

# **SUBDIVISION REGULATIONS**

## **WASHINGTON COUNTY, TENNESSEE**



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MARCH 1981**

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Prepared for  
WASHINGTON COUNTY REGIONAL PLANNING COMMISSION

Cleates Murray, Chairman  
Mark Larkey, Vice Chairman  
Joe Wilson  
Ted Lynch  
Johnny Shadden  
Chuck Mason  
Fred Chase  
Wayne Rupert  
Daryl Rowe  
Gerald Sparks  
Kelly Wolfe  
Joe McCoy  
Pete Speropulos III

Prepared by  
WASHINGTON COUNTY ZONING OFFICE

&

DTWood Engineering, Inc.  
412 Shade Tree Way  
Johnson City, Tennessee 37604

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SUBDIVISION REGULATIONS  
OF THE  
WASHINGTON COUNTY, TENNESSEE  
REGIONAL PLANNING COMMISSION

(HEREAFTER REFERRED TO AS THE PLANNING COMMISSION)

ARTICLE I. PURPOSE, AUTHORITY AND JURISDICTION

A. Purpose

Land subdivision is the first step in the process of community development. Once land has been cut up into streets, lots and blocks and publicly recorded, the correction of defects is costly and difficult. Subdivision of land sooner or later becomes a public responsibility, in that roads and streets must be maintained and various public services customary to urban areas must be provided. The welfare of the entire community is thereby affected in many important respects. It is therefore to the interest of the public, and developer and the future owners that subdivisions be conceived, designed, and developed in accordance with sound rules and proper minimum standards.

The following subdivision regulations guiding the planning commission are designed to provide for the harmonious development of the planning region; to secure a coordinated layout and adequate provision for light, air, recreation, transportation, water, drainage, sewer, and other sanitary facilities.

B. Authority

These subdivision regulations are adopted under the authority granted by Sections 13-3-401, through 13-3-412 of the Tennessee Code Annotated. The planning commission has fulfilled the requirements set forth in these acts as prerequisite to the adoption of such regulations. A certified copy of the Washington County Major Thoroughfare Plan was filed in the office of the Registrar of Washington County, Tennessee.

C. Jurisdiction

These regulations shall govern all subdivision of land within the planning region of Washington County as now or hereafter established, and within the Washington County Planning Region as established by resolution of the Local Government Planning Advisory Committee. Within these regulations the term "subdivision" shall mean the division of a tract or parcel of land into two or more lots, sites or divisions for the purpose whether immediate or future, of sale or building development, and includes resubdivision and, when appropriate to the context, relates to the process of subdividing or area subdivided. Any owner of land within this area wishing to subdivide land shall submit to the Washington County Regional Planning Commission a plat of the subdivision according to the procedures outlined in Article II., this plat shall conform to the minimum requirements set forth in Article III. Improvements shall be installed as required by Article IV of these regulations.

## ARTICLE II. PROCEDURE FOR PLAT APPROVAL

The procedure for review and approval of a subdivision plat consists of three separate steps. The initial step is the early informal consultation with the planning commission technical staff for advice and assistance. The second step is the preparation and submission to the planning commission of a preliminary subdivision plan. The third step is the preparation and submission to the planning commission of a final plat together with required certificates. This final plat becomes the instrument to be recorded in the office of the county register when duly signed by the secretary of the planning commission.

### A. General

1. Any owner of land lying within the Washington County Planning Region wishing to divide such land into two or more lots, sites or divisions, for the purpose, either immediate or future of sale or building development, or wishing to resubdivide for this purpose, shall submit a plan of such proposed subdivision to the Washington County Regional Planning Commission for approval and shall obtain such approval prior to the filing of his subdivision plat for record. This plan shall meet the standards of design for the subdivision of land as set forth in Article III. of these regulations and shall be presented in the manner specified in the following section of this article. No plat of a subdivision of land within the Washington County Planning Region shall be filed or recorded by the Registrar of Washington County without the approval of the planning commission as specified herein.
2. In order to secure review and approval of the planning commission of a proposed subdivision, the prospective subdivider shall, prior to the making of any street improvements or installations of utilities, submit to the planning commission a preliminary subdivision plan as provided in Section C, below. On approval of said preliminary subdivision plan, he may proceed with the preparation of the final plat and other documents required in connection therewith as specified in Section C and the improvements set forth in Article IV.
3. A subdivision may omit the submission of a preliminary subdivision plan, submitting only a final plat if the following conditions are met:
  - a. All public improvements as set forth in Article IV are already installed. Any construction, installation, or improvements of any public improvements shall require the submission of a preliminary subdivision plan as prescribed by Section C of Article II, except as follows. If a proposed subdivision fronts upon an existing public road and only minor public road, public utility, and/or public drainage improvements are needed, the planning commission, based on a recommendation from the Washington County Departments, may waive the requirements for the preliminary approval, and permit the developer to submit only a final plat. See also Article III.A.5.
  - b. The subdivider has consulted informally with the planning commission technical staff for advice and assistance before the preparation of the final plat and its formal application for approval.

### B. Informal Consultation

The subdivider shall consult early and informally with the planning commission technical staff for advice and assistance before the preparation of the preliminary subdivision plan and its formal application for approval. This will enable him to become thoroughly familiar with these regulations, the Major Thoroughfare Plan and other official plans or public improvements which might effect the area. Such informal review should prevent unnecessary and costly revisions.

### C. Preliminary Subdivision Plan

1. At least thirty (30) days prior to the meeting at which it is to be considered, the subdivider shall submit to the secretary of the planning commission four (4) copies of a preliminary subdivision plan and a PDF digital copy of the proposed subdivision in order

to allow the planning commission technical staff and utilities heads time to review and prepare recommendations to the planning commission. The subdivision plat shall be drawn to a scale of not less than one inch equals one hundred (100) feet. At the time of such submission the secretary of the planning commission shall issue a receipt acknowledging said submission. Neither the submission of the preliminary subdivision plan to the secretary of the planning commission or the receipt issued by the secretary of the planning commission shall constitute submission of the preliminary subdivision plan for consideration by the planning commission.

2. The preliminary subdivision plan shall be presented to the planning commission at its next meeting by the secretary or the acting secretary of the planning commission for the consideration for approval, disapproval or approval subject to modification. Failure to present the preliminary subdivision plan by the secretary or the acting secretary shall not relieve the planning commission of its responsibilities to consider said subdivision plan.
3. The subdivision plan which shall meet the minimum standards of design as set forth in Article III and the general requirements for the construction of public improvements as set forth in Article IV shall give the following information insofar as possible:
  - a. The proposed subdivision name and location, the name of the designer of the preliminary subdivision plan who shall be a design professional in accordance with State of Tennessee regulations.
  - b. Date, approximate north point and graphic scale.
  - c. The location of existing and platted property lines, streets, building, water course including undisturbed buffer, railroads, sewers and diameters, bridges, culverts with diameters, drain pipes and diameters, water mains and diameters, and any public utility and drainage easements, the present zoning classifications, on the land to be subdivided and on the adjoining land; and the names of adjoining property owners or subdivisions.
  - d. A construction plan set which shall include the following information which may be shown on the same sheets as long as the information on the sheets can be easily distinguished and understood:
    1. A complete layout plan showing the locations and dimensions of all proposed improvements including but not limited to roads, rights of way, lots, and existing and proposed easements. Also provide notes or labeling stating zoning, lot areas, lot widths and depths, minimum lot size allowable, and density allowable and provided.
    2. A complete grading and drainage plan showing all improvements including all proposed streets, easements, storm drains, swales, ditches, reserved areas and lot drainage;
    3. A complete stormwater management plan and calculations, as required, in accordance with all County and State regulations including but not limited to peak runoff control and post construction water quality.
    4. A complete public road plan and profile of all streets showing centerline stations, horizontal and vertical radii, any other layout information needed for construction, typical cross sections of proposed roadways, swales and ditches as well as both existing and proposed finished grades of paved rights-of-ways and special ditches, and details of all structures which are part of the physical improvements in the subdivision. All proposed drainage structures including manholes, catch basins, junction boxes, storm drains, ditches, and other drainage facilities including headwalls shall be shown on the plan. Washington County Highway Department shall review the road plans and profiles and provide the Washington County Zoning Office written comments in a timely fashion to incorporate their review comments into an overall plan review response back to the developer/applicant before the Planning Commission meeting.

5. Erosion and sediment control plan in accordance with all County and State regulations.
  6. Public water and/or sanitary sewer plans in accordance with all regulations of the public utility provider and State regulations.
  7. Details as appropriate.
  8. Any other plan, report, or calculations, as appropriate.
- e. The distance and bearing of one of the corners of the boundary of the subdivision to the nearest intersection of existing streets or roads and to an original corner of the original survey of which it is a part or a key map showing relation of subdivision to well-known streets, railroads, and water courses in all direction to a distance of at least one-half mile. Suggested scale: One inch equals 2,000 feet.
  - f. Plans of proposed utility layouts (sanitary and storm sewers, water, and electricity) showing feasibility of connections to any existing or the proposed utility system. When such connections are not practicable, any proposed individual water supply and/or sewage disposal system must be approved by the State of Tennessee.
  - g. The names, locations, widths, and other dimensions of proposed streets, alleys, easements, parks, and other open spaces, reservations, lot lines, building lines and utilities.
  - h. Contours at vertical intervals of not more than five feet, except when specifically not required by the planning commission.
  - i. The acreage of the land to be subdivided, square footage for each lot, and the depths and widths of each lot.
  - j. If any portion of the land being subdivided is subject to flood, the area subject to flood shall be shown and elevations given, if available. A notation stating whether or not any portion of the property to be subdivided lies within a flood hazard area, shall be based upon review of the latest applicable FEMA Flood Insurance Rate Map(s). The map panel number(s) and effective date shall be indicated on the plat.
4. Within sixty (60) days after submission of the preliminary subdivision plan, the planning commission will review it and indicate its approval, disapproval, or approval subject to modifications as a basis for the preparation of the final plat. If a subdivision plan is disapproved, reasons for such disapproval will be stated in writing. If approved subject to modifications, the nature of the required modifications will be indicated.
  5. The approval of the preliminary subdivision plan by the planning commission will not constitute acceptance of the final plat and will not be indicated on the preliminary subdivision plan.
  6. Failure of the planning commission to act on the preliminary subdivision plan within sixty (60) days after being presented at a planning commission meeting in accordance with subsections C.1 and C.2 of this Article will be deemed approval of this subdivision plan, and a certificate to that effect shall be issued by the commission on demand, provided, however, that the applicant may waive this requirement and consent to the extension of such period.
  7. One copy of the preliminary subdivision plan will be returned to the subdivider with any notations at the time of approval or disapproval and the specific changes, if any, required.

8. The approval of the preliminary subdivision plan shall lapse unless a final plat based thereon is submitted within one year from the date of such approval unless an extension of time is applied for and granted by the planning commission.
9. If the subdivision is going to be developed and submitted as final plats as phases of the preliminary subdivision plan, the phase must be designated and titled in alphabetical characters.
10. No subdivision shall use the name of an existing subdivision except as noted in Article II,C.9.



D. Final Plat

1. The final plat shall conform substantially to the preliminary subdivision plan as approved, and, if desired by the subdivider, it may constitute only that portion of the approved preliminary subdivision plan which he proposes to record and develop at the time, provided, however, that such portion conforms to all requirements of these regulations. If a proposed subdivision fronts upon an existing public road and no, or minor, public road, public utility, and/or public drainage improvements are needed, the planning commission, based on a recommendation from the Washington County Departments, may waive the requirements for the preliminary approval, and permit the developer to submit only a final plat. See also Article III.A.5.
2. For projects that require public improvements, an as-built survey of the public improvements including, but not necessarily limited to, pavement, curbing, storm drain, and other utilities shall be provided to the Washington County Zoning Administrator and the Highway Department for review and approval before final plat approval. The as-built survey shall be prepared by a licensed land surveyor and/or professional engineer. The required elements of the as-built shall be determined by the Washington County Departments and the Utility Providers.
3. Prior to the approval of a final plat, the following minimum inspections of improvements shall be performed and written documentation provided to the Zoning Administrator:
  - a. Public road improvements including pavement and curbing by the Washington County Highway Department.
  - b. Public drainage improvements including inlets, catch basins, headwalls, pipes, and swales by the Washington County Highway Department and the Stormwater Program Manager or designee.
  - c. Public water and sanitary sewer lines by the Utility Provider.
  - d. Stormwater management facilities-both public and private-by the Stormwater Program Manager or designee
  - e. Erosion and Sediment Control measures and stabilization of the disturbed areas by the Stormwater Program Manager or designee.
4. In order to allow the planning commission technical staff and utilities heads time to review and prepare recommendations to the planning commission, the final plat shall be submitted to the planning commission at least thirty (30) days prior to the meeting at which it is to be considered. The subdivider shall submit four (4) copies (black and white prints or blue line prints), and a digital version, PDF document or other acceptable format if requested, of the drawings, together with other plans that may be required by the planning commission. At the time of such submission the secretary of the planning commission shall issue a receipt acknowledging said submission.
5. The final plat shall be presented to the planning commission at its next meeting by the secretary or acting secretary of the planning commission for consideration for approval or disapproval; provided that if the plat of subdivision divides the tract into no more than two (2) lots, the approval may be endorsed in writing on the plat by the secretary of the commission without the approval of the regional planning commission, upon certification and endorsement in writing on the plat by the planning staff of the regional planning commission that the subdivision complies with the Subdivision Regulations of Washington County; provided, further, that no request for a variance from said regulations has been made.
6. The plat shall be drawn to a scale of one inch equals one hundred (100) feet on sheets eighteen (18) by twenty-four (24) inches or of an approved size to correspond to local plat book dimension; provided that subdivisions containing no more than two (2) lots may be drawn at such scale as may be required by the planning staff on a sheet eight and one half (8.5) by fourteen (14) inches and registered as an attachment to the deeds of the property and

placed in the deed books in the Registrar's Office of Washington County. When more than one sheet is required, an index shall be provided showing the entire subdivision with the sheets lettered in alphabetical order as a key or other means such as labeling each sheet "Plat Sheet 1 of 2, Plat Sheet 2 of 2, etc".

