is required. Consult with the Southwest Tennessee Electric Membership Corporation for specific design standards.

In areas with overhead electric lines and observing easement restrictions, trees topping out at less than 25' may be planted within 20' of a utility pole. Trees growing to no more than 40' may be planted within 50' of a utility pole. Trees growing more than 40' may be planted anywhere beyond 50' of the pole (See the following illustration.)^{xviii}



5. The subdivider will bear the financial responsibility for the original installation costs for the materials and labor for street lighting where it is deemed reasonably necessary by the Public Works Department. Street lighting will be of such size and specifications as deemed appropriate by the Public Works Department to meet the specific requirements of the subdivision. Street lights will be installed between the curb and the sidewalk. In general, street lights will be provided at roadway intersections and at appropriate intervals of no more than 500' in between intersections. The subdivider will consult with the utility company to service the subdivision with power and locate on the design plans the probable location of street light poles.

G. UTILITY EASEMENTS - Easements will be required along the front, rear and side yard of all lots of at least 15 feet when underground electric service is required and at least 5 feet in cases of existing streets facing infill development with the easement being indicated on all plats. In addition, the Planning Commission may require additional easements across lots or additional width of easements depending upon the topography of the land or due to other conditions of the land. The subdivider/developer will take such actions as are necessary to ensure the coordination and continuation of utility easements established on adjacent properties with those proposed within his development. Temporary construction easements exceeding the width of permanent easements may be required as necessary until completion of any one project.

H. SURVEY MONUMENTS - Permanent and semi-permanent survey monuments are an essential byproduct of the land subdivision process. Such monuments facilitate the resurvey of lands contained within the subdivision and provide survey control points for future cadastral and

cartographic surveys and mapping. In each subdivision subdivider/developer will provide, at his expense, all survey monuments and documentation specified herein.

1. Permanent Monuments

- a. A permanent survey monument will be set behind the curb on the North and East side of every street and at least one monument will be provided near each street intersection and located to provide connected visibility with one or more monuments located on each of the intersecting streets. At least one monument will be located at a point in the exterior boundary of the subdivision or subdivision addition. There will be a minimum of two permanent monuments within every subdivision.
- b. Permanent survey monuments will be constructed of dense Portland cement, concrete, 4 inches square, 3 feet long, with a flat top, the top of each monument will have an indented cross to identify the precise location of the survey point, and the top will be set flush with the finished grade of the surrounding surface or, in asphalt paved areas, flush with the finished grade of the pavement base.
- c. Where deemed necessary by the City engineer or public works supervisor, to insure recovery of a survey point, a subsurface mark set in concrete, poured at the base of the concrete monument and plumbed to the surface mark, will be required.

2. Semi-permanent Monuments

- a. All lot corners in the subdivision not set with a permanent monument will be marked with an iron rod not less than 5/8 inch in diameter and 24 inches long, set flush with the finished grade of the surrounding surface.
- b. Upon completion of subdivision development, these metal rods will be protected by 1 or more flagged guard stakes.

3. Unauthorized Survey Marks - Survey reference marks, benchmarks, witness marks, or auxiliary corners which are unsightly or damaging to street pavements will not be permitted. Any such unauthorized marks and corners will be removed or repaired by the subdivider/developer at his expense.

4. Survey Documentation - The subdivider/developer will provide to the public works supervisor a detailed description of all new and recovered permanent survey monuments lying within or on the boundary of the subdivision. Each description will include:

- a. A physical description of the monument.
- b. Instructions for locating the monument with respect to a fixed prominent landmark. Survey data in addition to that shown on the Final Plat which will, when available, consist of adjusted plan coordinates and elevation, survey precision and accuracy, and datum to which coordinates and elevation refer.

I. DRIVEWAYS AND CURB CUTS

Driveways will be so located that vehicles entering or leaving an establishment or location will not interfere with the free movement of traffic or create a hazard on the public roadway. Where feasible, access driveways will be located where there are no sharp curves or steep grades, and where sight distance is adequate for safe traffic operation. Driveways should not be located within an intersection, intersection radius, or interchanges of highways. No curb cut will be closer than 20 feet from the point of curvature of a corner radius. Access drives will be located that they will not interfere with the placement of signs, signals or other devices that effect traffic operation and regulations.

