REGULATIONS CONTROLLING THE SUBDIVISION OF LAND IN THE TOWN OF GRAYSVILLE, TENNESSEE, AND ITS PLANNING REGION: REQUIRING AND REGULATING THE PREPARATION AND PRESENTATION OF PRELIMINARY AND FINAL DESIGN STANDARDS: REQUIRING MINIMUM IMPROVEMENTS TO BE MADE OR GUARANTEED TO BE MADE BY THE SUBDIVIDER: SETTING FORTH THE PROCEDURE TO BE FOLLOWED BY THE PLANNING COMMISSION IN APPLYING THESE RULES, REGULATIONS AND STANDARDS: AND PRESCRIBING PENALTIES FOR THE VIOLATION OF ITS PROVISION.

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 roads, lots and blocks and has been publicly recorded, the correction of defects is costly and difficult. Subdivision of land sooner or later becomes a public responsibility, in that roads 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, the developer and the future owner that subdivisions be conceived, designed and developed in accordance with sound rules and proper minimum standards.

B. Authority

These subdivision regulations are adopted under the authority granted by Section 13-4-301 through 13-4-309, Tennessee Code Annotated. The planning commission has fulfilled the requirements set forth in these acts as prerequisite to the adoption of such regulations.

C. Jurisdiction

These regulations shall govern all subdivision of land within the Town of Graysville, Tennessee, as now or hereafter established.

ARTICLE II

DEFINITION OF CERTAIN TERMS USED HEREIN

Except as specifically defined herein, all words used in the regulations have their customary dictionary definitions where not inconsistent with the context. For the purpose of these regulations, certain words or terms are defined as follows:

The term "shall" is mandatory, when not inconsistent with the context, words used in the singular number include the plural and those used in the plural number include the singular. Words used in the present tense include the future.

Access. The right to cross between public and private property; permitting pedestrians and vehicles to enter and leave a lot.

Block. A tract of land bounded by roads, or by a combination of roads.

Bond. Any form of security including a surety bond, collateral, property, or instrument or credit in an amount and form satisfactory to the planning commission.

Dedication. The transfer of property interest from private to public ownership for a public purpose, either in fee-simple interest or an easement.

Development. Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

Easement. The right of one owner of land to make lawful and beneficial use of the land of another created by an express or implied agreement.

Flood Hazard Area. Areas along Roaring and Sale Creeks which must be left unobstructed in order to preserve the flood carrying capacity of the stream and its floodplain without appreciably increasing the height of the floodwaters. This includes all such areas identified by the Federal Flood Insurance Rate Map (FIRM) for Rhea County and the Town of Graysville.

Front Yard. An open, unoccupied space on the same lot, extending the full width of the lot, located between the street line and the front line of the building projected to the sidelines of the lot.

Health Authority. The director of the Rhea County Health Department having jurisdiction over the community health, or his duly authorized representative.

Lot. A portion or parcel of land separated from other portions or parcels by description as on a subdivision plat or record of survey map or as described by metes and bounds, and intended for transfer of ownership or for building development. For the purpose of these regulations the term does not include any portion of a dedicated right-of-way.

Major Subdivision. All divisions of a tract or parcel of land into six (6) or more lots, building sites or other divisions for the purpose, whether immediate or future, of sale or building development; and includes all division of land into two (2) or more lots involving new roads or a change in existing roads; or divisions of land involving the extension of water, sewer or gas lines and includes resubdivisions and, where appropriate to the context, relates to the process of subdividing or to the land or area subdivided. The following are not included within this definition:

a. testamentary division of property;

b. partnership division of property between two (2) or more owners of an undivided interest by court order.

The creation of a tract or parcel of less than five (5) acres shall be deemed a subdivision and subject to the provisions of this chapter whether or not it fronts on an existing street or road, except where land is partitioned among the owners by the court.

Minor Subdivision. All divisions of a tract into five (5) or less lots, building sites or other divisions for the purpose, whether immediate or future, of sale or building development, and where appropriate to the context, relates to the process of subdividing or to the land or area subdivided. The creation of a tract or parcel of less than five (5) acres shall be deemed a minor subdivision.

Plat, Plan, Plot or Replat. A map, drawing or chart upon which the subdivider's plan of the subdivision is presented and which he submits for approval and intends to record in final form.

Planning Commission. The Graysville Municipal Planning Commission.

Private Development. A major development, wherein ownership of roads, utilities, or any combination thereof will be retained by the developer or his designee. Responsibility for maintenance of the roads, utilities, or combination must be clearly delineated, submitted with the final plat, and a copy recorded with the approved final plat in the Office of the Rhea County Registrar.

Private Road. Transportation access to lots on a private easement of at least fifty (50) feet in width, solely for the use of lot owners and their guest and not utilized by the general public. For the purpose of these regulations all private roads shall be built to public road standards and designated as private on the subdivision plat.

Road. (Amended 2/23/10) A way for vehicular traffic, whether designated as an avenue, arterial, collector, boulevard, road, highway, lane, alley or other way, and for the purpose of these regulations "roads" are divided into the following categories.

1. **Rural Principal Arterials**

   The rural principal arterial system consists of a connected rural network of continuous routes having the following characteristics:

   a. Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel.

   b. Serve all, or virtually all, urban areas of 50,000 and over population and a large majority of those with population of 25,000 and over.

   c. Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise (e.g., international boundary connections and connections to coastal cities).

   In the more densely populated States, this system of highway may not include all heavily traveled routes which are multi-lane facilities. It is likely, however, that in the majority of States the principal arterial system will include all existing rural freeways.

2. **Rural Minor Arterials**

   The rural minor arterial road system should, in conjunction with the principal arterial system, form a rural network having the following characteristics:

   a. Link cities and larger towns (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and inter-county service.

   b. Be spaced at such intervals, consistent with population density, so that all developed areas of the State are within a reasonable distance of an arterial highway.

c. Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise (e.g., international boundary connections and connections to coastal cities).

3. Collectors

The rural collector routes generally serve travel of primarily intra-county rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be typical, on the average.

In order to define more clearly the characteristics of rural collectors, this system should be sub-classified according to the following criteria:

a. *Rural Major Collectors*

These routes should: (1) Provide service to any county seat not on an arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance, such as consolidated schools, shipping points, county parks, important mining and agricultural areas, etc. ; (2) link these places with nearby larger towns or cities, or with routes of higher classification; and (3) serve the more important intra-county travel corridors.

b. *Rural Minor Collectors*

These routes should: (1) Be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road; (2) provide service to the remaining smaller communities; and (3) link the locally important traffic generators with their rural hinterland.

4. Residential Roads

Residential roads are included in the rural local road system. Local roads should have the following characteristics: (1) Serve primarily to provide access to adjacent land; and (2) provide service to travel over relatively short distances as compared to collectors or other higher systems. Local roads will, of course, constitute the rural mileage not classified

as part of the principal arterial, minor arterial, or collector systems.

5. **Cul-de-sac**

Permanent dead-end roads designed so that they cannot be extended in the future.

Roadway. That portion of a road that is paved or ordinarily used for vehicular traffic.

Right-of-Way (R.O.W.). The complete land which is dedicated for use as a road and includes roadway and those portions on either side customarily used for planting strips, drainage or utility installation, extending from property line to property line.

Subdivision. The term "subdivision" means the division of a tract or parcel of land into two or more lots, sites, or other divisions for the purpose whether immediate or future, of sale or building development and includes resubdivision.

"Subdivision" includes the two types of development or division listed below:

1. All such divisions where one or more of the resulting tracts is less than five acres in size.

2. All such divisions where a new road or public utility installation (water or sewer) is required, regardless of the size of any or all of the parcels.

The following type of "division" is not a subdivision:

Divisions where the resulting tracts are all five (5) acres or more, all have frontage on an existing publicly-maintained road, and where none require the extension of public water or sewer lines.

Subdivider/Developer. The person, firm or corporation having such a proprietary interest in the land to be subdivided as will authorize the maintenance or proceedings to subdivide such land under this ordinance, or the authorized agent, person, firm or corporation for the purpose of proceeding under these regulations.

ARTICLE III

PROCEDURE FOR PLAT APPROVAL

MAJOR AND MINOR SUBDIVISIONS

In order to prevent unnecessary and costly revisions to any plat the developer should consult with the planning commission and its technical staff for advice and assistance before the preparation of the preliminary sketch plat and the formal application for approval. This will enable the developer to become familiar with the Major Thoroughfare Plan, with these regulations and other official plans or improvements which may affect the area.