7. When the final plat has been approved by the planning commission two copies will be returned to the subdivider, with the approval of the planning commission certified thereon, for filing with the County Registrar as the official plat of record.
8. The planning commission shall approve or disapprove the final plat within sixty (60) days after its submission. Failure of the planning commission to act on this final plat within these sixty (60) days shall be deemed approval of it. If the plat is disapproved, the grounds for disapproval shall be stated upon the records of the planning commission.
9. Approval of the final plat by the planning commission shall not constitute the acceptance by the public of the dedication of any streets or, other public way or ground until acceptance of the road by the County Legislative Body.
10. The final plat shall show:
  - a. The lines of all streets and roads, alley lines, lot lines, lots numbered in numerical order, reservations, easements, and any areas to be dedicated to public use or sites for other than residential use with notes stating their purpose and any limitations. The width and location of existing pavement shall be shown. The location of the rights of way for both sides of all public roads shall be shown, insofar as possible, to assist in determining any right of way or road improvements. The right of way on the opposite side of the public road from the subject property being subdivided shall be shown per available Washington County right of way maps if a recorded plat is not available for that property.
  - b. Sufficient data to determine readily and reproduce on the ground the location, bearing and length of every street line, lot line, boundary line, block line and building line whether curved or straight, and including north point. This shall include the radius, central angle and tangent distance for the center line of curved streets and curved property lines that are not the boundary of curved street.
  - c. All dimensions to the nearest one hundredth (100th) of a foot and angles to the nearest minute.
  - d. Location and description of property markers.
  - e. The names and locations of adjoining subdivisions and streets and the location and ownership of adjoining unsubdivided property.
  - f. Date, title, name and location of subdivision, graphic scale, and north point.
  - g. Location sketch map showing site in relation to area.
  - h. Assignment of street names for 911 emergency purposes, as approved by the Washington County 911 Addressing Department. Addresses shall be assigned as dwellings are constructed on the tracts or lots.
  - i. All waivers and/or variances granted shall be noted on the final plat.
  - j. All stormwater easements for conveying stormwater and stormwater management facilities or devices. Provide dimensions and notes or labeling explaining the purpose and limitations of the easements.

- k. A statement or note stating who is responsible for maintenance of stormwater conveyance and management facilities.
- l. Notes stating any stormwater management maintenance covenants and their recording references.
- m. Streams and wetlands and their buffers, in accordance with all County and State regulations. Provide notes and/or labeling explaining the purposes and limitations associated with them. Provide the stream name(s). If it is unnamed then label it as an “unnamed tributary” to the nearest downstream named stream.
- n. Provide notes pertaining to any environmental permits such as Aquatic Resource Alteration Permit (ARAP) that are needed in order to access or develop the infrastructure or the individual lots.
- o. Any other notes, easements, or labeling needed to ensure the development of the subdivision is in accordance with the approved construction plans, permits, and subdivision regulations and in accordance with any conditions of approval by the Planning Commission such as, but not limited to, road improvements to an existing public road or right of way.
- p. Provide note(s) applicable to any additional front yard setback, limited or denial of access, or conditions of access along arterial streets as approved by the Planning Commission.
- q. Provide note(s) stating driveway entrance permit required for connection to the public road through the Washington County Highway Department for County roads or TDOT for State roads.
- r. The required notes that apply to more than one sheet in the plat set may be shown on one plat sheet only as long as it is very clear that there are multiple sheets and that these notes apply to all of the sheets:

11. The following certificates shall be presented with the final plat (see Appendix B):

- a. Certification showing that applicant is the land owner and dedicates streets, rights-of-way and any sites for public use.
- b. Certification by surveyor to accuracy of survey and plat and placement of property markers.
- c. If public sanitary sewer is available, certification by the sanitary sewer department or utility district that public sewer is available and adequate to serve the property.
- d. Certification by the County Road Commissioner that the subdivider has complied with one of the following alternatives:
  - 1. Installation of all public road and stormwater improvements were constructed in accordance with both the Washington County Subdivision Regulations and the approved preliminary subdivision plan, where applicable, as approved by the Washington County Regional Planning Commission.
  - 2. Posting of security of sufficient amount to assure such completion of all required improvements (See Appendix A).

- e. Certification by Washington County 911 Addressing Department has approved the subdivision name and street names.
- f. Certification of approval signed by the secretary of the planning commission
- g. If public water is available, a certification by the water department or utility district stating that water lines and pressure are adequate to serve the subdivision.
- h. Register of Deed Block.
- i. Division of Groundwater Protection Block (when applicable).

ARTICLE III. GENERAL REQUIREMENTS AND  
MINIMUM STANDARDS OF DESIGN

A. Streets

1. Conformity to the Major Thoroughfare Plan

The location and right of way width of all streets and roads shall conform to the official Major Thoroughfare Plan which may include a Major Street Plan within the municipality and/or a Major Road Plan within the Washington County Planning Region.

2. Relation to Adjoining Street System

The proposed street system shall extend existing streets or projects. They shall be extended at a width no less than the required minimum width as set forth in this Article.

3. Access Streets to Subdivision Boundaries

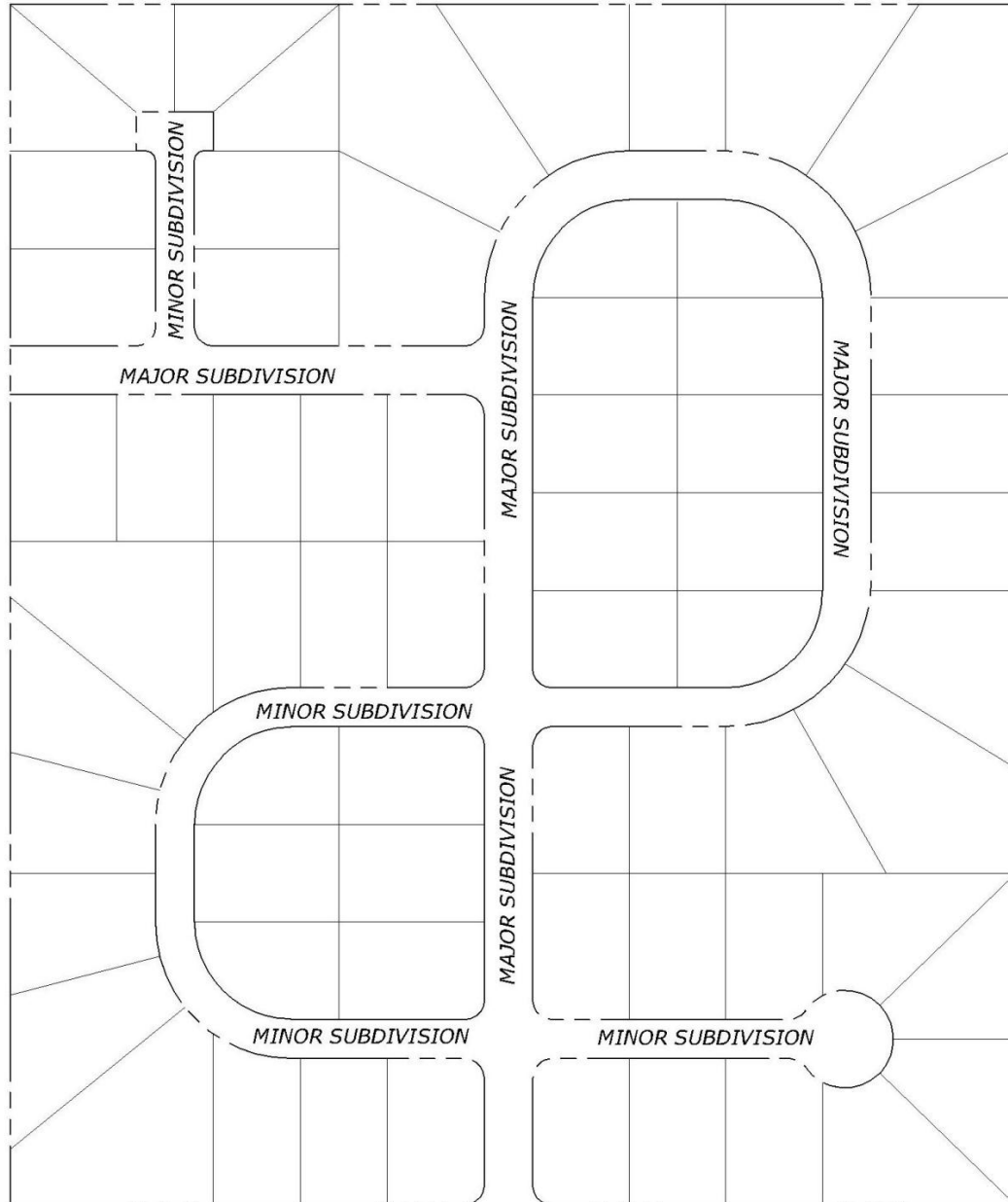
Sufficient access streets to adjoining properties shall be provided in subdivisions to permit harmonious development to the area, provide interconnectivity, and provide additional ingress/egress points for traffic including emergency vehicles.

4. Street Design

<u>Street Classification</u>	<u>Right of Way Width</u>	<u>Road Width</u>
Arterial Streets	80'-150' or as designed	As designed
Arterial streets are used primarily for fast or heavy traffic and are designated on the Major Thoroughfare Plan. These may be highways, interstates, and other major roads.		
Collector Streets	60'	26'
Collector streets carry traffic from the major residential streets to the system of arterial streets and highways.		
Major Residential Streets	50'	24'
Major residential streets carry internal subdivision traffic to a collector road and provide interconnectivity between adjoining properties.		
Minor Residential Streets	40' (50' for open section)	22'
Minor residential streets provide access from the individual lots to the major residential streets. Minor residential streets may be loop streets, dead-end streets, short through streets, or frontage streets. Frontage streets are parallel to and adjacent to arterial streets and provide safer access to the subdivision lots along the arterial street. Each street shall not exceed twelve hundred (1200) feet in length without Planning Commission approval.		
Alleys	20'	12'
Alleys are minor public ways used primarily for service access to the back or side of properties otherwise abutting on a street.		

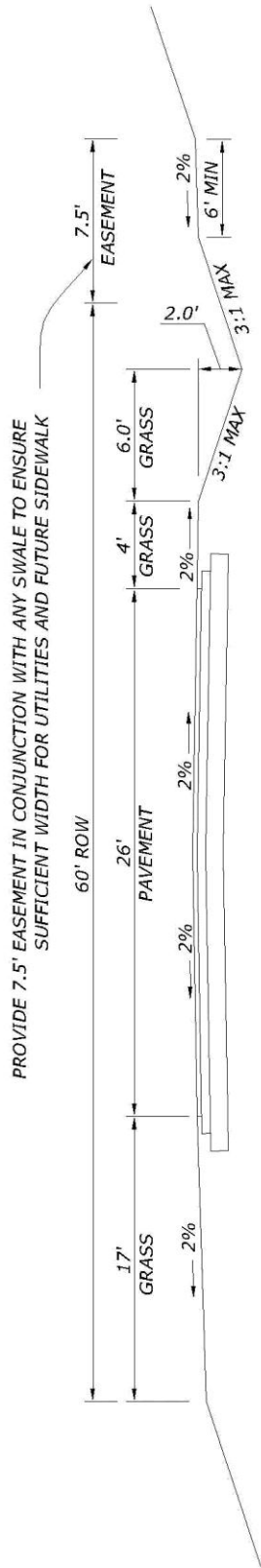
See illustrations of the typical street cross sections.

- a. The rights of way are minimums and may be increased as needed with approval by the Planning Commission.
- b. In cases where topography, the shape of a piece of property, or other physical conditions make a street of the required minimum width or length impracticable, the planning commission may modify these requirements.
- c. The above road widths are from face of curb to face of curb for closed section streets and from edge of pavement to edge of pavement for open section streets. These road widths are based on two-way traffic flow. The road widths are minimums and may be increased with Planning Commission approval. However, the developer is encouraged to keep road widths to a minimum to help reduce vehicular speed, reduce stormwater runoff, and improve water quality.
- d. The Planning Commission may approve one-way streets on a case by case basis where topography, the shape of a piece of property, or other physical conditions warrant their use. For one way streets, the minimum road width shall be 12' and the minimum right of way shall be sufficient for installation of the road, utilities, and drainage but shall not be less than 30'. The one-way street shall have a road width and/or horizontal curves large enough to allow for emergency and sanitation vehicle access.
- e. Roads may be open section (no curbing), as opposed to closed section (curbing), with Planning Commission approval. See Articles III and IV for additional design and construction requirements for open section streets
- f. The Planning Commission, with recommendations from the Washington County Departments, shall determine if parking is allowed along the streets and to what extent. Street parking signage such as, but not limited to, "no parking" and "no parking this side of street" is the responsibility of the developer.