1. Number and Arrangement of Driveways

- a. For property tracts with a sizable frontage on a highway or street, driveway location and arrangement will be governed by position of building(s) thereon as determined through the site plan review process of the Fayetteville Municipal Zoning Ordinance. Where driveways are provided to land areas only, (areas with no development), they will be so located to the best advantage regarding highway alignment profile and sight distance conditions as determined by the applicant and the City of Fayetteville, jointly. The allowed number, arrangement, width and design of driveways will be governed during the site plan review process, such process to consider the amount of highway frontage and the use of the facility/property.
- b. The number of driveways permitted will be the minimum number necessary to properly serve the need of the property. Frontages of one 100 feet or less will be limited to 1 driveway, unless a variance is approved by the Fayetteville Municipal Board of Zoning Appeals. Normally, not more than 2 driveways will be provided to any single property tract or business establishment. Furthermore, there will not be more than 4 driveways per any 500foot distance. The joint use of curb cuts is encouraged to facilitate traffic flow.
- c. Consistent with State guidelines, driveways will be positioned to clear the frontage boundary lines by the specified minimum dimensions. Where 2 driveways are provided for 1 frontage or adjacent frontages separately, the clear distance between driveways measured along the right-of-way line will not be less than 25 feet.
- d. On a major, controlled access road, where there are or may be several businesses, consideration should be given to the construction of a frontage road, the frontage road then having well-spaced access points to major roads.
- e. Driveway design, consistent with State regulation, will not exceed 40 feet in width for two-way use and 20 feet in width for one-way use.
- f. The City, County and/or State of Tennessee specifically reserves, through the site plan review process, the right of full review, comment and approval for curb cuts, and nothing herein will be so construed to subordinate that authority.

Driveway Aprons All driveway aprons will be approved by the City of Fayetteville and will be in a manner which insures positive drainage to the street. An expansion joint with filler will be provided at each edge of the driveway apron where it abuts the curb and gutter. If roll type curbs and gutters are used, curb cuts may be waived by the Planning Commission.

2. Quality of Concrete - All sidewalks, curbs, gutters, handicap ramps and driveway aprons will be constructed of high quality durable portland cement concrete. The concrete will be ready mixed, air entrained, 4000lb. concrete. All concrete will be Class A and will be placed, cured, and tested in accordance with the Technical Specifications.

J. SIDEWALKS AND HANDICAP RAMPS

Effective at the passage of these regulations sidewalks will be required in all developments and will be installed within the right-of-way of all existing streets bordering the subdivision and will adhere to the following requirements:

1. Sidewalks - All sidewalks will be located in the street right-of-way with the outside edge coinciding with the right-of-way line. All sidewalks will have a main slab of not less 4 inches in thickness. For proper drainage all sidewalks will have .25 inch per foot slope towards the adjacent street. Sidewalks will conform to the following minimum widths:



- | | |
|------------------------------|-------------|
| a. Single family residential | 4 feet wide |
| b. Multifamily residential | 5 feet wide |
| c. Other than residential | 5 feet wide |
2. Handicap Ramps - In all subdivisions where sidewalks and curbs and gutters are provided, handicap ramps will be installed at all crosswalks so as to make the transition from street to sidewalk easily negotiable for physically handicapped persons in wheelchairs and for others who may have difficulty in making the step up or down from curb level to street level. This requirement is not subject to waiver.
 3. Quality of Concrete - All sidewalks, curbs, gutters, handicap ramps and driveway aprons will be constructed of high quality durable Portland cement concrete. The concrete will be ready mixed, air entrained, 4000 lb. concrete. All concrete will be Class A and will be placed, cured, and tested in accordance with the Technical Specifications.
 4. Deferment of Installation - At the request of the subdivider/developer, the Planning Commission may defer the installation of sidewalks and handicap ramps when the individual builders assume responsibility for installation of sidewalks, curb cuts and driveway aprons, the subdivider/developer will be relieved of responsibility for such installations. The responsibility assumed by individual builders will become a condition of the building permit and will comply with the Technical Specifications of the City of Fayetteville and the standards pertaining to sidewalks, curb cuts and driveway aprons contained in these regulations. No certificate of occupancy will be issued until the required improvements are complete and accepted.

K. SCREENING AND LANDSCAPING

When required by the Planning Commission and these Regulations, fences, vegetative screening and landscaping will be provided along the perimeter of certain developments to protect residential districts from undesirable views, lighting, noise, and other adverse influences. Other landscaping may be required for open space areas, storm drainage areas, recreational areas, and to help control erosion and preserve the environment and historical landmarks. Landscaping will not be placed within public right-of-ways.

1. Residential Development
 - a. Residential developments that have lots which have double frontage on a public street (alleys excepted) may be required to provide continuous screening along the rear line of these lots. Visibility areas required for traffic safety as designated by the public works supervisor will not be screened.
 - b. Where a residential development abuts against a nonresidential use, a continuous screening may be required.
2. Nonresidential Development Where a nonresidential development abuts against a residential use, a continuous screening may be required.
3. Other Landscaping The Planning Commission may specify to the subdivider/developer those areas within the subdivision which require landscaping. The subdivider/developer will present to the Planning Commission, a detailed landscaping plan and planting schedule, if required.

L. ENVIRONMENTAL PROTECTION AND PRESERVATION

Protection and preservation of existing features and the environment which would add value to a residential development or to the area as a whole particularly its natural features such as ground cover, trees, soils, watersheds, watercourses, falls, and similar irreplaceable assets, will be preserved in the design of the subdivision, as required by the Planning Commission. Protection and preservation of the area is an essential element of subdivision design. The subdivider/developer will provide, at his expense, all erosion control, revegetation planting, and protection for existing vegetation.