Two separate steps constitute the procedure for review and approval of a subdivision plat. The initial step is the preparation of and submission to the planning commission of a preliminary plat of the proposed subdivision to the planning commission for 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.

MAJOR SUBDIVISIONS

A. GENERAL

1. Any owner of land lying within the area of jurisdiction of the planning commission 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 subdivide for this purpose, shall submit a plan of such proposed subdivision to the Graysville Municipal Planning Commission for approval and shall obtain such approval prior to the filing of the subdivision plat for record. Any such plat of subdivision shall conform to the minimum standards of design for the subdivision of land and shall be presented in the manner as specified in the following section of this article. No plat of a subdivision of land within the Town of Graysville shall be filed or recorded by the Register of Rhea County without the approval of the planning commission as specified herein.

2. In order to obtain review and approval of a proposed subdivision by the planning commission, the developer shall submit to the planning commission a preliminary plat as provided in Section B of this article. This shall be done before the making of any improvements or installation of utilities. Upon the approval of this

SUBDIVISION PROCESS

WHAT IS A SUBDIVISION

preliminary plat the subdivider may proceed with the preparation of the final plat and other documents required in connection with as specified.

B. PRELIMINARY PLAT

1. At least fifteen (15) days prior to the meeting at which it is to be considered, the subdivider shall submit to the planning commission three (3) copies of a preliminary plat of the proposed subdivision drawn to a scale of not less than one inch equal one hundred (100) feet.

2. The preliminary plat which shall meet the minimum standards of design and the general requirements for the construction of public improvements as set forth in Article IV shall contain the following information:

a. The proposed subdivision name and location, the name and address of the owner or owners, and the name of the designer of the plat.

b. Date, approximate north point, and graphic scale.

c. The location of existing and platted property lines, roads, buildings, water courses, railroads, sewers, bridges, culverts, drain pipes, water mains, and any public utility pipes, water mains, and any public utility easements, unusual topographical contours, the present zoning classification, if any, both on the land to be subdivided and on the adjoining land; and the names of adjoining property owners or subdivisions.

d. Plans of proposed utility layouts (sewer and water) showing feasible connections to the existing or any proposed utility systems. When such connections are not practicable, any proposed or pre-existing individual water supply and/or sewage disposal system must be approved by the county health department.

e. The names, locations, widths, and other dimensions of the proposed roads, alleys, easements, parks, and other open spaces, reservations, lot lines, building lines, and utilities.

f. Contours based upon mean sea level calculations of not more than five (5) feet vertical intervals on those sites with less than one hundred (100) feet changes of elevation.

PRELIMINARY PLAT

g. The acreage of the land to be subdivided.

h. Location map showing relationship of subdivision site to area.

i. If any portion of the land being subdivided is subject to flood as defined by FIRM Maps, the limit of such flood shall be shown.

3. Within sixty (60) days after submission of the preliminary plat, 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 plat 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.

4. The approval of the preliminary plat by the planning commission will not constitute acceptance of the final plat and will not be indicated on the preliminary plat.

5. Two copies of the preliminary plat will be retained in the planning commission files, the other will be returned to the subdivider with any notations at the time of approval or disapproval, and the specific changes, if any, required.

6. The approval of the preliminary plat shall lapse if no 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.

C. FINAL PLAT

1. The final plat shall conform substantially to the preliminary plat as approved. If desired by the subdivider, it may constitute only that portion of the approved preliminary plat which he proposes to record and develop at the time, provided however, that such portion conforms to all requirements of these regulations.

2. In order to allow the planning commission, technical staff, and utilities personnel time to review and prepare recommendations to the planning commission, the final plat shall be submitted to the planning commission at least fifteen (15) days prior to the meeting at which it is to be considered. The subdivider shall submit seven (7) copies (black and white prints or blue line prints), together with road profiles or other plans that may be required by the planning commission. In addition, the developer shall

also submit copies of all Federal and state permits required for construction of the development as shown on the approved preliminary plat, including Section 404 permits of the Federal Water Pollution Control Act Amendments of 1972, 33 U. S. C. 1334.

3. 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.

4. The plat shall be drawn to the scale of one inch equals one hundred (100) feet on sheets seventeen (17) by twenty-two (22) inches or smaller. When more than one sheet is required, an index sheet of the same size shall be filed showing the entire subdivision with the sheets lettered in alphabetical order as a key.

5. When the final plat has been approved by the planning commission, one copy will be returned to the subdivider, with the approval of the planning commission certified thereon, for filing with the County Register as the official plat of record.

6. The planning commission shall approve or disapprove this final plat within thirty (30) days after its submission. If the plat is disapproved the grounds for disapproval shall be stated upon the records of the planning commission.

7. Approval of the final plat by the planning commission shall not constitute the acceptance by the public of the dedication of any roads or other public way or ground.

8. If action on a final plat is not taken by the planning commission within thirty (30) days of the date of submittal, the final plat shall be considered approved and a certificate of approval shall be issued on demand.

9. The final plat shall show:

a. The lines of all roads, lot lines, building setback 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.

b. Sufficient data to determine readily and reproduce on the ground the location, bearing and length of every road 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 roads and curved property lines that are not the boundary of curved roads.

c. All dimension to the nearest one hundredth (100th) of a foot and angles to the nearest minute.

d. Location and description of monuments; every corner shall have a monument. (**Amended 06/13/02**)

e. The names and locations of adjoining subdivisions and roads 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. All boundary traverses including lot and block traverses shall close to an accuracy of at least one (1) part in seven thousand five hundred (7,500).

i. The most recent recorded deed book number and page number for each deed constituting part of the property being platted, as well as the tax map and parcel number(s) for the tract(s). (**Amended 06/13/02**)

j. If any portion of the land being subdivided is subject to flood as defined by Federal Emergency Management Flood Insurance Rate Map, the limit of such flood shall be shown.

k. Contour lines shall not be shown on the final plat.

10. The following certification shall be presented with the final plat with said certificates being worded as those found within the appendix of this document.

a. Certification showing that the applicant is the land owner and dedicates roads, rights-of-way and any sites for public use.

FINAL PLAT

b. Certification by surveyor to accuracy of survey and plat and placement of monuments. (**Amended 06/13/02**)

c. Certification by the county health officers when individual sewage disposal or water systems are required. When a subdivision of property involves pre-existing systems, a letter of recertification of such systems shall be required.

d. Where a central water system is provided by the subdivider, the Town of Graysville or utility system shall certify the design and/or construction meets applicable standards and said utility accepts the utility system in the subdivision for operation and maintenance, or the subdivision has posted a sufficient bond to assure completion of the utility system.

e. Certification by the county road supervisor and town recorder that the subdivider has complied with one of the following alternatives:

1. Installation of all improvements in accordance with the requirements of the subdivision regulations, or

2. Posting of bond in sufficient amount to assure such completion of all required improvements.

f. Certification by the representative of the E-911 Board that road names are in compliance with E-911 requirements.

g. Certification of approval to be signed by the secretary of the planning commission.

11. Signatures

All certifications, except certification of approval to be signed by the secretary of the planning commission, shall be signed prior to consideration of final approval by the planning commission.

12. Recording of Final Plat

Upon approval of a final plat, the developer shall have the final plat recorded in the Office of the Rhea

County Register in order for approval of said plat to be effective.

MINOR SUBDIVISION

Whenever a proposed subdivision contains five (5) or less lots and does not require the construction or installation of new roads, utilities or other improvements, the following procedures for review and approval of the subdivision shall apply. Sections A, B, and C of this Article shall apply for all divisions of over six (6) or more lots. Section D allows for an alternative step when a lot of record is divided into only two (2) lots or five (5) lots requiring no new roads, and meets the definition of a "Minor Subdivision". The subdivider may, if he desires, submit only a final plat in securing plat approval provided that the plat submitted complies with all the requirements of the final plat. However, if any corrections or modifications are needed, the planning commission shall disapprove the plat and require that it be resubmitted for approval.

D. FINAL PLAT

1. The subdivider shall submit the original tracing and four (4) copies of the survey hereafter called the "plat" – of the proposed minor subdivision prepared by an approved land surveyor or registered engineer. The plat shall be submitted at least fifteen (15) days prior to the next regular meeting of the planning commission.