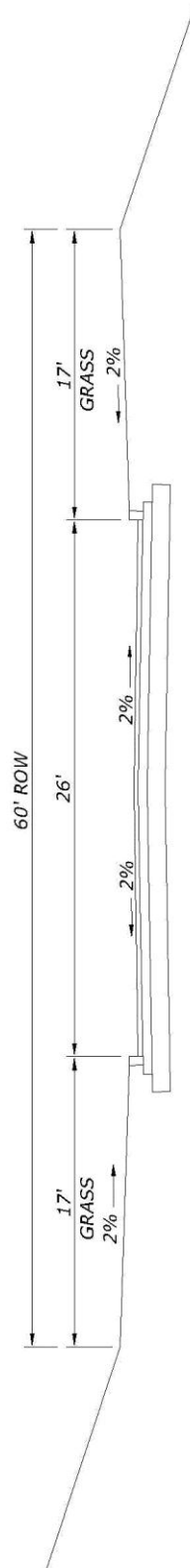


ARTERIAL OR COLLECTOR

STREET CLASSIFICATIONS



OPEN SECTION

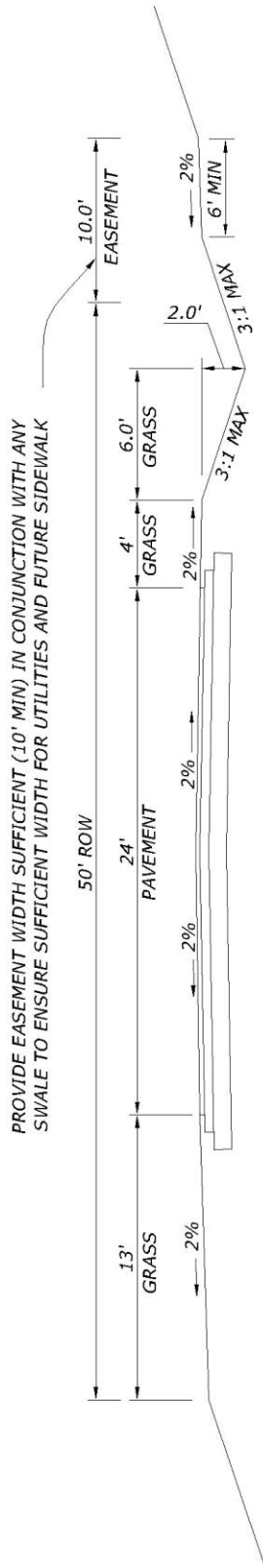


CLOSED SECTION

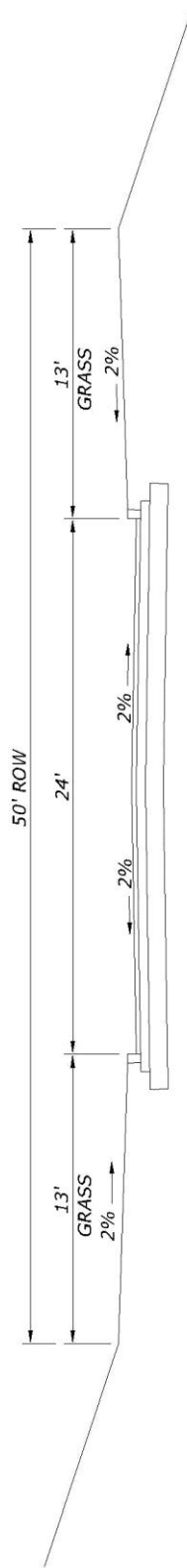
COLLECTOR STREET

Washington County, TN Subdivision Regulations





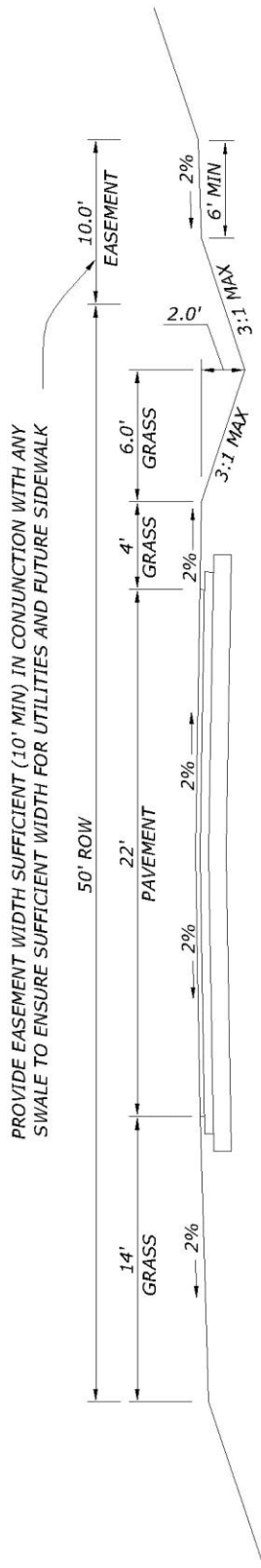
OPEN SECTION



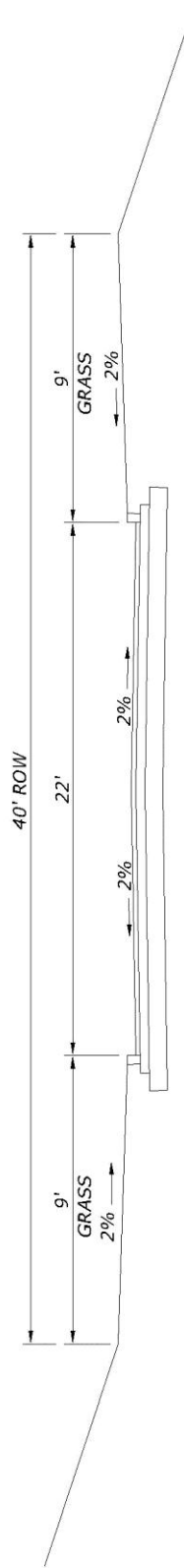
CLOSED SECTION

MAJOR RESIDENTIAL STREET

Washington County, TN Subdivision Regulations



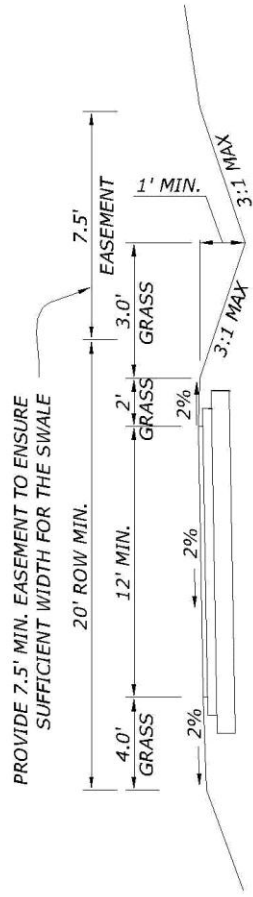
OPEN SECTION



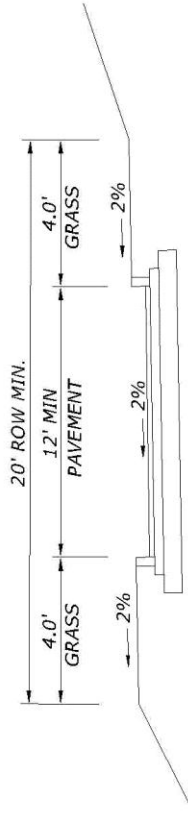
CLOSED SECTION

MINOR RESIDENTIAL STREET

Washington County, TN Subdivision Regulations



**OPEN SECTION**



**CLOSED SECTION**

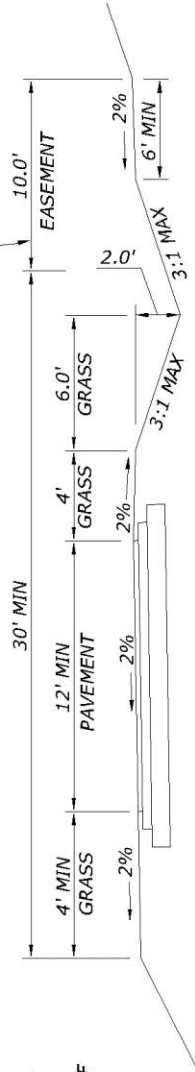
- OPEN SECTION NOTES:**
1. EXPAND RIGHT OF WAY AS NECESSARY FOR INSTALLATION OF ROAD, UTILITIES, AND DRAINAGE IMPROVEMENTS. THE SWALE SHALL BE WITHIN THE RIGHT OF WAY OR WITHIN A DRAINAGE EASEMENT.
  2. PAVEMENT SECTION MAY SLOPE ENTIRELY TO ONE SIDE INSTEAD OF BEING CROWNED IN THE MIDDLE. IF THIS IS THE CASE, THE DRAINAGE SWALE MAY BE OMITTED IF IT CAN BE SHOWN THAT SUFFICIENT DRAINAGE IS PROVIDED.
  3. IF THE DRAINAGE SWALE IS NEEDED, THE DEPTH AND WIDTH OF THE SWALE MAY BE REDUCED BELOW 2' WITH ENGINEERING CALCULATIONS BASED ON THE DRAINAGE SINCE ALLEYS TYPICALLY HAVE SMALL DRAINAGE AREAS BUT THE DEPTH SHALL NOT BE LESS THAN 1'.

- CLOSED SECTION NOTES:**
1. EXPAND RIGHT OF WAY AS NECESSARY FOR INSTALLATION OF ROAD, UTILITIES, AND DRAINAGE IMPROVEMENTS.
  2. PAVEMENT SECTION MAY SLOPE ENTIRELY TO ONE SIDE INSTEAD OF BEING CROWNED IN THE MIDDLE.

ALLEY

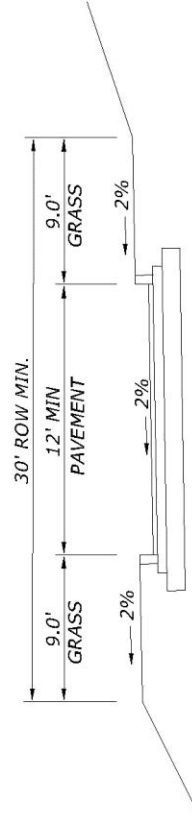
- OPEN SECTION NOTES:**
1. IN LIEU OF THE EASEMENT, THE RIGHT OF WAY MAY BE EXPANDED IN WIDTH TO PROVIDE SUFFICIENT WIDTH FOR INSTALLATION OF UTILITIES AND FUTURE SIDEWALK.
  2. THE CENTER OF THE PAVEMENT MAY BE OFF CENTER OF THE RIGHT OF WAY BUT THE PAVEMENT EDGE MAY NOT BE ANY CLOSER THAN 4' TO THE EDGE OF THE RIGHT OF WAY.

PROVIDE EASEMENT WIDTH AS NECESSARY (10' MIN) IN CONJUNCTION WITH ANY SWALE TO ENSURE SUFFICIENT WIDTH FOR UTILITIES AND FUTURE SIDEWALK



OPEN SECTION

- CLOSED SECTION NOTES:**
1. EXPAND RIGHT OF WAY AS NECESSARY FOR INSTALLATION OF ROAD, UTILITIES, AND DRAINAGE IMPROVEMENTS.
  2. PAVEMENT SECTION MAY SLOPE ENTIRELY TO ONE SIDE INSTEAD OF BEING CROWNED IN THE MIDDLE.



CLOSED SECTION

ONE WAY STREET

5. Improvements and Additional Right of Way Width on Existing Streets

Subdivisions that adjoin existing streets shall dedicate additional right-of-way to meet the above minimum street right of way width requirements and may be required to provide grading and drainage improvements as noted below:

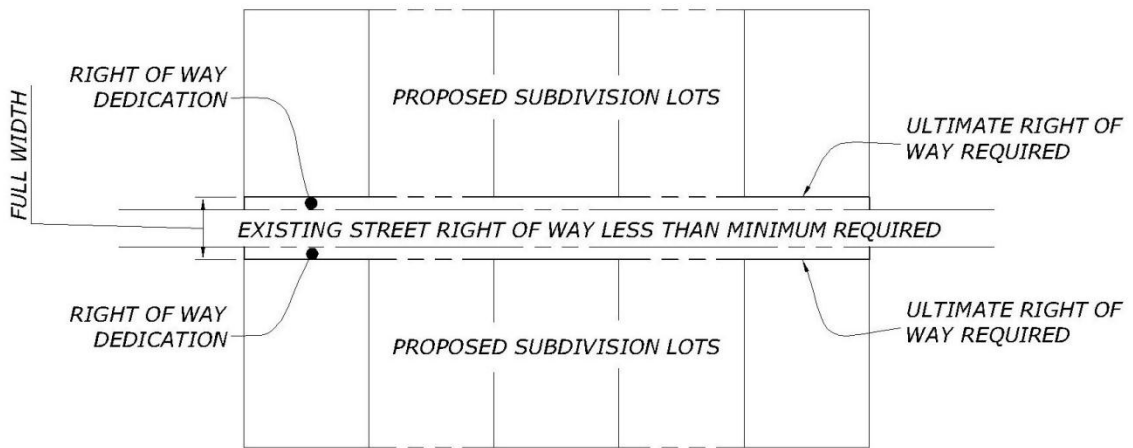
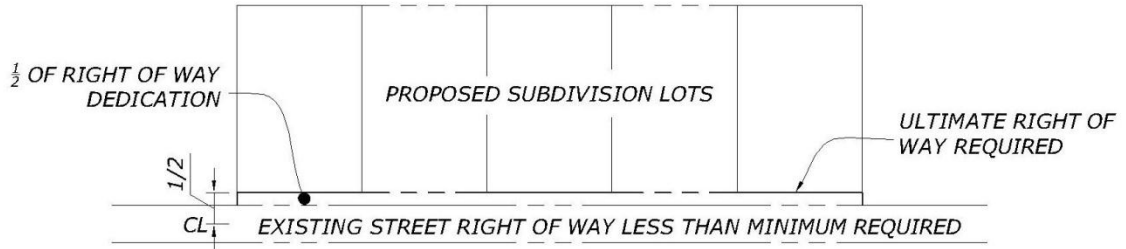
- a. The entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing street.
- b. When the subdivision is located on only one side of an existing street, one-half of the required right-of-way, measured from the center line of the existing roadway, shall be provided. In no case shall the resulting ultimate right-of-way width be less than the minimum required right of way based on the street classification.
- c. When the subdivision of land is located on an existing public road, the petitioner may be required to provide grading and drainage improvements for the property's frontage along the existing public road. The extent of the improvements shall be determined by the Washington County Departments and approved by the Planning Commission. In lieu of completing these improvements before the final plat is approved, these improvements may be guaranteed with a security in accordance with Article IV.B.