Erosion Control – Prior to any construction taking place, a Storm Water Pollution Protection Plan (SWPPP) must be completed with a copy received by the City. The subdivider/developer will submit a plan and schedule for soil erosion and sedimentation control to the public works supervisor for approval. The subdivider/developer will provide necessary erosion control such as seeding for gentle slopes, grass sod for sharper slopes, with special grading and terracing in accordance with the plans approved by the public works supervisor and Planning Commission. All freshly excavated embankment areas not covered with satisfactory vegetation will be fertilized, mulched and seeded and/or will have laid sod as required to prevent erosion. Provisions will be made to accommodate increased runoff caused by changed soil and surface conditions during development. Runoff will be intercepted and safely conveyed to storm drains or natural outlets where it will not erode or flood land. Sediment basins will be installed and maintained to collect sediment from runoff waters. If the public works supervisor determines that the necessary erosion control is not being provided by the subdivider/developer, the public works supervisor will officially notify the subdivider/developer of the problem. If the subdivider/developer has not begun to provide satisfactory erosion control within 15 days after the notice, the City will make the necessary improvements to eliminate the erosion problem documenting all expenses incurred. Prior to release of the surety instrument, all expenses incurred by the City will be paid in full by the subdivider/developer.

1. Preservation of Trees and Revegetation - No trees of caliper 10 inches or larger measured 5 feet above the surrounding ground surface will be removed if at all possible, and special attention will be given to preserving larger trees. For removal of trees greater than 12 inches in diameter, the Planning Commission may require a plan for re-vegetation, in order to recover soil stabilization, percolation or buffering lost by removal of such tree.
2. Planting of New Trees - In all new Major Residential Subdivisions, the subdivider is required to plant at least two (2) suitable broadleaved deciduous shade trees per approved lot, one of which will be located in the front yard, unless specifically exempted by the Planning Commission. All trees will be the equivalent of well rooted nursery grown stock free of injury, harmful insects, and diseases. They will be well branched, and the branching structure should be sound. Unless waived by the Planning Commission, the required tree will not measure less than two (2) inches in girth at the time of planting. Acceptable types of street trees may be selected from a list available from the City of Fayetteville. Conditions for waiver of this requirement may include a detailed plan to retain mature trees within the development. At the request of the subdivider/developer, the Planning Commission may defer the planting of trees when the individual builder assumes responsibility for planting. The responsibility assumed by individual builders will become a condition of the building permit and will comply with the Technical Specifications of these regulations. No certificate of occupancy will be issued until these requirements are completed and accepted.

M. NONRESIDENTIAL SUBDIVISIONS

1. General - If a proposed subdivision includes land which is zoned for a commercial or industrial purpose, the layout of the subdivision with respect to such land will make such provisions as the Planning Commission may require. A nonresidential subdivision also will be subject to all the requirements of site plan approval as set forth in the Fayetteville Regional Zoning Ordinance. Site plan approval may proceed simultaneously at the discretion of the Planning Commission. A nonresidential subdivision will be subject to all the requirements of these regulations, as well as such additional standards set forth by the Planning Commission, and will conform to the Growth Plan, major road plan, and zoning ordinance.
2. Standards - In addition to the principles and standards in the regulations, which are appropriate to the planning of all subdivisions, the subdivider/developer will demonstrate to the satisfaction of the Planning Commission that the public way, parcel, and block pattern proposed is specifically adapted to the uses anticipated and takes into account other uses in the vicinity. The following principles and standards will be observed:
 - a. Proposed industrial parcels will be suitable in areas and dimensions to the types of nonresidential development anticipated.

Public way right-of-ways and pavements will be adequate to accommodate the type and volume of traffic anticipated.
 - b. Special requirements may be imposed by the governing body with respect to any public way, curb, gutter, and sidewalk design and construction specifications.

- c. Special requirements may be imposed by the governing body with respect to the installation of public utilities, including water, sewer, and stormwater drainage.
- d. Every effort will be made to protect adjacent residential areas from potential nuisance from the proposed nonresidential subdivision, including the provision of extra depth in parcels backing on existing or potential residential development and provisions for permanently landscaped buffer strips, when necessary.
- e. Roads and streets carrying nonresidential traffic, especially trucks, normally will not be extended to the boundaries of adjacent existing or potential residential areas.

N. **TECHNICAL SPECIFICATIONS INCLUDED BY REFERENCE** - The Technical Specifications of the City of Fayetteville as set forth in Article 4 are included in all of the foregoing requirements of this article and these regulations by reference. Unless these regulations state otherwise, deviations to the Technical Specifications may be allowed only with the prior approval of the Planning Commission.