2. The plat shall be drawn to the scale of one inch (1) equals one hundred (100) feet. When the plat has been approved by the Planning Commission, one (1) copy will be returned to the subdivider, with the approval of the planning commission certified thereon, for filing with the County Register as the official plat of record.

3. The planning commission shall approve or disapprove this final plat within thirty (30) days after its submission. Failure of the planning commission to act on this final plat within these thirty (30) days shall be deemed approval of it. If the plat is disapproved the grounds for disapproval shall be stated within the official minutes of the planning commission.

4. The final plat shall show:

a. The lines of all roads, alley lines, lot lines, building setback lines, lots numbered in numerical order, house number, reservations for 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.

b. Sufficient data to determine readily and reproduce on the ground the location, bearing and length of every road line, lot line, boundary line, block line, and building line whether curved or straight, and including true north point. This shall include the radius, central angle and tangent distance for the center line of curved roads and curved property lines that are not the boundary of curved roads.

c. All dimension to the nearest tenth (10th) of a foot and angles to the nearest minute.

d. Location and description of monuments.

e. The names and locations of adjoining subdivisions and roads and the location and ownership of adjoining unsubdivided property.

f. Date, title, name and location of subdivision, graphic scale, and magnetic north point.

g. Location sketch map showing site in relation to area.

h. The most recent recorded deed book number and page number for each deed constituting part of the property being platted.

i. Contour lines shall not be shown on the plat.

j. If any portion of the land being subdivided is subject to flood as defined by Federal Emergency Management Flood Insurance Rate Map, the limit of such flood shall be shown.

5. The following certification shall be presented with the final plat:

a. Certification showing that the applicant is the land owner and dedicates rights-of-way and any sites for public use.

b. Certification by surveyor to accuracy of survey and plat and placement of monuments. (**Amended 06-13-02**)

c. Certification by the county health officers when individual sewage disposal or water

systems are to be installed. When a subdivision of property involves pre-existing systems a letter of recertification of such systems shall be required.

d. Certification of approval to be signed by the secretary of the planning commission.

6. Recording of Final Plat

Upon approval of a final plat, the developer shall have the final plat recorded in the Office of the Rhea County Register in order for approval of said plat to be effective.

ARTICLE IV

GENERAL REQUIREMENTS AND MINIMUM STANDARDS OF DESIGN

A. GENERAL CONSIDERATIONS

The Graysville Municipal Planning Commission has adopted a plan which includes, at least, a major road plan, certified copies of which are filed in the Office of the Rhea County Register of Deeds. All subdivisions of land within the Graysville Town Limits must conform to the requirements of this major road plan.

1. Community Assets

In all subdivisions due regard shall be shown for all natural features such as large trees, water courses, historical spots, and similar community assets which, if preserved, will add attractiveness and value to the property.

2. 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 which is subject to flooding shall not be platted for residential occupancy or building sites unless such land is shown to be outside of the floodway of the river or stream causing the flooding. Fill may not be used to raise land within any designated floodway. See also Graysville Flood Damage Prevention Ordinance.

3. Name of Subdivision

The name of the subdivision must have the approval of the planning commission. The name shall not duplicate or closely approximate the name of an existing subdivision in Rhea County.

4. Access

Access to every subdivision shall be provided over a public road. Access to every lot shall be over a public road.

Typical Floodplain

5. Large-Scale Development

The requirements of these regulations may be modified in the case of large-scale community or neighborhood units, such as a housing project, trailer court or shopping center which is not subdivided into customary lots, blocks and roads, if the development is approved by the planning commission, and if it is in conformity with the purpose and intent of these regulations.

B. ROAD DESIGN STANDARDS

In most cases, access to the lots established by a subdivision is provided by the creation of new roads. In the interest of public safety, all new roads in subdivisions must meet certain minimum standards set out in the following sections.

1. Conformance to Adopted Street Plan

All roads and other features of the Street Plan of Graysville, Tennessee, shall be platted by the subdivider in the location and to the dimensions indicated on the Street Plan adopted by the planning commission.

2. Continuation of Existing Roads

Existing roads shall be continued at the same or greater width, but in no case less than the required width.

3. Road Connections

Where proposed roads are to adjoin existing roads, the developer must make the connection at his expense and meet all road design requirements set forth in these regulations.

4. Road Elevations

The planning commission may require, where necessary, profiles and evaluations of roads in areas subject to flood. Fill may be used for roads provided such fill does not unduly increase flood heights. Drainage openings shall be so designed as to not restrict the flow of water and unduly increase flood heights.

5. Road Names

The road names shall require the approval of the planning commission. Roads that are obviously in alignment with roads already existing and named shall be given the name of the existing road. Names of new

roads shall not duplicate or closely approximate those of existing roads. All road names shall be reviewed by the representative of the E-911 Board.

6. Restriction of Access

When a tract fronts on an arterial or highway, the planning commission may require such lots to be provided with frontage on a marginal access road or may require reverse frontage lots.

7. Alleys

Alleys may be required at the rear of all lots used for multi-family, commercial or industrial developments but shall not be provided in one-and-two-family residential developments unless the subdivider provides evidence satisfactory to the planning commission of the need for alleys.

8. Private Roads and Reserved Strips

There will be no private streets permitted; provided that internal circulation for apartment complexes, shopping malls, motels and the like are permitted. There shall be no reserve strips controlling access to roads, except where the control of such strips is definitively placed with the county under conditions approved by the planning commission. (**Amended 06/13/02)**

9. Easements

Where a subdivision is traversed by a water course, drainageway, channel, or stream, there shall be provided a stormwater or drainage easement of adequate width. The planning commission may require an access road alongside the watercourse. (**Amended 06/13/02**)

10. Classifications of Roads (Amended 2/23/10)

Roads are classified according to the amount and type of traffic anticipated.

a. Rural Principal Arterials

b. Rural Minor Arterials

c. Rural Major Collectors

d. Rural Minor Collectors

e. Residential Roads

Local streets shall not be longer than one-thousand (1,000) feet, or in the case of cul-de-sacs, not longer than five-hundred (500) feet.

(See Article II, DEFINITIONS OF CERTAIN TERMS USED HEREIN, for more detail)

In deciding which roads shall be built to collector road standards, the Graysville Municipal Planning Commission and its staff shall, based on the following guidelines, determine which proposed roads or portions thereof shall be designated collector roads and built with a wider pavement width.

GUIDELINES FOR COLLECTOR ROADS

1. 100 or more lots served,
2. Large total acreage served,
3. proposed through roads shown or proposed for future development,
4. Potential for roads being extended into additional phases of subdivision (temporary cul-de-sacs, etc.),
5. Large total road network or configuration, and
6. When several short roads branch from one main road.

11. Road Right-of-Way Widths (Amended 2/23/10)

The right-of-way width shall be the distance across a street or road from property line to property line. The minimum right-of-way widths shall be as follows:

ROAD TYPES

a. Rural Principal Arterial..... 100 feet or as required by the commission

b. Rural Minor Arterial..... 80 feet

c. Rural Major Collector..... 60 feet

d. Rural Minor Collector..... 50 feet

e. Residential Roads..... 50 feet

f. Cul-de-sacs: permanent..... 40 feet (and with planning commission approval)

12. Cul-de-sacs

Cul-de-sacs are dead end roads, permanent or temporary, to be used only when loops or interconnecting roads would prove impractical.

a. Cul-de-sac turnaround designs shall be any one of the designs known as Circle, T Backaround, or Y Backaround.

b. Cul-de-sacs shall be classified residential or collector with a length not greater than 500 feet.

c. Temporary Cul-de-sacs shall be required where, in the opinion of the planning commission, it is desirable to provide for road access to adjoining property. Where deemed necessary by the planning commission, adequate rights-of-way shall be dedicated to connect with any temporary dead end roads adjoining the subdivision.

13. Additional Width on Existing Roads

Subdivisions that adjoin existing roads shall dedicate additional right-of-way to meet the minimum road width requirements.

a. The entire right-of-way shall be dedicated where any part of the subdivision is on both sides of the existing road; and

b. Where the subdivision is located on only one (1) side of an existing road, one-half (1/2) of the required right-of-way, measured from the centerline of the existing roadway, shall be provided - in no case shall the resulting right-of-way be less than fifty (50) feet.