Minor administrative subdivisions are exempt from this standard unless it is part of a larger common development.

6. Restriction of Access

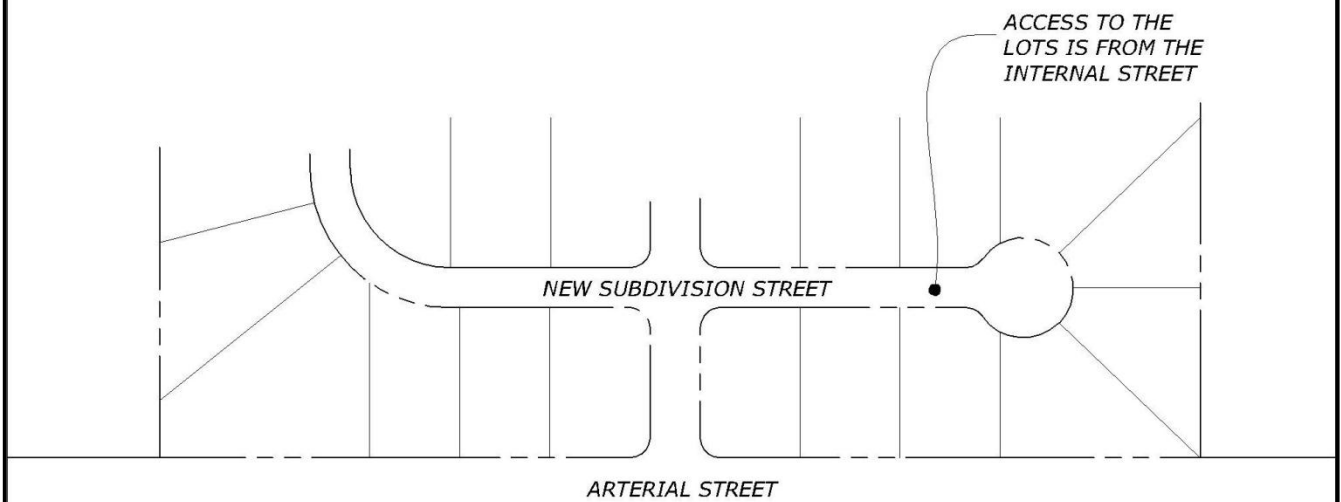
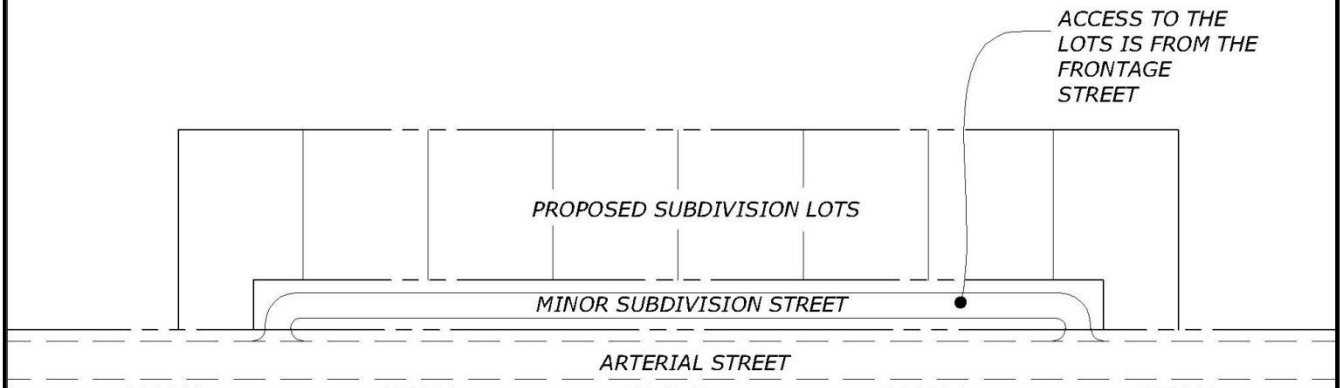
Where a subdivision abuts or contains an existing or proposed major street, the planning commission may require frontage streets, reverse frontage lots possibly with screen plantings contained in a non-access reservation along the rear property line, or such other treatment as may be necessary for adequate protection of residential properties to afford separation of through and local traffic.

Also see Article III, C, Lots for additional information concerning lots along an arterial street.



STREET RIGHT OF WAY DEDICATION

NOTE:  
THESE ARE SOME EXAMPLES OF HOW TO PROVIDE  
ACCESS TO PROPOSED LOTS ALONG AN ARTERIAL  
STREET SO THAT INGRESS AND EGRESS TO THE  
ARTERIAL STREET IS SAFER FOR EVERYONE.



RESTRICTION OF ACCESS

7. Street Grades

Grades on arterial and collector streets shall not exceed seven (7) percent without Planning Commission Approval. Grades on other streets shall not exceed thirteen (13) percent without Planning Commission approval.

For streets intersecting proposed or existing streets, the minimum length of vertical curve shall be 10 times the algebraic difference between the two grades. The maximum centerline grade for the intersection road shall be 2% at the intersection.

8. Horizontal Curves

Where a deflection angle of ten (10) degrees or more in the alignment of a street occurs, a curve of reasonable long radius shall be introduced. For arterial and collector streets the center line radius of curvature shall not be less than three hundred (300) feet; For major and minor residential streets the center line radius of curvature shall not be less than one hundred (100) feet.

9. Vertical Curves

All changes in grade shall be connected by vertical curves of minimum length in feet equal to thirty (30) times the algebraic difference in rates of grade for arterial and collector streets and fifteen (15) times the algebraic difference in rates of grade for other streets. The planning commission may waive the strict enforcement of this requirement if the subdivider can show that the lot layout will be adversely affected and provided that this requirement is followed as closely as possible. Profiles of all streets showing natural and finished grades drawn to a scale of not less than one inch equals one hundred (100) feet horizontal, and one inch equals ten (10) feet vertical, may be required by the planning commission.

10. Intersections

Street intersections shall be as nearly at right angles as it is possible, and no intersection shall be at an angle of less than sixty (60) degrees.

To permit the construction of a curb having a desirable radius, property line radii at all street intersections shall not be less than twenty (20) feet. Where the angle of the street intersection is less than ninety (90) degrees, the planning commission may require a greater radius.

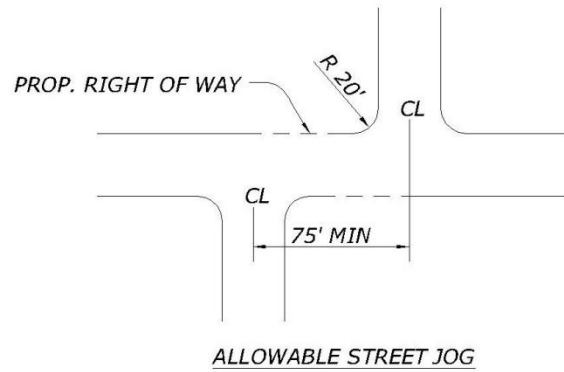
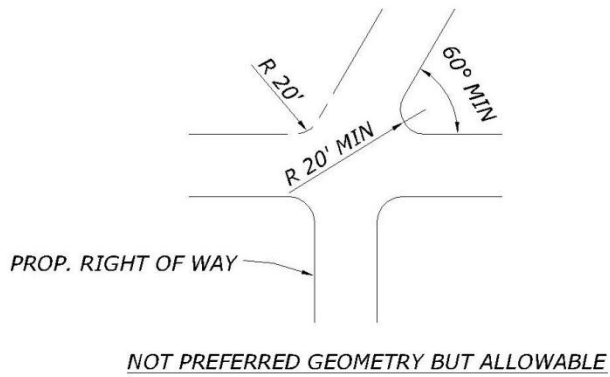
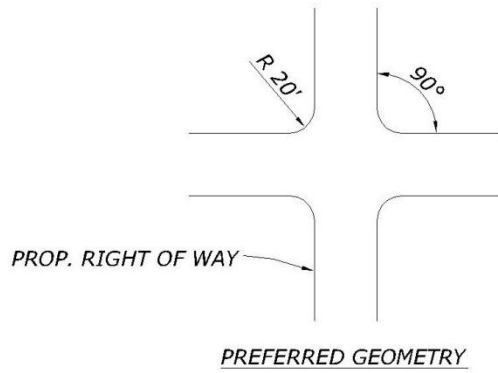
11. Tangents

A tangent of at least one hundred (100) feet long shall be introduced between reverse curves on arterial and collector streets.

12. Street Jogs

Street jogs with center line offsets of less than seventy-five (75) feet shall not be allowed.





INTERSECTION GEOMETRY

13. Dead End Streets

- a. Minor terminal streets or court designed to have one end permanently closed shall be no more than twelve hundred (1200) feet long unless approved by the Planning Commission. They shall be provided at the closed end with a turn-around having an outside right of way diameter of at least one hundred (100) feet with a pavement diameter of eighty (80) feet or the planning commission may approve an alternate design such as the T or Y turnaround
- b. Where, in the opinion of the planning commission, it is desirable to provide for street access to adjoining property, proposed streets shall be extended to the boundary of such property. Such dead-end streets shall be provided with a temporary turn-around meeting the geometry of permanent dead-end streets.

14. Private Streets and Control Strips

There shall be no private streets platted in any subdivision. Every subdivided property shall be served from a publicly dedicated street. There shall be a control strip for the final five (5) feet of rights of way at the perimeter of the subdivision. No person shall cross or otherwise utilize this strip without the approval of the Planning Commission. There shall be no control strips restricting access to public streets, except where the control of such strips is with the planning commission.

15. Stormwater Drainage

a. General

All streets and roads must be so designed as to provide for the discharge of surface water from the right-of-way of all streets and roads by grading and drainage as shall be approved by the planning commission. Where it is the opinion of the planning commission that water cannot be adequately discharged by surface drainage, the planning commission may require the installation of a closed storm drain system.

Private stormwater conveyance systems shall be designed for the 25 year storm event and a flow path for the 100 year storm shall be provided so that no structures are negatively impacted.

Pursuant to the National Pollutant Discharge and Elimination System, Phase II Policy and the *Washington County Illicit Discharge Detection and Elimination Resolution*, all proposed storm drains shall be required to be manufactured with the stamp reading "Drains to Creek, Do Not Dump Waste" or similar language and/or with the universal fish symbol on the grate to alert the public not to drain illicit discharges to the storm drain system.

When connecting to an existing drainage system, the existing drainage system shall be analyzed to determine available capacity. The new drainage system shall not overload the existing drainage to the point that it causes flooding of public streets, structures, or private property, or does not make an existing flooding problem any worse.

b. Public Storm Drain Definitions

1. A stormwater drainage system is a network of natural or manmade structures, channels, and pipes that collect, convey, store, or treat stormwater runoff. The network can consist of both private and public systems.
2. A private stormwater system is for stormwater runoff from private property and flowing within the property or from one private property to another private property. Drainage easements and drainage facilities that only contain private stormwater systems shall not be maintained by Washington County.

3. A public stormwater system is for stormwater runoff flowing through or from publicly owned land or public rights of way. Public stormwater systems must be located within publicly owned land, dedicated rights of way, or drainage easements granted to Washington County. There shall be no structures, trees, or other obstructions placed within publicly maintained drainage easements that would restrict, divert, or block the flow of stormwater or that would prohibit access to the public stormwater system for maintenance and improvements.

c. All publicly maintained storm drains shall meet the following:

1. All pipes under the road pavement and within the road prism (a line drawn at 45 degrees into the ground away from the outside edge of the compacted stone base) shall be designed and installed for a minimum service life of 50 years, unless otherwise noted in these regulations. All other publicly maintained storm drains shall be designed and installed for a minimum service life of 30 years, unless otherwise noted in these regulations.

The allowable pipe material for the service life requirements shall be determined by the Washington County Highway Department in conjunction with other Washington County Departments. This list of allowable storm drain materials shall be approved by the Planning Commission and updated and reapproved from time to time as needed.