CUL-DE-SAC, T BACKAROUND, AND Y BACKAROUND

14. Road Pavement Widths (Amended 2/23/10)

Road pavement widths are the distances across the pavement surface and shall be as follows:

1. **Rural Principal Arterial..... 48 feet or as required by the planning commission**
2. **Rural Minor Arterial..... 32 feet**
3. **Rural Major Collector..... 24 feet**
4. **Rural Minor Collector..... 22 feet**
5. **Residential Roads..... 20 feet**
6. **40' R.O.W. Cul-de-sacs…..... 18 feet**

NOTE: The pavement widths are measured from curb to curb. These widths are considered the minimum necessary to accommodate modern traffic. Road parking must, of course, be considered in the pavement widths. Where road parking is permitted or is anticipated, allowances may be made.

See also: Shoulders, Section 21.

15. Road Grades

Maximum and minimum road grades shall be eight (8) percent and five-tenths of one percent (0.5) respectively.

NOTE: These road grade limits are considered to be the optimum requirements to provide adequate safety. Different topographical situations may necessitate adjustment. The minimum grade requirement is necessary for drainage purposes. In this regard, it should be considered that in addition to accommodating traffic, roads are the heart of the surface drainage system.

16. Horizontal Curves (Amended 2/23/10)

Where a deflection angle of more than ten (10) degrees in the alignment of a road occurs. the road shall have a centerline radius of not less than the following:

a. **Rural Principal Arterials.....300 feet**
b. **Rural Minor Arterials.....300 feet**
c. **Rural Major Collectors.....200 feet**

d. Rural Minor Collectors.....200 feet

e. Residential Roads.....100 feet

17. Vertical Curves

Every change in grade shall be connected by a vertical curve constructed so as to afford a minimum sight distance of two hundred (200) feet, said sight distance being measured from the driver's eyes, which are assumed to be four and one-half (4 1/2) feet above the pavement, to an object four (4) inches high on the pavement. Where, in the opinion of the planning commission, topography warrants it, profiles of all roads showing natural and finished grades drawn to a scale of not less than one (1) inch equals one hundred (100) feet horizontally and one (1) inch equals twenty (20) feet vertically may be required.

18. Intersections

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

Curb radii at road intersections shall not be less than twenty (20) feet, and where the angle of a road intersection is less than seventy-five (75) degrees, the planning commission may require a greater curb radius. Whenever necessary to permit the construction of a curb having a desirable radius without curtailing the sidewalk at a road corner to less than normal width, the property line at such road corner shall be rounded or otherwise set back sufficiently to permit such construction.

19. Tangents

Between reverse curves there shall be a tangent having a length not less than one hundred (100) feet.

20. Road Jogs

Road jogs with centerline offsets of less than one hundred fifty (150) feet shall not be allowed.

21. Shoulders

If curbs are not provided, shoulders three (3) feet wide shall be provided on each side of the pavement.

C. BLOCK AND LOT DESIGN STANDARDS

1. **Block Lengths and Widths**

Block lengths and widths shall be as follows:

ROAD JOGS

TYPES OF LOTS

a. Blocks shall be no greater than one thousand two hundred (1,200) feet nor less than three hundred (300) feet in length, except in unusual circumstances; and

b. Blocks shall be wide enough to provide two (2) tiers of lots of minimum depths, except where abutting upon major roads or where other situations make this requirement impractical.

2. Building Sites in Floodplains

Each lot in a subdivision shall comply with the provisions of the current Graysville Flood Damage Prevention Ordinance.

3. Lot Sizes

Residential lots shall be a minimum of twenty thousand (20,000) square feet or more if required by the Rhea County Health Department. Residential lots shall not be less than sixty-five (65) feet wide at the setback (building) line. Other lot size requirements follow:

a. Residential lots shall have a depth of not less than one hundred (100) feet and not greater than five (5) times the width of the lot at the building line, unless unusual circumstances make these limitations impractical.

b. The minimum distance between the septic tank fieldline and fresh-water well shall be one hundred (100) feet. The county health officer shall also prescribe minimum lot sizes to conform to health standards, which may be greater than the standards contained herein.

c. Residential corner lots shall have adequate width to meet building setback requirements for both abutting roads.

d. Commercial and industrial lots shall be adequate in size to provide service areas and off-road parking suitable for 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.

SUBDIVISION DESIGNS

e. Land shall not be platted for commercial or industrial purposes unless the subdivider can demonstrate to the planning commission that each lot provides the following:

1. A site that does not unduly interfere with through traffic.

2. An integrated parking area.

3. A buffer or insulation against any adverse effect on any present or future adjacent residences.

4. A parcel size sufficient in area to allow future expansion.

4. Lot Lines

All lot lines shall be perpendicular or radial to road lines, unless impractical because of topographical or other features.

5. Building Setback Lines

Front yard setbacks shall be a minimum of thirty (30) feet from the road right-of-way lines. Other minimum setback lines shall be as follows:

1. From the side property line..... 10 feet

2. From the rear property line..... 15 feet

3. From the side property line..... 30 feet which abuts a minor road (corner lot)

6. Lots Abutting Roads.

Each lot shall abut upon a dedicated public road or designated private road built to the standards established herein.

7. Double and Reverse Frontage Lots

Double frontage and reverse frontage lots should be avoided, except where essential to provide separate residential development from traffic arteries or to overcome specific disadvantages of topography and orientation. Reverse frontage lots shall have a depth of not less than one hundred fifty (150) feet. A planted evergreen screen easement of at least ten (10) feet wide, across which there shall be no right of access, shall be provided along the line of lots abutting a traffic artery or other incompatible land use.

SETBACKS AND YARDS

D. WATER SYSTEM STANDARDS

1. Supply System Design-General

The supply system shall provide an adequate water supply and pressure for domestic needs. The system shall be evaluated for the period of peak hourly consumption. The public supply system shall be capable of providing the required fire flows in addition to the peak domestic demands. The system shall be designed to supply these domestic and fire needs without creating adverse velocities or pressures in new or existing systems. Future development shall be considered in system design where adjacent undeveloped areas have no alternative water source. Easements or public access areas for future connections shall be provided. See also Article V, Section D.

Domestic flows required for residential use shall be based on estimated occupancy and per capita water use according to Tables 1 and 2.

Table 1
WATER CONSUMPTION RATES

Dwelling Unit Type	Average Day Consumption	Factor for Peak Hour Consumption
Single-Family*	100 gpcd	5.5
Single-Family w/Extensive Water Require-ments*	125 gpcd	6.0
Apartments*	75 gpcd	5.0

*Values based on a metered water system.

Table 2
DESIGN VALUES:
PERSONS PER DWELLING UNIT

Distance Between Buildings	Design Value Persons/D.U.
Single-Family	3.5
Townhouse	3.1
Low-Rise Apartment	2.9
Medium-or High-Rise Apartment	2.7

The water system shall be designed to provide satisfactory pressure at fixtures during the peak hourly demand. For residential buildings less than four stories, a minimum design pressure of 30 psi at the service connections shall be provided during the period of peak hourly demand. Alternatively, the system shall be designed to provide adequate pressure during the period of peak hourly demand at the most remote fixture in a dwelling.

The required fire flow is based on exposure from and to adjacent structures. For residential one-and two-family dwellings not exceeding two stories in height, Table shall be used to calculate needed fire flows of two-hour duration. In recognition of the value and effectiveness of automatic sprinklers, the required fire flow for buildings with sprinklers shall be that needed for the sprinkler system plus 500 gpm hydrant flow.

Table 3
REQUIRED RESIDENTIAL FIRE FLOWS

Distance Between Buildings	Required Fire Flow (gpm)
Over 100 Feet	500
31-100 Feet	750
11-30 Feet	1,000
10 Feet or Less	1,500

Add 500 gpm to the required fire flow for woodshingle roof coverings on the subject dwelling or adjacent buildings.

The water system design shall protect against negative backflow due to pressures in the main by maintaining a minimum allowable residual pressure of 20 psi during the period of peak hourly demand.

Excessive internal pressures that lead to leaks or ruptures of pipe materials and fittings shall be avoided in the system. When static pressures exceed 100 psi, pressure-reducing devices shall be provided on mains. In no case shall the design pressure exceed the maximum working pressure of the pipe materials and fittings.

Excessive velocities in the system; resulting in large head losses, pipe erosion, and water hammer; create the potential for breaks and connection failures and shall be prohibited. The maximum allowable design velocities in the system shall not exceed those recommended by the manufacturer of the pipe and fittings.

The pipes in the system shall be sized to provide the design pressures and flows at the acceptable velocities outlined in this section. Fire hydrants shall be served by minimum six-inch-diameter pipes or by larger pipes, if calculations warrant.

In many communities, the existing water distribution infrastructure provides an acceptable level of service but does not meet the minimum requirements of these standards. In these situations, where reasonable layout and sizing of a development's water system are not the cause of inadequate pressures or flows according to these standards, the system shall be evaluated by the community by a case-by-case basis. An analysis shall be submitted to the community to demonstrate the performance of the proposed design.

2. Pipe Materials

Acceptable pipe materials include concrete, ductile and cast iron, plastic, steel and vitrified clay that meet the requirements of the standards listed in Section D.10. The engineer shall use manufacturers' or other appropriate roughness coefficients in the design calculations.

Water systems shall be capable of withstanding anticipated loads. Pipes located under roadways or travelways shall be able to sustain the live loads imposed from passing vehicles and shall meet design requirements for AASHTO H-20 loading. The maximum depth of burial shall not exceed pipe manufacturers' recommended depth for the material used unless calculations show the material to be adequate.

3. Pipe Placement

The system shall be placed to deliver water adequately to its distribution points in accordance with this section.

Maintenance personnel shall have access via easements to maintain the public system located outside the public right-of-way. The easement shall be wide enough to allow personnel and equipment access to maintain and perform general repair on all parts of the system. The minimum easement width shall be ten feet. Pipes may be offset from the center of the easement. Easements of separate utilities may overlap.

Water pipes shall be protected from excessive bearing pressures by placing them outside the influence zone of building structures unless engineering calculations show the pipe material or soil condition is capable of sustaining the applied load.

Precautions shall be taken when water pipes approach, cross, or run parallel to sewers to avoid possible contamination. A water pipe shall not pass through or come in contact with a sewer manhole. The water pipe shall be protected by one of the following:

a. providing a ten-foot horizontal separation between water pipes and the sewer;

b. placing the water pipe 18 inches above the sewer and on a separate shelf; or

c. constructing both the water pipe and sewer with watertight joints and pressure testing each to ensure water tightness.

Water pipes that cross surface waters shall be protected against damage, anchored to prevent movements, and provided with easily accessible shutoff valves located outside the floodway at each end of the water crossing. For aerial crossings, the pipe shall be supported and protected from damage or freezing. For underwater crossings, the top of the water pipe shall be at least one foot below the natural bottom of the stream bed when the pipe is located in rock or three feet below the natural bottom of the stream bed when the pipe is located in other material. The trench shall be backfilled with crushed rock or gravel.

Water supply pipes shall be protected against freezing by providing adequate burial depths or other insulating arrangements. The top of the water pipe shall be located below the lowest established frost depth.

Proper trenching, bedding, and backfill are required for pipe performance. Bedding shall conform to the standards of Section D.10. The width of the trench shall allow the pipe to be properly laid and jointed and to permit the backfill to be laced and compacted as needed. Backfill shall be of a suitable material removed from excavation except where other material is specified. Debris, frozen material, large stones, organic matter, or other unstable materials shall not be used for backfill within two feet of the top of the pipe.

Pipes constructed on fill shall be stable and protected against settlement by compacting fill material to 95 percent of the modified Proctor (ASTM D1557-78) maximum dry density.

Metal water pipe shall be protected from corrosion due to local conditions through the installation of cathodic protection, application of protective coatings, treatment of water, or avoidance of corrosive soils.

4. Service Connections

The function of a service connection is to convey potable water from the main to the building at an adequate pressure and flow rate.

Service lines that serve more than one building shall be located in an easement or in a common area and meet requirements of locally adopted building codes for installation and placement. The service shall separate before entering a dwelling unit.

Service line valves, fittings, and materials shall conform to the standards outlined in Section D.10.

Service line size provide adequate water quantities and pressures to the buildings served yet meet minimum size requirements of the Southern Standard Building Code.

5. Appurtenances

Appurtenances are accessories to the water system, including fittings to accommodate system geometry and controls for the protection and maintenance of the system.

Sufficient valves shall be provided on water mains to minimize any inconvenience or sanitary hazards during repairs. At minimum, valves shall be located to reduce the length of pipe shut down during service to 800 feet. Where systems serve widely scattered customers and future and future development is not expected, the valve spacing shall not exceed one mile.

The system shall be designed to prevent failure at fittings by selecting fittings with the same range of working pressure as the pipe with which they are used. Fitting materials shall be compatible with pipe materials and standards outlined in Section D.10.

All tees, bends, plugs, and hydrants shall be provided with thrust blocking, tie rods, or joints designed to prevent movement.

The system shall be designed to allow for the removal of sediment and air by placing air releases or hydrants at high points and blowoffs or hydrants at low points. A blowoff or fire hydrant shall be located on dead-end lines to provide a means of flushing these lines. No flushing device shall be directly connected to a sewer. Automatic air relief valves shall not be used in situations where flooding of the manhole or chamber may occur.

Where meters are required, they shall be located in an accessible area and be of minimal size to deliver adequate flows. Meters shall be placed so they are protected from damage or freezing.

There shall be no connection between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into the system. Backflow prevention devices shall be required on hydrants that use pumps interconnected with an auxiliary water supply.

6. <u>Fire Hydrants</u>

Fire hydrants shall be placed to provide adequate coverage and convenient access in an emergency.

Fire hydrants shall be able to deliver adequate flows from the system to the hose and shall meet the applicable standards outlined in Section D.10, paragraph 3.

Hydrants located within the pavement of a travelway or parking area shall be protected from vehicular damage with bollards or similar physical barriers that must not interfere with the operation of or connection to the hydrant.

Hydrants shall be located within a 500-foot hose reach of lot lines or building areas. The available equipment of the Graysville Volunteer Fire Department may allow adjustments in required hydrant locations.

Hydrants protecting multistory residential or commercial buildings shall be located such that a burning structure will not impair connection to the hydrant. The hydrants protecting these structures shall be placed at a minimum of 40-feet from the protected structure.

Hydrants shall allow for convenient connections in an emergency and facilitate emergency repairs. Hydrants shall be located with the hydrant flange 2.5 inches from the ground surface as shown in the appendix to this standard.

Hydrants shall be located outside areas of constant or frequent ditch flows to protect them from surface water erosion.

7. Testing and Disinfection

Flushing, testing, and disinfecting the water system shall be conducted to prepare the newly constructed system for service and to locate installation problems.

The system shall be flushed before connection to the public water supply to remove foreign materials. The system shall also be pressure tested and leakage tested in accordance with AWWA Standard C600-87. The system shall meet minimum leakage requirements of AWWA C600-87, which requires leakage to be less than the number of gallons per hour determined by the following formula:

$$L = \frac{ND \quad P}{J}$$

where: L=minimum allowable leakage (gph);
J=1,850 for bell and spigot joints;
J=3,700 for mechanical and push-on joints;
N=number of joints in tested length;
D=nominal diameter of pipe (in.); and
P=average test pressure (psi gauge).

All new, cleaned, or repaired water mains shall be disinfected in accordance with AWWA Standard C651-86 to remove harmful bacteria.

8. Private Wells

A private water supply system or well may serve as an alternative to a public system for water supply needs. Where used, wells shall comply with the requirements of this section.

To protect public supply systems from contamination by a private well, cross connections between private and public water systems shall be prohibited.

The private well and system shall be designed, tested, and maintained to supply adequate water quantities while complying with local or state water quality standards or, in the absence of such standards, with relevant EPA standards required by the Safe Drinking Water Act.

The well shall be protected from possible sources of contamination by conforming to the minimum offset distances in Table 4.

Table 4
MINIMUM WELL SEPARATION DISTANCES

Distance From	To Well (By Feet)
Property Line	5
Down Gradient Septic Tank or Drain Field with Deep Drilled Well	50
Up or Cross-Gradient Septic Tank or Drain Field	100
Septic Tank or Drain Field with Dug Well	100
Sewer Lines	10

Pressure shall be retained in artesian wells by sealing the casing into the overlying impermeable formation.