2. For major infrastructure projects, pipes with an excessive depth, or where failure of the pipe could cause structural damage and/or major flooding, the pipes shall be designed for a service life of 75 years. The Washington County Departments shall determine which pipes have to meet this criteria.
3. Shall be designed for the 25 year storm event except major infrastructure projects and pipes conveying large drainage areas through developments may be required to design for the 100 year storm event. The Washington County Departments shall determine which pipes would need to meet the 100 year storm design criteria. For storm drain systems designed for the 25 year storm event, the flow path through the property for the 100 year storm shall be considered and the project designed so the 100 year storm overflow will not damage any residence, bridge, public road, or other critical structure.
4. Storm drains shall be designed using standard engineering practices. The minimum acceptable diameter is fifteen (15) inches or equivalent arch or elliptical pipe.
5. The minimum desirable physical slope should be 0.5% for smooth invert pipe such as reinforced concrete (RCP) or double wall plastic (HDPE) and 1.0% for non-smooth invert pipe such as corrugated metal pipe (CMP). The Planning Commission, with a favorable recommendation from the Washington County Departments, may approve flatter slopes on a case by case basis,
6. Culvert skews shall not exceed 45 degrees as measured from a line perpendicular to the roadway center line. The Planning Commission, with a favorable recommendation from the Washington County Departments, may approve a greater angle on a case by case basis,
7. Shall be installed and backfilled per manufacturer's specifications for heavy duty loading. The pipes shall be placed at a sufficient depth below the road bed to avoid structural collapse or deformation of the pipes and in no case shall the top of the pipe be less than one (1) foot below the compacted base course unless an alternative design is provided by a professional engineer. The pipes shall be laid with spigot end pointing in the direction of the flow and with the ends fitted and matched to provide tight joints and a smooth uniform invert.

8. The ends of the pipes shall be protected with a headwall or end section, unless it would create a traffic safety issue,
9. Be located within publicly owned land, dedicated rights of way, or stormwater easements granted to Washington County. There shall be no structures, trees, or other obstructions placed within publicly maintained drainage easements that would restrict, divert, or block the flow of stormwater or that would prohibit access to the public stormwater system for maintenance and improvements.

16. Street Names

Proposed streets which are obviously in alignment with others already existing and named, shall bear the names of existing streets. In no case shall the name for proposed streets duplicate existing street names, irrespective of the use of suffix street, avenue, boulevard, driveway, place, or court. Through its index list of street names on file, the planning commission can assist the subdivider in avoiding duplication. Washington County 911 Addressing Department shall approve and certify the subdivision name and the street names prior to Planning Commission approval of the final plat.

17. Alleys

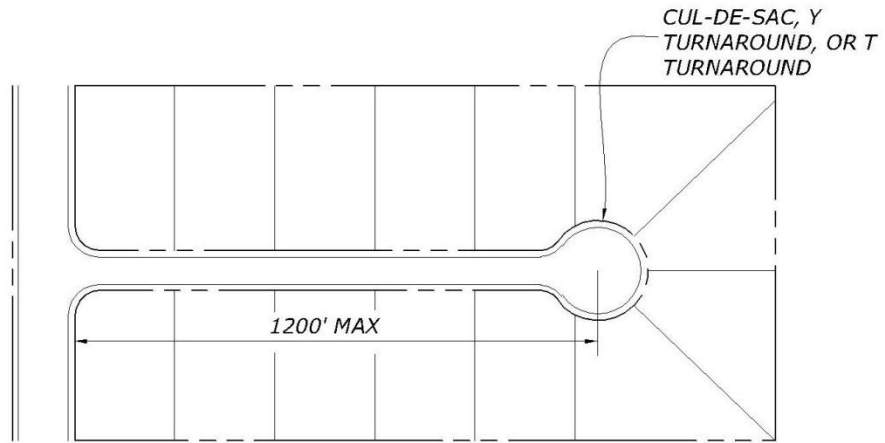
Alleys shall be provided to the rear of all lots used for business purposes, and may be provided in residential blocks with Planning Commission approval.

18. Traffic Calming

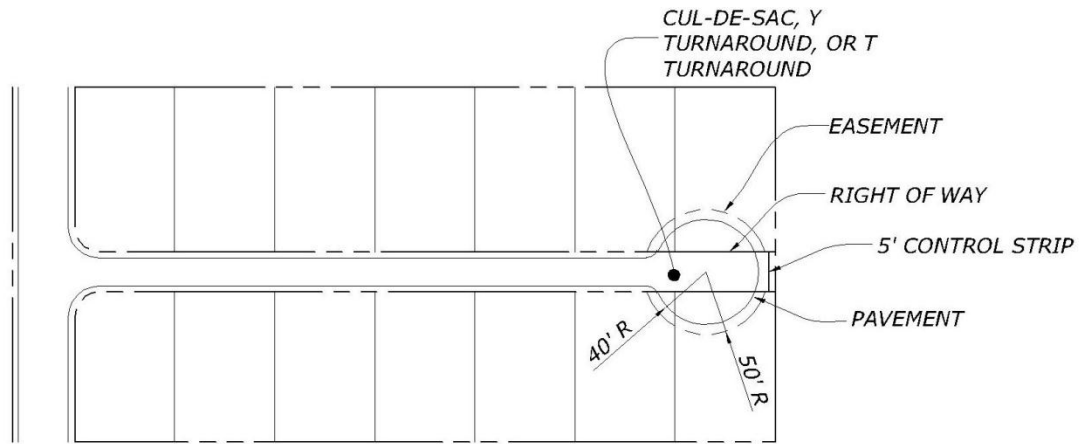
Long straight sections of roadway shall be discouraged. The maximum street length without an intersection requiring stopping, horizontal curve sufficient to slow vehicular speed, dead end, or traffic calming device is 500'. Traffic calming devices on new roads shall not be speed bumps, humps, or other vertical devices unless associated with a raised crosswalk or intersection and with Planning Commission approval.

19. Sight Distance

The locations of intersections, horizontal and vertical curves, and grading shall be designed to provide for sight distance, in accordance with Washington County Highway Department criteria, or TDOT criteria if County criteria does not exist, to ensure the safety of pedestrians and vehicular traffic. This includes the intersection of new public roads with existing public roads. The designer should take into account the driveway locations for individual lots as well when designing the lot layout. The driveways for individual lots should be located at time of construction to maximize sight distance.

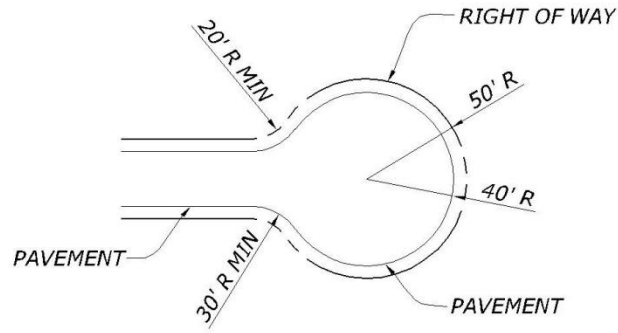


PERMANENT DEAD-END STREET

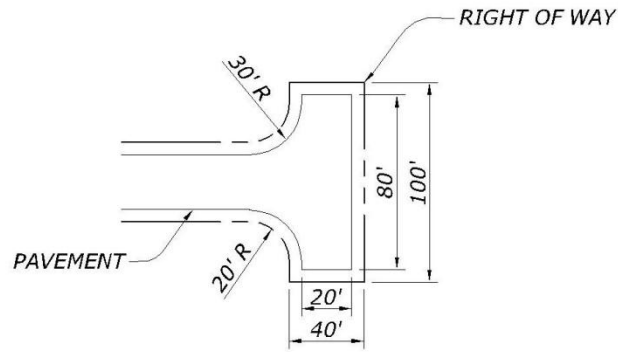


TEMPORARY DEAD-END STREET

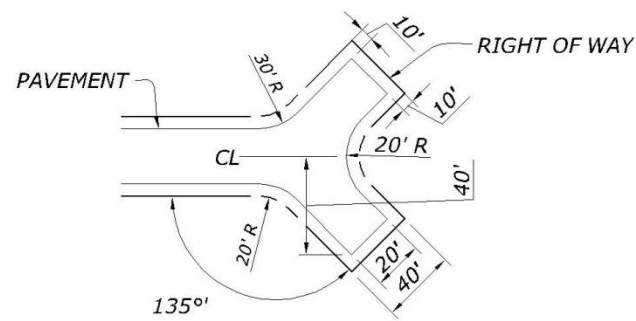
DEAD-END STREETS



CUL-DE-SAC



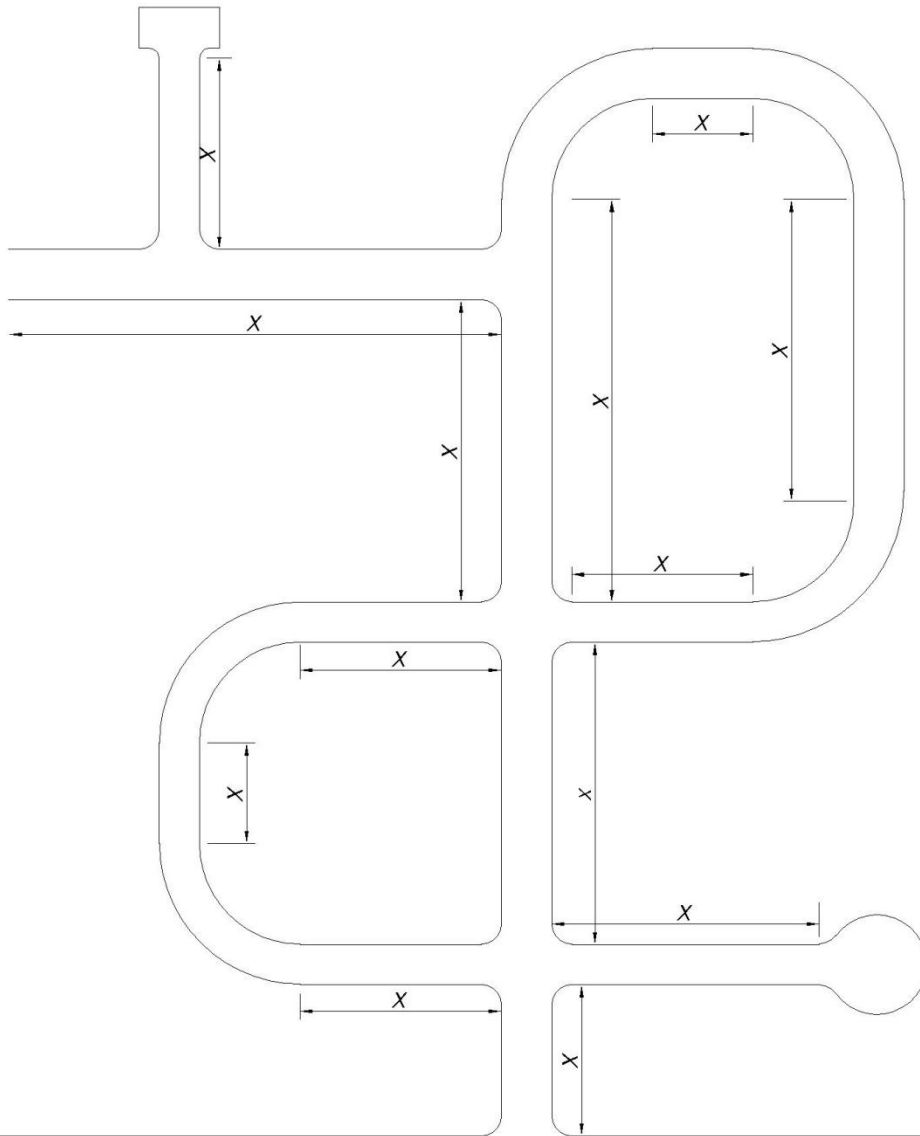
T TURNAROUND



Y TURNAROUND

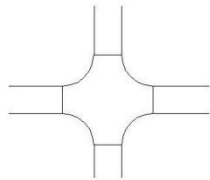
DEAD-END TURNAROUNDS

*NOTE:  
TRAFFIC CALMING NEEDED FOR ANY STRAIGHT LENGTH  
OF ROAD (DIMENSION "X") THAT EXCEEDS 500'.*

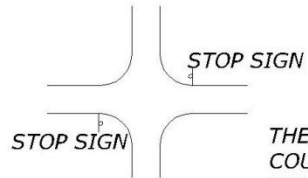


TRAFFIC CALMING

**NOTE:**  
THESE ARE ONLY SOME EXAMPLES OF TRAFFIC CALMING DEVICES. OTHERS  
MAY BE ALLOWED EXCEPT SPEED HUMPS AND BUMPS ARE NOT ALLOWED.

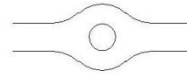


RAISED INTERSECTIONS



STOP SIGNS

THE STOP SIGN ONLY  
COUNTS AS TRAFFIC  
CALMING FOR THE ROAD  
THAT IT SERVES



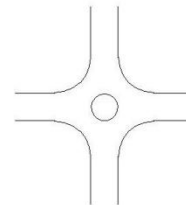
MEDIANS



CHOKERS



HORIZONTAL ROAD DEFLECTIONS



CIRCLES OR ROUNDABOUTS

TRAFFIC CALMING EXAMPLES



B. Blocks

1. Length

Blocks shall not be less than four hundred (400) nor more than twelve hundred (1200) feet in length, except as the planning commission considers necessary to secure efficient use of land or desired features of street pattern. In blocks over eight hundred (800) feet in length the planning commission may require one or more public crosswalks of not less than ten (10) feet in width to extend entirely across the block and at locations deemed necessary.

2. Width

Blocks shall be wide enough to allow two tiers of lots of minimum depth, except where fronting on major streets or prevented by topographical conditions or size of the property, in which case the planning commission will approve a single tier of lots of minimum depth.

C. Lots

1. Arrangement and Width

- a. Insofar as practical, side lot lines shall be at right angles to straight street lines or radial to curved street lines. Each lot less than two (2) acres in total area must front for a minimum of twenty-five (25) feet upon a public street; each lot greater than or equal to two (2) acres in total area must front for a minimum of fifty (50) feet upon a public street. The planning commission may approve a smaller lot width if the subdivider can show that a smaller lot width does not destroy the intent of these regulations.
- b. There shall be no more than two (2) contiguous flag lots at the street right of way.
- c. For single and two family residential use lots along an arterial street with driveway access onto the arterial street, the following shall apply:
  1. The minimum lot width shall be 100', or in accordance with the Zoning Resolution, whichever is greater.
  2. The front setback shall be 1.5 times the required setback in the Zoning Resolution.
  3. There shall be a turnaround associated with the driveway so vehicles do not back into the street.
  4. Notes shall be provided on the final plat stating these conditions.