Surface water shall be prevented from entering the well by filling the open space outside the casing with a watertight cement grout or puddled clay from a point just below the frost line or at the deepest level of excavation near the well to the necessary depth. Contaminated water or other objectionable material shall be prevented from entering the well by installing a sanitary well seal with an approved cap at the top of the well casing.

9. Reserved for Future Use

10. Material Standards

All materials and appurtenances shall be specified in the design, shall be suitable to accomplish the objective of the water supply system, and shall conform to currently dated standards of the American Society

for Testing and Materials (ASTM), the American Standards Association (ASA), the American Water Works Association (AWWA), the American National Standards Institute (ANSI), or the General Services Administration (federal specifications) for the material type and intended use. All installations shall be in accordance with manufacturers' recommendations where not governed by these standards. The following are applicable specifications:

a. Pipe and Fittings

Ductile iron pipe shall conform to ANSI/AWWA Standard C151/A21.51-86. Ductile iron pipe fittings and gray iron pipe fittings three inches through 48 inches shall conform to ANSI/AWWA Standard C110/A21.10-87. Rubber-gasket joints for gray iron pipe or ductile iron pipe and fittings shall be as specified in ANSI/AWWA Standard C111/A21.10-90. Joints for ductile iron pipe with threaded flanges shall conform to ANSI/AWWA Standard C115/A21.15-88.

Reinforced concrete water pipe shall conform to ANSI/AWWA Standards C300-89, C301-84, C302-87, and C303-87. Joints for reinforced concrete pipe shall be as specified in AWWA Standard C301-84.

PVC pressure pipe and fittings four inches through 12 inches shall conform to ANSI/AWWA Standard C900-89. PVC pipe sizes 14 inches through 36 inches shall conform to AWWA Standard C905-88. Installation shall be in accordance with ASTM D-2321-89 and ASTM D-2274-88.

Polyethylene tubing for water mains or connections one-half inch through three inches shall comply with AWWA Standard C901-88 and conform to ASTM specification D-1248-89. Polybutylene tubing one half inch through three inches shall conform to AWWA Standard C902-88 and ASTM specification D-2581-91. Tubing dimensions and tolerances shall conform to ASTM D-2737-89.

b. Valves

Service line valves and fittings shall comply with AWWA Standard C800-89.

Gate valves shall comply with ANSI/AWWA Standard C500-86 or AWWA C509-87.

Butterfly valves shall be designed and manufactured in accordance with ANSI/AWWA Standard C504-87.

Ball valves shall conform to AWWA Standard C507-85.

Check valves two inches through 24 inches shall comply with ANSI/AWWA Standard C508-82.

c. Hydrants

Dry barrel fire hydrants shall conform to AWWA Standard C502-85. Wet barrel hydrants shall conform to AWWA Standard C503-88.

Fire hydrant outlets shall be equipped with American National Fire Hose Connection Screw Threads (NST-NH).

Installation and testing of all new water mains and their appurtenances shall comply with AWWA Standard C600-87.

Water mains shall be disinfected according to AWWA Standard C651-86. Wells shall be disinfected according to AWWA Standard C654-87.

11. Abbreviations and Definitions

AASHTO: American Association of State Highway and Transportation Officials, Room 341, National Press Building, Washington, DC 20045; (202) 624-5800.

ANSI: American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036; (212) 642-4900.

ASTM: American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103; (215) 299-5400.

Average Day Consumption: The daily average of water consumption used during a one-year period (see Table 1).

AWWA: American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235; (303) 794-7711.

Fixture: A device that is either temporarily or permanently connected to the water distribution system and demands a supply of water.

Main: The principle water pipe to which service connections are made.

Maximum Day Consumption: The amount of water used in the 24-hour period during which the highest consumption total is expected in a three-year period.

Multistory Residential: A building greater than four stories in height and intended for multifamily occupancy.

NFPA: National Fire Protection Association, Batterymarch Park, Quincy, MA 02269; (617) 770-4543.

Peak Hourly Consumption: The maximum amount of water used in any given hour of a day. It is calculated by multiplying the average daily consumption by the peak factor in Table 1.

Potable Water: Water free from impurities in amounts sufficient to cause disease or harmful physiological effects and conforming to the standards or regulations of the public health authority with jurisdiction over the water supply.

Residual Pressure: The resultant pressure in the system during periods of demand flows.

Service Connection: The appurtenances and pipe from the municipal main to any building receiving water.

ARTICLE V

DEVELOPMENT REQUIREMENTS PRIOR TO FINAL APPROVAL

Prior to the approval of a final plat, the subdivider shall be required to have installed at his expense the following improvements:

A. GENERAL REQUIREMENTS

1. Monuments

All corners shall be established with a metal or concrete object. Metal corners (monuments) shall be no less than ½ inch in diameter, concrete corners shall be no less than 4 inches in diameter, both shall be no less than 18 inches in length. Monuments shall be placed so the top is flush with the finish grade.

Concrete markers shall have a permanent mark for the survey point and shall have the surveyor's name or company name attached or stamped. All new monuments shall have a cap or tag on non-corrosive material with surveyor's registration number or company name stamped. (Ref. Sec. 0820-3-07 (1) (h) *Rules of Tennessee State Board of Examiners for Land Surveyors)*. (**Amended 06-13-02**)

B. ROAD IMPROVEMENTS

Any and all roads constructed within Graysville, Tennessee, shall meet the approval of the County Road Supervisor and adhere to these minimum standards set forth in this section.

1. Grading

All roads shall be graded by the subdivider to the required cross section. Due to special topographic 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 shall be first cleared of all stumps, roots, brush and other objectionable materials and all trees not intended for preservation.

b. **Cuts.** All tree stumps, boulders and other obstructions shall be removed to a depth of two (2) feet below the subgrade. Rock, encountered, shall be scarified to a depth of twelve (12) inches below the subgrade. This provision applies

to the roadway and not necessarily to the entire right-of-way width.

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 development site. The fill shall be spread in layers not to exceed twelve (12) inches loose and compacted.

2. Road Base

a. The roadbed shall be inspected by the County Road Supervisor prior to the installation of any base material to assure proper compaction.

b. A crushed stone base of 303-01 (pug mix) aggregate shall be applied at the rate of 110 pounds per square yard per inch of thickness. The minimum compacted thickness shall be six (6) inches.

c. Weight tickets shall be furnished to the County Road Supervisor to determine the gravel used. The crushed stone shall be dumped and windrowed uniformly along the center of the roadway compacted in such a manner as to construct a crown in the center of said roadway.

d. Said base shall be inspected by the County Road Supervisor prior to any additional surface treatment to assure proper compaction and roadway crown.

3. Prime Treatment

a. After the base course has been thoroughly compacted and worked, it shall be broomed to remove any excess loose material and dampened if necessary.

b. The type and grade of prime material shall depend on the condition of the base course and shall be approved prior to application by the County Road Supervisor.

c. The rate of application shall be .50 to .75 gallons per square yard. Immediately after the prime material has been applied, mineral aggregate (size 6 or 7) shall be spread at the rate of 12 to 15 pounds per square yard. Then a twelve ton wheel roller shall roll the aggregate into the prime material.

CUT AND FILL CROSS SECTION

d. There shall be a curing period before surface treatment with the length of this curing period to be no less than 24 hours or as determined by the County Road Supervisor.

4. Surface Treatment

Surface treatment shall be either a double-bituminous surface treatment or an asphaltic surface treatment (plant mix-hot) as required by the County Road Supervisor and applied to the following minimum standards:

a. Double-Bituminous Surface

1. Coat applications shall be in compliance with the standards set forth in Section 404 "Double Bituminous Surface Treatment" of the Tennessee Department of Transportation's Standard Specifications for Road and Bridge Construction (most current edition) in regards to equipment, seasonal limitations, surface preparation, material's application, rolling, and curing.

2. The first application shall be applied at the rate of .40 to .50 gallons per square yard. Immediately following this application, mineral aggregate (size 6) shall be applied at the rate of 30 to 40 pounds per square yard and rolled into the bituminous material.

3. The second application shall be applied at the rate of .35 to .45 gallons per square yard. The mineral aggregate (size 7) shall be applied at the rate of 30 to 40 pounds per square yard.