2. Minimum Size

The size, shape and orientation of lots shall be such as the planning commission deems appropriate for the type of development and use contemplated. Where a public sanitary sewer is reasonable accessible, the subdivider shall connect with such sewer and provide a connection to each lot. Where a public sewer is not accessible, an alternate method of sewage disposal may be used, when meeting all applicable public health regulations.

- a. Residential lots shall meet the minimum area and width requirements in accordance with the Washington County Zoning Resolution
- b. Size of properties reserved or laid out for commercial or industrial properties shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated. Platting of individual lots should be avoided in favor of an overall design of the land to be used for such purposes.
- c. The size and widths of lots shall in no case be less than the minimum requirements of any zoning ordinance in effect.

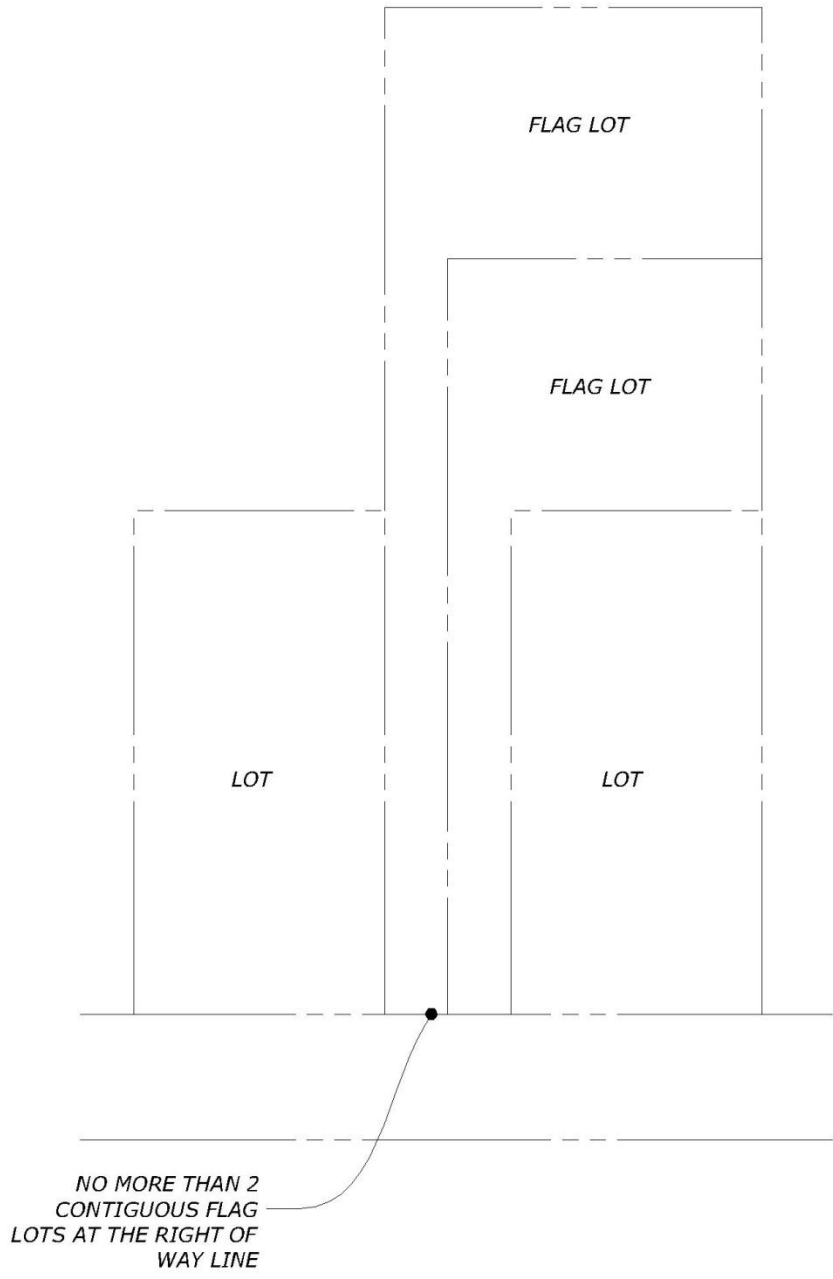
3. Building Setback Lines

The minimum depth of building setback lines shall be taken into account with the lot layout and the lot sizes shall be large enough to be truly buildable without a variance required. The building setbacks shall be in accordance with the Washington County Zoning Resolution at the time of building permit and noted such on the plat. The front yard shall be known as the portion of the property that abuts the road right of way. If the lot fronts on two streets, see "Corner Lots" below.

4. Corner Lots

Corner lots, as defined in the Zoning Resolution, shall be sufficiently wider and larger to permit the additional side yard requirements of the Zoning Resolution for building setback lines.

To ensure that corner lots are large enough to accommodate building construction without a variance, the subdivision designer should assume that the corner lots have two front yard setbacks as this will provide additional buildable area. However, building construction on the corner lots are not required to meet two front yard setbacks.



FLAG LOT GEOMETRY

D. Public Use and Service Areas

Due consideration shall be given to the allocation of areas suitably located and of adequate size for playgrounds and parks for local or neighborhood use as well as public service areas.

1. Public Open Spaces

Where a school, neighborhood park or recreation area or public access to water frontage, shown on an official map or in a plan made and adopted by the planning commission is located in part in the applicant's subdivision, the planning commission may require the dedication or reservation of such open space within the subdivision up to a total of ten (10) percent of the gross area of water frontage of the plat, school or recreation purposes.

2. Easements for Utilities

a. Stormwater conveyance and utility easements shall be provided on all interior lot lines for a width of 7.5'. Provide additional easements as necessary for utilities, transportation, and drainage that cross any lot outside of the easements noted above along the lot lines. The easement width shall be designed to adequately provide utilities and drainage but shall be a minimum of 15' wide. If the easement is centered along a lot line then the easement may be 7.5' on each lot. Each Cul-De-Sac shall have the provision for fifteen (15) feet utility easement extending from the cul-de-sac to the adjoining property to prevent dead-end water mains. Easements of the same or greater width may be required along the lines of or across lots where necessary for the extension of existing or planned utilities.

The corresponding note shall be on all final plats, and may be shown on one plat sheet only as long as it is very clear that there are multiple sheets and that these notes apply to all of the sheets:

*Easement Note:*

*There is hereby established an easement area a minimum of 7 1/2' wide along the interior side of all lot lines for the installation and maintenance of utilities and the conveyance of stormwater runoff. Such standard easement area is in addition to any other easements as may be delineated on the final plat. No primary or customary accessory structures may be placed within the easements. Minor structures such as but not limited to fences and planter boxes may be located within the easements but they must not block, restrict, or divert the flow of stormwater.*

3. Water Supply and Sewerage Connections

Where a public water supply or public sewerage system is reasonably accessible, the subdivider shall indicate a connection with such water supply or sewerage system and a water or sewerage connection for each lot with such material and to such size and length as shall be approved by the planning commission. Where a public water supply or public sewerage system is not reasonably accessible or not planned for in the future, an alternate method of water supply or sewage disposal may be indicated and shall be approved in writing by the State of Tennessee.

4. Community Assets

In all subdivisions, due regard shall be shown for all natural features such as large trees, wetlands, water courses, historical sites or structures, and similar community assets which, if preserved, will add attractiveness and value to the property and the community. Effort should be made to protect these community assets.

E. Suitability of the Land

The planning commission shall not approve the subdivision of land if from adequate investigations conducted by all public agencies concerned, it has been determined that in the best interest of the public the site is not suitable for platting and development purposes of the kind proposed.

Land subject to flooding and land deemed to be topographically unsuitable shall not be platted for residential occupancy, nor for such other uses as may increase danger to health, fire or property or aggravate erosion or flood hazard. Such land within the plat shall be set aside for such uses as shall not be endangered by periodic or occasional inundation or shall not produce unsatisfactory living conditions.

All subdivisions shall be in accordance with the flood plain management regulations of Washington County. Fill material may not be used to raise the land in areas subject to flood unless the fill proposed does not restrict the flow of water and unduly increase flood heights.

F. Large Tracts or Parcels

When land is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged to allow for the opening of future streets and logical further resubdivision.

G. Waivers

Waivers may be granted by the Planning Commission to the subdivision regulations under the following conditions:

1. Where the subdivider can show that a provision of these standards could cause unnecessary hardship if strictly adhered to, or
2. Where the planning commission decides that there are topographical or other conditions peculiar to the site, and a departure may be made without destroying the intent of such provisions. Any waiver thus authorized is to be stated in writing in the minutes of the planning commission with the reasoning on which the departure was justified set forth.
3. Waivers granted shall be noted on the preliminary subdivision plan and final plat.

H. Zoning or Other Regulations

No final plat of land within the force and effect of an existing Zoning Resolution will be approved unless it conforms with such ordinance. Whenever there is a discrepancy between minimum standards or dimensions noted herein and those contained in zoning regulations, building code, or other official regulations, the highest standard shall apply.

I. Stormwater Management

Stormwater management shall be provided in accordance with all Washington County and State regulations including but not limited to peak runoff control and post construction water quality.

## ARTICLE IV. DEVELOPMENT PREREQUISITE

### TO FINAL APPROVAL

A perfectly prepared and recorded subdivision or plat means little to a prospective lot buyer until he can see actual physical transformation of raw acreage into lots suitable for building purposes and human habitation. Improvements by the subdivider spare the community from a potential tax liability. The following tangible improvements are required before final plat approval in order to assure the physical reality of a subdivision which approval and recordation will establish legally.

A. Required Improvements

Every subdivision developer shall be required to grade and improve streets and alleys, to install curbs, survey markers, sewers, storm water system, and water mains, in accordance with specifications established in these regulations by the Washington County Planning Commission, and to install improvements as shown on the approved preliminary subdivision plan and construction plans.

1. Property and Boundary Markers

An iron pipe or solid steel rod not less than one-half (1/2) inch in diameter and eighteen (18) inches long and driven so as to be flush with the finished grade shall be provided at all street corners, boundaries of the subdivision, angle points and points of curve in each street, the center of the rights of way for all cul-de-sacs, at all lot corners, and any other critical point to properly delineate the subdivision, or in accordance with State of Tennessee regulations, whichever is more stringent.

2. Grading

All streets, roads and alleys shall be graded or filled horizontally to the full width of their rights-of-way by the subdivider or developer. Due to special topographical conditions, deviation from the above will be allowed only with special approval of the planning commission.

a. Preparation.

Before grading is started, the entire right-of-way area shall be cleared of all trees, stumps, roots, brush and other objectionable materials.

b. Cuts.

All tree stumps, boulders and other obstructions shall be removed to a depth of two (2) feet below the sub grade or to good compactable soil. Rock, when encountered, shall be removed to a depth of twelve (12) inches below sub grade and to a point 4' from the back of curb or ditch..

c. Fill.

All suitable material from roadway cuts may be used in the construction of fills, approaches, or at other places as needed. Excess materials including organic materials, soft clays, etc., shall be removed from the rights of way. The fill shall be spread in layers not to exceed six (6) inches loose and compacted by a sheep's foot roller, unless another method of preparation of the sub grade is approved by Washington County Highway Department. The sub grade shall be constructed as specified in Section 23, Standard Specifications for Road and Bridge Construction, Tennessee Department of Highways and Public Works - July 1, 1951, and latest revision thereto. The filling of utility trenches and other places not accessible to a roller shall be mechanically tamped and where water is used

to assist compaction, the water content should not exceed the optimum moisture content.

d. Inspection.

Upon the completion of the rough grade and prior to the final grade work or utility installation, including storm drains, a twenty-four (24) hour notice shall be given to the County Road Superintendent for an inspection and approval by his/her department.

3. Stormwater Drainage

See Article III.A.15 for additional information relating to the design of drainage systems.

An adequate drainage system, including storm drains, open ditches, pipes, culverts, intersectional drains, drop inlets, bridges, etc., shall be provided for the proper drainage of all surface water.

4. Roadway Improvements

a. Base:

A compacted base course six (6) inches deep and at least one and one-half (1-1/2) feet wider than the width of the pavement on each side of the street shall be installed on all streets, including cul-de-sacs, temporary turn arounds and access streets to adjoining properties, according to the method specified in Section 303 Standard Specifications for Roads and Bridge Construction, (Tennessee Department of Highways January 1, 1968) and latest revision thereto. Wetting of the stone before compaction may be done at a point of origin or on the job site at the option of the contractor. In ~~all~~ most cases the center line of a roadway shall coincide with the center line of the right-of-way dedicated for such road or street.

b. Prime coat:

A prime coat shall only be required in those areas in which no asphalt binder course and surface course will be added for a period of sixty (60) or more days.

c. Open versus closed section streets

1. Curbs:

For streets that require curbing, the following may be installed:

- a. extruded concrete curb
- b. concrete curb and gutter
- c. Rolled, Miami, angled, or "S" curb, or other curb as approved by the Planning Commission with a recommendation from the Washington County Departments

The minimum dimensions of the curbing shall meet those shown on the following illustrations.

Back fill shall be towards the street and be higher than the curb or street to insure drainage of surface water into the drainage system.

One-half (1/2) inch to three-fourths (3/4) inch expansion and contraction joints for the curbs shall be placed at intervals not exceeding sixty (60) feet.

Curbs shall not be cut or otherwise modified for the installation of roof drains or other small drains from individual lots properties through the

curbing to the street. This does not include designated curb openings that are part of the public drainage system.

The type of curbing used, and its height, shall be designed as part of the comprehensive drainage system to collect stormwater in the street and to not allow it to overflow onto private property.

2. Open Section Streets:

Road swale construction may be approved by the Planning Commission in lieu of curbs as the drainage system in subdivisions only under the following conditions:

- a. If part of a residential subdivision, minimum street frontage (lot width at right-of-way) of 100 feet
- b. Total width at the right of way of all driveways on each lot may not exceed 30% of the road frontage width.
- c. Re-subdivision to create smaller lots shall not be permitted unless the street frontage of the re-subdivided lots meets the above requirements.
- d. Swales and driveway culverts must be able to convey the 25-year storm without water overflowing into the street or overtopping the driveways. The developer may be required to provide additional grading or storm drains to convey runoff away from swales to ensure the requirement is met. The culverts and swales may act as small “detention ponds”. Temporary ponding of runoff in the swale at the upstream end of the driveway culvert is allowed as long as the water in the swale will completely drain down after the storm event and the water does not flow into the street or onto private property, unless the ponding area or flow path is within an easement.
- e. Swales shall be stabilized at the time of street construction to minimize erosion. Stabilization may include seeding, sodding, fabric and/or other synthetic materials which aid in the establishment and maintenance of a natural vegetative cover. Vegetative swales are the first choice as it allows water to infiltrate into the soil. However, concrete liners, rip rap, or other hard surfaces may be utilized where natural vegetative cover is not feasible, as determined by the Washington County Departments. The stabilization methods shall be shown on all drainage and erosion control plan.
- f. Storm drain culverts must be provided under driveways to convey stormwater in the swales. The culverts under the driveways shall be corrugated metal pipe (CMP) or reinforced concrete pipe (RCP) or other pipe material as approved by the Washington County Highway Department.
- g. The pipes shall be designed using standard engineering practices but the minimum size shall be 15” diameter.
- h. The length of the driveway culvert shall be no less than the minimum required to install a stable driveway and driveway side slopes. The slopes around the pipe ends shall be stabilized. If the slopes around the pipe ends are 3:1 or flatter, soil and vegetation may be used. If the slopes at the pipe ends exceed 3:1, a structural means shall be used such as but not limited to headwalls, end sections, or stone.
- i. The ends of the pipes shall be protected from failure-especially from crushing or deformation. As much as possible, all pipes, except for reinforced concrete (RCP), shall be of sufficient length to extend at least 10’ from the edge of the driveway to protect the ends from vehicular traffic that use the driveway entrance. If the pipe ends are closer than 10’ to the driveway edge, the ends shall be protected with a concrete, stone, brick, or block headwall or concrete end section. Reinforced concrete pipe (RCP) may be closer than 10’ to the driveway



edge without a headwall or end section as long as the soil around the ends of the pipe are stabilized. The requirements in this section shall not be used as justification to provide a pipe across the entire lot frontage and fill-in the swale.

- j. The size and material options of the driveway culverts and headwalls for each lot shall be noted on the approved construction plans. The driveway locations do not need to be shown on the approved construction plans.
- k. The road swales must be located within the public right-of-way or within an easement shown on the construction plans and final plat. The swales and grassed shoulders shall be designed in accordance with the Washington County street sections.
- l. A note shall be placed on the subdivision plat stating that the road swales are part of the public drainage system and must remain open to convey water and may not be filled-in or enclosed in a pipe except for the driveway culvert(s), and that the property owner of each lot shall maintain the vegetation in the swale across their street frontage and maintain their driveway culvert(s).
- m. A sign, at the responsibility of the developer, shall be placed at all entrances to the subdivision stating, "The road swales are part of the public drainage system and shall not be filled-in or enclosed in a pipe except under the driveways." The sign locations, size, and lettering size shall be approved by the Zoning Administrator and shown on the approved construction plans. The signs shall be installed before any building permits are issued for the subdivision.
- n. If a cul-de-sac is the low point along a dead-end road with the road drainage flowing toward the cul-de-sac, then the minimum street frontage for each lot shall be 60 feet to continue the swale around the cul-de-sac.
- o. If the minimum street frontage for the lots around the cul-de-sac is less than 60 feet, then the runoff in the swale leading to the cul-de-sac shall be conveyed under or away from the cul-de-sac with a storm drain.
- p. If the cul-de-sac is the high point along a dead-end road or has a relatively small drainage area, the street frontage for each lot around the cul-de-sac may be reduced to 40 feet with a swale with the approval of the Planning Commission.

d. Binder:

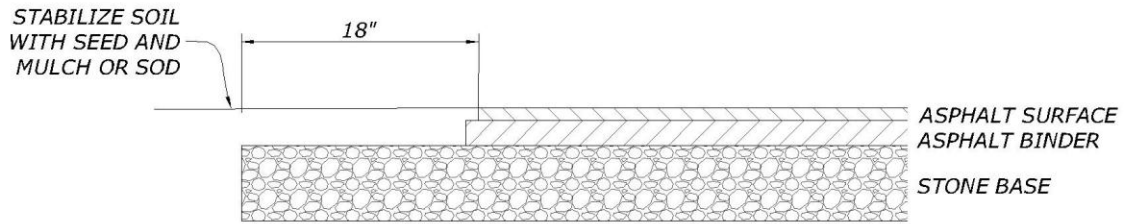
After a thoroughly compacted base has been established, an asphalt binder course shall be constructed in one layer not less than two (2) inches thick as specified under Section 307, Bituminous Plant Base (hot Mix) Type B, Standard Specifications for Road and Bridge Construction, Tennessee Department of Highways, and latest revisions thereto.

e. Surface course:

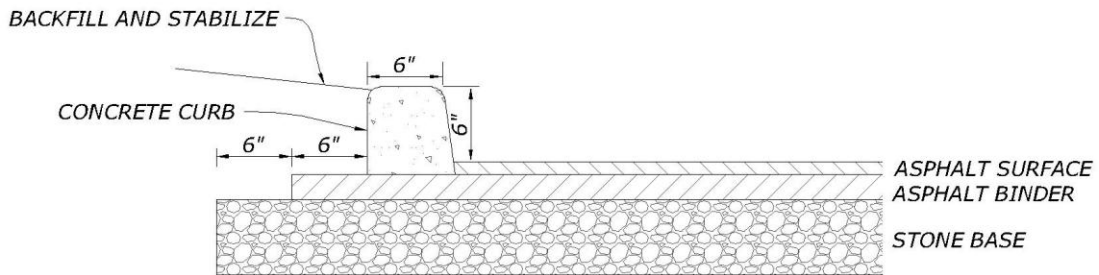
The surface course shall consist of a course constructed with asphaltic concrete, prepared with mineral aggregate laid hot as specified under Section 41I, Asphaltic Concrete Surface (hot mix) Grade E, mixed with sand. Standard Specifications for Road and Bridge Construction, Tennessee Department of Highways, January 1, 1968 and latest revisions thereto. It shall be constructed in one layer not less than one and one-fourth (1-1/4) inches thickness.

f. Inspections:

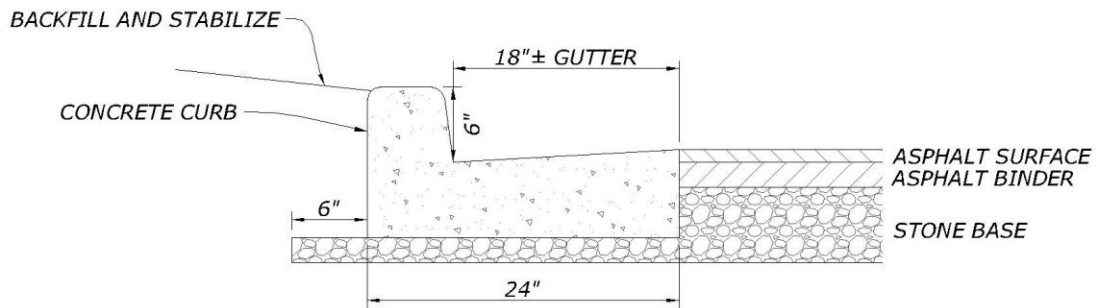
Prior to the installation of the following: the base, prime coat, curbs, binder and surface coat, a twenty-four (24) hour notice shall be given to the County Road Superintendent for inspection and approval by his/her department.



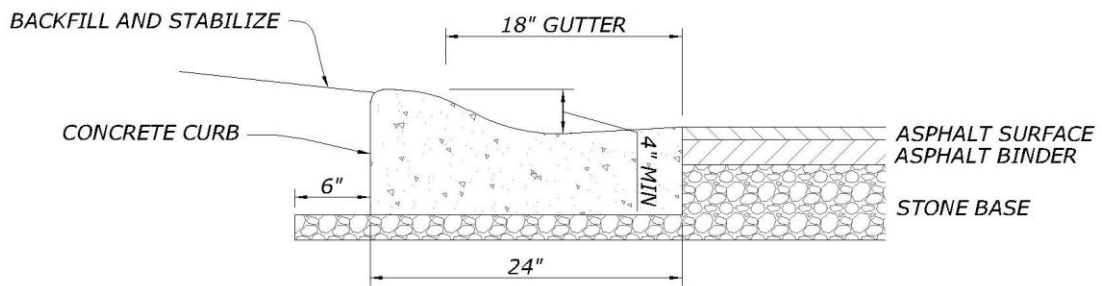
NO CURB (OPEN SECTION)



EXTRUDED CONCRETE CURB

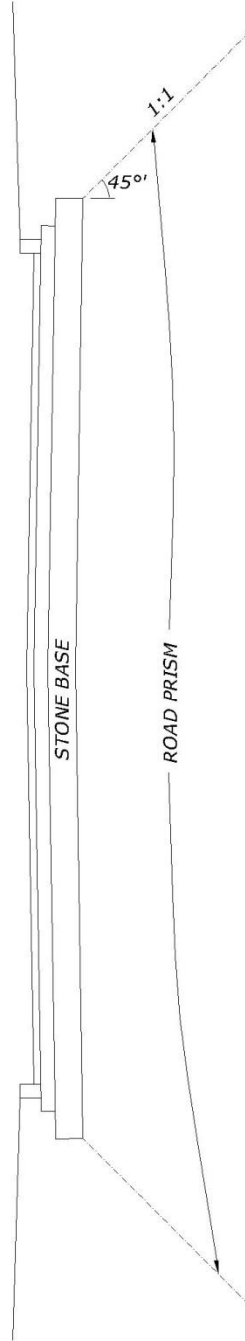


CONCRETE CURB AND GUTTER



MIAMI, "S", OR ROLL CONCRETE CURB

CURBING AND PAVEMENT EDGE



ROAD PRISM

Washington County, TN Subdivision Regulations

5. Installation of Utilities

After grading is completed and approved and before any base is applied, all of the underground work (water mains, gas mains, etc.) and all service connections shall be installed completely and approved throughout the length of the road and across the flat section.

All driveways shall have the public street curbing saw cut and repaired and positive drainage provided.

All utility installations under the streets and within the road prism (line projected down into the soil at a 45 degree angle from the edge of the compacted stone base) shall meet the following minimum standards to ensure the long term stability of the road and the utilities:

- a. The trench width should be at least 2' wider than the pipe outside diameter for standard installations. For installations in poor soils or for deep excavations, a wider trench may be required.
- b. A layer of loosely placed uncompactable material should be placed directly under the pipe, allowing the bedding material to conform to the pipe to decrease the point loading on the pipe.
- c. Well graded granular material shall be placed from the bedding material up to a depth of 12" above the top of the pipe and compacted to a 95% relative density. For inlets, manholes, and other structures in and along the road, this material shall be provided around the entire structure. The material shall be placed in shallow lifts and compacted, with special attention to the haunch area. Care must be taken to not over-deflect the pipe and its joints due to improper compaction. In some cases, it will be necessary to support the pipe to prevent deflection.
- d. The remainder of the backfill may be compacted soil if outside of the pavement or the road prism. If the trench is under pavement or within the road prism, the well graded granular material shall extend up to the stone base for the pavement.
- e. All backfill material shall be capable of being removed with standard excavation equipment. Flowable fill may be used for backfill. For pipes that could float during backfill with flowable fill such as CMP, HDPE, and PVC, construction methods shall be used to ensure the pipe does not shift vertically or horizontally during backfill operations. This may require backfilling under the pipe up to its midpoint with compactable granular material in C above.

6. Water Supply System

Water mains properly connected with the community water system, or with an alternate supply approved by the State of Tennessee, shall be constructed in such a manner as to adequately serve all lots shown on the subdivision plat for both domestic use and fire protection, if the pressure and flow are sufficient to meet State regulations for fire hydrant installation.

The size of water mains, the location and type of valves and hydrants, the amount of soil cover, the pipes and other features of the installation shall be approved by the Public Utility provider and shall conform with accepted standards of good practice for municipal water systems.

7. Fire Protection

If the pressure and flow for public water mains are sufficient to meet State regulations for fire hydrant installation, fire hydrants shall be installed in accordance with the following minimum requirements:

- a. For residential lots, the maximum fire hydrant spacing shall be 1000' as measured along an improved road and the center of any improved, approved, or recorded lot shall be within 500' of a hydrant.
- b. For multifamily structures, the maximum fire hydrant spacing shall be 500' as measured along an improved road and any building shall be within 300' of a hydrant.
- c. For commercial or industrial uses, the maximum fire hydrant spacing shall be 300' as measured along an improved road and any building shall be within 300' of a hydrant.
- d. Hydrants shall be located at intersections whenever possible.