4. After the final surface has been rolled with a twelve ton roller, it shall then be dragged with a broom, or wire, until the seal chips are uniformly spread.

b. Asphaltic Surface (Plant Mix-Hot)

1. Coat applications shall be in compliance with the standards set forth in Section 411 "Asphaltic Concrete Surface (Hot Mix) of the Tennessee Department of Transportation's Standard Specifications for Road and Bridge Construction (latest

edition) in regards to materials, equipment, and construction requirements.

2. The asphalt and mineral aggregate shall conform to said specifications Section 407 "Bituminous Plant Mix Pavements (General)." The bituminous material shall be of grade known as "Grade C or CW."

3. The plant mix shall be 200 pounds per square yard. Weight tickets shall be furnished to the County Road Supervisor.

5. Shoulders (Amended 2/23/10)

a. Double-Bituminous Surface

In the case of double-bituminous pavement surfaces, gravel shoulders shall be required.

b. Asphaltic Surface (Plant Mix-Hot)

1. In the case of asphaltic (plant mix-hot) surfaces, shoulders shall be required. Said shoulders shall be of the same aggregate size as the base aggregate material, and shall be compacted to the level of the final grade surface of the finish coat.

2. Shoulder widths shall be as follows:

a. Rural Principal Arterials....5 feet

b. Rural Minor Arterials.....5 feet

c. Rural Major Collectors.....3 feet

d. Rural Minor Collectors.....3 feet

e. Residential Roads.....2 feet

c. Shoulders are not required where approved curbing is placed.

6. Street Signs

Street signs shall be placed at all intersections in new subdivisions with town and county streets. Street signs shall conform to town standards for size (4" x 36") and color (white on green) except private roads

shall have the same size signs with black letters on white background. Appropriate regulatory and warning signs shall be installed as needed and conform with those in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).

C. STORM DRAINAGE IMPROVEMENTS

An adequate drainage system, including necessary open ditches, pipe culverts, catchbasins, and bridges shall be provided for proper drainage of all surface water. Cross drains shall be of sufficient length to permit full roadway widths and the required slopes. The drainage structure sizes are to be determined by either the Manning Formula or Talbot Formula, but in no case shall a cross drain be less than 15 inches in diameter. The County Road Supervisor shall be consulted before any drains are installed to ensure they will conform to the proper size.

Cross drains shall be built on a straight line and grade and shall be laid on a firm compacted base. In the event rock is encountered in the trench, the rock shall be removed four (4) inches below the grade and replaced with suitable material. Pipe shall be laid with the spigot end pointing in the direction of flow and with ends fitted and matched to provide tight joints and a smooth uniform invert made by grouting tile of 24 inch diameter or larger half way up the pipe on the inside and half way down on the outside.

When necessary for proper flow, inlet and outlet ditches shall be provided at drainage structures and drainage easements shall be shown on side and rear lot lines. Where at all possible, main drainage ways shall be cut to the rear of lot lines and not carried down the roadway. This is to avoid having oversized side drains under driveways.

If a drainage pipe is under three (3) feet in diameter, located in the ditch line and more than 50 feet long, concrete or solid masonry catchbasins with a six (6) inch minimum wall thickness shall be required at intervals of 50 feet, except a greater run may be approved by the road supervisor. The design of these catchbasins shall be approved by the road supervisor.

D. UTILITY IMPROVEMENTS

1. Installation of Utilities

After grading is completed and approved and before any base is applied, all of the required underground work – water mains, sewer lines, gas mains, etc., and all service connections shall be installed completely and approved throughout the subdivision.

2. Water Supply System

Water mains properly connected and approved by the Tennessee Department of Conservation and Environment with the community water supply system or with an alternate on-site supply approved by the county health officer shall be constructed in such a manner as to serve adequately for both domestic use and fire protection for all lots shown on the subdivision plat. Where public water systems are to be used, six (6) inch water mains shall be required, except along cross roads of one thousand (1,000) feet or less and in permanent cul-de-sacs. The location and types of valves and hydrants, the amount of soil cover over the pipes and other features of the installation, shall be approved by the Town of Graysville and shall conform to accepted standards of good practice for water systems.

3. Fire Protection

Fire hydrants shall be required for all major subdivisions. The number and location of fire hydrants shall be as determined by the planning commission after consultation with the Graysville Fire Department, but in no case shall any be more than five hundred (500) feet from any building site, provided that on cul-de-sacs and on side residential streets, the planning commission may grant a variance not to exceed 600 feet total.

4. Sanitary Sewers

When the subdivision is located within the service area of a public sewerage system, sanitary sewers shall be designed and installed in such a manner to serve adequately all lots with connection to the public system and approved by the appropriate public health authority.

Where lots cannot be economically connected with a sewerage system, each lot shall be required to adhere to test requirements of the county health officer, contain adequate area for the installation of approved septic tank and disposal fields, and be approved in writing by the county health officer.

E. GUARANTEE IN LIEU OF COMPLETED IMPROVEMENTS

No final subdivision plat shall be approved by the planning commission or accepted for recording by the County Register of Deeds, until one of the following conditions have been met:

1. All required improvements have been constructed in a satisfactory manner and approved by the planning commission, county road supervisor, and appropriate public health authorities.

2. The planning commission has accepted either a) a surety bond, b) certified check, or c) an irrevocable letter-of-credit in an amount equal to the estimated cost of installation of the required improvements, whereby improvements may be made without cost to the county in the event of default by the subdivider. These shall be made out to the Town of Graysville.

F. CONTINUATION OF LEGAL RESPONSIBILITY

1. In addition to the requirements listed above, the subdivider shall be responsible for the maintenance of roads and ditches for a period of one (1) year beginning at the time of application of final surface or of acceptance of the subdivision by the planning commission which ever occurs later. Responsibility for maintenance shall include such activity as to assure that the road surface, shoulders, culverts and ditches or curbs are in accordance with the Graysville Subdivision Regulations at the end of the one (1) year period.

ARTICLE VI

LEGAL STATUS PROVISIONS

A. PLATTING AUTHORITY

From and after the passage of these regulations, the planning commission shall be the official platting authority, and no plat of a land subdivision shall be entitled to be recorded in the Office of the Rhea County Register unless it shall have the approval of the planning commission inscribed thereon. The filing or recording of a plat of a subdivision without the approval of the planning commission, as required by these regulations, is declared to be a misdemeanor as prescribed under Tennessee law and punishable by law.

B. USE OF PLAT

The transfer of, sale of, agreement to sell, or negotiation to sell land by reference to or exhibition of, or other use of a subdivision plat that has not been given final approval by the planning commission and recorded in the Office of the Rhea County Register is prohibited, and the description by metes and bounds in the instrument of transfer from such penalties.

C. ENFORCEMENT

No plat or plan of a subdivision located within the area of planning jurisdiction shall be filed or recorded by the Rhea County Register of Deeds until said plat or plan has received final approval in writing by the planning commission as provided in Section 13-4-302, Tennessee Code Annotated.

D. ERECTION OF BUILDINGS

No building permit shall be issued and no building shall be erected on any lot in a subdivision within the area of jurisdiction of the Graysville Municipal Planning Commission unless the road giving access thereto has been dedicated or accepted as a public road in accordance with these regulations; unless such road has been accepted as a public road prior to the effective date of these regulations; or is a designated private road constructed in accordance with such standards set forth within this document.

Any building or structure erected or to be erected in violation of this section shall be deemed an unlawful building or structure, and the city attorney or other official designated by the Graysville Town Commission may bring an action to enjoin such erection or cause it to be vacated or removed.

E. PENALTIES

No Rhea County Register or employee thereof 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 13-4-302, Tennessee Code Annotated, and any county register so doing shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law.

Section 13-4-406, Tennessee Code Annotated, 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 planning commission and obtained its approval as required before such plat be recorded in the office of the appropriate Rhea County Register, shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law; and the description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transaction from such penalties. The town, through its attorney or other official designated by the Mayor and Board of Commissioners, may enjoin such transfer or sale or agreement by action or injunction.

F. SEPARABILITY

Should any section or provision of these regulations be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of the regulations as a whole or part thereof which is not specifically declared to be invalid or unconstitutional.

G. CONFLICT WITH OTHER REGULATIONS

No final plat of land within the force and effect of an existing zoning ordinance shall be approved unless it conforms to 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 higher, or more restrictive standard shall apply.