If the pressure and flow for public water mains are not sufficient to meet State regulations for fire hydrant installation, the water system shall provide sufficient main size per State regulations for fire hydrants and provide tees and valves for future fire hydrant installation. The location of the tees and valves for future fire hydrant installation shall be shown and labeled on the construction plans.

8. Sanitary Sewers

Where lots cannot be economically connected to a sanitary sewer system, they must contain adequate area for the installation of an approved septic tank and disposal fields and must be approved in writing by the State of Tennessee.

9. Street and Traffic Signs

Street name signs shall be provided at all intersections. Traffic signs, such as stop signs, shall be provided in accordance with TDOT regulations for size, height, type, placement and installation. Street signs are the responsibility of the developer.

B. Guarantee in Lieu of Completed Improvements

No final subdivision plat shall be approved by the planning commission or accepted for recording by the County Registrar of Deeds unless the following conditions are met:

1. All requirements of the Washington County Subdivision Regulations and, if applicable, all requirements of the approved Preliminary Subdivision Plans have been constructed in a satisfactory manner and approved by the Washington County Highway Department and other Washington County Departments.
2. In lieu of completed improvements, the planning commission may accept sufficient security or a performance bond in an amount equal to the estimated cost of installation of the required improvements, whereby improvements may be made and utilities installed without cost to the county in the event of default of the subdivider. The conditions of such security or performance bond shall provide for the installation of the improvements covered by such bond within a period not to exceed one (1) year; provided however, that such period may be extended by the planning commission with the consent of the parties thereto if the planning commission finds that the public interest will not be adversely affected by such extension. If the planning commission shall decide at any time that the cost to finish the purchase and construction of subdivision improvements is more than the amount covered by such security or performance bond than the owner of the project shall provide additional security or performance bond. During the construction process, security may be released to the owner upon application to and approval by the planning commission, so long as sufficient security is retained to complete all remaining subdivision improvements.

Performance bonds which are submitted in lieu of the installation of required improvements shall be cash or made by a surety company authorized to do business in the State of Tennessee. In the case of a surety company, the performance bond shall be prepared according to a form as shown in Appendix A, said Appendix A is made part of these subdivision regulations.

3. In lieu of completed improvements or a surety performance bond, a letter of credit meeting the requirements of the County Road Superintendent and County Attorney shall be provided.

4. The planning commission may elect to deny any developer or property owner the opportunity to provide a performance bond or letter of credit if that developer or property owner has failed to timely complete subdivision improvements in a previous project. Furthermore, the planning commission may elect to deny bonding by performance bond or letter of credit if the planning commission or county has ever made claim for payment on a letter of credit or performance bond issued on behalf of an owner or developer.
5. A performance bond or letter of credit will only be accepted for final subdivision approval for the following:
  - a. surface course of asphalt.
  - b. Conversion of a sediment device, such as a sediment basin, to a permanent stormwater management facility.
  - c. The Planning Commission, with recommendations from the Washington County Departments, may allow a performance bond or letter of credit for other minor improvements
6. Before the release of any security, an as-built survey of the public improvements that the security guaranteed including, but not necessarily limited to, pavement, curbing, storm drain, and other utilities shall be provided to the Washington County Departments for review and approval. The as-built survey shall be prepared by a licensed land surveyor and/or professional engineer. The required elements of the as-built shall be determined by the Washington County Departments and the Utility Providers.
7. Prior to the release of a security, the following minimum inspections of improvements shall be performed and written documentation provided to the Zoning Administrator:
  1. Public road improvements including pavement and curbing by the Washington County Highway Department.
  2. Public drainage improvements including inlets, catch basins, headwalls, pipes, and swales by the Washington County Highway Department and the Stormwater Program Manager or designee.
  3. Public water and sanitary sewer lines by the Utility Provider.
  4. Stormwater management facilities-both public and private-by the Stormwater Program Manager or designee
  5. Erosion and Sediment Control measures and stabilization of the disturbed areas by the Stormwater Program Manager or designee.

ARTICLE V. ENFORCEMENT AND PENALTIES FOR VIOLATIONS

A. Enforcement

1. No plat or plan of a subdivision of land into two or more lots located within the Washington County Planning Region shall be admitted to the land records of the county or received or recorded by the County Registrar of Deeds until said plat or plan has received final approval in writing by the planning commission as provided in Section 13-302, Tennessee Code Annotated.
2. No board, public officer or authority shall light any road, lay or authorize the laying of water mains or sewers, or the construction of other facilities or utilities in any road located within the planning region unless such road shall have been accepted, opened or otherwise received the legal status of a public road prior to the adoption of these regulations and lines to a road shown on a road plan made and adopted by the commission as provided in Section 13-306, Tennessee Code Annotated.

B. Penalties

1. No county registrar shall receive, file or record a plat of a subdivision within the planning region without the approval of the planning commission as required in Section 13-302, Tennessee Code Annotated, and any county registrar so doing shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law.
2. Tennessee Code Annotated Section 13-3-410, provides that "Whoever, being the owner or agent of the owner of any land, transfers or sells or agrees to sell or negotiates to sell such land by reference to or exhibition of or by other use of a plat of subdivision of such land without having submitted a plat of such subdivision to the regional planning commission and obtained its approval as required by this part and before such plat is recorded in the office of the appropriate county register, or who falsely represents to a prospective purchaser of real estate that roads or streets will be built or constructed by a county or other political subdivision, commits a Class C misdemeanor." "The county, through its county attorney or other official designated by the county legislative body, may enjoin such transfer or sale or agreement by action or injunction."
3. Failure to follow the laws related to the subdivision of property may result in legal action to stop construction or to cause the removal of any building erected. Tenn. Code Ann. § 13-3-411 provides that "Any building erected or to be erected in violation of this section is an unlawful structure, and the state building commission or the county attorney or other official designated by the county legislative body may institute a civil action to enjoin such erection or cause it to be vacated or removed."



ARTICLE VI. ADOPTION AND EFFECTIVE DATE

- A. Before adoption of these subdivision regulations or any amendment thereof, a public hearing thereon shall be held by the planning commission thirty (30) days notice of the time and place of which shall be given by one publication in a newspaper of general circulation in each county lying wholly or partly in the planning region.
- B. These rules and regulations shall be in full force and effect from and after their adoption and effective date.

Date adopted: March, 1981

Date Re-adopted: April 6, 2010

Signed: \_\_\_\_\_  
Secretary

Approved: \_\_\_\_\_  
Chairman

APPENDIX A

PERFORMANCE BOND FORM

KNOW ALL MEN by these presents:

WHEREAS \_\_\_\_\_ Principal herein is the owner and developer of the Subdivision located in Washington County, Tennessee and \_\_\_\_\_, a surety company authorized to do business in the State of Tennessee (hereinafter called the "surety"), and

WHEREAS, the plans and specifications of said subdivision showing the location, construction and installation of streets, roads, curbs and utilities and other improvements therein have been filed with the Washington County Regional Planning commission for final approval and which are referred to and made a part of this instrument, as if fully copied and set forth herein, and

WHEREAS, the Principal herein does hereby obligate itself and does agree to complete the construction and installation of all streets, roads, sidewalk, curbs, and utilities, and all other improvements in the said subdivision in accordance with the plans and specifications attached hereto and made a part of this bond.

NOW, THEREFORE, \_\_\_\_\_, as Principal and \_\_\_\_\_, as Surety, do hereby firmly bind ourselves, our heirs, executors, administrators and successors unto the Washington County Regional Planning Commission and the State of Tennessee for and on behalf of Washington County, Tennessee in the sum of \_\_\_\_\_ conditioned upon the performance by the Principal of its undertaking herein, and its completion of said \_\_\_\_\_ subdivision in the construction of all the streets, sidewalks, roads, curbs, and all other improvements therein called for by the plans and specifications attached hereto, the same to be completed on or before the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, and upon the completion thereof this obligation to the null and void, otherwise to remain in full force and effect.

If the principal fails to complete the construction, and the improvements of said subdivision as shown and provided for by said plans and specifications attached hereto within the time herein specified, the commission may in its discretion extend the time for the completion of said work by order duly made and entered by the said commission for a period of up to 90 days, said extension to be granted in writing and certified by the Secretary of the Washington County Regional Planning Commission.

WITNESS our hands this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

WITNESS

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

I, \_\_\_\_\_, do hereby certify that \_\_\_\_\_ is authorized to do business in the State of Tennessee as of the last date hereinabove set out.

\_\_\_\_\_  
( Agent of the Surety Company )

**APPENDIX B**

**FORMS FOR FINAL PLAT CERTIFICATIONS**

**CERTIFICATE OF OWNERSHIP AND DEDICATION**

I (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and dedicate all streets, alleys, walks, parks and other open space to public or private use as noted.

\_\_\_\_\_, 20\_\_\_\_  
Date

\_\_\_\_\_  
\_\_\_\_\_  
(print name), Owner

\_\_\_\_\_  
\_\_\_\_\_  
(print name), Owner

**CERTIFICATE OF ACCURACY**

I hereby certify that the plan shown and described hereon is a true and correct survey to the accuracy required by the Washington County Regional Planning Commission and the State of Tennessee and that the monuments have been placed as shown hereon, to the specifications of the subdivision regulations.

\_\_\_\_\_, 20\_\_\_\_  
Date

\_\_\_\_\_  
\_\_\_\_\_  
(print name), Tennessee Registered Land Surveyor

**CERTIFICATE OF THE APPROVAL OF PUBLIC WATER SYSTEMS**

I hereby certify that the public water utility system or systems installed, or proposed for installation, fully meet the requirements of the local utility district, and are hereby approved as shown.

\_\_\_\_\_, 20\_\_\_\_  
Date

\_\_\_\_\_  
\_\_\_\_\_  
(print name), (City) Water Director or Authorized Representative

**CERTIFICATE OF APPROVAL OF PUBLIC SANITARY SEWERAGE SYSTEM**

I hereby certify that the public sanitary sewage disposal system: (1) is available to the property; or (2), as shown on the accompanying plans, has been installed in an acceptable manner and according to specifications; or (3) that a security in the form of \_\_\_\_\_ and in the amount of \$\_\_\_\_\_ has been posted to ensure completion of all required improvements in case of default.

\_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_

(print name), (City) Sewer Director or Authorized Representative

**CERTIFICATION OF THE APPROVAL OF STREETS AND STORM DRAIN SYSTEM**

I hereby certify: (1) that public streets and public storm drain systems have been installed in an acceptable manner and according to the specifications approved by the Washington County Planning Commission or, (2) adequate rights-of-way dedication, street width, and drainage upon an existing public road shall serve these lots as proposed.

\_\_\_\_\_, 20\_\_\_\_

Date

\_\_\_\_\_

(print name), County Road Commissioner or authorized representative

**CERTIFICATION OF THE APPROVAL FOR 911-STREET ASSIGNMENT**

I hereby certify that the street name(s), as noted on the final plat, is(are) approved as assigned.

\_\_\_\_\_, 20\_\_\_\_

Date

\_\_\_\_\_

(print name), Washington County 911 Addressing Department

**CERTIFICATE OF APPROVAL FOR RECORDING**

I hereby certify that the subdivision plat shown here has been found to comply with the *Subdivision Regulations* for Washington County, Tennessee, with the exception of such variances and waivers, if any, as are noted in the minutes of the Washington County Regional Planning Commission and that it has been approved for recording in the Office of the County Registrar. If required, a security in the form of \_\_\_\_\_ and in the amount of \$ \_\_\_\_\_ has been posted with the Washington County Regional Planning Commission to assure completion of all required improvements in case of default.

\_\_\_\_\_, 20\_\_\_\_  
Date

\_\_\_\_\_

\_\_\_\_\_  
(print name), Secretary of the Washington County Regional Planning Commission

**DIVISION OF GROUNDWATER PROTECTION**

(Blank Box or sufficient space)

**Register of Deeds**

(Blank box or sufficient space)

## APPENDIX C

### List of Approved Materials for Publicly Maintained Storm Drains in accordance with Article III, A.15.c

(Approved by Planning Commission on April 6, 2010)

For pipes within the road prism meeting a 50 year service life:

1. Reinforced concrete pipe, class III or greater.
2. Corrugated steel pipe, 14 gauge (16 gauge for 15"- 21" diameter pipe), with any of the following coatings:
  - a. Aluminized Type 2
  - b. Polymer coated
3. Spiral rib steel pipe, 14 gauge (16 gauge for 15"- 21" diameter pipe) with any of the following coatings:
  - a. Aluminized Type 2
  - b. Polymer coated
4. Corrugated plastic pipe
  - a. Double wall high density polyethylene
  - b. Triple wall high density polyethylene
5. Joints are Type 2 (T2) or greater with combination of gasket material and joint configuration meeting 5 PSI hydrostatic pressure.

For pipes outside of the road prism meeting a 30 year service life:

1. All of the above pipe materials except steel pipes may be minimum 16 gauge.
2. Corrugated aluminum pipe, 16 gauge minimum.
3. Corrugated steel pipe, 16 gauge minimum, with galvanized coating.
4. Other as specified by the Designing Engineer and approved by the Washington County Highway Department and the Washington County Stormwater Manager that would meet the service life requirement.
5. Joints are Type 1 (T1) or greater with combination of gasket material and joint configuration to prevent infiltration.

General Notes:

1. All pipe and joints shall be installed for H20 loading in accordance with manufacturer's specifications.
2. All pipe installation shall be inspected by the Washington County Highway Department.
3. The pipe material shall be specified on the construction plans. No substitutions are allowed without the approval of the Designing Engineer, the Washington County Highway Department, and the Washington County Stormwater Manager.