H. VARIANCES

Variances may be granted where the planning commission decides that there are topographical or other conditions peculiar to the site, and a departure from these regulations will not destroy their intent. Any variance thus authorized

shall be stated in writing in the minutes of the planning commission with the reasoning on which the departure is justified as set forth.

I. AMENDMENTS

These regulations may be amended by the planning commission. However, before enacting an amendment, the planning commission shall hold a public hearing thereon, at least fifteen (15) days notice of the time and place of which shall be published in a newspaper of general circulation in the county.

J. ADOPTION AND EFFECTIVE DATE

These regulations shall take effect and be in force from and after the day of its adoption, the public welfare demanding it.

_____DAY OF_____, 19_____
DATE ADOPTED BY THE
GRAYSVILLE MUNICIPAL PLANNING COMMISSION

_____
CHAIRMAN
GRAYSVILLE MUNICIPAL PLANNING COMMISSION

_____DAY OF_____, 19_____
DATE AMENDED BY THE
GRAYSVILLE MUNICIPAL PLANNING COMMISSION

_____
CHAIRMAN
GRAYSVILLE MUNICIPAL PLANNING COMMISSION

A P P E N D I X

CERTIFICATE STANDARDS

A. CERTIFICATES OF APPROVAL

Each final plat submitted to the planning commission for approval shall contain the signed certificates worded as follows:

1. CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book Number _____, page _____, County Register's Office, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and that offers of irrevocable dedication for all public ways, utilities, and other facilities have been filed.

_____, 19 __, _____

DATE **OWNER**

_____

TITLE

(If action for partnership or corporation)

2. CERTIFICATE OF SURVEY ACCURACY

I (we) hereby certify that to the best of my (our) knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a class "_____" _____ Land Survey as defined in Title 62, Chapter 18, Tennessee Code Annotated, and that the ratio of precision is greater than or equal to 1: _____.

_____, 19 __, _____

DATE **REGISTERED LAND SURVEYOR NUMBER**_____

3. CERTIFICATE OF APPROVAL PRIVATE SUBSURFACE SEWAGE DISPOSAL

General approval is hereby granted for lots proposed hereon as being suitable for subsurface sewage disposal with the listed and/or attached restrictions.

Before the initiation of construction, the location of the house or other structures and plans for the subsurface sewage disposal system shall be approved by the local health authority.

_____, 19 __, _____
DATE **LOCAL HEALTH AUTHORITY**

4. CERTIFICATION OF THE APPROVAL OF ROADS

I hereby certify that the (those) road(s) as shown in regards to grade, base, and surface, have been installed in an acceptable manner according to specifications and that the (those) road(s) have been inspected as required by the Subdivision Regulations of the Town of Graysville, Tennessee.

_____, 19 __, _____
DATE **ROAD SUPERVISOR**

OR

5. CERTIFICATION OF THE APPROVAL OF ROAD NAMES

I hereby certify that I have reviewed the names of the roads indicated on this plat and find that they conform to the county's E-911 requirements.

_____, 19 __, _____
DATE **911 BOARD REPRESENTATIVE**

6. CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the Town of Graysville Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of the planning commission, and that it has been approved for recording in the Office of the County Register.

_____, 19 __, _____

DATE **SECRETARY, PLANNING COMMISSION**

SUGGESTED STEPS FOR A DEVELOPER OF A SUBDIVISION

CONFER WITH THE PLANNING COMMISSION AND ITS STAFF REPRESENTATIVE TO BECOME THOROUGHLY FAMILIAR WITH THE SUBDIVISION REQUIREMENTS, THE MAJOR ROAD PLAN AND OTHER PUBLIC IMPROVEMENTS WHICH MIGHT AFFECT THE AREA TO BE SUBDIVIDED.

HAVE PRELIMINARY PLAT PREPARED BY A REPUTABLE ENGINEER OR SURVEYOR.

DISCUSS PRELIMINARY PLAT WITH STAFF REPRESENTATIVE. THIS PRE-APPLICATION REVIEW MAY SAVE THE SUBDIVIDER TIME AND COSTLY REVISIONS AS WELL AS POSSIBLE SAVING THROUGH BETTER DESIGN.

SUBMIT REQUIRED COPIES OF THE PRELIMINARY PLAT TO THE PLANNING COMMISSION FOR APPROVAL IN ADVANCE OF ITS REGULAR MONTHLY MEETING.

WHEN PRELIMINARY APPROVAL HAS BEEN GRANTED

SEE TOWN RECORDER FOR ROAD AND UTILITY SPECIFICATIONS; CONTACT COUNTY HEALTH OFFICIALS FOR SEPTIC TANK SPECIFICATIONS IF PUBLIC SEWERS ARE NOT AVAILABLE.

DEVELOP SUBDIVISION ACCORDING TO PRELIMINARY PLAT AND REQUIRED MODIFICATIONS, IF ANY. INSTALL IMPROVEMENTS.

OBTAIN CERTIFICATES FROM HEALTH OFFICIALS CERTIFYING THAT IMPROVEMENTS HAVE BEEN MADE OR THAT A PERFORMANCE BOND HAS BEEN POSTED.

PREPARE FINAL PLAT.

SUBMIT FINAL PLAT TO THE PLANNING COMMISSION FOR APPROVAL. WHEN APPROVED, THE PLANNING COMMISSION SECRETARY WILL SIGN THE CERTIFICATE OF APPROVAL FOR RECORDING.

THE SUBDIVIDER NOW RECORDS THE PLAT WITH THE COUNTY REGISTER'S OFFICE. HE IS NOW READY TO SELL HIS LOTS.

PRELIMINARY PLAT CHECKLIST

____ Two (2) copies submitted seven (7) days prior to meeting.

____ Drawn to a scale of not less than one (1) inch equals one hundred (100) feet.

____ Name and location of subdivision.

____ Name and address of owner of record and designer of plat.

____ Date, approximate north point, and graphic scale.

____ Location of existing and platted property lines, roads, buildings, water courses, railroads, sewers, bridges, culverts, drain pipes, water mains, and any public utility easements and unusual topographical contours.

____ Present zoning classification, if any, on land in subdivision and adjacent land.

____ Names of adjoining property owners and/or subdivisions.

____ Plans of proposed utility layouts showing connections to existing or proposed utility systems.

____ Names, locations, and dimensions of proposed roads, alleys, easements, parks, and other open spaces, reservations, lot lines, building lines, and utilities.

____ Contours of not more than five (5) feet vertical intervals on sites with less than one hundred (100) feet changes of elevation and on sites with elevation changes of more than one hundred (100) feet – twenty (20) foot vertical intervals.

____ Acreage of land to be subdivided.

____ Location map showing relationship of subdivision to surrounding area.

____ Flood limits (if applicable).

FINAL PLAT CHECKLIST

____ Seven (7) copies submitted seven (7) days prior to meeting.

____ Drawn to a scale of one (1) inch equals one hundred (100) feet on sheets 18" X 24" (or an approved size to correspond to plat book dimensions).

____ Lines of all roads, lot lines, and building setbacks.

____ Lots numbered in numerical order, reservations, easements, and areas to be dedicated to public use.

____ Radius, central angle, tangent distance for the centerline of curved streets and property lines.

____ Dimensions to the nearest one hundredth of a foot and angles to the nearest minute.

____ Location and description of monuments.

____ Names and locations of adjoining subdivisions and roads.

____ Location and ownership of adjoining unsubdivided property.

____ Date, title, name, and location of subdivision.

____ Graphic scale and north point.

____ Location map showing site in relation to area.

____ Boundary traverses including lot and block traverses.

____ Most recent recorded deed book number and page number for each deed that is part of property being platted.

____ Flood limits (if applicable).

____ Certificate of ownership.

____ Certificate of dedication.

____ Certificate of accuracy from surveyor or engineer.

____ Certificate of approval of water and sewerage systems.

____ Certificate from county road supervisor.

____ Certificate of approval of road names.

____ Certification of approval by planning commission secretary.

TOWN OF GRAYSVILLE SUBDIVISION REGULATIONS

Prepared By

Graysville Municipal Planning Commission

Andy Beene
Richard Cassidy
Harold Hackler
Butch Jenkins

Adopted June, 1995
(Amended through 02/23/10)

TABLE OF CONTENTS

ARTICLE VI

APPENDIX

LIST OF ILLUSTRATIONS

A P P E N D I X